

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-05806
Publication date:	2022-03-22
Valid until:	2027-03-22

Environmental Product Declaration



In accordance with ISO 14025 for:

“Fonteviva natural mineral water”

“Acqua minerale naturale Fonteviva”

from

E.V.A.M.



An EPD should provide current information and may be updated if conditions change.

The stated validity is therefore subject to the continued registration and publication at “www.environdec.com.”

ACQUA MINERALE NATURALE
FONTEVIVA



Programme information

Programme:	<p>The International EPD® System</p> <p>EPD International AB Box 210 60 SE-100 31 Stockholm Sweden</p> <p>www.environdec.com info@.environdec.com</p>
-------------------	---

<p>Product category rules (PCR): <i>BOTTLED WATERS, NOT SWEETENED OR FLAVOURED, PCR 2010:11, VERSION 4.0 , UN CPC 24410.</i></p>
<p>PCR review was conducted by: Technical Committee of the International EPD® System</p>
<p>Independent third-party verification of the declaration and data, according to ISO 14025:2006:</p> <p><input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification</p>
<p>Third party verifier: DNV Business Assurance Italy S.r.l.</p>
<p>Accredited by: Accredia</p>
<p>Procedure for follow-up of data during EPD validity involves third party verifier:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable.

Company information

Owner of the EPD: E.V.A.M. SPA

E.V.A.M. SPA was founded in 1973 when the **Municipality of Massa**, for the enhancement and marketing of its mineral waters, established E.V.A.M. Spa, an acronym for "Ente Valorizzazione Acque Minerali".

The operational headquarters is established in Canevara, near the Apuan Alps of Massa and in 1980 the construction of the current plant is completed.

Over the years, the company has grown gradually and has been able to make the most of the Fonteviva brand, which now in the Apuano-Versilia territory and beyond, everyone knows.



In the awareness of how much its actions are connected to the natural resource that, in absolute terms, has a closer link with life, E.V.A.M. Spa adheres to some simple rules:

- Respect the environment, nature and the territory
- Ensuring the safety and healthiness of water
- Protecting health and ensuring consumer expectations
- Ensure full traceability of both the product and raw materials
- Fully meet all customer needs



Product-related or management system-related certifications: ISO 14001 (Number of certificate: 10000449671-MSC-ACCREDIA-ITA)

Production site: E.V.A.M. SPA, Via Campanelle 3, 54100 Prati della Ciocca (Massa Carrara, Italy)

Product information



Product name: Acqua minerale Fonteviva (PET bottle 0,5L; 1L; 1,5L; non-returnable glass bottle 0,5L; 0,75L; 1L).

Product identification: Bottled mineral water, not flavoured or sweetened, in PET and disposable glass bottles.

Product description: Fonteviva water, microbiologically pure and light, holds within itself all the best of this extraordinary territory, presenting unique characteristics, of absolute purity and low sodium content. This is why many people choose it for a balanced diet. Fonteviva, with a fixed residue of less than 50 milligrams, can boast the title of minimally mineralized

mineral water as required by the Ministry of Health.

UN CPC code: UN CPC 24410

Geographical scope: Italy



- *Fonteviva mineral water bottled in non-returnable glass.*



- *Fonteviva mineral water bottled in PET.*

Fonteviva still water chemical analysis

Chemical and chemical-physical analysis (by the University of Pavia on 30/08/2018)	
Temperature at source	10,9° C
Specific electrical conductivity 20°C	80 µs/cm
pH at the source	9,9
Fixed residue 180°	49 mg/l
Sodium	4,8 mg/l
Potassium	0,2 mg/l
Calcium	7,4 mg/l
Chloride	9,8 mg/l
Sulphate	3,5 mg/l
Bicarbonate	28,0 mg/l
Silica	4,5 mg/l
Ammonium ion	< 0,05 mg/l

Fonteviva sparkling water chemical analysis

Chemical and chemical-physical analysis (by the University of Pavia on 30/08/2018)	
Temperature at source	10,9° C
Specific electrical conductivity 20°C	80 µs/cm
pH at the source	9,9
Fixed residue 180°	49 mg/l
Sodium	4,8 mg/l
Potassium	0,2 mg/l
Calcium	7,4 mg/l
Chloride	9,8 mg/l
Sulphate	3,5 mg/l
CO2	10,0 mg/l
Bicarbonate	28,0 mg/l
Silica	4,5 mg/l
Ammonium ion	< 0,05 mg/l

LCA information

The LCA study was carried out by examining the year 2020, considering as a functional unit 1L of Fonteviva mineral water for all formats produced by the company.

All data were collected at the company, through the compilation of checklists relating to the composition of the products, the phases of the production process, the consumption in input and output and the transport of raw materials carried out by suppliers, and finished products to the points of sale (primary data).

Where primary data were not sufficient to reconstruct production-related activities, data from the scientific literature (secondary data) were retrieved or assumptions were made to make the LCA study as realistic as possible.

All Proxy Data does not exceed 10% on each impact category.

For transports related to the Core module, for each product supplied (packaging/consumables) the distance was considered average of the various suppliers from the EVAM plant.

For the transport of the product to the points of sale and to the customer, the data relating to the sales recorded in the year 2020 were used.

Functional unit / declared unit: 1L of each size.

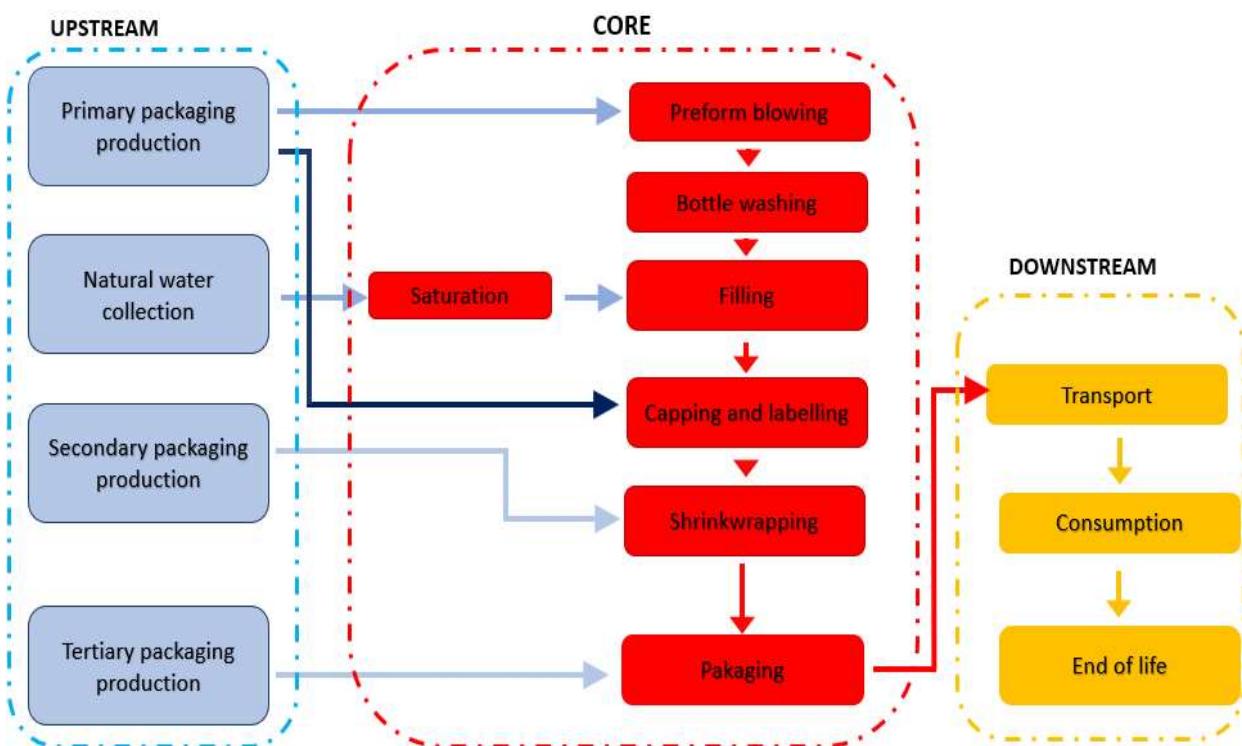
Time representativeness: year 2020.

Database(s) and LCA software used: Ecoinvent 3.7.1; Open LCA 1.10.3.

System diagram:

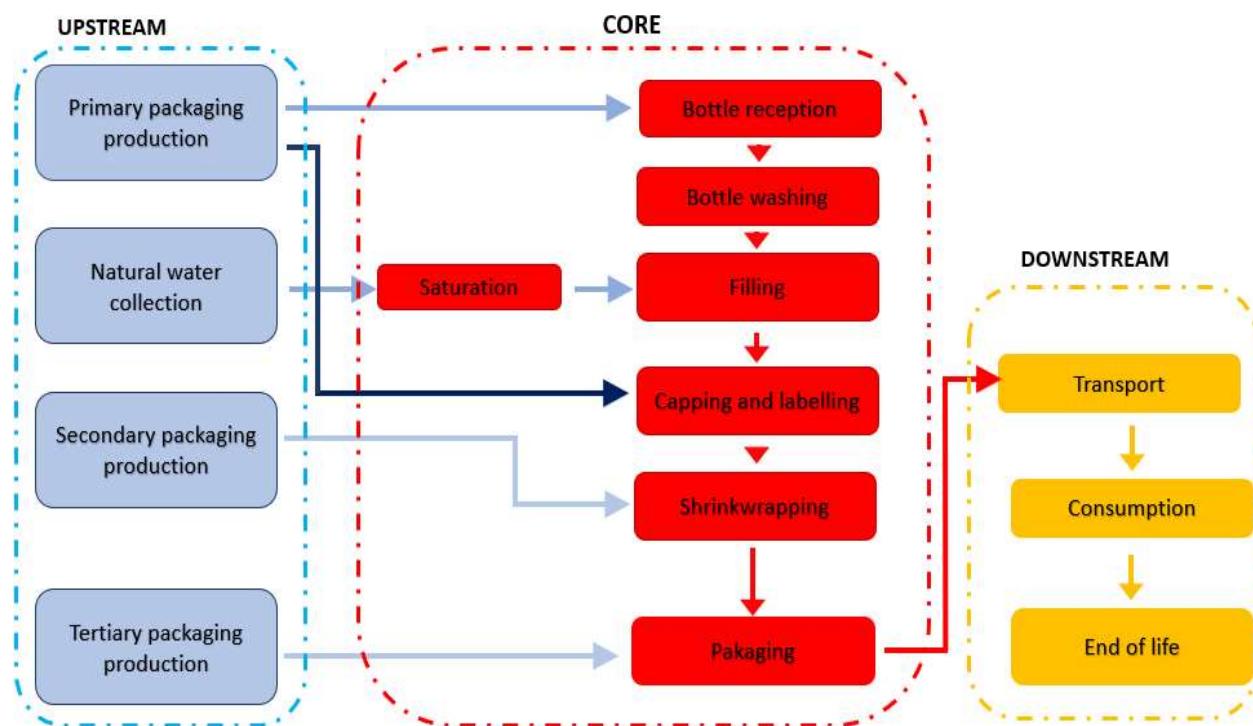
PET BOTTLE

System boundaries: from cradle-to-grave.



NON-RETURNABLE GLASS BOTTLE

System boundaries: from cradle-to-grave.



Excluded lifecycle stages: all environmental impacts that do not modify the results of the LCA study impacting more than 1% of the total on the identified values (cut-off rules).

The use of natural gas to heat the water of the company's sanitary facilities and the inclusion of CO₂ in sparkling water bottles are part of the cut-off.

LCA study conducted by:

Gruppo Gelati SRL

(Via Marconi, 49 - 43058 Sorbolo [Parma] – ITALY)

Tel: +39 0521 697525 – 690849

Fax: +39 0521 698018

END OF LIFE SCENARIOS

To represent the end-of-life scenario corresponding to the type of waste generated after the consumption of the product and the type of treatment it undergoes, the urban waste report updated to the year 2020 drawn up by ISPRA was used, to calculate the percentages on the national territory of specific treatments for each type of exhausted product.

Landfill

Landfill	
Aluminium	24 %
Paper	12 %
Wood	35 %
Plastic	10 %
Glass	23 %

Recycling

Recycling	
Aluminium	70 %
Paper	81 %
Wood	61 %
Plastic	60 %
Glass	77 %

Incineration

Incineration	
Aluminium	6 %
Paper	7 %
Wood	4 %
Plastic	30%
Glass	0 %

The distance from the point of sale to the waste disposal site was considered with an average approach of 50 km.

Content declaration

CONTENENT DECLARATION PET 0,5 L



PRODUCT DESCRIPTION	QUANTITY PER FUNCIONAL UNIT (1L)	PERCENTAGE PER FUNCIONAL UNIT (1L)
Product		
Fonteviva mineral water	1l	95.3 %
Primary pakaging		
Pet preform	0.027 kg	2,65 %
HDPE Cap	0.0043 kg	0.40 %
Paper label	0.004 kg	0.38 %
Glue	0.0005 kg	0.047 %
Secondary pakaging		
LDPE Film and handle burden	0.00270 kg	0.25 %
Tertiary pakaging		
Cardboard	0.01 kg	1 %
LDPE Film	0.0006 kg	0.057 %
TOTAL	1.05 kg	100%

CONTENENT DECLARATION PET 1 L



PRODUCT DESCRIPTION	QUANTITY PER FUNCIONAL UNIT (1L)	PERCENTAGE PER FUNCIONAL UNIT (1L)
Product		
Fonteviva mineral water	1l	95.8 %
Primary pakaging		
Pet preform	0.027 kg	2,58%

HDPE Cap	0.00215 kg	0.20%
Paper label	0.002 kg	0.19%
Glue	0.0003 kg	0.028%
Secondary pakaging		
LDPE Film and handle burden	0.00275 kg	0.26%
Tertiary pakaging		
Cardboard	0.0083 kg	0.79%
LDPE Film	0.00047 kg	0.045%
TOTAL	1.043 kg	100%

CONTENENT DECLARATION PET 1,5 L



PRODUCT DESCRIPTION	QUANTITY PER FUNCIONAL UNIT (1L)	PERCENTAGE PER FUNCIONAL UNIT (1L)
Product		
Fonteviva mineral water	1l	97 %
Primary pakaging		
Pet preform	0.017 kg	1,69%
HDPE Cap	0.0013 kg	0.14%
Paper label	0.00028 kg	0.13%
Glue	0.00028 kg	0.027%
Secondary pakaging		
LDPE Film and handle burden	0.0022 kg	0.22%
Tertiary pakaging		
Cardboard	0.0066 kg	0.64%
LDPE Film	0.00059 kg	0.05%
TOTAL	1.029 kg	100%

CONTENENT DECLARATION GLASS 0,5 L



PRODUCT DESCRIPTION	QUANTITY PER FUNCIONAL UNIT (1L)	PERCENTAGE PER FUNCIONAL UNIT (1L)
Product		
Fonteviva mineral water	1 l	62%
Primary pakaging		
Glass bottle	0.570 kg	35.5 %
Alluminium cap	0.004 kg	0.25%
Paper label	0.004 kg	0.25%
Glue	0.0007 kg	0.04%
Secondary pakaging		
LDPE Film and handle burden	0.0022 kg	0.23%
Tertiary pakaging		
Cardboard	0.03 kg	1.86%
LDPE Film	0.00028	0.017%
TOTAL	1.60 kg	100%

CONTENENT DECLARATION GLASS 0,75 L



PRODUCT DESCRIPTION	QUANTITY PER FUNCIONAL UNIT (1L)	PERCENTAGE PER FUNCIONAL UNIT (1L)
Product		
Fonteviva mineral water	1 l	60%
Primary pakaging		
Glass bottle	0.613 kg	36.8%
Alluminium cap	0.0026 kg	0.16%
Paper label	0.0026 kg	0.16%
Glue	0.00054 kg	0.024%
Secondary pakaging		

LDPE Film and handle burden	0.00048	0.028%
Tertiary pakaging		
Cardboard	0.044 kg	2.64 %
LDPE Film	0.00030 kg	0.021%
TOTAL	1.66 kg	100%

CONTENENT DECLARATION GLASS 1 L



PRODUCT DESCRIPTION	QUANTITY PER FUNCIONAL UNIT (1L)	PERCENTAGE PER FUNCIONAL UNIT (1L)
Product		
Fonteviva mineral water	1 l	57,54%
Primary pakaging		
Glass bottle	0.430 kg	29.3%
Alluminium cap	0.002 kg	0.13%
Paper label	0.002 kg	0.13%
Glue	0.00041 kg	0.028%
Secondary pakaging		
LDPE Film and handle burden	0.0017	0.079%
Tertiary pakaging		
Cardboard	0.0283 kg	1.93%
LDPE Film	0.00117	0.018%
TOTAL	1.46 kg	100%

Data quality

Categories of Environmental Impact

In the following tables, divided into the three phases Upstream - Core - Downstream Module and for each packaging format, are reported:

Environmental Impact

- Fossil GWP (Kg CO₂ eq)
- Biogenic GWP (Kg CO₂ eq)
- GWP Land use and transformation (Kg CO₂ eq)
- Total GWP (Kg CO₂ eq)
- Potential acidification (kg SO₂ eq.)
- Eutrophication (kg PO₄ eq)
- Potentially tropospheric ozone formation (kg NMVOC eq)
- Consumption of abiotic resources (elements) (kg Sb eq.)
- Consumption of abiotic (fossil) resources (MJ)
- Water scarcity potential (m³ eq.)

Use of resources

- Renewable energy resources (MJ)
- Non-renewable energy resources (MJ)
- Secondary material (Kg)
- Renewable secondary fuels (MJ, net calorific value)
- Non-renewable secondary fuels (MJ, net calorific value)
- Net use of fresh water (m³)

Waste production

- Production of hazardous waste (Kg)
- Production of non-hazardous waste (Kg)
- Production of radioactive waste (Kg)

Any discrepancies between the reported values of the individual items and the totals of the sums of the individual items are to be attributed to approximations of decimal places.

Environmental performance

- Potential environmental impact of Fonteviva PET 0,5L



PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	8.81E-02	3.77E-02	1.04E-01	2.30E-01
	Biogenic	kg CO ₂ eq.	4.40E-04	7.00E-05	8.10E-04	1.32E-03
	Land use and land transformation	kg CO ₂ eq.	2.40E-04	1.00E-05	4.00E-05	2.90E-04
	TOTAL	kg CO ₂ eq.	8.85E-02	3.78E-02	1.05E-01	2.32E-01
Acidification potential (AP)		kg SO ₂ eq.	3.90E-04	1.20E-04	2.30E-04	7.40E-04
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	1.10E-04	2.00E-05	7.00E-05	2.00E-04
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	4.10E-04	7.00E-05	2.20E-04	7.00E-04
Abiotic depletion potential – Elements		kg Sb eq.	2.14E-07	4.17E-08	4.57E-07	7.13E-07
Abiotic depletion potential – Fossil resources		MJ, net calorific value	6.38E-01	5.06E-01	1.03E+00	2.18E+00
Water scarcity potential		m ³ eq.	1.11E-01	4.63E-03	1.08E-02	1.26E-01

Use of resources

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Primary energy	Use as energy carrier	MJ, net calorific value	5.29E-01	2.09E-02	2.37E-02	5.73E-01

resources – Renewable	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	5.29E-01	2.09E-02	2.37E-02	5.73E-01
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	1.25E+00	5.93E-01	1.07E+00	2.91E+00
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	1.25E+00	5.93E-01	1.07E+00	2.91E+00
Secondary material	kg	0	0	0	0	0
Renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Net use of fresh water	m ³	1.00E+00	1.00E-01	0	1.10E+00	

Waste production

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	1.79E-06	7.97E-07	2.85E-06	5.44E-06
Non-hazardous waste disposed	kg	4.29E-03	1.58E-03	3.42E-02	4.00E-02
Radioactive waste disposed	kg	2.16E-06	1.71E-06	6.96E-06	1.08E-05

Potential environmental impact of Fonteviva PET 1L



PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	8.37E-02	3.82E-02	7.12E-02	1.93E-01
	Biogenic	kg CO ₂ eq.	4.00E-04	7.00E-05	7.30E-04	1.20E-03
	Land use and land transformation	kg CO ₂ eq.	2.30E-04	0.00E+00	3.00E-05	2.60E-04
	TOTAL	kg CO ₂ eq.	8.43E-02	3.83E-02	7.20E-02	1.95E-01
Acidification potential (AP)		kg SO ₂ eq.	3.80E-04	1.20E-04	1.30E-04	6.30E-04
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	9.70E-05	3.30E-05	4.00E-05	1.70E-04
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	4.00E-04	7.00E-05	1.40E-04	6.10E-04
Abiotic depletion potential – Elements		kg Sb eq.	1.98E-07	4.52E-08	2.71E-07	5.14E-07
Abiotic depletion potential – Fossil resources		MJ, net calorific value	5.96E-01	5.14E-01	6.10E-01	1.72E+00
Water scarcity potential		m ³ eq.	1.09E-01	4.68E-03	7.72E-03	1.21E-01

Use of resources

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Primary energy	Use as energy carrier	MJ, net calorific value	4.89E-01	2.11E-02	1.47E-02	5.25E-01

resources – Renewable	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	4.89E-01	2.11E-02	1.47E-02	5.25E-01
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	6.90E-01	6.01E-01	6.33E-01	1.92E+00
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	6.90E-01	6.01E-01	6.33E-01	1.92E+00
Secondary material	kg	0	0	0	0	0
Renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Net use of fresh water	m ³	1.00E+00	1.00E-01	0	0	1.10E+00

Waste production

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	1.71E-06	8.20E-07	1.65E-06	4.19E-06
Non-hazardous waste disposed	kg	3.95E-03	1.83E-03	2.08E-02	2.66E-02
Radioactive waste disposed	kg	1.93E-06	1.77E-06	4.04E-06	7.75E-06

Potential environmental impact of Fonteviva PET 1,5L



PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	6.18E-02	3.94E-02	5.80E-02	1.59E-01
	Biogenic	kg CO ₂ eq.	3.60E-04	7.00E-05	4.80E-04	9.10E-04
	Land use and land transformation	kg CO ₂ eq.	2.10E-04	0.00E+00	3.00E-05	2.40E-04
	TOTAL	kg CO ₂ eq.	6.18E-02	3.94E-02	5.80E-02	1.59E-01
Acidification potential (AP)		kg SO ₂ eq.	6.24E-02	3.95E-02	5.85E-02	1.60E-01
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	2.80E-04	1.20E-04	1.30E-04	5.30E-04
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	8.14E-05	2.86E-05	4.00E-05	1.50E-04
Abiotic depletion potential – Elements		kg Sb eq.	2.90E-04	8.00E-05	1.10E-04	4.80E-04
Abiotic depletion potential – Fossil resources		MJ, net calorific value	1.75E-07	5.28E-08	2.48E-07	4.76E-07
Water scarcity potential		m ³ eq.	5.18E-01	5.32E-01	5.60E-01	1.61E+00

Use of resources

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Primary energy resources – Renewable	Use as energy carrier	MJ, net calorific value	4.47E-01	2.05E-02	1.29E-02	4.81E-01
	Used as raw materials	MJ, net calorific value	0	0	0	0

	TOTAL	MJ, net calorific value	4.47E-01	2.05E-02	1.29E-02	4.81E-01
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	6.06E-01	6.09E-01	5.81E-01	1.80E+00
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	6.06E-01	6.09E-01	5.81E-01	1.80E+00
Secondary material	kg	0	0	0	0	0
Renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Net use of fresh water	m³	1.00E+00	1.00E-01	0	0	1.10E+00

Waste production

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	1.63E-06	8.69E-07	1.54E-06	4.04E-06
Non-hazardous waste disposed	kg	3.52E-03	2.38E-03	1.86E-02	2.45E-02
Radioactive waste disposed	kg	1.59E-06	1.89E-06	3.77E-06	7.24E-06

Potential environmental impact of Fonteviva Non-Returnable Glass 0,5L



PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	5.66E-01	1.15E-01	5.52E-01	1.23E+00
	Biogenic	kg CO ₂ eq.	4.06E-03	1.00E-04	1.80E-04	4.34E-03
	Land use and land transformation	kg CO ₂ eq.	8.40E-04	5.00E-05	3.20E-04	1.21E-03
	TOTAL	kg CO ₂ eq.	5.70E-01	1.15E-01	5.52E-01	1.24E+00
Acidification potential (AP)		kg SO ₂ eq.	4.41E-03	3.00E-04	5.18E-03	9.89E-03
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	7.80E-04	8.00E-05	6.70E-04	1.53E-03
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	2.69E-03	8.50E-04	3.58E-03	7.12E-03
Abiotic depletion potential – Elements		kg Sb eq.	7.58E+00	1.63E+00	7.74E+00	1.69E+01
Abiotic depletion potential – Fossil resources		MJ, net calorific value	7.58E+00	1.63E+00	7.74E+00	1.69E+01
Water scarcity potential		m ³ eq.	2.32E-01	1.19E-02	4.88E-02	2.93E-01

Use of resources

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
-----------	------	----------	------	------------	-------

Primary energy resources – Renewable	Use as energy carrier	MJ, net calorific value	2.01E+00	4.43E-02	1.33E-01	2.19E+00
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	2.01E+00	4.43E-02	1.33E-01	2.19E+00
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	8.60E+00	1.75E+00	7.94E+00	1.83E+01
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	8.60E+00	1.75E+00	7.94E+00	1.83E+01
Secondary material	kg	0.29	0	0	0	0.29
Renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Net use of fresh water	m ³	1.00E+00	1.00E-01	0	0	1.10E+00

Waste production

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	2.28E-05	3.98E-06	1.82E-05	4.49E-05
Non-hazardous waste disposed	kg	6.32E-02	3.68E-02	1.87E-01	2.87E-01
Radioactive waste disposed	kg	3.74E-05	9.44E-06	5.32E-05	1.00E-04

Potential environmental impact of Fonteviva Non-Returnable Glass 0,75L



PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	5.95E-01	1.35E-01	4.79E-01	1.21E+00
	Biogenic	kg CO ₂ eq.	4.29E-03	1.10E-04	1.65E-03	6.05E-03
	Land use and land transformation	kg CO ₂ eq.	8.30E-04	6.00E-05	9.00E-05	9.80E-04
	TOTAL	kg CO ₂ eq.	5.99E-01	1.35E-01	4.80E-01	1.21E+00
Acidification potential (AP)		kg SO ₂ eq.	4.76E-03	3.40E-04	3.60E-03	8.70E-03
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	8.70E-04	9.00E-05	4.60E-04	1.42E-03
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	2.56E-03	3.00E-04	2.41E-03	5.27E-03
Abiotic depletion potential – Elements		kg Sb eq.	4.08E-06	6.61E-07	7.53E-07	5.50E-06
Abiotic depletion potential – Fossil resources		MJ, net calorific value	8.22E+00	1.92E+00	2.21E+00	1.23E+01
Water scarcity potential		m ³ eq.	2.54E-01	1.38E-02	3.39E-02	3.02E-01

Use of resources

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Primary energy resources – Renewable	Use as energy carrier	MJ, net calorific value	2.34E+00	5.05E-02	4.01E-02	2.43E+00
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	2.34E+00	5.05E-02	4.01E-02	2.43E+00
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	9.39E+00	2.06E+00	2.27E+00	1.37E+01
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	9.39E+00	2.06E+00	2.27E+00	1.37E+01
Secondary material	kg	0.312	0	0	0	0.312
Renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Net use of fresh water	m ³	1.00E+00	1.00E-01	0	0	1.10E+00

Waste production

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	6.77E-02	4.61E-02	6.77E-02	1.81E-01
Non-hazardous waste disposed	kg	2.05E-05	4.82E-06	5.06E-06	3.03E-05
Radioactive waste disposed	kg	4.12E-05	1.15E-05	1.54E-05	6.80E-05

Potential environmental impact of Fonteviva Non-Returnable Glass 1L



PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	4.30E-01	1.47E-01	3.53E-01	9.30E-01
	Biogenic	kg CO ₂ eq.	3.14E-03	1.10E-04	1.22E-03	4.47E-03
	Land use and land transformation	kg CO ₂ eq.	6.40E-04	7.00E-05	7.00E-05	7.80E-04
	TOTAL	kg CO ₂ eq.	4.33E-01	1.47E-01	3.54E-01	9.34E-01
Acidification potential (AP)		kg SO ₂ eq.	9.08E-03	2.60E-04	4.89E-03	1.42E-02
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	6.00E-04	1.00E-04	3.10E-04	1.01E-03
Photochemical oxidant formation potential (POFP)		kg NMVOC eq.	1.84E-03	3.20E-04	1.62E-03	3.78E-03
Abiotic depletion potential – Elements		kg Sb eq.	2.87E-06	7.32E-07	6.38E-07	4.24E-06
Abiotic depletion potential – Fossil resources		MJ, net calorific value	5.80E+00	2.09E+00	1.75E+00	9.63E+00
Water scarcity potential		m ³ eq.	1.90E-01	1.49E-02	2.52E-02	2.30E-01

Use of resources

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Primary energy	Use as energy carrier	MJ, net calorific value	1.62E+00	5.39E-02	3.33E-02	1.70E+00

resources – Renewable	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	1.62E+00	5.39E-02	3.33E-02	1.70E+00
Primary energy resources – Non-renewable	Use as energy carrier	MJ, net calorific value	6.61E+00	2.22E+00	1.80E+00	1.06E+01
	Used as raw materials	MJ, net calorific value	0	0	0	0
	TOTAL	MJ, net calorific value	6.61E+00	2.22E+00	1.80E+00	1.06E+01
Secondary material	kg	0.21	0	0	0	0.21
Renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0	0
Net use of fresh water	m ³	1.00E+00	1.00E-01	0	0	1.10E+00

Waste production

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Hazardous waste disposed	kg	1.46E-05	5.28E-06	4.25E-06	2.42E-05
Non-hazardous waste disposed	kg	4.75E-02	5.12E-02	5.58E-02	1.55E-01
Radioactive waste disposed	kg	2.87E-05	1.26E-05	1.21E-05	5.34E-05

References

- General Programme Instructions of the International EPD® System. Version 4.0.
- PCR *BOTTLED WATERS, NOT SWEETENED OR FLAVOURED, PCR 2010:11, VERSION 4.0 , UN CPC 24410.*
- Municipal waste report by ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale) – 2020 edition.
- Open LCA 1.10.3 – database Ecoinvent 3.7.1
- Gruppo Gelati- "LCA TECHNICAL REPORT PRODUCTION OF FONTEVIVA WATER" rev 6 (23/03/2022)



www.environdec.com