Granja Tres Arroyos S.A

Environmental Product Declaration, In accordance with ISO 14025:2006.

- **Whole chicken with giblets.**

EPD

Argentina EPD

CPC CODE
2112

SCOPE
Argentina

PUBLICATION DATE
2024-03-25

VALID UTIL
2029-03-24

EPD REGISTRARION NUMBER
S-P-07363

PROGRAM
The International EPD® System, www.environdec.com

PROGRAM OPERATOR
EPD® International AB

Executive Summary

Granja Tres Arroyos is an Argentine company with a long history and experience. It was born more than 50 years ago in the streets of Buenos Aires and, since then, the company has grown to position itself as a benchmark in poultry production.
The main challenge is to continue being a leading company capable of providing food to Argentina and the world with the best quality and complying with all food safety standards, ensuring the traceability of the entire process.
The environment is a fundamental part of our home. For this reason, we implement the pollution prevention program, forging sustainable development by reducing the consumption of natural resources, such as alternative energy, and preventing insurmountable environmental problems.

The slaughter plants are equipped with advanced effluent treatment systems, which discharge treated water into the water basin. In this way, we generate energy from liquid effluents, which translates into the optimization of natural resources and a balanced relationship with the environment.

The main objective of this paper is to determine the environmental impacts derived from the production of chicken meat for the domestic market, produced in the slaughtering plants that belong to Granja Tres Arroyos S.A.

The scope of this analysis covers “the entire production process”, meaning from the production of all raw materials, supplies and energy used in the production of animal feed for our chickens, in the production and slaughtering processes, going through the logistics of transportation to the distributor and consumer, conservation, cooking and until the final disposal of the waste. The study was calculated for the year 2021. The result of the most widespread environmental impact, total potential global warming, according to the average production volume of 6 slaughtering plants analyzed in this study, is 3,172 kg CO_2 equivalent per kilogram of whole chicken with giblets, for the complete life cycle, including cooking. If cooking is excluded, the value obtained is 1.88 kg CO_2 equivalent per kilogram of chicken

EPD® Program Information

Program: The International EPD® System.

EPD® International AB / Box 210 60 / SE-100 31 Stockholm, Sweden /www.environdec.com | info@environdec.com

Argentina EPD

Contact: For additional information regarding the activities of Granja Tres Arroyos S.A. related to the declaration of this environmental issue, contact: Miguel Sarasti / email: msarasti@gta.com.ar

General Program Instructions for The International EPD® System AB

- Accountabilities for PCR, LCA an independent, third-party verification.
- PCR – "Meat of poultry (fresh, frozen, or chilled)" versión 3.0
- PCR review was conducted by: Filippo Sessa
- EPD Owner: Granja Tres Arroyos S.A.
- Life Cycle Assessment (LCA): Verónica Barrera; Leda Lirio; Leda Lirio; María Candela García de Andina; Leticia Tuninetti

- Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

✓ EPD verification by individual verifier: Javier Martín Echazarreta - Instituto Nacional de Tecnología Industrial

- Approved by: The International EPD® System.
- Procedure for follow-up of data during EPD validity involves third-party verifier:

✓ YES NO

EPD® Program Information

Argentina EPD

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see ISO 14025.

OUR HISTORY

GTA IS A COMPANY WITH A LONG REPUTATION IN THE REGION AND THE WORLD. THE BEGINNINGS GO BACK OVER 85 YEARS WHEN CHICKEN WAS SOLD LIVE IN THE STREETS OF BUENOS AIRES. PIONEER IN THE INTERNATIONAL MARKET, GTA IS CURRENTLY THE FIRST PROCESSOR AND EXPORTER OF POULTRY IN ARGENTINA AND URUGUAY.

Timeline

1965

Granja Tres Arroyos was born in 1965. It was located in its current address on Tres Arroyos Street, in the city of Buenos Aires.

1981

The extended list of Granja Tres Arroyos's acquisitions started in 1981, when the feed mill located in Recreo, Santa Fe, was bought.

1982

In 1982 the Grandparent Breeder farm, Cobb, located in Colón, province of Buenos Aires, was acquired from Cobb Inc.

1984

In 1984, a hatching facility located in Malacate, Buenos Aires, was incorporated from Dekalb.

1985

Processing plant "La China", located in Concepción del Uruguay, Entre Ríos, was acquired from Cargill.

1986

Breeding farms and Hatchery plant located in Brandsen, Buenos Aires, and Oleos Santafesinos, in Santo Tomé, Province of Santa Fe were added.

1987

The next year, 1987, the feed mill located in Concepción del Uruguay, Entre Ríos, was bought to Cargill.

1993

Time went by and we got to the year 1993, when the hatchery plant and breeder farms in Zárate, Buenos Aires, were acquired from Cargill.

1995

During the year 1995 we added the feed mill in Capilla del Señor also from Cargill and the slaughter plant "Cahuané", both located in Buenos Aires.

1997

A new milestone for the group, the grandparents breeding farms, situated in Santa Elena, Entre Ríos, were built with Cobb Vantress Int.

2004

The next acquisition took place in the year 2004, when the powder products plant was bought. It is located in Zárate, Buenos Aires.

2006

In 2006, the company becomes international and establishes in the Republic of Uruguay.

2008

"Pinazo" processing plant, in Pilar, Buenos Aires, was acquired in 2008.

2012

During the year 2012 P.I.E.R. hatchery plant, in Gualeguaychú, Entre Rios and together the second feed mill in Capilla del Señor, Buenos Aires were built..

2014

"SUPER" processing plant, in Concepción del Uruguay , Entre Ríos was acquired in 2014.

2018

"Wade" (Cresta Roja) facilities became part of our company. Located in the south of Buenos Aires.

2024

We are still growing!

GTA TODAY

poultry
3.75 million birds/week ARG
+0.3million birds/week URU

milk
600.000 lts/month

plants
6 processing plants.
3 further porcessing plants. 5 rendering plants.
8 hatchery plants. 10 feed mills plants**.**

distribution
Retail
Fast Food Pet Food Industry Export

exports
More than 60 coutries.
35% of the production

staff
7200

Production

01. COBB ARGENTINA

Grandparent Complex
Location: Santa Elena - Entre Ríos Capacity: 5 million breeders/year Hatchery Feed Mill

02. BREEDERS

GTA
Location: Buenos Aires - Entre Ríos - Chaco
Capacity: 2.800.000 · HE/Week

Wade
Location: Buenos Aires
Capacity: 1.700.000 · HE/Week

03. HATCHERIES

La Laguna - GTA
Location: Brandsen - Buenos Aires Capacity: 800.000 · HE/Week

Zarate - GTA
Location: Zárate - Buenos Aires
Capacity: 1700000 · HE/Week

Malacate - GTA
Location: Malacate - Buenos Aires
Capacity: 200.000 · HE/Week

Pier - GTA
Location: Gualeguaychú - Entre Ríos Capacity: 1.150.000 · HE/Week

Aurora - WADE
Location: San Miguel del Monte - Buenos Aires
Capacity: 900.000 · HE/Week

04. FEED MILLS

Capilla del Señor - GTA
Location: Buenos Aires
Capacity: 20.000 · tons/feed per month

Piensos - GTA
Location: Entre Ríos
Capacity: 16.000 · tons/feed per month

La Pampita - Wade
Location: Buenos Aires
Capacity: 20.000 · tons/feed per month

Processing

01.

Cahuané - GTA
Location: Buenos Aires
Production: 185.000 · birds/day

02.

Pinazo - GTA
Location: Buenos Aires
Production: 65.000 · birds/day

03.

La China - GTA
Location: Entre Ríos
Production: 180.000 · birds/day

04.

El Jagüel - Wade
Location: Buenos Aires
Production: 65.000 · birds/day

05.

La Unión - Wade
Location: Buenos Aires
Production: 65.000 · birds/day

06.

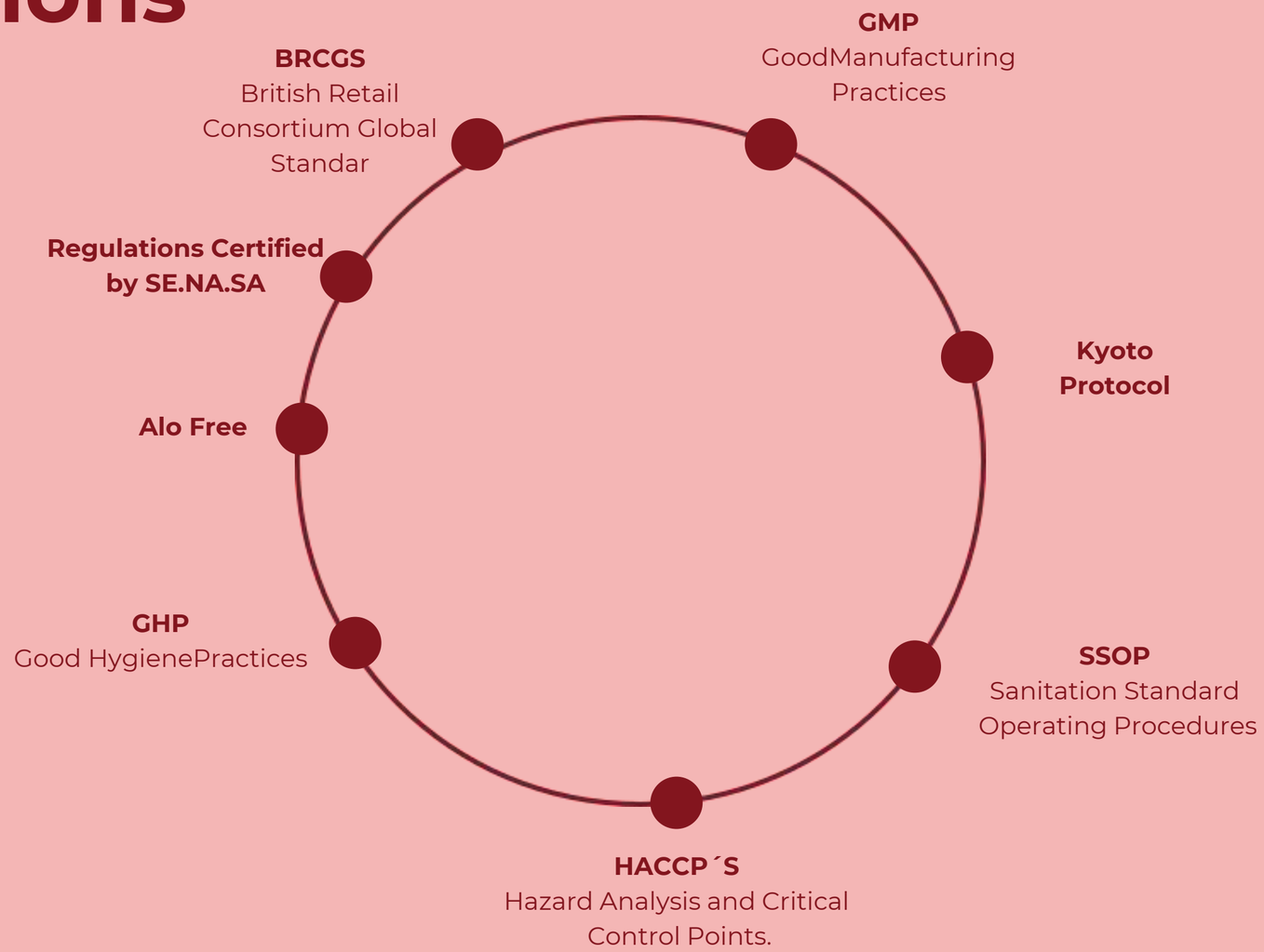
SUPER - GTA
Location: Entre Ríos
Production: 65.000 · birds/day

SUSTAINABILITY

WE ARE COMMITTED TO:

- FEEDING HIGH QUALITY AND ACCESSIBLE PROTEIN TO ARGENTINA URUGUAY AND THE WORLD.
- CONSTANTLY IMPROVING OUR ENVIRONMENTAL FOOTPRINT.
- SUPPORTING OUR COMMUNITIES.
- HELPING OUR TEAM MEMBERS TO DEVELOP THEIR POTENTIAL.

Certifications



INTERNATIONAL MARKET FROM ARGENTINA TO THE WORLD

For a world that demands better food products every day, in Granja Tres Arroyos we export 35% of our production to the five continents. Wide acceptance of our products in more than 60 international destinations is the result of a combination between best quality products, sustainable practices andcorporate responsibility.

we export to more than 60 countries

Chilled whole chicken with giblets

Content declaration - LCA Information.

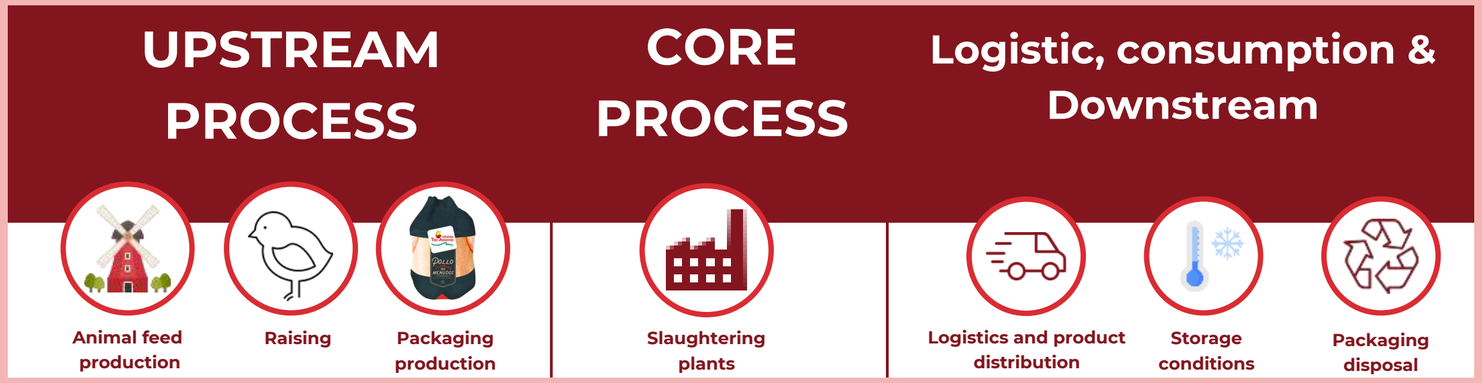
1. **FUNCTIONAL UNIT:** 1 kilogram of chilled chicken meat, slaughtered and with giblets, packaged, including packaging. The weight of the container is not included in the mentioned kilogram.
2. **Allocation:** Mass
3. **EVALUATED PERIOD:** January to December 2021
4. **Database: Agri-footprint Ecoinvent V 3.8 | Software: SIMAPRO® 9.4**
5. **Scope:** Cradle to grave

Chilled whole chicken with giblets

Nutritional facts

NUTRITIONAL TABLE		
Porción 100 g		
	Amount per proportion	% VD (*)
Energetic value	168 kcal = 706 kJ	8
Carbohydrates	0 g	0
Proteins	17 g	23
Total fats	11 g	20
Saturated fats	3,4 g	15
Trans fat	0 g	
Dietary fiber	0 g	0
Sodium	75mg	3

(*) % Daily values based on a diet of 2000 Kcal or 8400 kj.
Your daily values may be higher or lower depending on your energy needs



Production of whole chicken with giblets. - UPSTREAM PROCESS

Animal feed production: The feed mills are located in the provinces of Entre Ríos and Buenos Aires.
We have exclusive mills for breeders and others for grillers. To guarantee the quality of both the raw materials and feed, the feed mills are equipped with their own physical, chemical and quality control laboratorios microbiological.

Raising: The objective of re-breeding is to obtain healthy animals and of maximum quality that transfer these conditions to the baby chicks that they will produce. After this period, they are taken to laying farms to produce fertile eggs.

Packaging Production: Primary packaging is a printed polyethylene bag, sealed with plastic tape containing the expiry date. The Secondary packaging is a corrugated cardboard box that identifies the product through a label

Slaughtering plants - CORE PROCESS

We have 6 slaughtering plants : That are located in the districts of Pilar (Buenos Aires Province), Capitán Sarmiento (Buenos Aires Province), Concepción del Uruguay (Buenos Aires Province), Ezeiza (Buenos Aires Province), Esteban Echeverría (Buenos Aires Province) and in Río Cuarto (Córdoba Province). Nowadays, we are slaughtering around 710.000 birds a day among the plants, by following the most advanced and rigorous quality standards audited by National and International organizations. All plants are automated, with trailblazing technology.

Logistic, consumption & Downstream

Logistics and product distribution: When we distribute our products to our customers, We always maintain the cold chain and take care of all conditions to ensure quality from start to finish.
Storage conditions: At -2°C+2°C. The product shelf life is 13 days.
Packaging disposal: The packaging is eliminated through household waste

Results of the Environment performance indicators

Parameter		Unit	UPSTREAM PROCESSES			CORE PROCESSES	DOWNSTREAM PROCESSES				TOTAL without cooking	Total with cooking
			Food production	Animal growth	Packaging production	Fridge	Product distribution	Conservation	Cooking	End of life packaging		
Global Warming Potential (GWP)	Fossil	kg CO_2 eq	5,68E-01	3,78E-01	4,14E-02	3,64E-01	9,33E-02	3,66E-01	1,28E+00	7,91E-04	1,81E+00	**3,09E+00**
	Land use and land transformation	kg CO_2 eq	1,04E-03	7,24E-04	1,59E-04	6,01E-03	4,14E-05	8,77E-03	7,05E-03	7,47E-07	1,67E-02	**2,38E-02**
	Biogenic	kg CO_2 eq	7,34E-03	1,11E-02	1,55E-02	1,03E-02	6,54E-04	7,69E-03	7,03E-03	7,96E-06	5,27E-02	**5,97E-02**
	TOTAL	kg CO_2 eq	**5,76E-01**	**3,90E-01**	**5,71E-02**	**3,80E-01**	**9,40E-02**	**3,82E-01**	**1,29E+00**	**7,99E-04**	**1,88E+00**	3,17E+00
Acidification Potential (AP)		mol H^+ eq	2,82E-03	9,48E-04	2,17E-04	7,19E-04	6,05E-04	9,78E-04	1,90E-03	7,44E-06	6,30E-03	**8,19E-03**
Eutrophication potential (EP)	Aquatic freshwater	kg P eq	8,72E-04	1,17E-05	1,22E-05	3,44E-05	1,50E-05	1,69E-05	2,64E-05	7,24E-08	9,63E-04	**9,89E-04**
	Aquatic marine	kg N eq	7,42E-04	3,29E-04	7,51E-05	2,03E-04	2,29E-04	1,66E-04	3,51E-04	2,58E-06	1,75E-03	**2,10E-03**
	Aquatic terrestrial	mol N eq	7,20E-03	3,27E-03	5,95E-04	1,95E-03	2,49E-03	1,78E-03	3,75E-03	2,83E-05	1,73E-02	**2,11E-02**
Photochemical oxidant creation potential (POCP)		kg NMVOC eq	2,72E-03	9,89E-04	1,84E-04	6,29E-04	6,88E-04	6,06E-04	1,47E-03	8,23E-06	5,83E-03	**7,29E-03**
Ozone layer depletion (ODP)		kg CFC_{11} eq	1,34E-07	2,49E-08	2,96E-09	2,80E-08	1,98E-08	3,63E-08	1,28E-07	3,20E-10	2,46E-07	**3,74E-07**
Abiotic depletion potential (ADP) "*"	Metals and minerals	kg Sb eq	1,83E-06	5,76E-07	2,27E-07	1,09E-06	4,15E-07	2,14E-06	1,85E-06	1,80E-09	6,28E-06	**8,13E-06**
	Fossil resources	MJ, net calorific value	6,48E+00	2,84E+00	7,86E-01	3,38E+00	1,36E+00	6,40E+00	2,05E+01	2,21E-02	2,13E+01	**4,18E+01**
Water deprivation potential (WPD) "*"		m^3 world eq. deprived	6,00E-02	7,28E-02	1,98E-02	1,84E-01	4,85E-03	5,24E-01	4,23E-01	9,94E-04	8,66E-01	**1,29E+00**

***Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.**

Results of the Environment performance indicators

Parameter			UPSTREAM PROCESSES			CORE PROCESSES	DOWNSTREAM PROCESSES				TOTAL without cooking	TOTAL with cooking
			food production	Animal growth	Packaging production	Fridge	Product distribution	Conservation	Cooking	End of life packaging		
Primary energy resources – Renewable	Use as energy carrier	MJ, net calorific value	2,22E-01	1,53E-01	1,73E-02	4,10E-01	1,23E-02	1,27E+00	1,04E+00	1,28E-04	2,08E+00	3,12E+00
	Used as raw materiales	MJ, net calorific value	9,76E-02	4,16E-01	7,61E-01	1,19E-01	5,20E-03	4,98E-03	1,01E-02	6,46E-05	1,40E+00	1,41E+00
	Total	MJ, net calorific value	**3,19E-01**	**5,69E-01**	**7,79E-01**	**5,29E-01**	**1,75E-02**	**1,27E+00**	**1,05E+00**	**1,92E-04**	**3,49E+00**	**4,54E+00**
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	2,60E+00	1,91E+00	0,00E+00	1,62E+00	9,14E-01	1,87E+00	1,53E+01	0,00E+00	8,91E+00	2,43E+01
	Used as raw materiales	MJ, net calorific value	2,76E-03	1,38E-04	1,20E-04	4,07E-03	5,82E-05	3,08E-05	9,71E-05	3,86E-06	7,18E-03	7,28E-03
	Total	MJ, net calorific value	**2,60E+00**	**1,91E+00**	**1,20E-04**	**1,62E+00**	**9,14E-01**	**1,87E+00**	**1,53E+01**	**3,86E-06**	**8,92E+00**	**2,43E+01**

Study results

The extensive soil surfaces available for sowing, allow a high rotation between different crops that prevents rapid land degradation.

It consumes less fuel in preparing the soil prior to sowing. Due to the climatic conditions of the “Pampa húmeda” region, artificial irrigation is practically not used; the favorable effect is the reduction of different environmental impacts.

Intensive production with advanced technology allows a reduction in energy consumption per unit of mass of manufactured products, adding the technology used to transform effluents into usable energy to be utilized in the same plants, reducing the need for external sources while reducing the impacts of the treatment and final disposal of waste.

Our commitment is to respect and care for the environment. The company adheres to the concept of “economy circular” which involves sharing, reusing and recycling to contribute to sustainable development.

Study results

The location of plants in different provinces of Argentina and within these in different regions, allows to reduce the distance of transport in the stage of transporting the manufactured products to the different marketing points as well as reducing the consumption of fuel used with the consequent drop of gas emissions.

REFERENCES

GENERAL PROGRAMME INSTRUCTIONS FOR THE INTERNATIONAL EPD® SYSTEM. GPI | versión 4.0.

ISO 14025:
Environmental labels and declarations. Type III environmental declarations. Principles and procedures..

ISO 14040:
Environmental management. Life cycle assessment. Principles and framework.

ISO 14043:
Environmental management. Life cycle analysis. Interpretation of the life cycle.

ISO 14044:
Environmental management. Life cycle assessment. Requirements and guidelines.

ISO 14046:
Environmental management. Water footprint. Principles, requirements and guidelines.

ISO 14067:
Greenhouse gases. Carbon footprint of the products. Requirements and guidelines for its quantification.

Website EPD International System
https://www.environdec.com

GRANJA TRES ARROYOS

SABEMOS MUCHO DE POLLO

EPD

Argentina EPD