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: 20th 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 (CO₂e). Hereafter in this report, the full term or CO₂e 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 *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 2.1General information

PAS 2060 Information Requirement	Information as it relates to Volvic®				
Individual responsible for the evaluation	Jean Descoeur, Carbon Master, Evian Volvic World;				
and provision of data necessary for the substantiation of the declaration including that of preparing, substantiating, communicating and maintaining the declaration.	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.	Société Anonyme des Eaux Minérales d'Evian (SAEM All natural mineral water, beverages & bottles products sold worldwide under Volvic® brand, including: Lost glass 750 mL; PET 250 mL (Volvic - Beverages); PET 330 mL (Volvic - Still); PET 330 mL (Volvic - Still); PET 370 mL (Volvic - Beverages); PET 450 mL (Volvic - Sparkling); PET 500 mL (Volvic - Sparkling); PET 750 mL (Volvic - Beverages); PET 750 mL (Volvic - Sparkling); PET 750 mL (Volvic - Sparkling); PET 900 mL (Volvic - Sparkling); PET 1 L (Volvic - Still); PET 1.5 L (Volvic - Beverages); PET 1.5 L (Volvic - Sparkling); PET 1.5 L (Volvic - Sparkling); PET 1.5 L (Volvic - Still); 				
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: Brick 250 mL (Volvic – Beverages) Brick 330 mL (Volvic – Beverages) 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 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 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 st January 2019
First application period	1 st January 2019 – 31 December 2019
Second application period	1 st January 2020 – 31 December 2020
Commitment period	1 st 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.

QUANTIFICATION OF THE CARBON FOOTPRINT

3.1 STANDARD CHOSEN AND EMISSIONS SOURCES

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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 2020. This method was chosen as it provides an internationally-recognised approach to the calculation of representative product CO₂e 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 CO₂e 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 CO₂e 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 1st January 2020 and 31st December 2020, the footprint resulted in 201 206 tCO₂e.

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 (CO₂); methane (CH₄); nitrous oxide (N₂O); sulphur hexafluoride (SF₆); 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-oflife, 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) &}lt;u>http://www.ghgprotocol.org/standards/product-standard</u>
(2) <u>www.ipcc.ch</u>

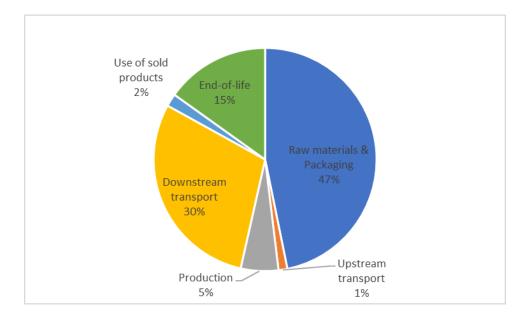


Figure 3.1: carbon emissions (intensity) breakdown

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: Extraction of mineral water; transportation of mineral water; transportation of mineral water to the plant; and 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). 		 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 Volvic [®] 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 Volvic plant over one year, the carbor footprint related to the production of consumables is estimated to represent less than 0.0005 kgCO₂e/litre, which represents about 1% or less of the total carbon footprint per litre of minera water; 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.

 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.

Life Cycle Stage	Description	GHG Emissions Category	Excluded Emissions and Justification
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.
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; and Consumer transport to the retail shop.
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, recovery. 	• Scope 3 – other indirect emissions	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 thirdparty 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.

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

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.

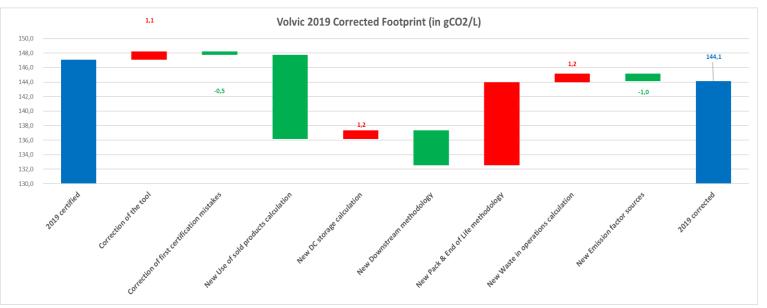
4.1 DETERMINATION OF REDUCTION

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:
 - \circ \quad 100:0 approach for each type of material
 - 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 CO2 calculator

As a result, the 2019 baseline is 144.1 gCO2e/L, and the total footprint represents 241 319 T CO2e



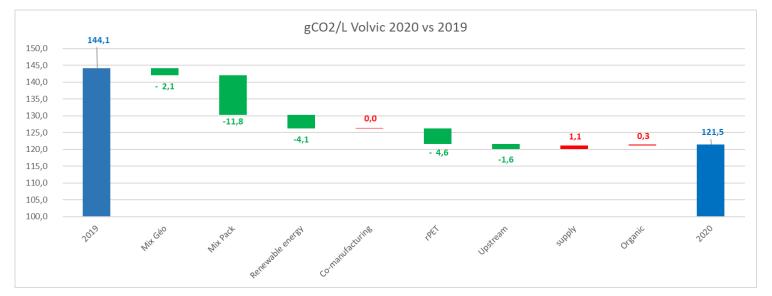
	OLD BASELINE 2019	- AS CERTIFIED	NEW BASELINE 2019		
	gCO₂e/L 2019	tCO₂e	gCO2e/L 2019	tCO₂e	
Factories Scope 1-2-3	10.7	17 890	10.6	17 709	
Downstream transport	39.1	65 513	35.1	58 761	
Downstream Storage	0.1	148	1.3	2 141	
End of life	6.0	10 113	20.6	34 516	
Raws & packaging	74.8	125 084	71.0	118 958	
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	
TOTAL	147.1	246 307	144.1	241 319	

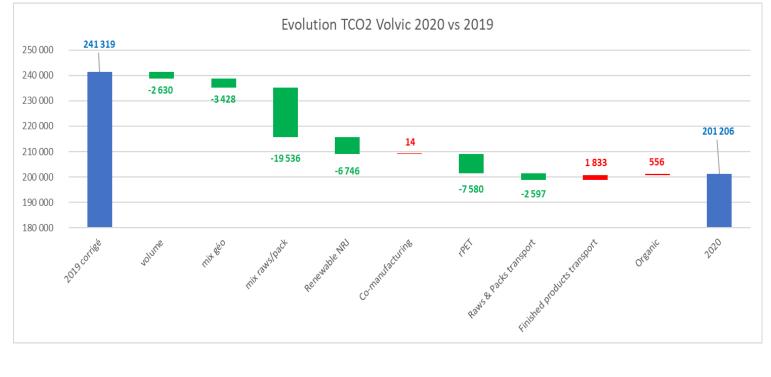
ENVIRONMENTAL RESOURCES MANAGEMENT

4.1.2 Quantification of reduction

- ⇒ The intensity has decreased by 22.6 gCO2e/L or 15.7% (above last year's commitment, which was -1% intensity reduction)
- \Rightarrow The total emissions have decreased by 40 113 TCO₂e.

The reduction has been achieved thanks to the following mainly





Effect	Description	Calculation	gCO2/L	Comments
Mix Geo	Sales volumes per country	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	Sales volumes per format	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 (>= 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	Implementation of hydroelectricity, bio- methane and bio-propane at Volvic Nature plant	Difference between: - Volvic 2019 carbon intensity of production (in gCO2/L) * Volvic 2020 sales volumes - Volvic 2020 production footprint	-4.1	
Co- manufacturing	co-manufactured products sales volumes	Difference between: - Volvic 2019 co-manufactured products footprint - Volvic 2020 co-manufactured products footprint	+0.01	Sales volumes of Volvic gourd
rPET	use of recycled PET	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	Transport from the supplier to the factory	Difference between: - Volvic 2019 carbon intensity (in gCO2/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	Transport from the factory to the customers	Difference between: - Volvic 2019 carbon intensity (in gCO2/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	Evolution of emission factors	Difference between : - Volvic 2020 carbon intensity (in gCO2/L) with 2019 emission factors (when the sources are the same) - Volvic 2020 footprint	+0.3	
Total			-22.6	

Effect	Description	Calculation	TCO2	Comments
Mix Geo	Sales volumes per country	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	Sales volumes per format	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 (>= 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	Implementation of hydroelectricity, bio- methane and bio-propane at Volvic Nature plant	Difference between: - Volvic 2019 carbon intensity of production (in gCO2/L) * Volvic 2020 sales volumes - Volvic 2020 production footprint	-6 746	
Co- manufacturing	co-manufactured products sales volumes	Difference between: - Volvic 2019 co-manufactured products footprint - Volvic 2020 co-manufactured products footprint	+14	Sales volumes of Volvic gourd
rPET	use of recycled PET	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	Transport from the supplier to the factory	Difference between: - Volvic 2019 carbon intensity (in gCO2/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	Transport from the factory to the customers	Difference between: - Volvic 2019 carbon intensity (in gCO2/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	Evolution of emission factors	Difference between : - Volvic 2020 carbon intensity (in gCO2/L) with 2019 emission factors (when the sources are the same) - Volvic 2020 footprint	+556	
Total			-40 113	

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 (1st January 2021 to 31st 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 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 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 4.1Carbon reduction plan (January 2020 – December 2020)

Life Cycle Stage	Description	Year of Impact	Expected footprint evolution			Review and Monitoring Process
			Volume affected (litres)	Per litre of volume affected (g CO₂e/L)	Estimated footprint evolution (tCO2e)	
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 5.1Retired VERs for application period

Region	Application period	Sales volume (litres)	Weighted CO ₂ e emission factor* (gCO ₂ e/litre)	Volume of VERs retired (tCO ₂ e)
Second applic	ation period			
Global	1 January 2020 to 31 December 2020	1 656 million	121.5	201 206

* The CO₂e emission factor was calculated from the carbon footprint of Volvic[®] sales worldwide over the period 1st January to 31st 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.

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					Vint	Volume	Retirement	
Project Name	Country	Technology	Serial ID	Standard	age	(tCO ₂ e)	Date	Link to registry
First application	period							
			6186-283722281-					
			283724946-VCU-					
			006-APX-ZW-14-				01/04/2020	
Kariba REDD+		Agriculture Forestry	902-01012015-					
Project	Zimbabwe	and Other Land Use	31122015-1	VCS	2015	31 307		https://registry.verra.org/app/projectDetail/VCS/902
			7693-422229866-					
			422284138-VCU-					
			007-MER-CD-14-				01/04/2020	
Isangi REDD+	DR of	Agriculture Forestry	1359-01012013-					
Project	Congo	and Other Land Use	31122013-1	VCS	2013	54 273		https://registry.verra.org/app/projectDetail/VCS/1359
REDD+ Project in			8124-458646386-					
the alto			458661385-VCU-					
Huayabamba			024-APX-PE-14-				01/04/2020	
Conservation		Agriculture Forestry	1882-01012016-					
Concession (CCAH)	Peru	and Other Land Use	31122016-0	VCS	2014	15 000		https://registry.verra.org/app/projectDetail/VCS/1882
REDD+ Project in			8125-458676734-					
the alto			458691733-VCU-					
Huayabamba			024-APX-PE-14-				01/04/2020	
Conservation		Agriculture Forestry	1882-01012018-					
Concession (CCAH)	Peru	and Other Land Use	31122018-0	VCS	2014	15 000		https://registry.verra.org/app/projectDetail/VCS/1882
REDD+ Project in			8126-458701133-					
the alto			458721132-VCU-					
Huayabamba			024-APX-PE-14-				01/04/2020	
Conservation		Agriculture Forestry	1882-01012017-					
Concession (CCAH)	Peru	and Other Land Use	31122017-0	VCS	2014	20 000		https://registry.verra.org/app/projectDetail/VCS/1882
			5614-251608945-					
			251615527-VCU-					
Comaco landscape			006-MER-ZM-14-				01/04/2020	
management		Agriculture Forestry	1532-01072012-					
project	Zambia	and Other Land Use	31122013-0	VCS	2015	6 583		https://registry.verra.org/app/projectDetail/VCS/1532

			5612-251455895-					
			251470421-VCU-					
Comaco landscape			006-MER-ZM-14-				01/04/2020	
management		Agriculture Forestry	1532-01012014-					
project	Zambia	and Other Land Use	31122014-0	VCS	2015	14 527		https://registry.verra.org/app/projectDetail/VCS/1532
			5613-251591935-					
			251593651-VCU-					
Comaco landscape			006-MER-ZM-14-				01/04/2020	
management		Agriculture Forestry	1532-01012015-					
project	Zambia	and Other Land Use	31102015-0	VCS	2015	1 717		https://registry.verra.org/app/projectDetail/VCS/1532
			GS1-1-UG-					
			GS2990-21-2013-				01/04/2020	
Kikonda Forest			3191-774960-				01/04/2020	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	777459	Gold Standard	2013	2 500		blocks/details/104065
			GS1-1-UG-					
			GS2990-21-2013-				04/04/2020	
Kikonda Forest			3191-802757-				01/04/2020	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	812771	Gold Standard	2013	10 015		blocks/details/104064
			GS1-1-UG-					
			GS2990-21-2012-					
Kikonda Forest			3192-823931-				01/04/2020	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	824430	Gold Standard	2012	500		blocks/details/104063
			GS1-1-UG-					
			GS2990-21-2012-					
Kikonda Forest			3192-852033-				01/04/2020	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	887032	Gold Standard	2012	35 000		blocks/details/104062
	0801100		GS1-1-UG-					
			GS2990-21-2012-					
Kilon de Ferret			3192-887033-				01/04/2020	https://registry.goldstandard.org/credit-
Kikonda Forest	Uganda	Other	887438	Gold Standard	2012	406		blocks/details/104061
Reserve	0501100		GS1-1-UG-		2012	100		
			GS2990-22-2011-					
			3193-887439-				01/04/2020	https://registry.goldstandard.org/credit-
Kikonda Forest	Uganda	Other	888177	Gold Standard	2011	739		blocks/details/104060
Reserve	oganua		GS1-1-UG-		2011	135		
Kikonda Forest	Uganda	Other		Cold Standard	2011	500	01/04/2020	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	GS2990-21-2011-	Gold Standard	2011	222		blocks/details/104059

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

Second application	on period							
			7349-386155446-					
			386167565-VCU-					
Comaco landscape			024-MER-ZM-14-				11/05/2021	
management		Agriculture Forestry	1532-01112015-					
project	Zambia	and Other Land Use	31122015-0	VCS	2015	12 120		https://registry.verra.org/app/projectDetail/VCS/1532
			6186-283722281-					
			283724946-VCU-					
			006-APX-ZW-14-				11/05/2021	
Kariba REDD+		Agriculture Forestry	902-01012015-					
Project	Zimbabwe	and Other Land Use	31122015-1	VCS	2015	2 666		https://registry.verra.org/app/projectDetail/VCS/902
			10012-					
			171887106-					
REDD+ Project in			171905105-VCS-					
the alto			VCU-576-VER-PE-				11/05/2021	
Huayabamba			14-1882-					
Conservation		Agriculture Forestry	01012014-					
Concession (CCAH)	Peru	and Other Land Use	31122014-1	VCS	2014	18 000		https://registry.verra.org/app/projectDetail/VCS/1882
			9358-86081860-					
REDD+ Project in			86093859-VCS-					
the alto			VCU-576-VER-PE-				11/05/2021	
Huayabamba			14-1882-					
Conservation	_	Agriculture Forestry	01012014-					
	Peru	and Other Land Use	31122014-1	VCS	2014	12 000		https://registry.verra.org/app/projectDetail/VCS/1882
REDD+ Project in			8124-458665483-					
the alto			458674840-VCU-					
Huayabamba			576-VER-PE-14-				11/05/2021	
Conservation	Dame	Agriculture Forestry	1882-01012016-	VCS	2010	0.250		
Concession (CCAH) REDD+ Project in	Peru	and Other Land Use	31122016-1 8123-458615461-	VCS	2016	9 358		https://registry.verra.org/app/projectDetail/VCS/1882
the alto			458617102-VCU-					
Huayabamba			576-VER-PE-14-				11/05/2021	
Conservation		Agriculture Forestry	1882-01012015-				11/03/2021	
Concession (CCAH)	Peru	and Other Land Use	31122015-1	VCS	2015	1 642		https://registry.verra.org/app/projectDetail/VCS/1882
The Kasigau	T CTU	Reduced Emissions	6776-343627693-	VC5	2015	1 042		
Corridor REDD		from Deforestation	343651446-VCU-				11/05/2021	
Project – Phase II	Kenya	and Degradation	006-MER-KE-14-	VCS	2015	23 754	11,00,2021	https://registry.verra.org/app/projectDetail/VCS/612
rioject rilase il	Kenya		000-WILIN-INL-14-	100	2013	23734		

The Community			612-01012015-					
Ranches			31122015-1					
The Kasigau			6776-343775360-					
Corridor REDD			343781605-VCU-					
Project – Phase II		Reduced Emissions	006-MER-KE-14-				11/05/2021	
The Community		from Deforestation	612-01012015-					
Ranches	Kenya	and Degradation	31122015-1	VCS	2015	6 246		https://registry.verra.org/app/projectDetail/VCS/612
			8147-461056732-					
			461069427-VCU-					
			007-MER-CD-14-				11/05/2021	
Isangi REDD+	DR of	Agriculture Forestry	1359-01012013-					
Project	Congo	and Other Land Use	31122013-1	VCS	2013	12 696		https://registry.verra.org/app/projectDetail/VCS/1359
			7693-422312818-					
			422313096-VCU-					
			007-MER-CD-14-				11/05/2021	
Isangi REDD+	DR of	Agriculture Forestry	1359-01012013-					
Project	Congo	and Other Land Use	31122013-1	VCS	2013	279		https://registry.verra.org/app/projectDetail/VCS/1359
			7693-422313097-					
			422339251-VCU-					
			007-MER-CD-14-				11/05/2021	
Isangi REDD+	DR of	Agriculture Forestry	1359-01012013-					
Project	Congo	and Other Land Use	31122013-1	VCS	2013	26 155		https://registry.verra.org/app/projectDetail/VCS/1359
			7691-422205278-					
			422207277-VCU-					
			007-MER-CD-14-				11/05/2021	
Isangi REDD+	DR of	Agriculture Forestry	1359-01012012-					
Project	Congo	and Other Land Use	31122012-1	VCS	2012	2 000		https://registry.verra.org/app/projectDetail/VCS/1359
			GS1-1-UG-					
Kikonda Forest			GS2990-21-2008-		2000	750	11/05/2021	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	7183-3188-3946	Gold Standard	2008	759		blocks/details/179118
			GS1-1-UG-					
Kikonda Forest			GS2990-22-2010- 3194-900954-				11/05/2021	https://rogistay.goldstandard.org/stadit
Reserve	Uganda	Other	901420	Gold Standard	2010	167		https://registry.goldstandard.org/credit- blocks/details/179117
Kikonda Forest	Uganua		GS1-1-UG-		2010	407		https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	GS1-1-0G- GS2990-22-2010-	Gold Standard	2010	227	11/05/2021	https://registry.goldstandard.org/credit- blocks/details/179119
Nesei ve	Uganda	other	935330-55-5010-	Guiu Statiuard	2010	352		<u>DIUCKS/UEIdIIS/1/9119</u>

			3194-900622-					
			900953					
			GS1-1-UG-					
			GS2990-22-2011-				11/05/2021	
Kikonda Forest			3193-889087-				11/05/2021	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	891393	Gold Standard	2011	2 307		blocks/details/179120
			GS1-1-UG-					
			GS2990-21-2013-				11/05/2021	
Kikonda Forest			3191-812772-				11/03/2021	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	815430	Gold Standard	2013	2 659		blocks/details/179121
			GS1-1-UG-					
			GS2990-21-2013-				11/05/2021	
Kikonda Forest			3191-786877-				11/05/2021	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	801063	Gold Standard	2013	14 187		blocks/details/179122
			GS1-1-UG-					
			GS2990-22-2013-				11/05/2021	
Kikonda Forest			3191-779588-				11/05/2021	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	786756	Gold Standard	2013	7 169		blocks/details/179123
			GS1-1-UG-					
			GS2990-21-2013-				11/05/2021	
Kikonda Forest			3191-777468-				11,03,2021	https://registry.goldstandard.org/credit-
Reserve	Uganda	Other	779587	Gold Standard	2013	2 120		blocks/details/179124
Riberinhos –					Unk			
Forest					now		To be offset*	
conservation	Brazil	Unknown	Unknown	VCS	n	30 000		Unknown
					Unk			
Nazava Water		Energy Efficiency -			now		To be offset*	-
Filter Project	Indonesia	Domestic	Unknown	Gold Standard	n	14 290		https://registry.goldstandard.org/projects/details/1597
Total						201 206		

*These credits will be offset by 31st 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. (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 (<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. (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 (<i>Scope</i> 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	ü	Section 2
	renewed without declaration of achievement.		
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	ü	Annex C
	neutrality are validated by a third-party certifier or second party organisations.		
28	Date the QES and have signed by the senior representative of the entity	ü	Section 1
	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).		
29	Make the QES publicly available and provide a reference to any freely	ü	Section 1
	accessible information upon which substantiation depends (eg via websites).		
30	Update the QES to reflect changes and actions that could affect the validity of	ü	Section 1
	the declaration of commitment to carbon neutrality.		

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</i> <i>quantify reductions shall be the same as that used to quantify the original</i> <i>carbon footprint. Should an alternative methodology be available that would</i> <i>reduce uncertainty and yield more accurate, consistent and reproducible</i> <i>results, then this may be used provided the original carbon footprint is re-</i> <i>qualified to the same methodology, for comparison purposes. Recalculated</i> <i>carbon footprints shall use the most recently available emission factors,</i> <i>ensuring that for purposes of comparison with the original calculation, any</i> <i>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. (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:		
	 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,	ü	Section 5
	permanence, leakage and double counting. (See WRI Greenhouse Gas		
	Protocol for definitions of additionality, permanence, leakage and double		
	counting.)		
	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	ü	Section 5
	reduction has taken place.		
	e) Credits from carbon offset projects are retired within 12 months from the	ü	Section 5
	date of the declaration of achievement.		
	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	ü	Section 5
	project documentation on a registry which shall provide information		
	about the offset project, quantification methodology and validation and		
	verification procedures.		
	h) Credits from carbon offset projects are stored and retired in an	ü	Section 5
	independent and credible registry		
12	Document the quantity of GHG emissions offset and the type and nature of	ü	Section 5
	offsets actually purchased including the number and type of credits used and		
	the time period over which credits were generated including:		
	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	ü	Section 5
	which the credits have been generated		
	e) For events, a rationale to support any retirement of credits in excess of	N/A	
	12 months including details of any legacy emission savings, taken into		
	account.		
	f) Information regarding the retirement/ cancellation of carbon offset	ü	Section 5
	credits to prevent their use by others including a link to the registry		
	where the offset has been retired.		
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	ü	Annex C
	neutrality are validated by a third-party certifier or second party organisations.		
15	Date the QES and have it signed by the senior representative of the entity	ü	Section 1
	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).		
16	Make the QES publicly available and provide a reference to any freely	ü	Section 1
	accessible information upon which substantiation depends (publically		
	available upon request).		

Table A.3QES 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	ü
	implication.	
2	Is not presented in a manner which implies that the declaration is endorsed or	ü
	certified by an independent third-party organization when it is not.	
3	Is not likely to be misinterpreted or be misleading as a result of the omission of	ü
	relevant facts.	
4	Is readily available to any interested party upon request.	ü

A4

Annex B

Carbon Offset Certificates











Annex C

Carbon Neutrality Assurance Statement



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
Methane	CH₄	28	per kg kg CO2-eq
weenanc		20	per kg
Nitrous oxide	N ₂ O	165	kg CO ₂ -eq
			per kg
Substances controlled by the			1
CFC-11	CCI _{3F}	4,660	kg CO ₂ -eq
CFC-12	CCl ₂ F ₂	10,200	per kg kg CO2-eq
		10,200	per kg
CFC-13	CCIF ₃	13,900	kg CO ₂ -eq
			per kg
CFC-113	CCl ₂ FCClF ₂	5,820	kg CO ₂ -eq
CEC 114		0 500	per kg
CFC-114	CCIF ₂ CCIF ₂	8,590	kg CO₂-eq per kg
CFC-115	CCIF ₂ CF 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
Halon-2402	CBrF ₂ CBrF ₂	1,470	per kg kg CO ₂ -eq
		1,470	per kg
Carbon tetrachloride	CCl ₄	1,730	kg CO ₂ -eq
			per kg
Methyl bromide	CH₃Br	2	kg CO₂-eq
		400	per kg
Methyl chloroform	CH ₃ CCl ₃	160	kg CO₂-eq per kg
HCFC-21	CHCl ₂ F	148	kg CO ₂ -eq
			per kg
HCFC-22	CHCIF₂	1,760	kg CO ₂ -eq
			per kg
HCFC-123	CHCl ₂ CF ₃	79	kg CO ₂ -eq
		EJJ	per kg
HCFC-124	CHCIFCF ₃	527	kg CO₂-eq per kg
HCFC-141b	CH ₃ CCl ₂ F	782	kg CO ₂ -eq
			per kg
HCFC-142b	CH ₃ CCIF ₂	1,980	kg CO₂-eq
			per kg
HCFC-225ca	CHCl ₂ CF ₂ CF ₃	127	kg CO₂-eq
HCFC-225cb	CHCIFCF2CCIF2	525	per kg kg CO2-eq
		525	per kg
Hydrofluorocarbons (HFCs)	······································		. 0
HFC-23	CHF ₃	12,400	kg CO ₂ -eq
		~	per kg
HFC-32	CH ₂ F ₂	677	kg CO ₂ -eq
HFC-41	CH ₃ F ₂	116	per kg kg CO ₂ -eq
		110	per kg
HFC-125	CHF ₂ CF ₃	3,170	kg CO ₂ -eq
			per kg
HFC-134	CHF ₂ CHF ₂	1,120	kg CO ₂ -eq
150 124-		4 200	per kg
HFC-134a	CH ₂ FCF ₃	1,300	kg CO ₂ -eq

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HFC-143	CH ₂ FCHF ₂	328	kg CO₂-eq per kg
HFC-143a	CH ₃ CF ₃	4,800	kg CO ₂ -eq per kg
HFC-152	CH ₂ FCH ₂ F	16	kg CO ₂ -eq per kg
HFC-152a	CH ₃ CHF ₂	138	kg CO ₂ -eq per kg
HFC-161	CH ₃ CH ₂ F	4	kg CO ₂ -eq per kg
HFC-227ea	CF ₃ CHFCF ₃	3,350	kg CO₂-eq per kg
HFC-236cb	CH ₂ FCF ₂ CF ₃	1,210	kg CO ₂ -eq per kg
HFC-236ea	CHF ₂ CHFCF ₃	1,330	kg CO ₂ -eq per kg
HFC-236fa	CF ₃ CH ₂ CF ₃	8,060	kg CO ₂ -eq per kg
HFC-245ca	CH ₂ FCF ₂ CHF ₂	716	kg CO₂-eq per kg
HFC-245fa	CHF ₂ CH ₂ CF ₃	858	kg CO ₂ -eq per kg
HFC-365mfc	CH ₃ CF ₂ CH ₂ CF ₃	804	kg CO ₂ -eq per kg
HFC-43-10mee	CF ₃ CHFCHFCF ₂ CF ₃	1,650	kg CO ₂ -eq per kg
Perfluorinated compounds			
Sulphur hexafluoride	SF ₆	23,500	kg CO₂-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 ₂ F ₆	11,100	kg CO ₂ -eq per kg
PFC-218	C ₃ F ₈	8,900	kg CO ₂ -eq per kg
PFC-318	c-C ₄ F ₈	9,540	kg CO ₂ -eq per kg
PFC-31-10	C ₄ F ₁₀	9,200	kg CO ₂ -eq per kg
PFC-41-12	C ₅ F ₁₂	8,550	kg CO ₂ -eq per kg
PFC-51-14	C ₆ F 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 ₅ CF ₃	17,400	kg CO ₂ -eq per kg
Perfluorocyclopropane	c-C ₃ F ₆	9,200	kg CO ₂ -eq per kg
Fluorinated ethers	L		F - 0
HFE-125	CHF ₂ OCF ₃	12,400	kg CO ₂ -eq per kg
HFE-134	CHF ₂ OCHF ₂	5,560	kg CO ₂ -eq per kg
HFE-143a	CH ₃ OCF ₃	523	kg CO ₂ -eq per kg
HCFE-235da2	CHF ₂ OCF ₂ CF ₃	491	kg CO ₂ -eq per kg
HFE-245cb2	CH ₃ OCF ₂ CF ₃	645	kg CO ₂ -eq
HFE-245fa2	CHF ₂ OCH ₂ CF ₃	812	kg CO ₂ -eq per kg

HFE-347mcc3	CH ₃ OCF ₂ CF ₂ CF ₃	530	kg CO ₂ -eq
			per kg
HFE-347pcf2	CHF ₂ CF ₂ OCH ₂ CF ₃	889	kg CO₂-eq
			per kg
HFE-356pcc3	CH ₃ OCF ₂ CF ₂ CHF ₂	413	kg CO₂-eq
			per kg
HFE-449sl (HFE-7100)	C ₄ F ₉ OCH ₃	421	kg CO₂-eq
. ,			per kg
HFE-569sf2 (HFE-7200)	C ₄ F ₉ OC ₂ H ₅	57	kg CO ₂ -eq
			per kg
HFE-43-10pccc124 (H-Galden	CHF ₂ OCF ₂ OC ₂ F ₄ OCHF ₂	2,820	kg CO ₂ -eq
1040x)		2,020	per kg
HFE-234ca12 (HG-10)	CHF ₂ OCF ₂ OCHF ₂	5,350	kg CO ₂ -eq
Th L-234Ca12 (110-10)		5,550	per kg
		2.040	
HFE-338pcc13 (HG-01)	CHF ₂ OCF ₂ CF ₂ OCHF ₂	2,910	kg CO ₂ -eq
			per kg
HFE-227ea	CF ₃ CHFOCF ₃	6,450	kg CO ₂ -eq
			per kg
HFE-236ea2	CHF ₂ OCHFCF ₃	1,790	kg CO ₂ -eq
			per kg
HFE-236fa	CF ₃ CH ₂ OCF ₃	979	kg CO₂-eq
			per kg
HFE-245fa1	CHF ₂ CH ₂ OCF ₃	828	kg CO₂-eq
			per kg
HFE-263fb2	CF ₃ CH ₂ OCH ₃	1	kg CO ₂ -eq
			per kg
HFE-329mcc2	CHF ₂ CF ₂ OCF ₂ CF ₃	3,070	kg CO ₂ -eq
		0,070	per kg
HFE-338mcf2	CF ₃ CH ₂ OCF ₂ CF ₃	929	kg CO ₂ -eq
		525	per kg
HFE-347mcf2		854	
HFE-54/IIICIZ	CHF ₂ CH ₂ OCF ₂ CF ₃	654	kg CO ₂ -eq
		207	per kg
HFE-356mec3	CH ₃ OCF ₂ CHFCF ₃	387	kg CO ₂ -eq
			per kg
HFE-356pcf2	CHF ₂ CH ₂ OCF ₂ CHF ₂	719	kg CO ₂ -eq
			per kg
HFE-356pcf3	CHF ₂ OCH ₂ CF ₂ CHF ₂	446	kg CO ₂ -eq
			per kg
HFE-365mcf3	CF ₃ CF ₂ CH ₂ OCH ₃	<1	kg CO ₂ -eq
			per kg
HFE-374pc2	CHF ₂ CF ₂ OCH ₂ CH ₃	627	kg CO ₂ -eq
			per kg
Perfluoropolyethers			
PFPMIE	CF ₃ OCF(CF ₃)CF ₂ OCF ₂ OCF ₃	9,710	kg CO ₂ -eq
		-	per kg
Hydrocarbons and other compo	ounds – direct effects		
Chloroform	CHCl ₃	16	kg CO₂-eq
			per kg
Methylene chloride	CH ₂ Cl ₂	9	kg CO ₂ -eq
		2	per kg
Methyl chloride	CH ₃ Cl	12	kg CO ₂ -eq
weary chonce		12	
Halan 1201		270	per kg
Halon-1201	CHBrF ₂	376	kg CO ₂ -eq
	I		per kg