1 CARBON (1) NEUTRALITY DECLARATION

Carbon neutrality of ***evian® products sold in France, UK, Germany, Benelux & Switzerland*** *achieved by* ***Société Anonyme des Eaux Minérales d'Evian****, in accordance with PAS 2060 on 31st of December 2022 with commitment to maintain to 31st of December 2023 for the period commencing on 1st of January 2023,* ***Carbon Trust*** *certified.*

Signed: Dawid Borowiec, evian® Brand Director, Société Anonyme des Eaux Minérales d'Evian

Date: 19/09/23

This Qualifying Explanatory Statement (QES) contains all the required information on the carbon neutrality of the given subject. All of the information provided within this report has been reviewed by a third-party and is believed to be correct. If provided with any information affecting the validity of the following statements, this document will be updated accordingly to reflect evian® brand's current status towards carbon neutrality. This report is publically available on evian® website.

The assurance statement from Carbon Trust can be found in *Annex C* of this report.

(1) Here, carbon is used as shorthand for aggregated greenhouse gas (GHG) emissions, reported as carbon dioxide equivalents (CO_2e). Hereafter in this report, the full term or CO_2e is employed. A full list of GHG emissions included in the inventory is provided in *Annex D* of this report.

This document forms the Qualifying Explanatory Statement (QES) to demonstrate that evian® brand has achieved carbon neutrality for evian® products sold in France, UK, Germany, Benelux & Switzerland, in accordance with the *Publically Available Specification for the Demonstration of Carbon Neutrality* (PAS 2060:2014) and is committed to being carbon neutral in accordance with PAS 2060:2014.

A checklist of information required and its location in this QES is provided as *Annex A*.

Table 2.1 ***General information***

PAS 2060 Information Requirement	Information as it relates to evian®
Individual responsible for the evaluation and provision of data necessary for the substantiation of the declaration including that of preparing, substantiating, communicating and maintaining the declaration.	Jean Descoeur, Carbon Master, Evian Volvic World; Jérémy Suzanne, Nature & Environment Manager, Evian Volvic World.
Entity making PAS 2060 declaration.	Société des Eaux Minérales d'Evian (SAEME)
Subject of PAS 2060 declaration.	All natural mineral water beverages & bottles products sold in France, UK, Germany, Benelux & Switzerland under evian® brand, including: • Lost glass 330 mL; • Lost glass 750 mL; • Returnable glass 500 mL; • Returnable glass 1 L; • PET 310 mL (evian - Totem); • PET 330 mL (evian & evian Prestige); • PET 370 mL (evian Fruits & Plants); • PET 400 mL (evian); • PET 500 mL (evian & evian Prestige); • PET 750 mL (evian & evian Prestige); • PET 1 L (evian & evian Prestige); • PET 1,25L (evian Prestige); • PET 1.5 L (evian); • PET 5L (evian) and its base; • PET 6L (evian) • evian Spray 50, 150, 300, 400 mL; • Can 330 mL (evian beverages); • Can 330 mL (evian Sparkling); • Lost glass 330 mL (evian Sparkling); • Lost glass 750 mL (evian Sparkling); • PET 1 L (evian Sparkling)*; *new products since the previous certification Notes: • The evian renew base, which is not produced in Evian plant, represents less than 0.01% of total evian® volumes sold in the world. Given the absence of data for most life cycle stages for these products and the significant

	efforts needed to fill this data gap, no full calculation of the associated impact could be performed within the timeline of this inventory. An estimate has however been included to account for these product's emissions in the overall inventory for the whole evian® brand. • The evian® sprays, which are not headed by SAEME, represent less than 0.07% of total evian® volumes sold in France, UK, Germany, Benelux & Switzerland. Given the absence of data for the logistic part for this range and the significant efforts test needed to fill this data gap, no full calculation of the associated impact could be performed within the timeline of this inventory. An estimate has however been included to account for this range's emissions in the overall inventory for the whole evian® brand.
Subject of PAS 2060 commitment	• Some new evian® products not mentioned in this list may be launched in 2023. In case of material change of the calculated carbon footprint, this one would be recalculated, and the list of products updated accordingly. These products will be offset in the following recertification stage. Carbon Trust has allowed for the use of the carbon neutrality logo for these selected products on the condition that: - These products are generally equivalent in nature to those certified in the 2022 footprint. - The additional sales of these new products do not materially affect the neutrality claim. This may be measured by volume of sales in KL, where a less that 5% increase would be considered immaterial. Greater than 5% would require further review by Carbon Trust. - Carbon Trust is updated with details of each new SKU which has been labelled, as and when this is confirmed. - QES is updated to include the commitment to achieving neutrality of the new products."
Rationale for selection of the subject.	The subject reflects all natural mineral water, beverages & bottles products sold in France, UK, Germany, Benelux & Switzerland under evian® brand. The scope includes cradle-to-grave emissions based on the greenhouse gas (GHG) inventory carried out in accordance to the Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard (GHGP Product Standard).
What type of conformity assessment has been undertaken?	I3P Independent third-party certification
Baseline date for PAS 2060 programme	1st January 2019
First application period (Global)	1st January 2019 – 31 December 2019
Second application period (Global)	1st January 2020 – 31 December 2020
Third application period (Global)	1st January 2021 – 31 December 2021

Forth application period (France, UK, Germany, Benelux & Switzerland)	1st January 2022 – 31 December 2022
Commitment period	1st January 2023 – 31 December 2023

2.1 *BOUNDARIES OF THE SUBJECT*

The commitment for carbon neutrality covers all activities that are material for the scope covered by this certification. The system boundary considered in assessing the carbon footprint of these products is described in ***Section 3.1***

2.2 *PAS 2060 CARBON NEUTRALITY OPTIONS*

This is the first QES for the evian® products sold in France, UK, Germany, Benelux & Switzerland (after 3 QES covering the products sold worlwide), with a commitment made to maintain carbon neutrality for the next application period, which is 2023 calendar year (January 2023 – December 2023).

A carbon management plan and offsetting options have been developed. These are summarised in ***Section 4.3*** of this report.

3 QUANTIFICATION OF THE CARBON FOOTPRINT

3.1 STANDARD CHOSEN AND EMISSIONS SOURCES

The *Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard* (GHGP Product Standard) [1] was used to quantify the GHG emissions associated with products covered by the certification scope, using data representing operations between 1st January and 31st December 2022. This method was chosen as it provides an internationally-recognised approach to the calculation of representative product CO_2e footprints and meets the requirements of PAS 2060 for the substantiation of GHG emissions (PAS 2060: 5.2.2 to 5.2.4). The product CO_2e footprints have been reviewed and assured by an independent third party, Carbon Trust (see *Annex C* of this report for the assurance statement).

The footprint resulted in a weighted average of **100.0 g CO_2e per litre** of product for the scope covered in this QES. In absolute terms, based on total sales of evian® products covered by the certification scope of 1 093 513 million litres in total in France, UK, Germany, Benelux & Switzerland between 1st January 2021 and 31st December 2022, the footprint resulted in **109 370 tCO_2e**.

This footprint includes 740 tCO_2e of biogenic emissions, for an average of 0.01 gCO2/L.

GHG emissions that are accounted for in the study are based on the 100 year Global Warming Potential figures published in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, 2014 [2] and include those required by the GHGP Product Standard, which specifies emissions to and removals from the atmosphere of: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); sulphur hexafluoride (SF_6); perfluorocarbons (PFCs); and hydrofluorocarbons (HFCs). A full list of GHG emissions included in the inventory is provided in *Annex D* of this report.

All Scope 1, 2 and 3 emissions relevant to the scope of certification are included in the footprint and are summarised in *Table 3.1* below. Where GHG emissions have been estimated, these have been determined based on a conservative approach that precludes underestimation. GHG emissions have been estimated in particular for the use and end-of-life phases. In the absence of data, emissions have been estimated based on conservative assumptions (e.g. for end-of-life, fate of retail waste has been considered the same as domestic waste whereas waste recycling may be greater at retail areas).

No weighting factors have been included for delayed emissions. Offsetting has not been included in calculations. No avoided emissions have been included in the calculations.

The breakdown of the emissions is as follows:

(1) http://www.ghgprotocol.org/standards/product-standard
(2) www.ipcc.ch

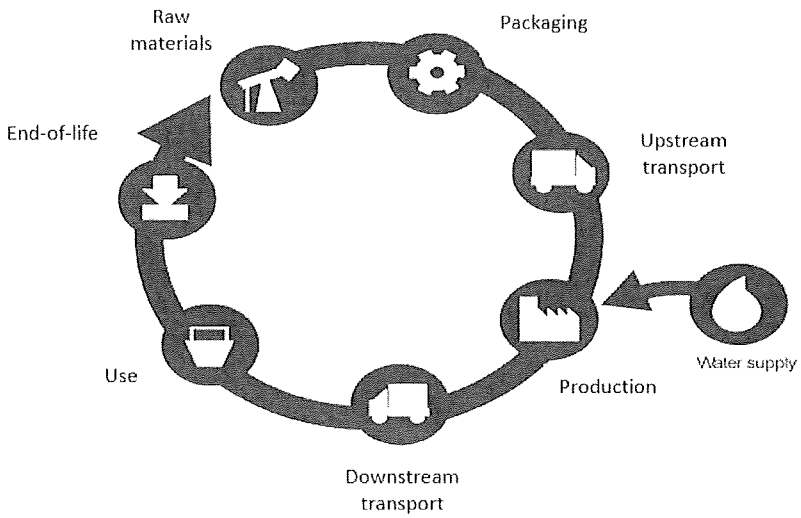


Figure 3.1: Life cycle steps

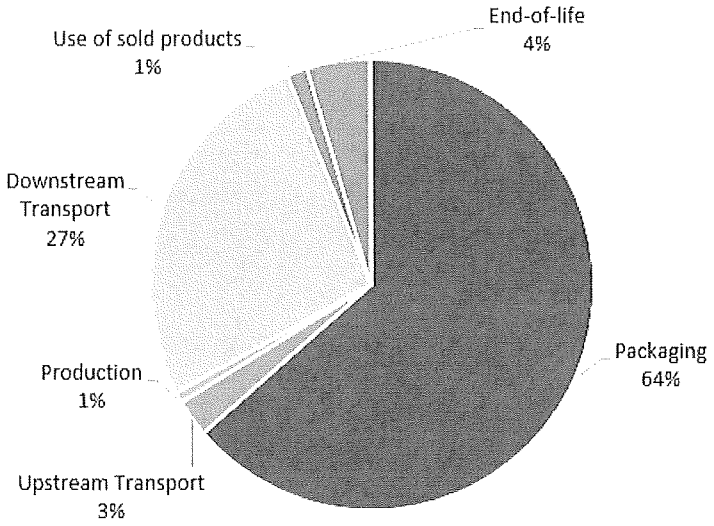


Figure 3.2: Carbon emissions (intensity) breakdown

Table 3.1 ***Description of GHG emissions***

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
Raw materials & Packaging	Raw material extraction and processing for the manufacture of the products included in the scope of certification. The following processes are included in the boundary of this life cycle stage: • Production of raw materials & packaging, comprising: extraction and transportation of raw materials; processing to packaging base materials (preform injection); and manufacturing of packaging products (preform blow moulding).	• Scope 3 – other indirect emissions	• Capital goods and infrastructure (i.e. manufacture and maintenance of buildings and machinery), which are considered to be non-attributable to the product.
Upstream transport	Transport of the raw materials & packaging from their production location to the plant where evian® products included in the scope of this certification are produced.	• Scope 3 – other indirect emissions	N/A

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
Production	Water pumping, bottle filling and plugging. The following processes are included in the boundary of this life cycle stage: • Water pumping; • Filling and plugging operations at the production plant; • Bulk packaging; and • Wastes from production.	• Scope 1 – direct GHG emissions from vehicles/ premises • Scope 2 – GHG emissions arising from the consumption of electricity on premises where the products within the scope of certification are produced	• Capital goods and infrastructure (i.e. manufacture and maintenance of buildings and machinery), which are considered to be non-attributable to the product; • Production of consumables (e.g. lubricants, cleaning products) used at the plant, as well as their treatment after use. Based on the actual consumption in Evian plant over one year, the carbon footprint related to the production of consumables is not material; • Corporate activities and services (research and development, administrative functions, sales and marketing), which are considered to be non-attributable to the product; • Personnel activities (i.e. commuting to and from work); • Production of glue used to stick the label on the bottle and to stick the cardboard box. The average glue consumption per beverage litre is estimated around 0.15 g/L, which represents less than 0.2% of the total carbon footprint per litre of mineral water, in CO_{2e}[1]; • Production of the dye that is mixed with the plastic granules. Maximum content is less than 0.1% of the plastic weight, which represents less than 0.04% of the total packaging weight.
Downstream transport	Distribution of the packed products from the production plant to the customer including: • Transportation to intermediary distribution centres; • Storage at distribution centres; • Transportation to clients' warehouses; and • Waste generated in distribution centres.	• Scope 3 – other indirect emissions	• Capital goods and infrastructure (i.e. manufacture and maintenance of buildings and machinery), which are considered to be non-attributable to the product; and • Product transport from clients' warehouses to retail shops, given the significant efforts needed to quantify this data: - Not available through Danone corporate measuring tool, as not material at the Company level, thus not accounted, - Substantial number of markets, clients, retailers and consumers to collect information from.

[1] Assuming 1416 g CO_2e/kg of glue (EVA type assumed) and total GHG footprint of a product at 125 g CO_2e/litre.

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
Use	Products are used by consumers to hydrate themselves. This stage comprises: • Storage at clients' warehouses; • Storage at retail shop; • Consumer storage.	• Scope 3 – other indirect emissions	• Manufacture and maintenance of dishwasher and refrigerator, which are considered to be non-attributable to the product; • Transport of the product user to the retail location, which is not considered to be attributable to the product.
End-of-life	At end of life, primary, secondary, and tertiary waste packaging can be recycled, incinerated for energy recovery, incinerated without energy recovery or landfilled. The following processes are included in the boundary of this life cycle stage: • Transportation of waste packaging to a waste management facility; and • Waste packaging treatment and processing via recycling, incineration with energy recovery or incineration without energy recovery.	• Scope 3 – other indirect emissions	N/A

*All personnel activities were also excluded as there are not product related.

3.2 DATA METHODS

3.2.1 Data sources

Data sources used for the study include a mix of primary and secondary sourced data. Where possible, primary data were sourced. Secondary data were sourced only where primary data were not available or where the relative impact on the carbon footprint result was nominal.

Primary data were sourced for all activities related to the certification scope, including:

- Raw materials & Packaging inputs;
- Incoming material transport modes & distances from the suppliers' facilities;
- Evian plant operational data and production output;
- Distribution transport modes & distances down to the clients' warehouses located in the destination markets; and
- Sales data per country.

Secondary data were sourced to support use and end-of-life, such as:

- GHG emission factors sourced from reputable published databases like Ecoinvent;
- Average country specific fate of waste rates for packaging materials.

3.2.2 *Data quality and uncertainties*

All primary and secondary data points were assessed for data quality, according to below tables:

	Input data	Technological representativeness	Geographical representativeness	Temporal representativeness	Data quality rating
Raw materials & Packaging	Substances	1	1	1	1
	Weight	1	1	1	1
	Conversion factor	1	1	1	1
	EF	2	1	1	1,71
	Real quantities	1	1	1	1
	Average				**1,14**
Upstream transport	Distance	N/A	1	1	1
	Supplier split	1	1	1	1
	Transport type	2	1	1	1,71
	Transport type EF	2	1	1	1,71
	Average				**1,36**
Production	Energy consumption	N/A	1	1	1
	Losses of refrigerant	1	1	1	1
	Wastewater treatment	1	1	1	1
	Energy EF	1	1	1	1
	Average				**1**
Downstream transport	Distance to Customer DC	N/A	1	1	1,00
	Transport type EF	2	1	1	1,71
	Transport type	1	1	1	1,00
	Road empty rate	2	2	1	1,86
	Road filling rate	2	2	1	1,86
	Truck diesel consumption	2	2	1	1,86
	Average				**1,55**
Use	Retail storage emissions	1	2	1	1,71
	Chilled storage at retail	3	1	1	2,43
	Home storage	3	1	1	2,43
	Average				2,19
End-of-life	Waste fate at retail	N/A	1	2	2
	Emission factor at end-of-life	1	1	3	2,43
	Home waste fate	N/A	1	3	2,29
	Average				2,10

Data quality rating	Data quality level	Scoring criteria (for both primary and secondary data)		
		Technological representativeness	Geographical representativeness	Temporal representativeness
1	Very good	Data generated using the same technology	Data from the same area	Data with less than 3 years of difference
2	Good	Data generated using a similar but different technology	Data from a similar area	Data with less than 6 years of difference
3	Fair	Data generated using a different technology	Data from a different area	Data with less than 10 years of difference
4	Poor	Data where technology is unknown	Data from an area that is unknown	Data with more than 10 years of difference or unknown

3.3 KEY ASSUMPTIONS AND ESTIMATIONS

All significant assumptions are documented below and have been reviewed through the third-party verification process.

We have considered a market-based approach.

Upstream transport:

Apportioning of Upstream transport

The weighted averaged distance between the suppliers' facility and the production plant has been considered for the 3 main raw materials & packaging (representing about 70% of the scope): PET, HDPE and glass. This average distance has then been allocated to 100% of the raw materials and packaging.

Downstream transport:

Transport distances

Transport distances used in distribution impact calculations were based on shipped volumes distributed via each route.
Distances are calculated as a weighted average, based on estimated distances from Google Maps and sales volumes to each destination.

Apportioning between the brands

Between warehouses, several products of different brands (ex: evian® and Volvic®) can be transported in a same truck. The associated transport is allocated to the different products according to the sales volume rate of the country of destination.

Use:
Apportioning of storage in warehouses and stores

For the ambient storage at distribution centres and ambient/chilled storage in the stores, an allocation rule using the volume of products per pallet is used.
Default data expressed per pallet is used to calculate the GHG emissions per litre of product.

Storage at clients' warehouses

evian® products are assumed to be stored at clients' warehouses at ambient temperature.
Electricity consumption is based on data provided by the PEFCR

Storage at retail shop

evian® products are assumed to be stored at retail shop at ambient temperature.
Electricity consumption is based on data provided by the PEFCR

Consumer storage

According to PEFCR, the storage of natural mineral water at home is assumed to be at 70% ambient temperature and 30% chilled.

Electricity consumption was considered not material for ambient storage. For refrigerated storage, the electricity consumption was not available in PEFCR for packed water so it has been assumed as same consumption than dairy products in line with PEFCR for dairy products.

End-of-life:

All packaging waste are considered recycled, incinerated or landfilled according to the national solid waste treatment rates of each main country where evian® products are sold.

Market	Associated "main country"
France	*France*
United Kingdom	*United Kingdom*
Germany	*Germany*
Switzerland	*Switzerland*
Benelux	*Belgium*

Allocation method for recycling

Recycling relates to the raw materials stage and the end-of-life stage. The same recycling allocation method is applied to similar inputs and outputs within the product's life cycle.

To calculate this step, we use the Circular Footprint Formula (CFF) from European commission. The formula is described in the following presentation:
PowerPoint-Präsentation (europa.eu)

The CFF considers three types of material for a given product:

- Virgin material used for production
- Recycled material used for production
- Recycled material coming from the product recycling process

This formula describes the allocation rule of recycling and energy recovery from incineration, between recycled material supplier and user.
This allocation is defined in the formula by a Factor "A", which can vary from 0.2 to 0.8 depending on the material.
The lower "A" is, the more the gains are allocated to the material recyclability.
The higher "A" is, the more the gains are allocated to the use of the recycled material.

The factors "A" used to calculate the carbon footprint of the products covered by the certification are described in the table below.

Packaging type	Parameters	France
Aluminium	A	0,2
complex multilayers_Labels	A	0,5
Flexible_LDPE_Recycled	A	0,5
Flexible_LDPE_Virgin	A	0,5
Flexible_OPP_Virgin	A	0,5
Flexible_OPS_Virgin	A	0,5
Glass	A	0,2
Metal/steel	A	0,2
Other rigid_PP_virgin	A	0,5
PP caps	A	0,5
Recycled paper-based packaging	A	0,2
rPET chemical bottles (granules)	A	0,5
rPET chemical bottles (preform)	A	0,5
rPET mechanical bottles (granules)	A	0,5
rPET mechanical bottles (preform)	A	0,5
Tetra briks	A	0,2
Virgin HDPE caps	A	0,5
Virgin paper-based packaging	A	0,2
Virgin PET bottles (granules)	A	0,5
Virgin PET bottles (preform)	A	0,5
Wood	A	0,8

Allocation method for landfill and incineration

All packaging waste not recycled is assumed incinerated or landfilled according to the national solid waste treatment rates of each main country where evian® products are sold (see Table 3.2).

Fate of waste packaging

Following product use, 100% of used packaging is assumed to be collected by a reputable waste contractor for management and either recycled, landfilled, or incinerated with or without energy recovery.

Waste taken into account corresponds to loss of packaging occurring at the Evian site (actual figures) and packaging waste after beverage drinking (consumers waste).

The approach to model the GHG emissions related to packaging end of life is the following:

1) The total weight of each type of material (e.g. PET, PP, HDPE, LDPE film, paper, cardboard) and each type of waste (warehouse waste / shop waste / domestic waste) is calculated.
2) For each type of material and type of waste, their average respective destinations in each main country where evian® products are sold (see Table 3.2) are modelled by using average statistics relating to the country (e.g. for France : 92% of cardboard is recycled, 4 % is incinerated with energy recovery), with one series relating to retail waste and another series relating to domestic waste.
3) For each couple material/destination (e.g. landfilling of PET), GHG emission factors per kg of waste following this route are defined based on existing LCA databases (Ecoinvent) and models. These factors cover the collection of the waste, its treatment, and the potential energy recovery related to it.
4) For site waste, primary data on the recycling, incineration and landfill rates achieved by the site have been used, in order to represent real destination of waste.

3.4 METHODOLOGICAL UPDATES

In 2023, the calculation methodology for recycling allocation was updated from the Cut-off method to PEF-CFF (see section 3.3 for more information).

4 CO_2e FOOTPRINT MANAGEMENT PLAN

4.1 DETERMINATION OF REDUCTION

4.1.1 Recalculation of the 2019 baseline

The emissions for 2019 have been recalculated for the following reasons:

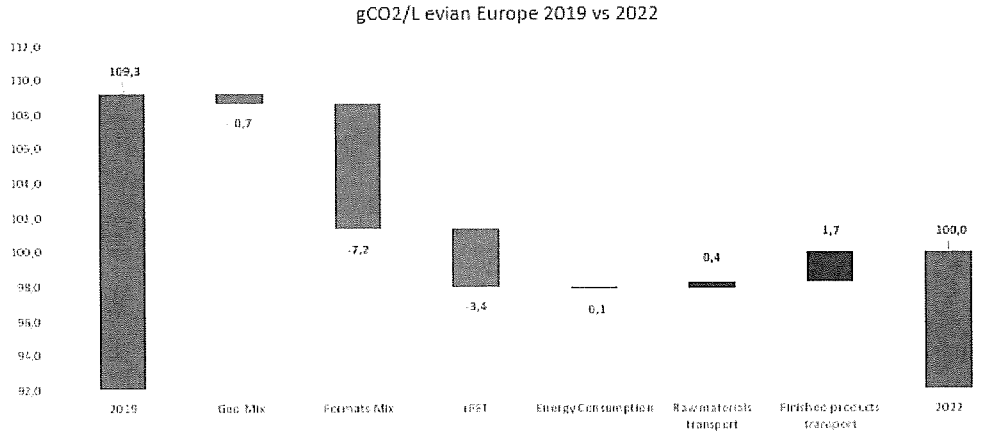
- Different scope: Products sold in France, UK, Germany, Benelux & Switzerland vs Worldwide
- New calculation methodology for Packaging / End of life (Circular Footprint Formula)

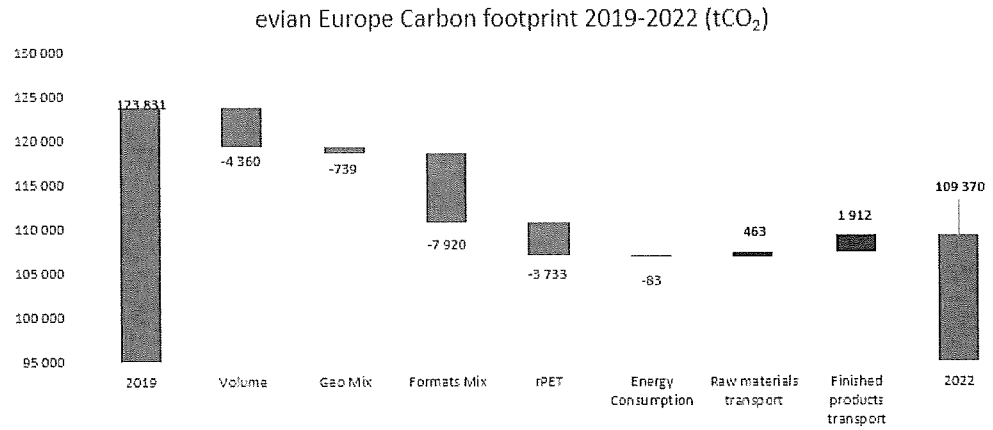
As a result, the 2019 baseline is 109.3 gCO2e/L, and the total footprint represents 123 831 tCO2e.

4.1.2 Quantification of reduction

- ⇨ The intensity has decreased by 9.3 gCO2e/L or 8.5% versus the baseline
- ⇨ The total emissions have decreased by 14 461 tCO_2e or 11.7% versus the baseline, above the commitment of -1.2% per year in tCO2 on a 2019 baseline, ie -3.6% versus 2019

The reduction has been achieved thanks to the following mainly:





Effect	Description	Calculation	gCO2/L	tCO2	Comments
Volume		Difference between: - Evian 2019 corrected footprint - Evian 2019 carbon intensity (in gCO2/L) * Evian 2022 sales volumes	-	-4 360	Sales volumes have decreased from 1133 million liters to 1093 million liters
Mix Geo	*Sales volumes per country*	Difference between: - Evian 2019 carbon intensity (in gCO2/L) * Evian 2022 sales volumes - Sum of Evian 2019 carbon intensity per country * Evian 2022 volumes per country	-0,7	-739	Evian Switzerland sales volumes have increased about 14% Evian Switzerland has a lower carbon intensity than Evian Europe
Mix Pack	*Sales volumes per format*	Difference between: - Sum of Evian 2019 carbon intensity per country multiplied per Evian 2022 volumes per country for packaging and end of life parts - Evian 2022 carbon intensity less the emission factors' organic effect and productivity effect of projects on packaging	-7,3	-7 920	Standard range sales have decreased about -2% Prestige range sales have decreased about -57% Prestige formats have a higher carbon intensity than standard formats
rPET	*Use of recycled PET*	Difference between the tons of rPET used in 2019 and 2022 multiplied per the difference between virgin PET and recycled PET emission factors	-3,4	-3 733	The Evian Europe recycled PET rate has increased from 33% to 51%
Energy consumption	*Energy consumption in Bottling site*	Difference between: - Evian 2019 carbon intensity (in gCO2/L) of the energy consumption multiplied per the Evian 2022 sales volumes - Evian 2022 footprint of the energy consumption	-0,1	-83	The energy consumption has decreased by 5,4 kWh/m3.
Upstream transport	*Transport from the supplier to the factory*	Difference between: - Evian 2019 carbon intensity (in gCO2/L) of the upstream transportation multiplied per the Evian 2022 sales volumes - Evian 2022 footprint of the upstream transportation	+0,4	+463	The average distance between the suppliers and the factory has increased about 254 km.
Downstream transport	*Transport from the factory to the customers*	Difference between: - Evian 2019 carbon intensity (in gCO2/L) of the downstream transportation multiplied per the Evian 2022 sales volumes - Evian 2022 footprint of the downstream transportation	+1,7	+1 912	The Evian France train rate has decreased from 26% to 6%
Total			**-9,3**	-14 461	

COMMITMENT TO NEUTRALITY FOR NEXT APPLICATION PERIOD (JANUARY 2023 – DECEMBER 2023)

evian® is committed to maintaining carbon neutrality for the scope covered by this certification for 2023 (1st January 2023 to 31st December 2023), in accordance with PAS 2060:2014. evian® commitment towards carbon neutrality can be broken down as follows:

- Commit to reduce the footprint of evian® products during the next application period (January 2023 to December 2023); 1.2% per year absolute reduction (in tCO2) on a 2019 baseline (first certification application period), in line with Science Based Targets 2°C pathway.
- Commit to an offset program for the remaining GHG emissions in line with PAS 2060:2014 (*Section 5* reports available information at the time of this commitment).

The quantification of reduction for the next application period will use the same methodology as the one outlined in section 3.1 for this first and second application period.

CARBON MANAGEMENT PLAN FOR COMMITMENT PERIOD (JANUARY 2023 – DECEMBER 2023)

PET is a key contributor of the products carbon footprint.
The carbon management plan aims to reduce it on the decrease of this by lightweighting & increasing the recycled rate in these materials.

Recycled PET has an emission factor around two times lower than Virgin PET.

Table 4.1 describes carbon reduction activities at each stage in the life cycle and sets a process for undertaking regular monitoring and review.

Table 4.1 Carbon reduction plan (January 2023 – December 2023)

Life Cycle Stage	Description	Year of Impact	Review and Monitoring Process
Raw materials & Packaging	LIghtweighting of bottles & caps	2023	Monthly meetings to review progress of action plan, Nature Evian Volvic World
Raw materials & Packaging	Increase use of recycled PET for evian® products	2023	Monthly meetings to review progress of action plan, Nature Evian Volvic World

5 OFFSET PROGRAM

Verified Emission Reductions (VERs) have been retired for the first application period, as detailed below in *Table 5.1*. Details of the credits purchased to cover the application periods are provided in *Table 5.2*.

Table 5.1 Retired VERs for application period

Region	Application period	Sales volume (litres)	Weighted CO_2e emission factor* (gCO_2e/litre)	Volume of VERs retired (tCO_2e)
Forth application period				
Global	1 January 2022 to 31 December 2022	1 093 million	100.0	109 370

** The CO_2e emission factor was calculated from the carbon footprint of evian® sales in France, UK, Germany, Benelux & Switzerland over the period 1st January to 31st December 2022 (see Section 3).*

Certificates are provided in *Annex B* of this report, which documents that the carbon offsets were purchased from sources guaranteeing that:

- The offsets purchased represent genuine, additional GHG emissions reductions; and
- The projects involved in delivering offsets meet the criteria of additionality, permanence, leakage and double counting.

The purchase of offsets via these schemes also guarantees that they have been verified by an independent third party, were only issued after the emissions reductions had taken place and were retired within 12 months from the date of the declaration of the achievement. These credits are supported by publicly available project documentation, references for which are provided in *Table 5.2* and are stored and retired in an independent and credible registry.

Table 5.2 VERs retired for each application period

Project Name	Country	Technology	Serial ID	Standard	Vintage	Volume (tCO_2e)	Retirement Date	Link to registry
Forth application period								
Livelihoods' mangrove restoration grouped project in Senegal	Senegal	Agriculture Forestry and Other Land Use	10712-242339665-242362727-VCS-VCU-263-VER-SN-14-1318-25082017-25062020-0	Verra	2020	23 063	29/06/23	Verra Search Page
Livelihoods' mangrove restoration grouped project in Senegal	Senegal	Agriculture Forestry and Other Land Use	5521-240367558-240374713-VCU-044-APX-SN-14-1318-06052014-24082017-0	Verra	2017	7 156	29/06/23	Verra Search Page
Agroforestry and forest restoration for ecological connectivity, poverty reduction and biodiversity conservation in Cerro San Gil, Caribbean Guatemala	Guatemala	Agriculture Forestry and Other Land Use	13433-501981806-501986649-VCS-VCU-263-VER-GT-14-1558-20072016-08072021-0	Verra	2021	4 844	29/06/23	Verra Search Page
Hifadhi-Livelihoods Improved Cookstove Project in Tharaka Nithi County, Kenya	Kenya	Energy Efficiency - Domestic	GS1-1-KE-GS7495-16-2020-22974-26844-26856	Gold Standard	2020	13	29/06/23	GSF Registry (goldstandard.org)
Hifadhi Improved cook-stoves in Embu County, Kenya			GS1-1-KE-GS2898-16-2020-22451-51895-97117			45 223		GSF Registry (goldstandard.org)
Efficient Cookstoves in Burkina Faso – VPA-10 – Tiipaalga F3PA Cookstoves in Bam and Loroum	Burkina Faso	Energy Efficiency - Domestic	GS1-1-BF-GS3524-16-2020-22897-200-9999	Gold Standard	2020	9 800	29/06/23	GSF Registry (goldstandard.org)
GS1340 Efficient cookstoves in Burkina Faso - VPA-09 - tiipaalga F3PA cookstoves in Bam and Loroum			GS1-1-BF-GS3523-16-2020-22896-200-9990			9 791		GSF Registry (goldstandard.org)
GS1340 Efficient cookstoves in Burkina Faso - VPA-08 - tiipaalga F3PA cookstoves in Bam and Loroum			GS1-1-BF-GS3522-16-2020-22895-200-9324			9 125		GSF Registry (goldstandard.org)
GS1340 Efficient cookstoves in Burkina Faso - VPA-07 - tiipaalga F3PA cookstoves in Bam and Loroum			GS1-1-BF-GS3521-16-2020-22894-201-555			355		GSF Registry (goldstandard.org)
Total						**109 370**		

Annex A

Qualifying Explanatory Statement (QES) Checklist

Table A.5.3 ***Checklist for QES supporting declaration of commitment to carbon neutrality***

The following table has been extracted from PAS 2060:2014. It provides a checklist of information that should be included in the commitment to carbon neutrality, as well as identification of where this information is located.

#	Item Description	Status	Section in this QES
1	Identify the individual responsible for the evaluation and provision of data necessary for the substantiation of the declaration including that of preparing, substantiating, communicating and maintaining the declaration.	ü	Table 2.1
2	Identify the entity responsible for making the declaration.	ü	Table 2.1
3	Identify the subject of the declaration.	ü	Table 2.1
4	Explain the rationale for the selection of the subject. *(The selection of the subject should ideally be based on a broader understanding of the entire carbon footprint of the entity so that the carbon footprint of the selected subject can be seen in context; entities need to be able to demonstrate that they are not intentionally excluding their most significant GHG emissions (or alternatively can explain why they have done so).)*	ü	Table 2.1
5	Define the boundaries of the subject.	ü	Section 2.1
6	Identify all characteristics *(purposes, objectives or functionality)* inherent to that subject.	ü	Section 2.1
7	Identify and take into consideration all activities material to the fulfilment, achievement or delivery of the purposes, objectives or functionality of the subject.	ü	Section 2.1
8	Select which of the 3 options within PAS 2060 you intend to follow.	ü	Section 2.2
9	Identify the date by which the entity plans to achieve the status of 'carbon neutrality' of the subject and specify the period for which the entity intends to maintain that status.	ü	Figure 2.2
10	Select an appropriate standard and methodology for defining the subject, the GHG emissions associated with that subject and the calculation of the carbon footprint for the defined subject.	ü	Section 3.1
11	Provide justification for the selection of the methodology chosen. *(The methodology employed shall minimise uncertainty and yield accurate, consistent and reproducible results.)*	ü	Section 3.1
12	Confirm that the selected methodology was applied in accordance with its provisions and the principles set out in PAS 2060.	ü	Section 3.1
13	Describe the actual types of GHG emissions, classification of emissions *(Scope 1, 2 or 3)* and size of carbon footprint of the subject exclusive of any purchases of carbon offsets:	ü	Table 3.1
	a) All greenhouse gases shall be included and converted to tCO_2e.	ü	Section 3.1
	b) 100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint.	ü	Section 3.1
	c) 100% Scope 2 (indirect) emissions relevant to the subject shall be included with determining the carbon footprint.	ü	Section 3.1
	d) Where estimates of GHG emissions are used in the quantification of the subject carbon footprint (particularly when associated with Scope 3 emissions) these shall be determined in a manner that precludes underestimation.	ü	Section 3.1
	e) Scope 1, 2 or 3 emission sources estimated to be more than 1% of the total carbon footprint shall be taken into consideration unless evidence can be provided to demonstrate that such quantification would not be technically feasible or cost effective. (Emissions sources estimated to constitute less than 1% may be excluded on that basis alone.)	ü	Section 3.1
	f) The quantified carbon footprint shall cover at least 95% of the emissions from the subject.	ü	Section 3.1
	g) Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions.	ü	Section 3.1
	h) Any exclusion and the reason for that exclusion shall be documented.	ü	Table 3.1
14	Where the subject is an organisation/ company or part thereof, ensure that:		
	a) Boundaries are a true and fair representation of the organisation's GHG emissions (i.e. shall include GHG emissions relating to core operations including subsidiaries owned and operated by the organisation). It will be important to ensure claims are credible – so if an entity chooses a very narrow subject and excludes its carbon intensive activities or it if outsources its carbon intensive activities, then this needs to be documented.	N/A	

	b) Either the equity share or control approach has been used to define which GHG emissions are included. Under the equity share approach, the entity accounts for GHG emissions from the subject according to its share of equity in the subject. Under the control approach, the entity shall account for 100% of the GHG emissions over which it has financial and/or operational control.	N/A	
15	Identify if the subject is part of an organisation or a specific site or location, and treat as a discrete operation with its own purpose, objectives and functionality.	N/A	
16	Where the subject is a product or service, include all Scope 3 emissions *(as the life cycle of the product/ service needs to be taken into consideration).*	ü	Table 3.1
17	Describe the actual methods used to quantify GHG emissions *(e.g. use of primary or secondary data)*, the measurement unit(s) applied, the period of application and the size of the resulting carbon footprint. *(The carbon footprint shall be based as far as possible on primary activity data.)* Where quantification is based on calculations *(e.g. GHG activity data multiplied by greenhouse gas emission factors or the use of mass balance/ life cycle models)* then GHG emissions shall be calculated using emissions factors from national *(Government)* publications. Where such factors are not available, international or industry guidelines shall be used. In all cases the sources of such data shall be identified.	ü	Section 3.2
18	Provide details of, and explanation for, the exclusion of any Scope 3 emissions.	ü	Table 3.1
19	Document all assumptions and calculations made in quantifying GHG emissions and in the selection or development of greenhouse gas emissions factors. *(Emission factors used shall be appropriate to the activity concerned and current at the time of quantification.)*	ü	Section 3.3
20	Document your assessments of uncertainty and variability associated with defining boundaries and quantifying GHG emissions including the positive tolerances adopted in association with emissions estimates. *(The statement could take the form of a qualitative description regarding the uncertainty of the results, or a quantitative assessment of uncertainty if available (e.g. carbon footprint based on 95% of likely greenhouse gas emissions; primary sources are subject to variation over time; footprint is best estimate based on reasonable costs of evaluation).)*	ü	Section 3.2
21	Document carbon footprint management plan:		
	a) Make a statement of commitment to carbon neutrality for the defined subject.	ü	Section 4.1
	b) Set timescales for achieving carbon neutrality for the defined subject.	ü	Section 4.1
	c) Specify targets for GHG reduction for the defined subject appropriate to the timescale for achieving carbon neutrality including the baseline date, the first qualification date and the first application period.	ü	Section 4.1
	d) Document the planned means of achieving and maintaining GHG emissions reductions including assumptions made and any justification of the techniques and measures to be employed to reduce GHG emissions.	ü	Section 4.2
	e) Specify the offset strategy including an estimate of the quantity of GHG emissions to be offset, the nature of the offsets and the likely number and type of credits.	ü	Section 5
22	Implement a process for undertaking periodic assessments of performance against the Plan and for implementing corrective action to ensure targets are achieved. The frequency of assessing performance against the Plan should be commensurate with the timescale for achieving carbon neutrality.	ü	Section 4.2
23	Where the subject is a non-recurring event, such as weddings or a concert, identify ways of reducing GHG emissions to the maximum extent commensurate with enabling the event to meet its intended objectives before the event takes place and include 'post event review' to determine whether or not the expected minimisation in emissions has been achieved.	N/A	
24	For any reductions in the GHG emissions from the defined subject delivered in the period immediately prior to the baseline date and not otherwise taken into account in any GHG emissions quantification (historic reductions), confirm: • the period from which these reductions are to be included; • that the required data is available and that calculations have been undertaken using the same methodology throughout; • that assessment of historic reduction has been made in accordance with this PAS, reporting the quantity of historic reductions claimed in parallel with the report of total reduction.	N/A	

25	Record the number of times that the declaration of commitment has been renewed without declaration of achievement.	ü	Section 2
26	Specify the type of conformity assessment:		
	a) independent third-party certification	ü	Section 2
	b) other party validation	N/A	
	c) self-validation	N/A	
27	Include statements of validation where declarations of commitment to carbon neutrality are validated by a third-party certifier or second party organisations.	ü	Annex C
28	Date the QES and have signed by the senior representative of the entity concerned (eg CEO of a corporation; Divisional Director, where the subject is a division of a larger entity; the Chairman of a town council or the head of the household for a family group).	ü	Section 1
29	Make the QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (eg via websites).	ü	Section 1
30	Update the QES to reflect changes and actions that could affect the validity of the declaration of commitment to carbon neutrality.	ü	Section 1

Table A.5.4 Checklist for QES supporting declaration of achievement of carbon neutrality

The following table has been extracted from PAS 2060:2014. It provides a checklist of information that should be included in the achievement of carbon neutrality, as well as identification of where this information is located.

#	Item Description	Status	Section in this QES
1	Define standard and methodology to use to determine its GHG emissions reduction.	ü	Section 4
2	Confirm that the methodology used was applied in accordance with its provisions and the principles set out in PAS 2060 were met.	ü	Section 4
3	Provide justification for the selection of the methodologies chosen to quantify reductions in the carbon footprint, including all assumptions and calculations made and any assessments of uncertainty. *(The methodology employed to quantify reductions shall be the same as that used to quantify the original carbon footprint. Should an alternative methodology be available that would reduce uncertainty and yield more accurate, consistent and reproducible results, then this may be used provided the original carbon footprint is re-qualified to the same methodology, for comparison purposes. Recalculated carbon footprints shall use the most recently available emission factors, ensuring that for purposes of comparison with the original calculation, any change in the factors used is taken into account.)*	ü	Section 4
4	Describe the means by which reductions have been achieved and any applicable assumptions or justifications.	N/A	
5	Ensure that there has been no change to the definition of the subject. *(The entity shall ensure that the definition of the subject remains unchanged through each and every stage of the methodology. In the event that material change to the subject occurs, the sequence shall be re-started on the basis of a newly defined subject.)*	N/A	
6	Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint. *(Quantified GHG emissions reductions shall be expressed in absolute terms and shall relate to the application period selected and/or shall be expressed in emission intensity terms (eg per specified unit of product or instance of service).*	N/A	
7	State the baseline/ qualification date.	ü	Table 2.1
8	Record the percentage economic growth rate for the given application period used as a threshold for recognising reductions in intensity terms.	N/A	
9	Provide an explanation for circumstances where a GHG reduction in intensity terms is accompanied by an increase in absolute terms for the determined subject.	N/A	
10	Select and document the standard and methodology used to achieve carbon offset.	ü	Section 5
11	Confirm that:		
	a) Offsets generated or allowance credits surrendered represent genuine, additional GHG emission reductions elsewhere.	ü	Section 5

	b) Projects involved in delivering offsets meet the criteria of *additionality, permanence, leakage* and *double counting*. (See WRI Greenhouse Gas Protocol for definitions of *additionality, permanence, leakage* and *double counting*.)	ü	Section 5
	c) Carbon offsets are verified by an independent third-party verifier.	ü	Section 5
	d) Credits from carbon offset projects are only issued after the emission reduction has taken place.	ü	Section 5
	e) Credits from carbon offset projects are retired within 12 months from the date of the declaration of achievement.	ü	Section 5
	f) Provision for event related option of 36 months to be added here.	N/A	
	g) Credits from carbon offset projects are supported by publically available project documentation on a registry which shall provide information about the offset project, quantification methodology and validation and verification procedures.	ü	Section 5
	h) Credits from carbon offset projects are stored and retired in an independent and credible registry	ü	Section 5
12	Document the quantity of GHG emissions offset and the type and nature of offsets actually purchased including the number and type of credits used and the time period over which credits were generated including:	ü	Section 5
	a) Which GHG emissions have been offset	ü	Section 5
	b) The actual amount of carbon offset	ü	Section 5
	c) The type of credits and projects involved	ü	Section 5
	d) The number and type of carbon credits used and the time period over which the credits have been generated	ü	Section 5
	e) For events, a rationale to support any retirement of credits in excess of 12 months including details of any legacy emission savings, taken into account.	N/A	
	f) Information regarding the retirement/ cancellation of carbon offset credits to prevent their use by others including a link to the registry where the offset has been retired.	ü	Section 5
13	Specify the type of conformity assessment:		
	a) independent third-party certification	ü	Section 2
	b) other party validation	N/A	
	c) self-validation	N/A	
14	Include statements of validation where declarations of achievement of carbon neutrality are validated by a third-party certifier or second party organisations.	ü	Annex C
15	Date the QES and have it signed by the senior representative of the entity concerned (e.g. CEO of a corporation; Divisional Director, where the subject is a division of a larger entity; the Chairman of a town council or the head of the household for a family group).	ü	Section 1
16	Make the QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (publically available upon request).	ü	Section 1

Table A.3 QES openness and clarity

The following table has been extracted from PAS 2060:2014. It provides a checklist of information that should be included to confirm openness and clarity of the QES.

#	Entities should satisfy themselves that the QES	Status
1	Does not suggest a reduction which does not exist, either directly or by implication.	ü
2	Is not presented in a manner which implies that the declaration is endorsed or certified by an independent third-party organization when it is not.	ü
3	Is not likely to be misinterpreted or be misleading as a result of the omission of relevant facts.	ü
4	Is readily available to any interested party upon request.	ü

Annex B

Carbon Offset Certificate

VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 29 Jun 2023, 23,063 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project Name

Livelihoods' mangrove restoration grouped project in Senegal

VCU Serial Number

10712-242339665-242362727-VCS-VCU-263-VER-SN-14-1318-25082017-25062020-0

Additional Certifications

Powered by APX

VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 29 Jun 2023, 7,156 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project Name

Livelihoods' mangrove restoration grouped project in Senegal

VCU Serial Number

5521-240367558-240374713-VCU-044-APX-SN-14-1318-06052014-24082017-0

Additional Certifications

Powered by APX

VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 29 Jun 2023, 4,844 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project Name

Agroforestry and forest restoration for ecological connectivity, poverty reduction and biodiversity conservation in Cerro San Gil, Caribbean Guatemala

VCU Serial Number

13433-501981806-501986649-VCS-VCU-263-VER-GT-14-1558-20072016-08072021-0

Additional Certifications

Powered by APX

Climate

Positive Action for Planet + People

We are delighted to confirm the retirement of

355 Verified Emission Reductions (VERs)

by

SOCIETE ANONYME DES EAUX MINERALES D'EVIAN

on 29/06/2023

Evian products Carbon neutrality certification 2023

Project: GS1340 Efficient cookstoves in Burkina Faso - VPA-07 - tiipaalga F3PA cookstoves in Bam and Loroum

These credits have been retired, saving 355 tonnes of CO2 emissions from being released into the atmosphere. Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Climate

Positive Action for Planet + People

We are delighted to confirm the retirement of

9125 Verified Emission Reductions (VERs)

by

SOCIETE ANONYME DES EAUX MINERALES D'EVIAN

on 29/06/2023

Evian products Carbon neutrality certification 2023

Project: GS1340 Efficient cookstoves in Burkina Faso - VPA-08 - tiipaalga F3PA cookstoves in Bam and Loroum

These credits have been retired, saving 9125 tonnes of CO2 emissions from being released into the atmosphere. Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Climate

Positive Action for Planet + People

We are delighted to confirm the retirement of

9800 Verified Emission Reductions (VERs)

by

SOCIETE ANONYME DES EAUX MINERALES D'EVIAN

on 29/06/2023

Evian products Carbon neutrality certification 2023

Project: GS1340 Efficient cookstoves in Burkina Faso - VPA-10 - tiipaalga F3PA cookstoves in Bam and Loroum

These credits have been retired, saving 9800 tonnes of CO2 emissions from being released into the atmosphere. Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Climate
Positive Action for Planet + People

We are delighted to confirm the retirement of
9791 Verified Emission Reductions (VERs)
by
SOCIETE ANONYME DES EAUX MINERALES D'EVIAN
on 29/06/2023

Evian products Carbon neutrality certification 2023

Project: GS1340 Efficient cookstoves in Burkina Faso - VPA-09 - tiipaalga F3PA cookstoves in Bam and Loroum

These credits have been retired, saving 9791 tonnes of CO2 emissions from being released into the atmosphere.
Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Climate
Positive Action for Planet + People

We are delighted to confirm the retirement of
45223 Verified Emission Reductions (VERs)
by
SOCIETE ANONYME DES EAUX MINERALES D'EVIAN
on 29/06/2023

Evian products Carbon neutrality certification 2023

Project: Hifadhi Improved cook-stoves in Embu County, Kenya

These credits have been retired, saving 45223 tonnes of CO2 emissions from being released into the atmosphere.
Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Climate
Positive Action for Planet + People

We are delighted to confirm the retirement of
13 Verified Emission Reductions (VERs)
by
SOCIETE ANONYME DES EAUX MINERALES D'EVIAN
on 29/06/2023

Evian products Carbon neutrality certification 2023

Project: Hifadhi-Livelihoods Improved Cookstove Project in Tharaka Nithi County, Kenya

These credits have been retired, saving 13 tonnes of CO2 emissions from being released into the atmosphere.
Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Annex C

Carbon Neutrality Assurance Statement

CARBON TRUST

Certificate of Achievement

Société Anonyme des Eaux Minérales d'Evian

has achieved carbon neutrality and is committed to on-going carbon neutrality of the total carbon footprint of its

Evian Bottle Waters

Carbon Trust Assurance Limited certifies that Société Anonyme des Eaux Minérales d'Evian has calculated the carbon footprint representing all Evian water products Cradle-to-Grave Business-to-Consumer and marketed in globally, in accordance with:

- PAS 2060:2014 – Specification for the demonstration of carbon neutrality

A detailed list of certified results can be found in the associated Certification Letter CERT-13526.

Awarded: 21 May 2023

for and on behalf of Carbon Trust Assurance Ltd,

M Hockaday

Martin Hockaday,
Head of Assurance

Annex D

Included GHG Emissions

Industrial designation or common name	Chemical formula	GWP values for 100-year time horizon Fifth Assessment Report (AR5)	
Carbon dioxide	CO_2	1	kg CO_2-eq per kg
Methane	CH_4	28	kg CO_2-eq per kg
Nitrous oxide	N_2O	165	kg CO_2-eq per kg
Substances controlled by the Montreal Protocol			
CFC-11	CCl_{3F}	4,660	kg CO_2-eq per kg
CFC-12	CCl_2F_2	10,200	kg CO_2-eq per kg
CFC-13	$CClF_3$	13,900	kg CO_2-eq per kg
CFC-113	CCl_2FCClF_2	5,820	kg CO_2-eq per kg
CFC-114	$CClF_2CClF_2$	8,590	kg CO_2-eq per kg
CFC-115	$CClF_2CF_3$	7,670	kg CO_2-eq per kg
Halon-1301	$CBrF_3$	6,290	kg CO_2-eq per kg
Halon-1211	$CBrClF_2$	1,750	kg CO_2-eq per kg
Halon-2402	$CBrF_2CBrF_2$	1,470	kg CO_2-eq per kg
Carbon tetrachloride	CCl_4	1,730	kg CO_2-eq per kg
Methyl bromide	CH_3Br	2	kg CO_2-eq per kg
Methyl chloroform	CH_3CCl_3	160	kg CO_2-eq per kg
HCFC-21	$CHCl_2F$	148	kg CO_2-eq per kg
HCFC-22	$CHClF_2$	1,760	kg CO_2-eq per kg
HCFC-123	$CHCl_2CF_3$	79	kg CO_2-eq per kg
HCFC-124	$CHClFCF_3$	527	kg CO_2-eq per kg
HCFC-141b	CH_3CCl_2F	782	kg CO_2-eq per kg
HCFC-142b	CH_3CClF_2	1,980	kg CO_2-eq per kg
HCFC-225ca	$CHCl_2CF_2CF_3$	127	kg CO_2-eq per kg
HCFC-225cb	$CHClFCF_2CClF_2$	525	kg CO_2-eq per kg
Hydrofluorocarbons (HFCs)			
HFC-23	CHF_3	12,400	kg CO_2-eq per kg
HFC-32	CH_2F_2	677	kg CO_2-eq per kg
HFC-41	CH_3F_2	116	kg CO_2-eq per kg
HFC-125	CHF_2CF_3	3,170	kg CO_2-eq per kg
HFC-134	CHF_2CHF_2	1,120	kg CO_2-eq per kg
HFC-134a	CH_2FCF_3	1,300	kg CO_2-eq per kg

HFC-143	CH_2FCHF_2	328	kg CO_2-eq per kg
HFC-143a	CH_3CF_3	4,800	kg CO_2-eq per kg
HFC-152	CH_2FCH_2F	16	kg CO_2-eq per kg
HFC-152a	CH_3CHF_2	138	kg CO_2-eq per kg
HFC-161	CH_3CH_2F	4	kg CO_2-eq per kg
HFC-227ea	CF_3CHFCF_3	3,350	kg CO_2-eq per kg
HFC-236cb	$CH_2FCF_2CF_3$	1,210	kg CO_2-eq per kg
HFC-236ea	CHF_2CHFCF_3	1,330	kg CO_2-eq per kg
HFC-236fa	$CF_3CH_2CF_3$	8,060	kg CO_2-eq per kg
HFC-245ca	$CH_2FCF_2CHF_2$	716	kg CO_2-eq per kg
HFC-245fa	$CHF_2CH_2CF_3$	858	kg CO_2-eq per kg
HFC-365mfc	$CH_3CF_2CH_2CF_3$	804	kg CO_2-eq per kg
HFC-43-10mee	$CF_3CHFCHFCF_2CF_3$	1,650	kg CO_2-eq per kg
Perfluorinated compounds			
Sulphur hexafluoride	SF_6	23,500	kg CO_2-eq per kg
Nitrogen trifluoride	NF_3	16,100	kg CO_2-eq per kg
PFC-14	CF_4	6,630	kg CO_2-eq per kg
PFC-116	C_2F_6	11,100	kg CO_2-eq per kg
PFC-218	C_3F_8	8,900	kg CO_2-eq per kg
PFC-318	c-C_4F_8	9,540	kg CO_2-eq per kg
PFC-31-10	C_4F_{10}	9,200	kg CO_2-eq per kg
PFC-41-12	C_5F_{12}	8,550	kg CO_2-eq per kg
PFC-51-14	C_6F_{14}	7,910	kg CO_2-eq per kg
PCF-91-18	$C_{10}F_{18}$	7,190	kg CO_2-eq per kg
Trifluoromethyl sulphur pentafluoride	SF_5CF_3	17,400	kg CO_2-eq per kg
Perfluorocyclopropane	c-C_3F_6	9,200	kg CO_2-eq per kg
Fluorinated ethers			
HFE-125	CHF_2OCF_3	12,400	kg CO_2-eq per kg
HFE-134	CHF_2OCHF_2	5,560	kg CO_2-eq per kg
HFE-143a	CH_3OCF_3	523	kg CO_2-eq per kg
HCFE-235da2	$CHF_2OCF_2CF_3$	491	kg CO_2-eq per kg
HFE-245cb2	$CH_3OCF_2CF_3$	645	kg CO_2-eq per kg
HFE-245fa2	$CHF_2OCH_2CF_3$	812	kg CO_2-eq per kg

HFE-347mcc3	$CH_3OCF_2CF_2CF_3$	530	kg CO_2-eq per kg
HFE-347pcf2	$CHF_2CF_2OCH_2CF_3$	889	kg CO_2-eq per kg
HFE-356pcc3	$CH_3OCF_2CF_2CHF_2$	413	kg CO_2-eq per kg
HFE-449sl (HFE-7100)	$C_4F_9OCH_3$	421	kg CO_2-eq per kg
HFE-569sf2 (HFE-7200)	$C_4F_9OC_2H_5$	57	kg CO_2-eq per kg
HFE-43-10pccc124 (H-Galden 1040x)	$CHF_2OCF_2OC_2F_4OCHF_2$	2,820	kg CO_2-eq per kg
HFE-234ca12 (HG-10)	$CHF_2OCF_2OCHF_2$	5,350	kg CO_2-eq per kg
HFE-338pcc13 (HG-01)	$CHF_2OCF_2CF_2OCHF_2$	2,910	kg CO_2-eq per kg
HFE-227ea	$CF_3CHFOCF_3$	6,450	kg CO_2-eq per kg
HFE-236ea2	$CHF_2OCHFCF_3$	1,790	kg CO_2-eq per kg
HFE-236fa	$CF_3CH_2OCF_3$	979	kg CO_2-eq per kg
HFE-245fa1	$CHF_2CH_2OCF_3$	828	kg CO_2-eq per kg
HFE-263fb2	$CF_3CH_2OCH_3$	1	kg CO_2-eq per kg
HFE-329mcc2	$CHF_2CF_2OCF_2CF_3$	3,070	kg CO_2-eq per kg
HFE-338mcf2	$CF_3CH_2OCF_2CF_3$	929	kg CO_2-eq per kg
HFE-347mcf2	$CHF_2CH_2OCF_2CF_3$	854	kg CO_2-eq per kg
HFE-356mec3	$CH_3OCF_2CHFCF_3$	387	kg CO_2-eq per kg
HFE-356pcf2	$CHF_2CH_2OCF_2CHF_2$	719	kg CO_2-eq per kg
HFE-356pcf3	$CHF_2OCH_2CF_2CHF_2$	446	kg CO_2-eq per kg
HFE-365mcf3	$CF_3CF_2CH_2OCH_3$	<1	kg CO_2-eq per kg
HFE-374pc2	$CHF_2CF_2OCH_2CH_3$	627	kg CO_2-eq per kg
Perfluoropolyethers			
PFPMIE	$CF_3OCF(CF_3)CF_2OCF_2OCF_3$	9,710	kg CO_2-eq per kg
Hydrocarbons and other compounds – direct effects			
Chloroform	$CHCl_3$	16	kg CO_2-eq per kg
Methylene chloride	CH_2Cl_2	9	kg CO_2-eq per kg
Methyl chloride	CH_3Cl	12	kg CO_2-eq per kg
Halon-1201	$CHBrF_2$	376	kg CO_2-eq per kg