

## 1 **CARBON<sup>(1)</sup> NEUTRALITY DECLARATION**

*Carbon neutrality of **Volvic® brand** achieved by **Société Anonyme des Eaux Minérales d'Evian**, for products sold worldwide, in accordance with PAS 2060 at 31 December 2020 with commitment to maintain to 31 December 2021 for the period commencing 1 January 2020, **Carbon Trust** certified.*

*Signed: Rita Pestana, Volvic® Brand Director, Société Anonyme des Eaux Minérales d'Evian*

*Date: 20<sup>th</sup> May 2021*

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 Volvic® brand's current status towards carbon neutrality. This report will be made publically available upon request.

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<sub>2</sub>e). Hereafter in this report, the full term or CO<sub>2</sub>e 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 Volvic® brand has achieved carbon neutrality for Volvic® products sold worldwide, in accordance with the *Publicly 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 Volvic®
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 Anonyme des Eaux Minérales d'Evian (SAEME)
Subject of PAS 2060 declaration.	All natural mineral water, beverages & bottles products sold worldwide under Volvic® brand, including: <ul style="list-style-type: none"> <li>• Lost glass 750 mL;</li> <li>• PET 250 mL (Volvic - Beverages);</li> <li>• PET 330 mL (Volvic - Still);</li> <li>• PET 330 mL (Volvic - Beverages);</li> <li>• PET 370 mL (Volvic - Beverages);</li> <li>• PET 450 mL (Volvic - Sparkling);</li> <li>• PET 500 mL (Volvic - Still);</li> <li>• PET 500 mL (Volvic - Sparkling);</li> <li>• PET 500 mL (Volvic - Beverages);</li> <li>• PET 750 mL (Volvic - Still);</li> <li>• PET 750 mL (Volvic - Beverages);</li> <li>• PET 900 mL (Volvic - Sparkling);</li> <li>• PET 1 L (Volvic - Still);</li> <li>• PET 1 L (Volvic - Beverages);</li> <li>• PET 1.25 L (Volvic - Beverages);</li> <li>• PET 1.5 L (Volvic - Still);</li> <li>• PET 1.5 L (Volvic - Sparkling);</li> <li>• PET 1.5 L (Volvic - Beverages);</li> <li>• PET 1.75 L (Volvic - Still);</li> <li>• PET 8 L (Volvic - Still)</li> <li>• Goud 600 mL Volvic</li> </ul>
Subject of PAS 2060 commitment	Some new Volvic® products not mentioned in this list may be launched in 2021 In case of material change of the calculated carbon footprint, this one would be recalculated and the list of products updated accordingly. These new products will be: <ul style="list-style-type: none"> <li>• Brick 250 mL (Volvic – Beverages)</li> <li>• Brick 330 mL (Volvic – Beverages)</li> </ul> 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 2020 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 than 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 worldwide under Volvic® 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	1 <sup>st</sup> January 2019
First application period	1 <sup>st</sup> January 2019 – 31 December 2019
Second application period	1 <sup>st</sup> January 2020 – 31 December 2020
Commitment period	1 <sup>st</sup> January 2021 – 31 December 2021

## 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 *Erreur ! Source du renvoi introuvable.*

## 2.2 PAS 2060 CARBON NEUTRALITY OPTIONS

This is the second QES for the Volvic® global brand, with a commitment made to maintain carbon neutrality for the next application period, which is 2021 calendar year (January 2021 – December 2021).

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

## 3.1

## STANDARD CHOSEN AND EMISSIONS SOURCES

The *Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard* (GHGP Product Standard) <sup>(1)</sup> was used to quantify the GHG emissions associated with products covered by the certification scope, using data representing operations between 1<sup>st</sup> January and 31<sup>st</sup> December 2020. This method was chosen as it provides an internationally-recognised approach to the calculation of representative product CO<sub>2</sub>e 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<sub>2</sub>e 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 121.5 g CO<sub>2</sub>e per litre of product for the scope covered in this QES. In absolute terms, based on total sales of Volvic® products covered by the certification scope of 1 656 million litres in total in the world between 1<sup>st</sup> January 2020 and 31<sup>st</sup> December 2020, the footprint resulted in 201 206 tCO<sub>2</sub>e.

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 <sup>(2)</sup> and include those required by the GHGP Product Standard, which specifies emissions to and removals from the atmosphere of: carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); sulphur hexafluoride (SF<sub>6</sub>); 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](http://www.ipcc.ch)

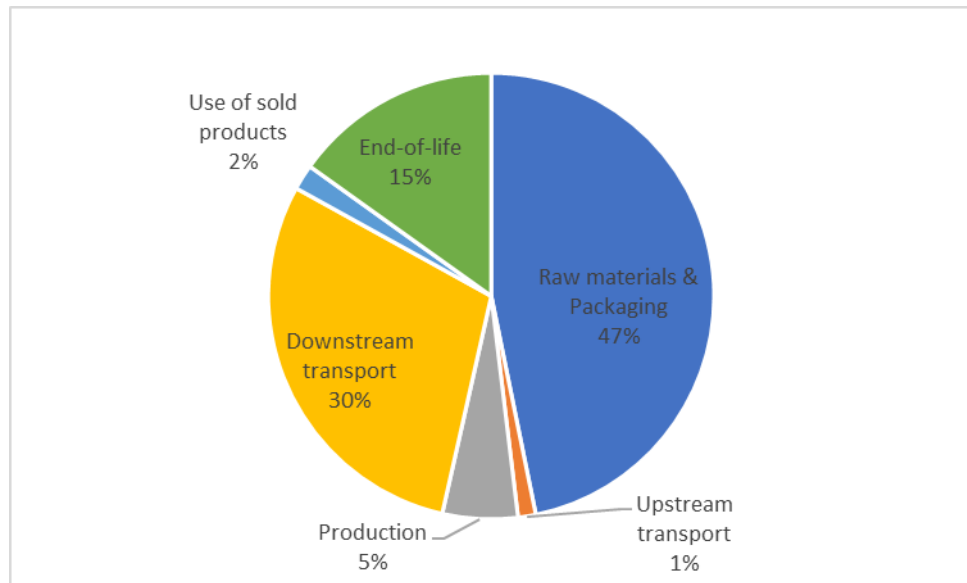


Figure 3.1: carbon emissions (intensity) breakdown

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

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
Raw materials & Packaging	<p>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:</p> <ul style="list-style-type: none"> <li>• Extraction of mineral water; transportation of mineral water to the plant; and</li> <li>• Production of raw materials &amp; packaging, comprising: extraction and transportation of raw materials; processing to packaging base materials (preform injection); and manufacturing of packaging products (preform blow moulding).</li> </ul>	<ul style="list-style-type: none"> <li>• Scope 3 – other indirect emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Capital goods and infrastructure (i.e. manufacture and maintenance of buildings and machinery), which are considered to be non-attributable to the product.</li> </ul>
Upstream transport	Transport of the raw materials & packaging from their production location to the plant where Volvic® products included in the scope of this certification are produced.	<ul style="list-style-type: none"> <li>• Scope 3 – other indirect emissions</li> </ul>	N/A

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
Production	<p>Water pumping, bottle filling and plugging. The following processes are included in the boundary of this life cycle stage:</p> <ul style="list-style-type: none"> <li>• Water pumping;</li> <li>• Filling and plugging operations at the production plant;</li> <li>• Bulk packaging; and</li> <li>• Wastes from production.</li> </ul>	<ul style="list-style-type: none"> <li>• Scope 1 – direct GHG emissions from vehicles/ premises</li> <li>• Scope 2 – GHG emissions arising from the consumption of electricity on premises where the products within the scope of certification are produced</li> </ul>	<ul style="list-style-type: none"> <li>• Capital goods and infrastructure (i.e. manufacture and maintenance of buildings and machinery), which are considered to be non-attributable to the product;</li> <li>• 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 Volvic plant over one year, the carbon footprint related to the production of consumables is estimated to represent less than 0.0005 kgCO<sub>2</sub>e/litre, which represents about 1% or less of the total carbon footprint per litre of mineral water;</li> <li>• Corporate activities and services (research and development, administrative functions, sales and marketing), which are considered to be non-attributable to the product;</li> <li>• Personnel activities (i.e. commuting to and from work);</li> <li>• 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<sub>2</sub>e<sup>1</sup>;</li> <li>• 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.</li> </ul>

<sup>1</sup> Assuming 1416 g CO<sub>2</sub>e/kg of glue (EVA type assumed) and total GHG footprint of a product at 125 g CO<sub>2</sub>e/litre.

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
Downstream transport	<p>Distribution of the packed products from the production plant to the customer including:</p> <ul style="list-style-type: none"> <li>• Transportation to intermediary distribution centres;</li> <li>• Storage at distribution centres;</li> <li>• Transportation to clients' warehouses; and</li> <li>• Waste generated in distribution centres.</li> </ul>	<ul style="list-style-type: none"> <li>• Scope 3 – other indirect emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Capital goods and infrastructure (i.e. manufacture and maintenance of buildings and machinery), which are considered to be non-attributable to the product; and</li> <li>• Product transport from clients' warehouses to retail shops, given the significant efforts needed to quantify this data: <ul style="list-style-type: none"> <li>- Not available through Danone corporate measuring tool, as not material at the Company level, thus not accounted,</li> <li>- Substantial number of markets, clients, retailers and consumers to collect information from.</li> </ul> </li> </ul>
Use	<p>Products are used by consumers to hydrate themselves. This stage comprises:</p> <ul style="list-style-type: none"> <li>• Storage at clients' warehouses;</li> <li>• Storage at retail shop;</li> <li>• Consumer storage.</li> </ul>	<ul style="list-style-type: none"> <li>• Scope 3 – other indirect emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacture and maintenance of dishwasher and refrigerator, which are considered to be non-attributable to the product;</li> <li>• Transport of the product user to the retail location, which is not considered to be attributable to the product; and</li> <li>• Consumer transport to the retail shop.</li> </ul>
End-of-life	<p>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:</p> <ul style="list-style-type: none"> <li>• Transportation of waste packaging to a waste management facility; and</li> <li>• Waste packaging treatment and processing via recycling, incineration with energy recovery or incineration without energy recovery.</li> </ul>	<ul style="list-style-type: none"> <li>• Scope 3 – other indirect emissions</li> </ul>	N/A



## **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;
- Volvic 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. Please refer to the data quality and uncertainty section of the file "EVW Data Quality Review v1".

## **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, Cardboard & HDPE. 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*

Volvic® 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*

Volvic® 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 Volvic® products are sold.

<b>Market</b>	<b>Associated "main country"</b>
France	<i>France</i>
United Kingdom	<i>United Kingdom</i>
Germany	<i>Germany</i>
Switzerland	<i>Switzerland</i>
Benelux	<i>Belgium</i>
North America	<i>United States</i>
Central Asia	<i>China</i>
South-East Asia	<i>Indonesia</i>
North-East Asia	<i>Japan</i>
Eastern Europe	<i>Russia</i>
Southern Europe	<i>Spain</i>
Middle-East	<i>United Arab Emirates</i>
South America	<i>Mexico</i>

**Table 3.2** *List of main countries used for Packaging end of life data*

*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.

- **Plastics**  
The **100:0** recycled content method is used, in line with the direction made in Chapter 9 of the GHG Protocol Product Life Cycle Accounting and Reporting Standard. No emissions or removals are allocated to the recycling of plastics at their end of life. Recycled and virgin materials therefore have different emission factors.
- **Aluminium, Steel & Glass**  
The **100:0** recycled content method is used, in line with the direction made in Chapter 9 of the GHG Protocol Product Life Cycle Accounting and Reporting Standard. No emissions or removals are allocated to the recycling of aluminium, steel, and glass at their end of life. Recycled and virgin materials therefore have different emission factors.
- **Paper, Cardboard & Wood**  
The **100:0** recycled content method is used, in line with the direction made in Chapter 9 of the GHG Protocol Product Life Cycle Accounting and Reporting Standard. No emissions or removals are allocated to the recycling of paper, cardboard, and wood at their end of life. Recycled and virgin materials therefore have different emission factors.

*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 Volvic® 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 Volvic site (actual figures), waste generated in the warehouses and shops (1% of the product and secondary and tertiary packaging), 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 Volvic® 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, 4% is landfilled), 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 (ex: 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.

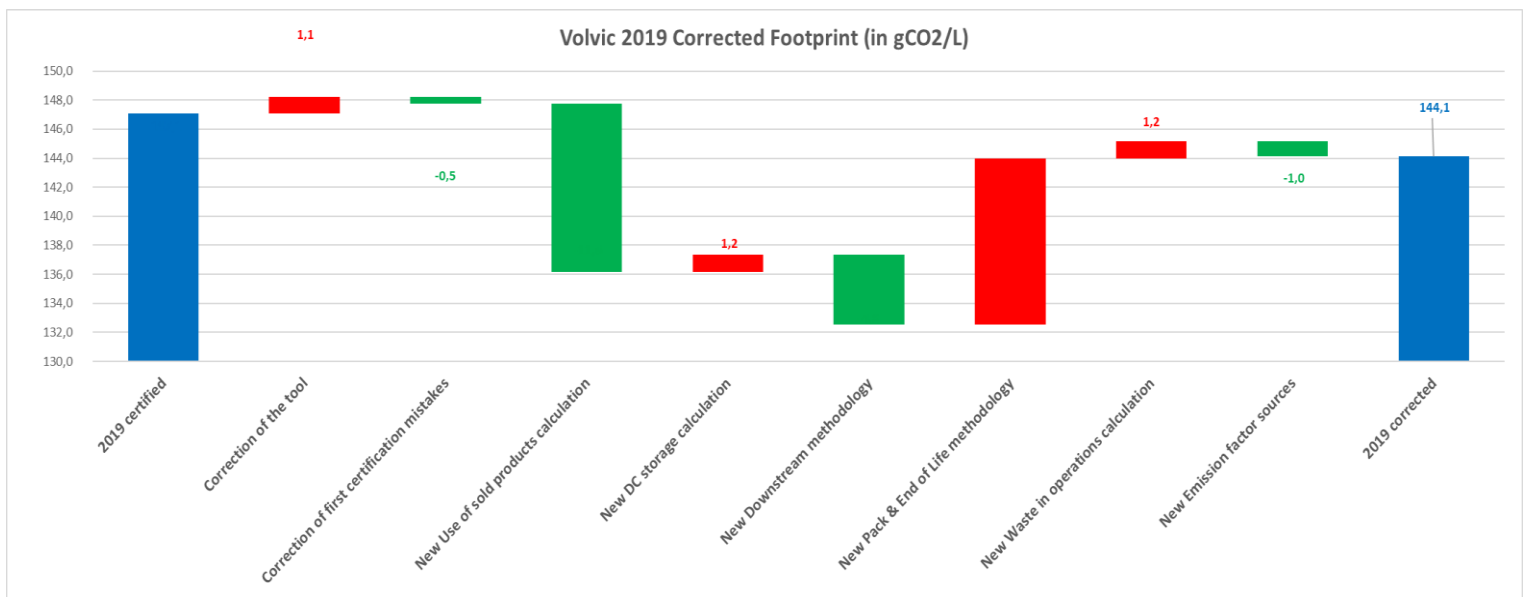
#### 4.1 DETERMINATION OF REDUCTION

##### 4.1.1 Recalculation of the 2019 baseline

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

- There have been significant changes in the packaging and end of life calculation:
  - o 100:0 approach for each type of material
  - o Incineration EF were accounting for negative emissions which is not allowed by the GHG protocol.
- Waste generated in operations aligned with 100:0 approach and no more saving on incineration
- New calculation methodology for use of sold products and DC storage
- Emission factor on foreign European truck are now aligned with French data for Downstream transportation
- Correction of some mistakes in the previous version of the CO<sub>2</sub> calculator

As a result, the 2019 baseline is 144.1 gCO<sub>2</sub>e/L, and the total footprint represents 241 319 TCO<sub>2</sub>e



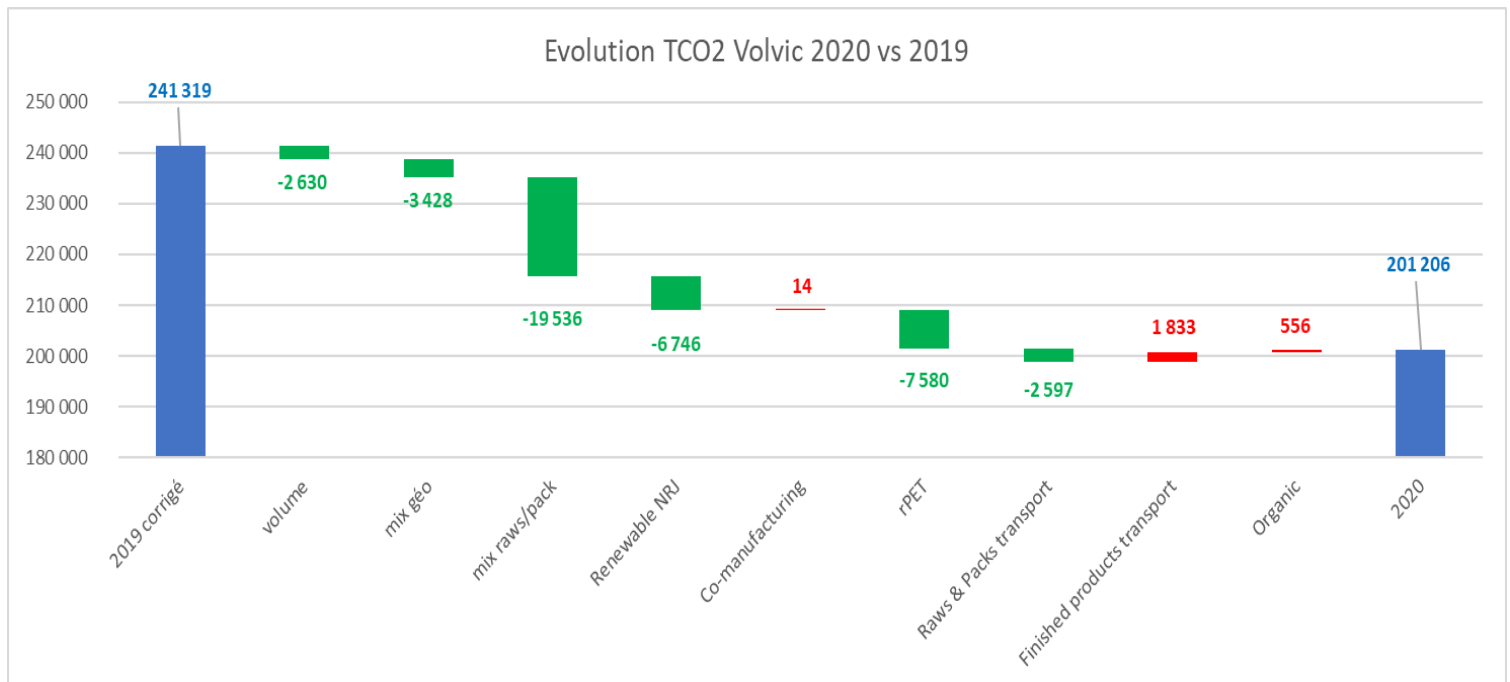
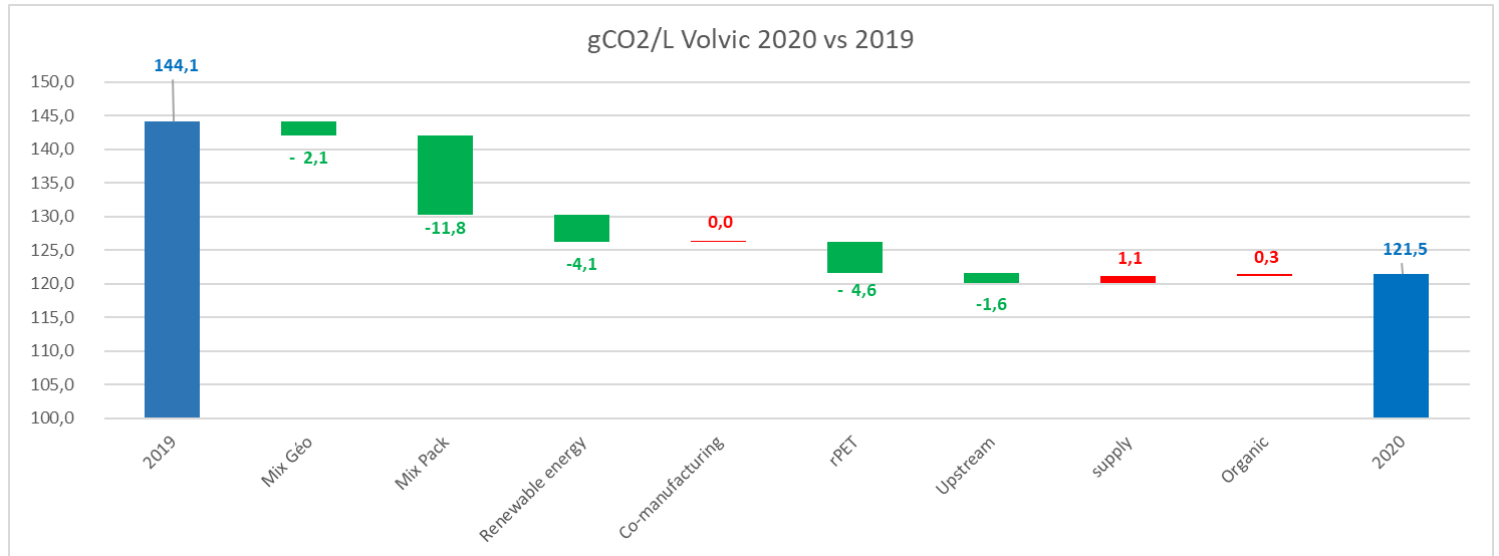
	OLD BASELINE 2019 - AS CERTIFIED		NEW BASELINE 2019	
	gCO <sub>2</sub> e/L 2019	tCO <sub>2</sub> e	gCO <sub>2</sub> e/L 2019	tCO <sub>2</sub> e
Factories Scope 1-2-3	10.7	17 890	10.6	17 709
Downstream transport	39.1	65 513	35.1	58 761
Downstream Storage	0.1	148	1.3	2 141
End of life	6.0	10 113	20.6	34 516
Packaging	66.8	111 920	63.7	106 916
Upstream transport	3.6	6 096	3.1	5 245
Use of sold products	13.9	23 246	2.3	3 773
Waste in operations	-1.1	-1 782	0.1	216
<b>TOTAL</b>	<b>147.1</b>	<b>220 161</b>	<b>144.1</b>	<b>232 090</b>

#### 4.1.2

#### Quantification of reduction

- ⇒ The intensity has decreased by 22.6 gCO<sub>2</sub>e/L or 15.7% (above last year's commitment, which was -1% intensity reduction)
- ⇒ The total emissions have decreased by 40 113 TCO<sub>2</sub>e.

The reduction has been achieved thanks to the following mainly



Effect	Description	Calculation	gCO2/L	Comments
Mix Geo	<i>Sales volumes per country</i>	Difference between: - Volvic 2019 carbon intensity (in gCO2/L) * Volvic 2020 sales volumes - Sum of Volvic 2019 carbon intensity per country * Volvic 2020 volumes per country	-2.1	Volvic Overseas sales volumes have decreased about 38% Volvic Europe sales volumes have increased about 1% Volvic Europe has a lower carbon intensity than Volvic Overseas
Mix Pack	<i>Sales volumes per format</i>	Difference between: - Sum of Volvic 2019 carbon intensity per country multiplied per Volvic 2020 volumes per country for packaging, other raws and end of life parts - Volvic 2020 carbon intensity less the emission factors' organic effect and productivity effect of projects on packaging	-11.8	Large formats ( $\geq 1L$ ) sales have decreased about -27% rather than small formats ( $< 1L$ ) have increased about 5%. And small formats have a higher carbon intensity than large formats.
Renewable energy	<i>Implementation of hydroelectricity, bio-methane and bio-propane at Volvic Nature plant</i>	Difference between: - Volvic 2019 carbon intensity of production (in gCO2/L) * Volvic 2020 sales volumes - Volvic 2020 production footprint	-4.1	
Co-manufacturing	<i>co-manufactured products sales volumes</i>	Difference between: - Volvic 2019 co-manufactured products footprint - Volvic 2020 co-manufactured products footprint	+0.01	Sales volumes of Volvic gourd
rPET	<i>use of recycled PET</i>	Difference between the tons of rPET used in 2019 and 2020 multiplied per the difference between virgin PET and recycled PET emission factors	-4.6	The Volvic recycled PET rate has increased from 21% to 37,9%.

Raws & Packs transport	<i>Transport from the supplier to the factory</i>	Difference between: - Volvic 2019 carbon intensity (in gCO <sub>2</sub> /L) of the upstream transportation multiplied per the Volvic 2020 sales volumes - Volvic 2020 footprint of the upstream transportation	-1.6	The average distance between the suppliers and the factory has decreased about 490km and the g of packaging per liter has decreased about 15%.
Finished products transport	<i>Transport from the factory to the customers</i>	Difference between: - Volvic 2019 carbon intensity (in gCO <sub>2</sub> /L) of the downstream transportation multiplied per the Volvic 2020 sales volumes - Volvic 2020 footprint of the downstream transportation	+1.1	The Volvic Germany train rate has decreased from 47% to 37%.
Organic	<i>Evolution of emission factors</i>	Difference between : - Volvic 2020 carbon intensity (in gCO <sub>2</sub> /L) with 2019 emission factors (when the sources are the same) - Volvic 2020 footprint	+0.3	
<b>Total</b>			<b>-22.6</b>	



Effect	Description	Calculation	gCO2/L	Comments
Mix Geo	<i>Sales volumes per country</i>	Difference between: - Volvic 2019 carbon intensity (in gCO2/L) * Volvic 2020 sales volumes - Sum of Volvic 2019 carbon intensity per country * Volvic 2020 volumes per country	-3 428	Volvic Overseas sales volumes have decreased about 38% Volvic Europe sales volumes have increased about 1% Volvic Europe has a lower carbon intensity than Volvic Overseas
Mix Pack	<i>Sales volumes per format</i>	Difference between: - Sum of Volvic 2019 carbon intensity per country multiplied per Volvic 2020 volumes per country for packaging, other raws and end of life parts - Volvic 2020 carbon intensity less the emission factors' organic effect and productivity effect of projects on packaging	-19 536	Large formats ( $\geq 1L$ ) sales have decreased about -27% rather than small formats ( $< 1L$ ) have increased about 5%. And small formats have a higher carbon intensity than large formats.
Renewable energy	<i>Implementation of hydroelectricity, bio-methane and bio-propane at Volvic Nature plant</i>	Difference between: - Volvic 2019 carbon intensity of production (in gCO2/L) * Volvic 2020 sales volumes - Volvic 2020 production footprint	-6 746	
Co-manufacturing	<i>co-manufactured products sales volumes</i>	Difference between: - Volvic 2019 co-manufactured products footprint - Volvic 2020 co-manufactured products footprint	+14	Sales volumes of Volvic gourd
rPET	<i>use of recycled PET</i>	Difference between the tons of rPET used in 2019 and 2020 multiplied per the difference between virgin PET and recycled PET emission factors	-7 580	The Volvic recycled PET rate has increased from 21% to 37,9%.

Raws & Packs transport	<i>Transport from the supplier to the factory</i>	Difference between: - Volvic 2019 carbon intensity (in gCO <sub>2</sub> /L) of the upstream transportation multiplied per the Volvic 2020 sales volumes - Volvic 2020 footprint of the upstream transportation	-2 597	The average distance between the suppliers and the factory has decreased about 490km and the g of packaging per liter has decreased about 15%.
Finished products transport	<i>Transport from the factory to the customers</i>	Difference between: - Volvic 2019 carbon intensity (in gCO <sub>2</sub> /L) of the downstream transportation multiplied per the Volvic 2020 sales volumes - Volvic 2020 footprint of the downstream transportation	+1 833	The Volvic Germany train rate has decreased from 47% to 37%.
Organic	<i>Evolution of emission factors</i>	Difference between : - Volvic 2020 carbon intensity (in gCO <sub>2</sub> /L) with 2019 emission factors (when the sources are the same) - Volvic 2020 footprint	+556	
<b>Total</b>			<b>-40 113</b>	

## 4.2

### **COMMITMENT TO NEUTRALITY FOR THIRD APPLICATION PERIOD (JANUARY 2021 – DECEMBER 2021)**

Volvic® is committed to maintaining carbon neutrality for the scope covered by this certification for 2021 (1<sup>st</sup> January 2021 to 31<sup>st</sup> December 2021), in accordance with PAS 2060:2014. Volvic® commitment towards carbon neutrality can be broken down as follows:

- Commit to reduce the footprint of Volvic® products during the third application period (January 2021 to December 2021); 1.2% per year absolute reduction (in tCO<sub>2</sub>) 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 third application period will use the same methodology as the one outlined in section 3.1 for this first and second application period.

## 4.3

### **CARBON MANAGEMENT PLAN FOR COMMITMENT PERIOD (JANUARY 2021 – DECEMBER 2021)**

*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 2020 – December 2020)**

Life Cycle Stage	Description	Year of Impact	Expected footprint evolution			Review and Monitoring Process
			<i>Volume affected (litres)</i>	<i>Per litre of volume affected (g CO<sub>2</sub>e/L)</i>	<i>Estimated footprint evolution (tCO<sub>2</sub>e)</i>	
Raw materials & Packaging	Light weighting of Volvic labels	2021	Not estimated	Not estimated	Not estimated	Meetings to review progress of action plan, Nature Evian Volvic World
Raw materials & Packaging	Increasing use of recycled PET for Volvic® products sold worldwide from Q1 2020.	2021	Not estimated	Not estimated	Not estimated	Monthly meetings to review progress of action plan, Nature Evian Volvic World

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 <sub>2</sub> e emission factor* (gCO <sub>2</sub> e/litre)	Volume of VERs retired (tCO <sub>2</sub> e)
<b>Second application period</b>				
Global	1 January 2020 to 31 December 2020	1 656 million	121.5	201 206

\* The CO<sub>2</sub>e emission factor was calculated from the carbon footprint of Volvic® sales worldwide over the period 1<sup>st</sup> January to 31<sup>st</sup> December 2020 (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	Vint age	Volume (tCO <sub>2</sub> e)	Retirement Date	Link to registry
<b>First application period</b>								
<b>Kariba REDD+ Project</b>	Zimbabwe	Agriculture Forestry and Other Land Use	6186-283722281-283724946-VCU-006-APX-ZW-14-902-01012015-31122015-1	VCS	2015	31 307	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/902">https://registry.terra.org/app/projectDetail/VCS/902</a>
<b>Isangi REDD+ Project</b>	DR of Congo	Agriculture Forestry and Other Land Use	7693-422229866-422284138-VCU-007-MER-CD-14-1359-01012013-31122013-1	VCS	2013	54 273	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1359">https://registry.terra.org/app/projectDetail/VCS/1359</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	8124-458646386-458661385-VCU-024-APX-PE-14-1882-01012016-31122016-0	VCS	2014	15 000	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	8125-458676734-458691733-VCU-024-APX-PE-14-1882-01012018-31122018-0	VCS	2014	15 000	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	8126-458701133-458721132-VCU-024-APX-PE-14-1882-01012017-31122017-0	VCS	2014	20 000	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>Comaco landscape management project</b>	Zambia	Agriculture Forestry and Other Land Use	5614-251608945-251615527-VCU-006-MER-ZM-14-1532-01072012-31122013-0	VCS	2015	6 583	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1532">https://registry.terra.org/app/projectDetail/VCS/1532</a>

<b>Comaco landscape management project</b>	Zambia	Agriculture Forestry and Other Land Use	5612-251455895-251470421-VCU-006-MER-ZM-14-1532-01012014-31122014-0	VCS	2015	14 527	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1532">https://registry.terra.org/app/projectDetail/VCS/1532</a>
<b>Comaco landscape management project</b>	Zambia	Agriculture Forestry and Other Land Use	5613-251591935-251593651-VCU-006-MER-ZM-14-1532-01012015-31102015-0	VCS	2015	1 717	01/04/2020	<a href="https://registry.terra.org/app/projectDetail/VCS/1532">https://registry.terra.org/app/projectDetail/VCS/1532</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2013-3191-774960-777459	Gold Standard	2013	2 500	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104065">https://registry.goldstandard.org/credit-blocks/details/104065</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2013-3191-802757-812771	Gold Standard	2013	10 015	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104064">https://registry.goldstandard.org/credit-blocks/details/104064</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2012-3192-823931-824430	Gold Standard	2012	500	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104063">https://registry.goldstandard.org/credit-blocks/details/104063</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2012-3192-852033-887032	Gold Standard	2012	35 000	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104062">https://registry.goldstandard.org/credit-blocks/details/104062</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2012-3192-887033-887438	Gold Standard	2012	406	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104061">https://registry.goldstandard.org/credit-blocks/details/104061</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2011-3193-887439-888177	Gold Standard	2011	739	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104060">https://registry.goldstandard.org/credit-blocks/details/104060</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2011-	Gold Standard	2011	599	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104059">https://registry.goldstandard.org/credit-blocks/details/104059</a>

			3193-888178-888776					
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2011-3193-888777-889086	Gold Standard	2011	310	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104058">https://registry.goldstandard.org/credit-blocks/details/104058</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2011-7181-1-6250	Gold Standard	2011	6 250	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104057">https://registry.goldstandard.org/credit-blocks/details/104057</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2009-7182-1-3681	Gold Standard	2009	3 681	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104056">https://registry.goldstandard.org/credit-blocks/details/104056</a>
<b>Nazava Water Filter Project</b>	Indonesia	Energy Efficiency - Domestic	GS1-1-ID-GS4290-16-2015-18613-1-217	Gold Standard	2015	217	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104055">https://registry.goldstandard.org/credit-blocks/details/104055</a>
<b>Nazava Water Filter Project</b>	Indonesia	Energy Efficiency - Domestic	GS1-1-ID-GS4290-16-2016-18614-6-7493	Gold Standard	2016	7 488	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104054">https://registry.goldstandard.org/credit-blocks/details/104054</a>
<b>Nazava Water Filter Project</b>	Indonesia	Energy Efficiency - Domestic	GS1-1-ID-GS4290-16-2017-18615-204-10177	Gold Standard	2017	9 974	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104053">https://registry.goldstandard.org/credit-blocks/details/104053</a>
<b>Nazava Water Filter Project</b>	Indonesia	Energy Efficiency - Domestic	GS1-1-ID-GS4290-16-2018-18616-720-10940	Gold Standard	2018	10 221	01/04/2020	<a href="https://registry.goldstandard.org/credit-blocks/details/104052">https://registry.goldstandard.org/credit-blocks/details/104052</a>
<b>Total</b>						<b>246 307</b>		



## Second application period

<b>Comaco landscape management project</b>	Zambia	Agriculture Forestry and Other Land Use	7349-386155446-386167565-VCU-024-MER-ZM-14-1532-01112015-31122015-0	VCS	2015	12 120	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1532">https://registry.terra.org/app/projectDetail/VCS/1532</a>
<b>Kariba REDD+ Project</b>	Zimbabwe	Agriculture Forestry and Other Land Use	6186-283722281-283724946-VCU-006-APX-ZW-14-902-01012015-31122015-1	VCS	2015	2 666	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/902">https://registry.terra.org/app/projectDetail/VCS/902</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	10012-171887106-171905105-VCS-VCU-576-VER-PE-14-1882-01012014-31122014-1	VCS	2014	18 000	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	9358-86081860-86093859-VCS-VCU-576-VER-PE-14-1882-01012014-31122014-1	VCS	2014	12 000	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	8124-458665483-458674840-VCU-576-VER-PE-14-1882-01012016-31122016-1	VCS	2016	9 358	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>REDD+ Project in the alto Huayabamba Conservation Concession (CAH)</b>	Peru	Agriculture Forestry and Other Land Use	8123-458615461-458617102-VCU-576-VER-PE-14-1882-01012015-31122015-1	VCS	2015	1 642	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1882">https://registry.terra.org/app/projectDetail/VCS/1882</a>
<b>The Kasigau Corridor REDD Project – Phase II</b>	Kenya	Reduced Emissions from Deforestation and Degradation	6776-343627693-343651446-VCU-006-MER-KE-14-	VCS	2015	23 754	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/612">https://registry.terra.org/app/projectDetail/VCS/612</a>

<b>The Community Ranches</b>			612-01012015-31122015-1					
<b>The Kasigau Corridor REDD Project – Phase II The Community Ranches</b>	Kenya	Reduced Emissions from Deforestation and Degradation	6776-343775360-343781605-VCU-006-MER-KE-14-612-01012015-31122015-1	VCS	2015	6 246	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/612">https://registry.terra.org/app/projectDetail/VCS/612</a>
<b>Isangi REDD+ Project</b>	DR of Congo	Agriculture Forestry and Other Land Use	8147-461056732-461069427-VCU-007-MER-CD-14-1359-01012013-31122013-1	VCS	2013	12 696	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1359">https://registry.terra.org/app/projectDetail/VCS/1359</a>
<b>Isangi REDD+ Project</b>	DR of Congo	Agriculture Forestry and Other Land Use	7693-422312818-422313096-VCU-007-MER-CD-14-1359-01012013-31122013-1	VCS	2013	279	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1359">https://registry.terra.org/app/projectDetail/VCS/1359</a>
<b>Isangi REDD+ Project</b>	DR of Congo	Agriculture Forestry and Other Land Use	7693-422313097-422339251-VCU-007-MER-CD-14-1359-01012013-31122013-1	VCS	2013	26 155	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1359">https://registry.terra.org/app/projectDetail/VCS/1359</a>
<b>Isangi REDD+ Project</b>	DR of Congo	Agriculture Forestry and Other Land Use	7691-422205278-422207277-VCU-007-MER-CD-14-1359-01012012-31122012-1	VCS	2012	2 000	11/05/2021	<a href="https://registry.terra.org/app/projectDetail/VCS/1359">https://registry.terra.org/app/projectDetail/VCS/1359</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2008-7183-3188-3946	Gold Standard	2008	759	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179118">https://registry.goldstandard.org/credit-blocks/details/179118</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2010-3194-900954-901420	Gold Standard	2010	467	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179117">https://registry.goldstandard.org/credit-blocks/details/179117</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2010-	Gold Standard	2010	332	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179119">https://registry.goldstandard.org/credit-blocks/details/179119</a>

			3194-900622-900953					
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2011-3193-889087-891393	Gold Standard	2011	2 307	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179120">https://registry.goldstandard.org/credit-blocks/details/179120</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2013-3191-812772-815430	Gold Standard	2013	2 659	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179121">https://registry.goldstandard.org/credit-blocks/details/179121</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2013-3191-786877-801063	Gold Standard	2013	14 187	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179122">https://registry.goldstandard.org/credit-blocks/details/179122</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-22-2013-3191-779588-786756	Gold Standard	2013	7 169	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179123">https://registry.goldstandard.org/credit-blocks/details/179123</a>
<b>Kikonda Forest Reserve</b>	Uganda	Other	GS1-1-UG-GS2990-21-2013-3191-777468-779587	Gold Standard	2013	2 120	11/05/2021	<a href="https://registry.goldstandard.org/credit-blocks/details/179124">https://registry.goldstandard.org/credit-blocks/details/179124</a>
<b>Riberinhos – Forest conservation</b>	Brazil	Unknown	Unknown	VCS	Unknown	30 000	To be offset*	Unknown
<b>Nazava Water Filter Project</b>	Indonesia	Energy Efficiency - Domestic	Unknown	Gold Standard	Unknown	14 290	To be offset*	<a href="https://registry.goldstandard.org/projects/details/1597">https://registry.goldstandard.org/projects/details/1597</a>
<b>Total</b>						<b>201 206</b>		

\*These credits will be offset by 31<sup>st</sup> of December 2021 by the SAEME and this QES will be updated to reflect that.

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. <i>(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).)</i>	ü	Table 2.1
5	Define the boundaries of the subject.	ü	Section 2.1
6	Identify all characteristics <i>(purposes, objectives or functionality)</i> 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. <i>(The methodology employed shall minimise uncertainty and yield accurate, consistent and reproducible results.)</i>	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 <i>(Scope 1, 2 or 3)</i> and size of carbon footprint of the subject exclusive of any purchases of carbon offsets:	ü	Table 3.1
	<i>a) All greenhouse gases shall be included and converted to tCO<sub>2</sub>e.</i>	ü	Section 3.1
	<i>b) 100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint.</i>	ü	Section 3.1
	<i>c) 100% Scope 2 (indirect) emissions relevant to the subject shall be included with determining the carbon footprint.</i>	ü	Section 3.1
	<i>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.</i>	ü	Section 3.1
	<i>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.)</i>	ü	Section 3.1
	<i>f) The quantified carbon footprint shall cover at least 95% of the emissions from the subject.</i>	ü	Section 3.1
	<i>g) Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions.</i>	ü	Section 3.1
	<i>h) Any exclusion and the reason for that exclusion shall be documented.</i>	ü	Table 3.1
14	Where the subject is an organisation/ company or part thereof, ensure that:		
	<i>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.</i>	N/A	

	<i>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.</i>	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 <i>(as the life cycle of the product/ service needs to be taken into consideration)</i> .	ü	Table 3.1
17	Describe the actual methods used to quantify GHG emissions <i>(e.g. use of primary or secondary data)</i> , the measurement unit(s) applied, the period of application and the size of the resulting carbon footprint. <i>(The carbon footprint shall be based as far as possible on primary activity data.)</i> Where quantification is based on calculations <i>(e.g. GHG activity data multiplied by greenhouse gas emission factors or the use of mass balance/ life cycle models)</i> then GHG emissions shall be calculated using emissions factors from national <i>(Government)</i> 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. <i>(Emission factors used shall be appropriate to the activity concerned and current at the time of quantification.)</i>	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. <i>(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).)</i>	ü	Section 3.2
21	Document carbon footprint management plan:		
	<i>a) Make a statement of commitment to carbon neutrality for the defined subject.</i>	ü	Section 4.1
	<i>b) Set timescales for achieving carbon neutrality for the defined subject.</i>	ü	Section 4.1
	<i>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.</i>	ü	Section 4.1
	<i>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.</i>	ü	Section 4.2
	<i>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.</i>	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: <ul style="list-style-type: none"> <li>• the period from which these reductions are to be included;</li> <li>• that the required data is available and that calculations have been undertaken using the same methodology throughout;</li> <li>• 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.</li> </ul>	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. <i>(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.)</i>	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. <i>(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.)</i>	N/A	
6	Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint. <i>(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).)</i>	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 <i>additionality, permanence, leakage and double counting</i> . (See WRI Greenhouse Gas Protocol for definitions of <i>additionality, permanence, leakage and double counting</i> .)	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 Certificates



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 12,120 Verified Carbon Units (VCUs) were retired on behalf of:

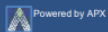
SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:  
COMACO Landscape Management Project

VCU serial number:  
7349-386155446-386167565-VCU-024-MER-ZM-14-1532-01112015-31122015-0

#### Additional Certifications:

Additional details on this retirement can be found on the Verra Registry.



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 2,666 Verified Carbon Units (VCUs) were retired on behalf of:

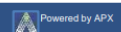
SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:  
KARIBA REDD+ PROJECT

VCU serial number:  
6186-283722281-283724946-VCU-006-APX-ZW-14-902-01012015-31122015-1

Additional Certifications:  
CCB-Gold

Additional details on this retirement can be found on the Verra Registry.



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 9,358 Verified Carbon Units (VCUs) were retired on behalf of:

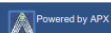
SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:  
REDD+ PROJECT IN THE ALTO HUAYABAMBA CONSERVATION CONCESSION (CCH).

VCU serial number:  
8124-458665483-458674840-VCU-576-VER-PE-14-1882-01012016-31122016-1

Additional Certifications:  
CCB-Biodiversity Gold; CCB-Community Gold

Additional details on this retirement can be found on the Verra Registry.



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 1,642 Verified Carbon Units (VCUs) were retired on behalf of:

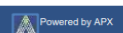
SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:  
REDD+ PROJECT IN THE ALTO HUAYABAMBA CONSERVATION CONCESSION (CCH).

VCU serial number:  
8123-458615461-458617102-VCU-576-VER-PE-14-1882-01012015-31122015-1

Additional Certifications:  
CCB-Biodiversity Gold; CCB-Community Gold

Additional details on this retirement can be found on the Verra Registry.





### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 6,246 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

The Kasigau Corridor REDD Project - Phase II The Community Ranches

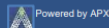
VCU serial number:

6776-343775360-343781605-VCU-006-MER-KE-14-612-01012015-31122015-1

Additional Certifications:

CCB-Gold

Additional details on this retirement can be found on the Verra Registry.



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 12,696 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

Isangl REDD+ Project

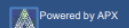
VCU serial number:

8147-461056732-461069427-VCU-007-MER-CD-14-1359-01012013-31122013-1

Additional Certifications:

CCB-Silver

Additional details on this retirement can be found on the Verra Registry.



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 12,000 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

REDD+ PROJECT IN THE ALTO HUAYABAMBA CONSERVATION CONCESSION (CCA).

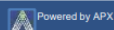
VCU serial number:

9358-86081860-86093859-VCS-VCU-576-VER-PE-14-1882-01012014-31122014-1

Additional Certifications:

CCB-Biodiversity Gold; CCB-Community Gold

Additional details on this retirement can be found on the Verra Registry.



### Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 11 May 2021, 26,155 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

Isangl REDD+ Project

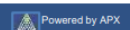
VCU serial number:

7693-422313097-422339251-VCU-007-MER-CD-14-1359-01012013-31122013-1

Additional Certifications:

CCB-Silver

Additional details on this retirement can be found on the Verra Registry.





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 11 May 2021, 279 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

Isangl REDD+ Project

VCU serial number:

7693-422312818-422313096-VCU-007-MER-CD-14-1359-01012013-31122013-1

Additional Certifications:

CCB-Silver

Additional details on this retirement can be found on the Verra Registry.



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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 11 May 2021, 2,000 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

Isangl REDD+ Project

VCU serial number:

7691-422205278-422207277-VCU-007-MER-CD-14-1359-01012012-31122012-1

Additional Certifications:

CCB-Silver

Additional details on this retirement can be found on the Verra Registry.



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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 11 May 2021, 23,754 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

The Kasigau Corridor REDD Project - Phase II The Community Ranches

VCU serial number:

6776-343627693-343651446-VCU-006-MER-KE-14-612-01012015-31122015-1

Additional Certifications:

CCB-Gold

Additional details on this retirement can be found on the Verra Registry.



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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 11 May 2021, 18,000 Verified Carbon Units (VCUs) were retired on behalf of:

SAEME (Société Anonyme des Eaux Minérales d'Evian)

Project name:

REDD+ PROJECT IN THE ALTO HUAYABAMBA CONSERVATION CONCESSION (CCA).

VCU serial number:

10012-171887106-171905105-VCS-VCU-576-VER-PE-14-1882-01012014-31122014-1

Additional Certifications:

CCB-Biodiversity Gold; CCB-Community Gold

Additional details on this retirement can be found on the Verra Registry.



Powered by APX

We are delighted to confirm the retirement of  
**467 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**  
on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **467** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry. [view your certificate.](#)

Gold Standard | Chemin de Balevert 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](#), +41 22 788 70 80, [help@goldstandard.org](#)

We are delighted to confirm the retirement of  
**759 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**  
on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **759** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry. [view your certificate.](#)

Gold Standard | Chemin de Balevert 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](#), +41 22 788 70 80, [help@goldstandard.org](#)

We are delighted to confirm the retirement of  
**332 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**  
on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **332** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry. [view your certificate.](#)

Gold Standard | Chemin de Balevert 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](#), +41 22 788 70 80, [help@goldstandard.org](#)

We are delighted to confirm the retirement of  
**2307 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**  
on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **2307** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry. [view your certificate.](#)

Gold Standard | Chemin de Balevert 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](#), +41 22 788 70 80, [help@goldstandard.org](#)

We are delighted to confirm the retirement of  
**2659 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**  
on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **2659** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry. [view your certificate.](#)

Gold Standard | Chemin de Balevert 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](#), +41 22 788 70 80, [help@goldstandard.org](#)

We are delighted to confirm the retirement of  
**14187 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**  
on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **14187** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry. [view your certificate.](#)

Gold Standard | Chemin de Balevert 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](#), +41 22 788 70 80, [help@goldstandard.org](#)

We are delighted to confirm the retirement of  
**7169 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**

on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **7169** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry, [view your certificate](#).

Gold Standard | Chemin de Balevent 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](mailto:goldstandard.org), +41 22 788 70 80, [help@goldstandard.org](mailto:help@goldstandard.org)

We are delighted to confirm the retirement of  
**2120 Verified Emission Reductions (VERs)**  
for  
**SOCIETE ANONYME DES EAUX MINERALES D'EVIAN**

on 11/05/2021

Kikonda Forest Reserve

*These credits have been retired, saving **2120** tonnes of CO2 emissions  
from being released into the atmosphere.  
Thank you for investing in a safer climate and more sustainable world.*

**Gold Standard**

Retirement certificates are hosted on the Gold Standard Impact Registry, [view your certificate](#).

Gold Standard | Chemin de Balevent 7-9 1219 Châtelaine, International Environment House 2, Switzerland | [goldstandard.org](mailto:goldstandard.org), +41 22 788 70 80, [help@goldstandard.org](mailto:help@goldstandard.org)

Annex C

## Carbon Neutrality Assurance Statement



## Certificate of Achievement

Societe Des Eaux De Volvic [SEV]

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

**all natural mineral water beverages & bottled products  
sold worldwide under Volvic® brand**

Carbon Trust Assurance Limited certifies that SEV has correctly calculated the carbon footprint of all natural mineral water beverages & bottled products sold worldwide under Volvic® brand in 2020 and satisfactorily offset this to achieve carbon neutrality in 2021, 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 Letters (CERT-12959 and CERT-12961).

Awarded: 21<sup>st</sup> May 2021

Valid Until: 20<sup>th</sup> May 2022

for and on behalf of Carbon Trust Assurance Ltd,

A handwritten signature in black ink, appearing to read "Hugh Jones".

Hugh Jones  
Managing Director Business Services, Carbon Trust

This certificate is for presentation purposes only. Please do not copy or circulate this certificate without the Certification Letter and associated Annexes where full details on the scope of the certification are documented. This certificate remains the property of Carbon Trust Assurance Limited and is bound by the conditions of the contract. Information and Contact: Carbon Trust Assurance Limited is registered in England and Wales under Company number 05676553 with its Registered Office at Dorset House, Stamford Street, London, SE1 9RT. Telephone: +44 (0) 20 7 170 7000. Carbon Trust Assurance Limited is a fully owned subsidiary of the Carbon Trust.



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 <sub>2</sub>	1	kg CO <sub>2</sub> -eq per kg
Methane	CH <sub>4</sub>	28	kg CO <sub>2</sub> -eq per kg
Nitrous oxide	N <sub>2</sub> O	165	kg CO <sub>2</sub> -eq per kg
<b>Substances controlled by the Montreal Protocol</b>			
CFC-11	CCl <sub>3</sub> F	4,660	kg CO <sub>2</sub> -eq per kg
CFC-12	CCl <sub>2</sub> F <sub>2</sub>	10,200	kg CO <sub>2</sub> -eq per kg
CFC-13	CClF <sub>3</sub>	13,900	kg CO <sub>2</sub> -eq per kg
CFC-113	CCl <sub>2</sub> FCClF <sub>2</sub>	5,820	kg CO <sub>2</sub> -eq per kg
CFC-114	CClF <sub>2</sub> CClF <sub>2</sub>	8,590	kg CO <sub>2</sub> -eq per kg
CFC-115	CClF <sub>2</sub> CF <sub>3</sub>	7,670	kg CO <sub>2</sub> -eq per kg
Halon-1301	CBrF <sub>3</sub>	6,290	kg CO <sub>2</sub> -eq per kg
Halon-1211	CBrClF <sub>2</sub>	1,750	kg CO <sub>2</sub> -eq per kg
Halon-2402	CBrF <sub>2</sub> CBrF <sub>2</sub>	1,470	kg CO <sub>2</sub> -eq per kg
Carbon tetrachloride	CCl <sub>4</sub>	1,730	kg CO <sub>2</sub> -eq per kg
Methyl bromide	CH <sub>3</sub> Br	2	kg CO <sub>2</sub> -eq per kg
Methyl chloroform	CH <sub>3</sub> CCl <sub>3</sub>	160	kg CO <sub>2</sub> -eq per kg
HCFC-21	CHCl <sub>2</sub> F	148	kg CO <sub>2</sub> -eq per kg
HCFC-22	CHClF <sub>2</sub>	1,760	kg CO <sub>2</sub> -eq per kg
HCFC-123	CHCl <sub>2</sub> CF <sub>3</sub>	79	kg CO <sub>2</sub> -eq per kg
HCFC-124	CHClFCF <sub>3</sub>	527	kg CO <sub>2</sub> -eq per kg
HCFC-141b	CH <sub>3</sub> CCl <sub>2</sub> F	782	kg CO <sub>2</sub> -eq per kg
HCFC-142b	CH <sub>3</sub> CClF <sub>2</sub>	1,980	kg CO <sub>2</sub> -eq per kg
HCFC-225ca	CHCl <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub>	127	kg CO <sub>2</sub> -eq per kg
HCFC-225cb	CHClFCF <sub>2</sub> CClF <sub>2</sub>	525	kg CO <sub>2</sub> -eq per kg
<b>Hydrofluorocarbons (HFCs)</b>			
HFC-23	CHF <sub>3</sub>	12,400	kg CO <sub>2</sub> -eq per kg
HFC-32	CH <sub>2</sub> F <sub>2</sub>	677	kg CO <sub>2</sub> -eq per kg
HFC-41	CH <sub>3</sub> F <sub>2</sub>	116	kg CO <sub>2</sub> -eq per kg
HFC-125	CHF <sub>2</sub> CF <sub>3</sub>	3,170	kg CO <sub>2</sub> -eq per kg
HFC-134	CHF <sub>2</sub> CHF <sub>2</sub>	1,120	kg CO <sub>2</sub> -eq per kg
HFC-134a	CH <sub>2</sub> FCF <sub>3</sub>	1,300	kg CO <sub>2</sub> -eq per kg

HFC-143	CH <sub>2</sub> FCHF <sub>2</sub>	328	kg CO <sub>2</sub> -eq per kg
HFC-143a	CH <sub>3</sub> CF <sub>3</sub>	4,800	kg CO <sub>2</sub> -eq per kg
HFC-152	CH <sub>2</sub> FCH <sub>2</sub> F	16	kg CO <sub>2</sub> -eq per kg
HFC-152a	CH <sub>3</sub> CHF <sub>2</sub>	138	kg CO <sub>2</sub> -eq per kg
HFC-161	CH <sub>3</sub> CH <sub>2</sub> F	4	kg CO <sub>2</sub> -eq per kg
HFC-227ea	CF <sub>3</sub> CHFCF <sub>3</sub>	3,350	kg CO <sub>2</sub> -eq per kg
HFC-236cb	CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>	1,210	kg CO <sub>2</sub> -eq per kg
HFC-236ea	CHF <sub>2</sub> CHFCF <sub>3</sub>	1,330	kg CO <sub>2</sub> -eq per kg
HFC-236fa	CF <sub>3</sub> CH <sub>2</sub> CF <sub>3</sub>	8,060	kg CO <sub>2</sub> -eq per kg
HFC-245ca	CH <sub>2</sub> FCF <sub>2</sub> CHF <sub>2</sub>	716	kg CO <sub>2</sub> -eq per kg
HFC-245fa	CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>	858	kg CO <sub>2</sub> -eq per kg
HFC-365mfc	CH <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>	804	kg CO <sub>2</sub> -eq per kg
HFC-43-10mee	CF <sub>3</sub> CHFCHFCF <sub>2</sub> CF <sub>3</sub>	1,650	kg CO <sub>2</sub> -eq per kg
<b>Perfluorinated compounds</b>			
Sulphur hexafluoride	SF <sub>6</sub>	23,500	kg CO <sub>2</sub> -eq per kg
Nitrogen trifluoride	NF <sub>3</sub>	16,100	kg CO <sub>2</sub> -eq per kg
PFC-14	CF <sub>4</sub>	6,630	kg CO <sub>2</sub> -eq per kg
PFC-116	C <sub>2</sub> F <sub>6</sub>	11,100	kg CO <sub>2</sub> -eq per kg
PFC-218	C <sub>3</sub> F <sub>8</sub>	8,900	kg CO <sub>2</sub> -eq per kg
PFC-318	c-C <sub>4</sub> F <sub>8</sub>	9,540	kg CO <sub>2</sub> -eq per kg
PFC-31-10	C <sub>4</sub> F <sub>10</sub>	9,200	kg CO <sub>2</sub> -eq per kg
PFC-41-12	C <sub>5</sub> F <sub>12</sub>	8,550	kg CO <sub>2</sub> -eq per kg
PFC-51-14	C <sub>6</sub> F <sub>14</sub>	7,910	kg CO <sub>2</sub> -eq per kg
PCF-91-18	C <sub>10</sub> F <sub>18</sub>	7,190	kg CO <sub>2</sub> -eq per kg
Trifluoromethyl sulphur pentafluoride	SF <sub>5</sub> CF <sub>3</sub>	17,400	kg CO <sub>2</sub> -eq per kg
Perfluorocyclopropane	c-C <sub>3</sub> F <sub>6</sub>	9,200	kg CO <sub>2</sub> -eq per kg
<b>Fluorinated ethers</b>			
HFE-125	CHF <sub>2</sub> OCF <sub>3</sub>	12,400	kg CO <sub>2</sub> -eq per kg
HFE-134	CHF <sub>2</sub> OCHF <sub>2</sub>	5,560	kg CO <sub>2</sub> -eq per kg
HFE-143a	CH <sub>3</sub> OCF <sub>3</sub>	523	kg CO <sub>2</sub> -eq per kg
HCFE-235da2	CHF <sub>2</sub> OCF <sub>2</sub> CF <sub>3</sub>	491	kg CO <sub>2</sub> -eq per kg
HFE-245cb2	CH <sub>3</sub> OCF <sub>2</sub> CF <sub>3</sub>	645	kg CO <sub>2</sub> -eq per kg
HFE-245fa2	CHF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>	812	kg CO <sub>2</sub> -eq per kg

HFE-347mcc3	CH <sub>3</sub> OCF <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub>	530	kg CO <sub>2</sub> -eq per kg
HFE-347pcf2	CHF <sub>2</sub> CF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>	889	kg CO <sub>2</sub> -eq per kg
HFE-356pcc3	CH <sub>3</sub> OCF <sub>2</sub> CF <sub>2</sub> CHF <sub>2</sub>	413	kg CO <sub>2</sub> -eq per kg
HFE-449sl (HFE-7100)	C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub>	421	kg CO <sub>2</sub> -eq per kg
HFE-569sf2 (HFE-7200)	C <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub>	57	kg CO <sub>2</sub> -eq per kg
HFE-43-10pccc124 (H-Galden 1040x)	CHF <sub>2</sub> OCF <sub>2</sub> OC <sub>2</sub> F <sub>4</sub> OCHF <sub>2</sub>	2,820	kg CO <sub>2</sub> -eq per kg
HFE-234ca12 (HG-10)	CHF <sub>2</sub> OCF <sub>2</sub> OCHF <sub>2</sub>	5,350	kg CO <sub>2</sub> -eq per kg
HFE-338pcc13 (HG-01)	CHF <sub>2</sub> OCF <sub>2</sub> CF <sub>2</sub> OCHF <sub>2</sub>	2,910	kg CO <sub>2</sub> -eq per kg
HFE-227ea	CF <sub>3</sub> CHFOCF <sub>3</sub>	6,450	kg CO <sub>2</sub> -eq per kg
HFE-236ea2	CHF <sub>2</sub> OCHFCF <sub>3</sub>	1,790	kg CO <sub>2</sub> -eq per kg
HFE-236fa	CF <sub>3</sub> CH <sub>2</sub> OCF <sub>3</sub>	979	kg CO <sub>2</sub> -eq per kg
HFE-245fa1	CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>3</sub>	828	kg CO <sub>2</sub> -eq per kg
HFE-263fb2	CF <sub>3</sub> CH <sub>2</sub> OCH <sub>3</sub>	1	kg CO <sub>2</sub> -eq per kg
HFE-329mcc2	CHF <sub>2</sub> CF <sub>2</sub> OCF <sub>2</sub> CF <sub>3</sub>	3,070	kg CO <sub>2</sub> -eq per kg
HFE-338mcf2	CF <sub>3</sub> CH <sub>2</sub> OCF <sub>2</sub> CF <sub>3</sub>	929	kg CO <sub>2</sub> -eq per kg
HFE-347mcf2	CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>2</sub> CF <sub>3</sub>	854	kg CO <sub>2</sub> -eq per kg
HFE-356mec3	CH <sub>3</sub> OCF <sub>2</sub> CHFCF <sub>3</sub>	387	kg CO <sub>2</sub> -eq per kg
HFE-356pcf2	CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>2</sub> CHF <sub>2</sub>	719	kg CO <sub>2</sub> -eq per kg
HFE-356pcf3	CHF <sub>2</sub> OCH <sub>2</sub> CF <sub>2</sub> CHF <sub>2</sub>	446	kg CO <sub>2</sub> -eq per kg
HFE-365mcf3	CF <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> OCH <sub>3</sub>	<1	kg CO <sub>2</sub> -eq per kg
HFE-374pc2	CHF <sub>2</sub> CF <sub>2</sub> OCH <sub>2</sub> CH <sub>3</sub>	627	kg CO <sub>2</sub> -eq per kg
<b>Perfluoropolyethers</b>			
PFPME	CF <sub>3</sub> OCF(CF <sub>3</sub> )CF <sub>2</sub> OCF <sub>2</sub> OCF <sub>3</sub>	9,710	kg CO <sub>2</sub> -eq per kg
<b>Hydrocarbons and other compounds – direct effects</b>			
Chloroform	CHCl <sub>3</sub>	16	kg CO <sub>2</sub> -eq per kg
Methylene chloride	CH <sub>2</sub> Cl <sub>2</sub>	9	kg CO <sub>2</sub> -eq per kg
Methyl chloride	CH <sub>3</sub> Cl	12	kg CO <sub>2</sub> -eq per kg
Halon-1201	CHBrF <sub>2</sub>	376	kg CO <sub>2</sub> -eq per kg