WASA Brand Carbon Neutrality PAS 2060 Qualifying Explanatory Statement

Final – December 3rd, 2019

2nd application period, 2018

This is PAS 2060 Qualifying Explanatory Statement to demonstrate that Wasa brand has achieved carbon neutrality and is committed to being carbon neutral in line with PAS2060:2014 reporting requirements.

CONTENTS

WASA BRAND

Wasa is a Swedish crispbread brand established in 1919. Wasa has two bakeries located in Filipstad (Sweden) and in Celle (Germany). From these two locations we bake crispbread and other products for many countries around the world.

In 1999 the Barilla Barilla G.e.R. Fratelli Group acquired the brand.

Following commitment to improving the environmental sustainability of its products, Wasa started to reduce GHG emissions and responsibly manage all processes, from field to shelf.

Several initiatives have been implemented over the last years. Examples of concrete actions include the effort to use more train transport, the launch of several energy saving projects, such as the ESP (Energy Saving Project), as well as the purchase of energy from renewable sources, guaranteed by GO certificates and the use of Verified Emissions Reduction (VER) credits.

Wasa brand has committed to maintain the carbon neutrality from field to shelf till the end of 2020.

1 CARBON NEUTRALITY DECLARATION

"Carbon neutrality of **Wasa brand products** achieved by Barilla G.e.R. Fratelli Società per Azioni in accordance with PAS 2060 at **1st January 2018** with commitment to maintain to 31st December 2020 for the period commencing at 1st January 2018 and ending at 31st December 2018, **DNV GL** Business Assurance Italia Srl **certified**."

Date: December 3rd, 2019

Signed: 

Luca F. Ruini
(HSE&E Vice President)

The **Qualifying Explanatory Statement** (QES) contains all the required information on the carbon neutrality of the given subject. All information provided within this report has been **reviewed** by a **third party** (**DNV GL**) 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 Wasa's current status towards carbon neutrality. This report is publicly available on a dedicated website:

www.wasaco2.com

This is the **second declaration** of achievement for **Wasa brand**.

Certification letter from DNV GL Business Assurance Italia Srl can be found in Annex A.

2 LOGO

2.1 Wasa Brand Carbon Neutral Logo

The Wasa Brand Carbon Neutrality logo adopted is the following designed in three different version:

	Anglo Saxon countries	Great Britain USA, Canada, Australia
	Nordics countries	Sweden, Norway Denmark, Finland
	Central Europe	Austria, Germany, Poland
	All other countries	

In the back of pack will be available the following sentence translated in the local language when it is required by local legislation.

Wasa's business reduces its greenhouse gas emissions from field to the shelf and offsets to zero any remaining emissions by promoting renewable energy and rainforest preservation projects. Verified by independent auditor (DNV GL). Learn more at www.wasaC02.com

3 INTRODUCTION

This document forms the Qualifying Explanatory Statement (QES) to demonstrate that **Wasa brand** has achieved **carbon neutrality** from **field to shelf** for all Wasa brand products, for the period starting 1st January 2018 and ending 31st December 2018, in accordance with PAS 2060:2014.

This has been achieved through:

- **Continuous CO_2 reduction** through action plans under Wasa direct control: manufacturing plants (bakeries) and logistics;
- **Offsetting of carbon emission** for the period commencing 1st January 2018 and ending 31st December 2018.

This report includes the information which substantiates the declaration of Wasa brand achievement on carbon neutrality for second application period (2018 year) and **commitment on carbon neutrality up to 2020** (3 years, from 2017 – the baseline year) in compliance with PAS 2060:2014 standard.

Wasa brand has also set up a **Carbon Management Plan** to **reduce the GHG emissions associated to the life cycle of Wasa brand products** in order to demonstrate commitment to being carbon neutral in accordance with PAS 2060:2014.

3.1 General information

PAS 2060 Information Requirement	Information as it relates to WASA
Entity making PAS 2060 declaration	Wasa brand
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)	Luca Ruini, Health Safety Environment and Energy Vice President of Barilla G.e.R. Fratelli società per Azioni
Subject of PAS 2060 declaration	Wasa brand product produced in 2018 (a complete list is available in Annex C)
Function of Subject	The function of Wasa brand is to provide its global consumers with Wasa brand products ready for consumption
Activities required for subject to fulfil its function	The activities required to produce Wasa brand product include: • Raw material cultivation/production • Packaging material production (primary, secondary and tertiary) • Auxiliary material production • Material transportation to factory • Product manufacturing • Waste management at factory • Product distribution (up to shelf) • Packaging end of life The system boundary is reported in Figure 3-2
Rationale for selection of the subject	The subject represents 100% of products sold by Wasa brand
Type of conformity assessment undertaken	I3P-3 Independent third-party certification - unified
Baseline date for PAS2060 programme	1st January 2017
Achievement Period	1st January 2018 – 31st December 2018
Commitment Period	1st January 2019 – 31st December 2020

3.2 Scope

The **subject** for carbon neutrality is **Wasa brand products**.

The main business activity is the manufacturing of bakery product within Wasa brand, as reported in Annex C.

Wasa product are sold worldwide and **distribution to all country market** is considered in the **scope**. Table 3.1 shows the main market distribution for Wasa brand products; the full list is available in Annex H.

Table 3.1 Wasa product distribution

Distribution markets	Sold volume – %
Nordics Market	53%
Sweden Market	*30%*
Norway Market	*15%*
Denmark – Iceland Market	*7%*
Finland Market	*1%*
Germany Market	21%
Netherlands Market	8%
USA Market	4%
France Market	4%
Italy Market	3%
Poland Market	2%

The selected subject covers all activities done by Wasa brand, with property plants (bakeries), offices and warehouse, **from field to shelf.**

All Wasa Brand products are included.

During the reporting period, the definition of the subject remains unchanged. In the case that material change to the subject occurs in the future, the process of determination and substantiation of the subject and associated **GHG emissions** shall be re-started on the basis of a newly defined subject.

3.3 PAS 2060 Carbon Neutrality

Wasa brand is following the timeline for Carbon Neutrality in accordance to Figure 3-1 – Carbon Neutrality declaration periods.

The first period represents the baseline period that corresponds to the whole 2017 year. During 2019 the subject has been defined and the 2018 Carbon Footprint has been quantified.

This QES will be updated accordingly to reflect any changes and actions that could affect the validity of the declaration of commitment.

Wasa brand is committed to achieving carbon neutrality for the global business for our application periods, as described in Figure 3-1:

- 1st application period (baseline): from 1st January 2017 to 31st December 2017,
- 2nd application period: from 1st January 2018 to 31st December 2018,
- 3rd application period: from 1st January 2019 to 31st December 2019,
- 4th application period: from 1st January 2020 to 31st December 2020.

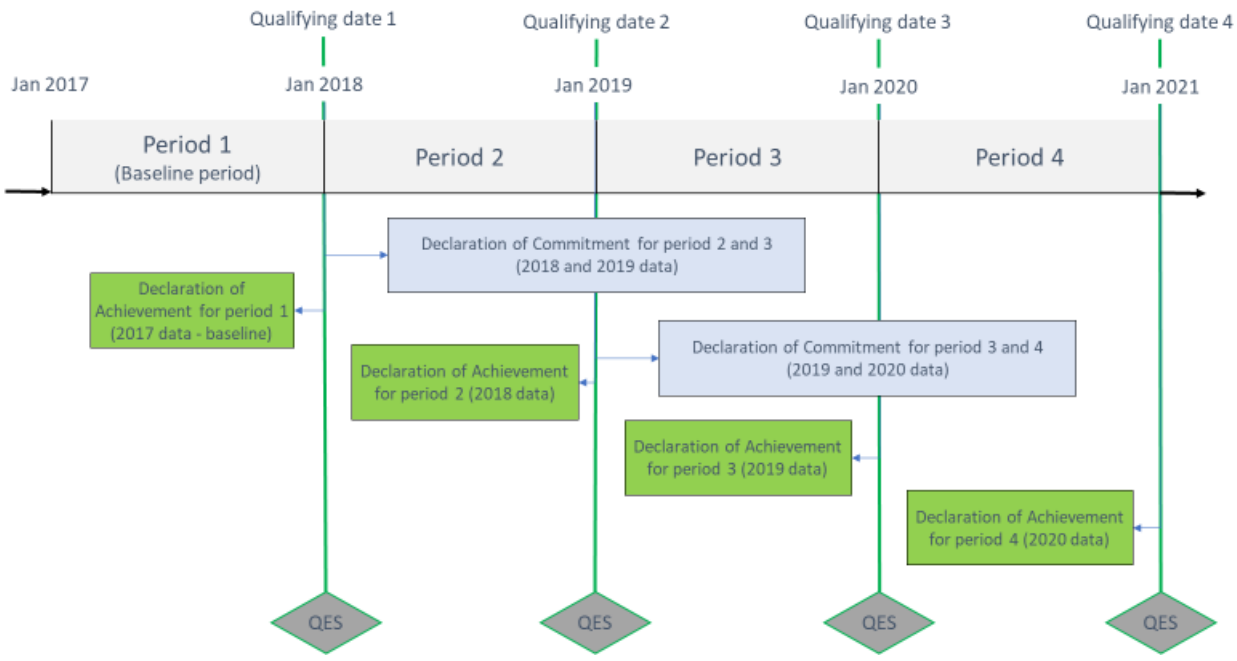

Figure 3-1 Carbon Neutrality declaration periods

Wasa brand decided to take into consideration GHG emissions reduction associated with the defined subject immediately prior to the baseline data (historical reductions).

3.4 Boundaries of the subject

The system boundary considered for the Carbon Footprint quantification of Wasa brand is described in Figure 3-2.

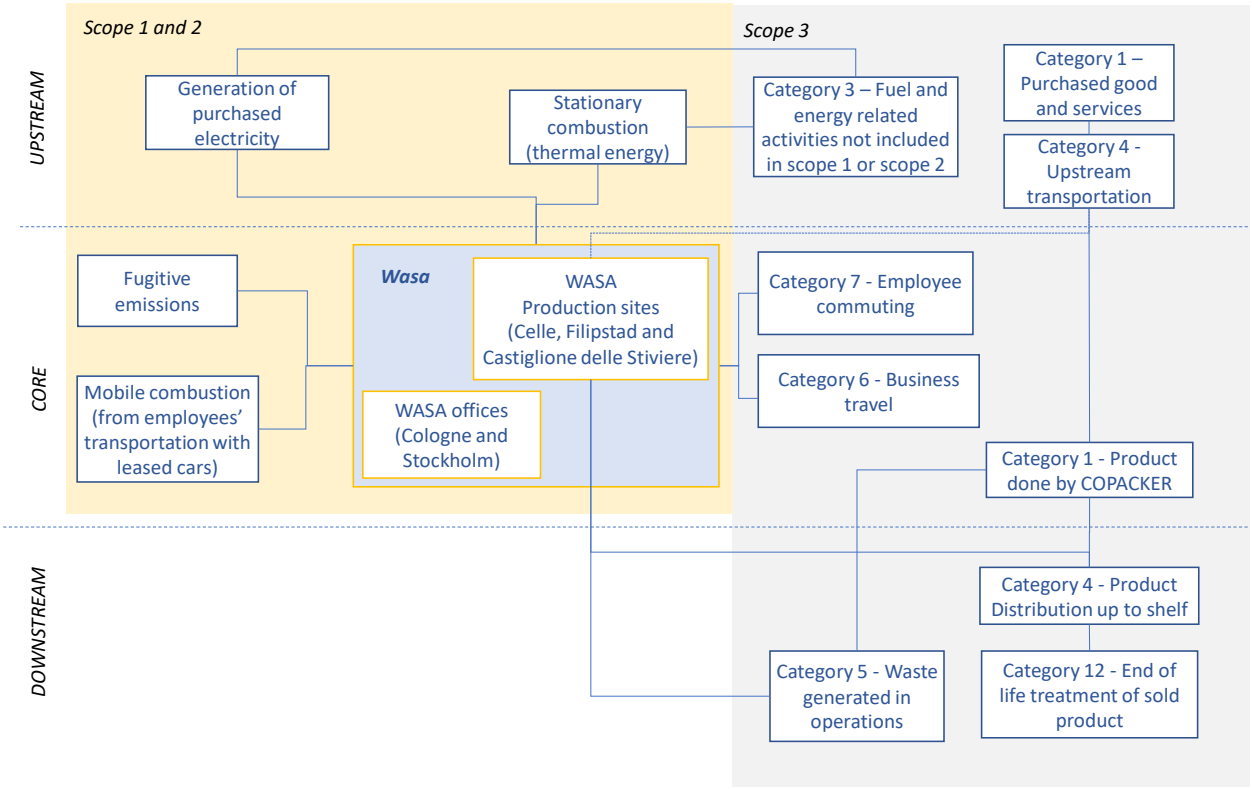

Figure 3-2 System Boundaries from field to shelf considered for Wasa brand Carbon Neutrality

GHG emissions associated to Wasa brand within the defined boundary from the periods of 1st January 2018 to 31st December 2018 have been quantified in accordance with GHG Protocol, following a corporate GHG inventory accounting. The approach selected refers to all Wasa brand products and is believed to be **more comprehensive and conservative** respect to a **product approach** because it does not exclude any GHG sources that would be included in a product approach and **considers a wider range** of emission sources.

This is confirmed by the average impact (in terms of GHG emissions) evaluated starting from the "corporate approach" respect to that evaluated starting from the EPD results.

The data for the second application period has been **verified by an independent third party**, DNV GL Business Assurance Italia Srl, who confirms that the Carbon Neutral Declaration set out in this QES is appropriately reported in accordance with the requirement of PAS 2060.

The assurance letter issued by **DNV GL Business Assurance Italia Srl** can be found in Annex A

4 QUANTIFICATION OF CARBON FOOTPRINT

4.1 Emission results

The total GHG emissions related to scope 1, 2 and 3 refer to manufactured products during the year 2018 (2nd application period) and represent a total of 101,437 tons of CO_2 equivalent.

Table 4.1 – GHG emissions overall results (2018 year – rounded data)

GHG Scope	GHG emissions [t CO_2 equivalent]	Scope contribution
Scope 1	4,886	5%
Scope 2 – market based	929	1%
Scope 3 – market based	95,622	94%
Total Carbon footprint for baseline period	**101,437**	100%

Emissions results (Table 4.1) show that the main contribution to the Carbon Footprint comes from scope 3, in particular raw materials (mainly rye, soft wheat flour and vegetable oils), upstream and product distribution and packaging production (about than 70% of the total carbon footprint). It means that scope 3 emissions, according to GHG Protocol, are the major contributor to the Wasa brand carbon footprint, while scope 1 and 2 emissions account for less than 10%.

Table 4.2 – GHG scope 3 emissions, main contributions (2018 year – rounded data)

Main GHG activity	Contribution - %
Rye flour	27%
Product distribution	17%
Soft wheat flour	10%
Packaging material	9%
Vegetable oils	4%
Raw and packaging material transport	3%

4.2 Methodology

Total GHG emissions associated with Wasa brand products, 1st January 2018 to 31st December 2018, have been quantified according to GHG Protocol, Corporate Accounting and Reporting Standard, following the operational control approach. This methodology was chosen as it represents best practice in terms of organization carbon footprint inventory and PAS 2060 endorses it as being fully compliant with its requirements, when applied correctly.

Seven types of greenhouse gases (GHG) included in the Kyoto Protocol to the United Nations Framework Convention on Climate Change are required for reporting under the GHG Protocol Corporate Standard and were covered in the calculations:

- carbon dioxide (CO_2),
- methane (CH_4),
- nitrous oxide (N_2O),
- hydrofluorocarbons (HFCs),
- perfluorocarbons (PFCs),
- sulphur hexafluoride (SF_6)
- nitrogen trifluoride (NF_3).

The calculation method used for Wasa brand Carbon Footprint assessment is IPPC 2013 – GWP100a v. 1.03, available in Simapro software 8.5.2.0, which takes into account also other than the previous 7 greenhouse gas types.

The total gross emissions are measured in tonnes (metric tons) of carbon dioxide equivalent (ton CO_2 equivalent), and they are in full compliance with the requirement of PAS 2060:2014.

The inventory accounts for 100% of GHG emissions of business activities and operations in which Wasa brand has direct operational control and the full authority to introduce and implement its operating policies, considering also the purchase of finished products manufactured by copackers.

All scope 1 and 2 greenhouse gas emissions relevant to the system boundary are included and quantified, as well as all relevant and available scope 3 greenhouse gas emissions, in accordance with the GHG Protocol, Corporate Accounting and Reporting Standard, as confirmed by DNV GL certification.

4.2.1 Scope 1 and 2 emissions

GHG emissions related to scope 1 come from direct emissions from sources owned or controlled by Wasa brand and GHG emissions related to scope 2 come from indirect emissions from the generation of purchased electricity consumed by Wasa brand.

In the Wasa brand context, scope 1 and 2 emissions considered are:

- stationary combustion,
- mobile combustion,
- fugitive emissions,
- generation of purchased electricity.

4.2.2 Scope 3 emissions

GHG emissions related to scope 3 refer to all other indirect emissions as a consequence of the activities of Wasa brand that occur from sources not owned or controlled by.

In the Wasa brand context, scope 3 emissions considered are:

- Category 1 - Purchased goods and services,
- Category 3 - Fuel and energy related activities not included in Scope 1 or Scope 2,
- Category 4 - Upstream transportation and distribution,
- Category 5 - Waste generated in operation,
- Category 6 - Business travel,
- Category 7 - Employee commuting,
- Category 12 - End-of-life treatment of sold products.

4.3 Data source

Primary and secondary data has been used for the Carbon Quantification process. Primary data is used where possible, only where primary data was not, secondary data was used to quantify emission.

1. Primary Data source relates to all input and output corresponding to steps under Wasa control were directly provided by Wasa brand or Barilla company. This includes production (material and energy inputs, waste outputs) distribution (volume and destination) as well as fuel consumption for employee's transportation with vehicles under control, distance covered by business travel and employees commuting.

2. Emission Factors were sourced from LCA recognised databases (Ecoinvent, Agri-footprint, GHG protocol, etc) and industry association (Plastics Europe, FEFCO, etc) publications.

3. All other secondary information were sourced either from national statistics (e.g. average waste management).

Source of data were reviewed by DNV GL through the GHG Protocol certification process and requirements of PAS 2060:2014.

4.4 Assumptions and estimations

All assumptions made to quantify the Greenhouse gas emission of Wasa brand were reviewed by DNV GL through the GHG Protocol certification process and requirements of PAS 2060:2014.

The most relevant assumptions made during the assessment are described below:

- Production managed by copackers: energy consumption per unit of product is assumed to be the same the highest energy consumption plant; while the energy emission factors are country specific for copacker location.
- Calculation of distribution distance: distribution is a significant contributor to the total Carbon Footprint; covered distances from third party contractors are not available, for these reason average distances between production plants, distribution markets (in behalf of distribution platform) and shops has been used.

4.5 Exclusions

Annex D outlines all the inclusions and exclusions for GHG emissions; in order to cover all exclusions within the system boundary an **overrate of 3%** has been added to Wasa total Carbon Footprint for compensation); in this way **Wasa Brand Carbon Neutrality covers 100% of the GHG emissions**.

4.6 Uncertainties

Generally, the use of secondary data throughout the assessment represents the major source of uncertainties on results. Actions taken to maximise the reduction of these uncertainties are described below and were reviewed by DNV GL.

- Secondary emissions factors: uncertainty associated to the use of secondary emission factors is because they represent averages, rather than specific emissions. However, their use was appropriate, and care has been taken to use the best available datasets, which come from main LCA databases (Ecoinvent, Agrifootprint, published Environmental product declaration within The International EPD® System).
- Secondary data used to model copacker energy consumption: variation could have material impacts on the total footprint, but reasonable data has been used throughout the assessment and conservative assumptions have been taken where appropriate. In particular considering a production process energy consumption per unit of product equal to Filipstad plant, which has the highest energy consumption per ton of product and correlated to each copacker production volume.

Result of the uncertainty calculation are reported in Annex F.

4.7 Comparison with baseline period results

The total GHG emissions related to WASA products during the year 2018 (2nd application period) compared to the baseline results (year 2017) is lower for Scope 1 and 2 (emissions directly under the organization control) but higher for Scope 3, that includes factors out from the direct control of the organization. This increase in the Scope 3 emissions is due to a change of system boundaries and an update of some conversion factors, done following the DNV Auditor requests with the aim of continuously improve the precision and the quality of the data collection and calculation.

In order to allow a more realistic comparison between the Carbon Footprint results of the two periods, a further elaboration was conducted: 2018 GHG emissions has been re-calculated keeping unchanged the system boundaries and the conversion factors used in the baseline period. The result of this elaboration indicates that the 2018 emissions versus 2017 remain substantially unchanged.

In order to recalculate the Scope 3, the elaborations focused on the following aspects:

- Raw materials: Raw materials are the main contributors to the Scope 3 in terms of emissions. The main impact is due to the cereal cultivation (for WASA products, this is represented by the rye cultivation) and is mainly related to the yield annually obtained. Since the yield is a very variable factor, the impact related to the agricultural products is also very variable. Yearly, the GHG emission factors related to the raw materials are updated in order to use values as accurate as possible that reflect the real situation. To compare the 2018 raw materials impact with the baseline, the 2017 emission factors have been used.
- Distribution: Transportation is the second main contributor in terms of emissions to the Scope 3 and one of the most difficult factors to be modelized. Logistic of the shipped products is, in fact, very complex and hard to trace. The company's effort is to annually improve the accuracy of the calculation, modifying and integrating the routes and transport hypotheses. To compare the 2018 distribution impact with the baseline, the 2017 routes and hypotheses have been used.
- Packaging materials: Packaging is a key element whose primary purpose is to protect and preserve the product properly, especially some elements of the tertiary packaging, that are essential for the distribution and often are reused several times before being disposed of. In order to try to reach a greater accuracy, in 2018, some of this packaging elements, considered out of the scope of this study in the baseline period, has been taken into consideration. To compare the 2018 packaging impact with the baseline, the same 2017 packaging elements have been included.

5 CARBON MANAGEMENT PLAN

The carbon reduction management plan will consider a 4 years period (2017-2020) with the aim of maintaining the emission intensity indicator, this means that the emission intensity indicator must not increase along the period.

This target will be monitored periodically (annually) in order to check if the expected results are aligned to the real ones. In order to achieve the target a series of project will be implemented both inside and outside Wasa brand gate.

Although Wasa brand began its Carbon Management Programme for Carbon Neutrality in 2018, energy saving measures have been implementing since the early 2010 year for production plants (Filipstad and Celle), some of them, started in 2016, will be considered in the boundaries of this study.

The following paragraphs explain in detail implemented (paragraph 5.2) and planned (paragraph 5.3) projects, that are mainly addressed to inside Wasa Brand gate: projects related to production plant GHG emissions reduction (Celle and Filipstad plants).

5.1 Wasa brand best practice

All Wasa production lines, except only two for Celle plant, are electrically powered, and all the electricity purchased comes from hydropower (electricity source written declarations are available for both plants in Annex G).

Carbon free electricity purchase entails a GHG emission reduction of about 19% over the total Wasa brand Carbon footprint, compared to grid electricity mix.

In addition, about 19% of the total intercompany transports (26% of distributed product volume) are by train (from Sweden to Norway and between Germany and Sweden). Thus, train transport allows a GHG emissions reduction of about 1.4% over the total Wasa brand Carbon footprint (about 8% with regards to product transportation emissions), compared to the use of road transport only.

5.2 Wasa Brand GHG emission implemented reduction Project

5.2.1 Implemented projects before baseline period

Implemented projects are related to energy savings at plant level. Project implemented during 2016 (Table 5.1) year allows to evaluate a saving already in the baseline Wasa brand Carbon Footprint (2017).

Table 5.1 Overview of the project implemented during year 2016

Project Name	Description	Year	Type of energy used	Plant	Emission reduction [kg of CO_2 eq]
Fluorescent lamps replacement with LED technology	Replacement of fluorescent lamps with LED in the warehouse.	2016	Electric energy	Celle	1,472
Heat recovery system	Increasing of the recovery system, using the heat of the compressors for local heating	2016	Electric energy	Filipstad	8,955

Celle fluorescent lamps replacement regarded the removal the fluorescent lamps, in order to install LED ones, enhancing the illumination with a new allocation of illumination and the installation of presence detector.

Filipstad heat recovery project aimed to reduce the energy consumption of cooling system by connecting the air compressor central to the heat recovery system, in order to reduce the use of cooling system and use the heat from the compressors for local heating.

5.2.2 Implemented projects in 2017 and 2018

Table 5.2 shows projects implemented in 2017 and 2018, evaluated in 2018 Carbon Footprint assessment.

Table 5.2 2017 and 2018 saving project

Project Name	Description	Year	Type of energy used	Plant	Emission reduction [kg CO2 eq]
Fluorescent lamps replacement with LED technology	Replacement of fluorescent lamps with LED in the magazine	2017	Electric energy	Celle	24
Fluorescent lamps replacement with LED technology	Replacement of fluorescent lamps with LED in the technical area	2017	Electric energy	Celle	5
Fluorescent lamps replacement with LED technology	Replacement of fluorescent lamps with LED in PL19 oven area	2018	Electric energy	Filipstad	92.6

Celle fluorescent lamps replacement has been implemented also to the magazine and technical area, while in the Filipstad plant the replacement has been made in the oven area.

5.3 Wasa Brand GHG emission planned reduction Project

In order to achieve the above-mentioned target, Wasa is committed to identifying and implementing carbon saving projects until 2020. Table 5.3 shows main projects implemented in 2017 and 2018 and the estimated reduction for the whole commitment period (year 2019-2020).

Table 5.3 Planned GHG emission reduction (year 2019-2020)

Plant	Type	Implementation year	Reduction in 2019 [kgCO2 eq]	Reduction in 2020 [kgCO2 eq]
Celle	LED in magazine area	2017	24.05	24.05
Celle	LED in the technical area	2017	5.04	5.04
Filipstad	LED in PL19 oven area	2018	46.31	92.63
Celle	LED in fermentation and oven area	2018-2019	95.55	1,146.56
TOTAL reduction			**170.95**	**1,268.27**

6 CARBON OFFSET PROGRAM

6.1 Offset program for the second application period

Together with **EcoAct**, an internationally recognised consultancy in carbon neutral strategies, Wasa Brand has put in place an offsetting programme that complies with the most rigorous international standards, while also driving social and economic improvements. The neutrality is achieved by reducing and compensating Green House Gases (GHG) emissions through supporting the development of sustainable climate solutions in developing countries. Offsetting projects bring social, environmental and economic side-benefits, which contribute to United Nations Sustainable Development Goals (SDGs) and are labelled by **Verified Carbon Standard** (**VCS**)[1] and the **Climate community and Biodiversity Alliance (CCBA)**[2].

The **VCS Program** is the world's most widely used voluntary GHG program. A wider description of each project is reported in Annex E.

VCS guarantee that the offset purchased represent **genuine**, **additional GHG emission reduction**: projects are assessed using a technically sound GHG emission reduction quantification methodology specific to that project type. The VCS label also guarantee that the project involved in delivering offsets meet the criteria of additionality, permanence, leakage and double counting. It also guarantees that the offsets were verified by an **independent third-party** and that the credits were only issued after the emission reduction has taken place.

CCBA developed the Climate, Community and Biodiversity Standards (CCB Standards) and have been managed by the VCS since November 2014. The CCB Standards evaluate land management projects from the early stages of development through implementation and foster the **integration of best-practice and multiple-benefit approaches into project design and implementation**.

The CCB Standards include projects that reduce greenhouse gas emissions from deforestation and forest degradation or projects that remove carbon dioxide by sequestering carbon or other land management.

Credits are retired by the **12nd August 2019.**

These **credits** are supported by publicly available project documentation on the **Market registry online** (**Markit**[3]). The registry system is the central storehouse of data on all registered projects, and tracks the generation, retirement and cancellation of all credits. To register with the program, projects must show that they have met all standards and methodological requirements.

[1] https://verra.org/
[2] http://www.climate-standards.org/
[3] https://mer.markit.com/br-reg/public/index.jsp?s=ca

6.2 Offsetting projects

Offsetting project selected by Wasa brand are:

1. Peruvian **Madre de Dios REDD+ project**, labelled by **VCS** and the **CCBA**, as an emblematic project
2. Indian **solar project** –multisite- also labelled by **VCS**.

Madre de Dios project aims to **reduce deforestation in the Peruvian Amazon**, preserving 100,000 hectares by reducing pressure for new agricultural lands and guarantee the sustainable forestry management of timber concessions. Doing this, it protects the habitat of 65 endangered species and the livelihood of local indigenous communities such as the Yine, Huitoto, Mashco, Piro, Yora and Amahuaca tribes, who rely on the forest for their survival. The project develops and promotes sustainable agriculture, that respects the integrity of the forest and of its fauna and flora, resulting in 700,000 tons of CO_2 equivalent emission avoided per year.

Indian solar project (**SaurIndia** project) aims to provide local renewable solar energy in India, involving the installation of photovoltaic panels in different Indian states (Telangana, Maharashtea and Karntaka). The total installed capacity of the project is 120 MW, therefore displacing an equivalent amount of electricity which would have otherwise been generated by fossil fuels dominant electricity grid. This decrease of GHG emissions results in a reduction of the country's pollution; indeed, the SaurIndia project helps to preserve natural resources and fights against climate change, with an emission reduction of 2,130,890 tons of CO_2 equivalent over ten year.

6.3 Amount of credits purchased

Credits have been ordered by Wasa brand for the period covering 1st January 2018 – 31st December 2018 to EcoAct. EcoAct has established a VERPA (Verified Emission Reduction Purchase Agreement) with the projects' developers, and will, by end 2019, transfer and retire the credits on behalf of Wasa Brand through its third-party audited internal registry.

The amount of credits purchased is **104,481 tonnes of CO_2 equivalent**, it is composed by two contribution:

- **101,437 tonnes** of CO_2 equivalent, amount evaluated for the second application period
- **3,044 tonnes** of CO_2 equivalent, that represent the **overrate of 3%** of the whole baseline carbon footprint to cover all the exclusions (Annex D) and precludes underestimation.

Wasa Brand portfolio offsetting credits is so defined:

1. Peruvian **Madre de Dios REDD+ project** cover **18%** of the portfolio
2. Indian **solar project** –multisite- cover remaining **82%** of the portfolio

We can say that Wasa Brand Carbon Neutrality covers 100% of the GHG emissions.

6.4 Offset program for the third application period

For the third application period, Wasa brand will notify EcoAct of the volume of carbon credits required once the emission calculations are completed for this period. The volumes of credits required by Wasa brand will be confirmed at early 3Q 2020 to EcoAct and retirements will be completed at the end of 3Q 2020 and before completion of the audit for this Application Period. The portfolio composition and share among projects will be similar to the second application period, as stated in the contract with EcoAct.

Total Carbon Credit retired for the second period exceeds carbon footprint as quantified for the second period by 3,519 tonnes of CO_2 equivalent. Excess credits retired will be reconciled against the third application period.

7 ANNEX A

7.1 DNV GL Carbon Neutral Assurance letter

DNV·GL

STATEMENT

Statement No.:
281357-2018-OTH-ITA-DNV

Initial Issuance Date:
27 December 2018

Validity Date:
28 December 2019 – 31 December 2020

This certifies that:

the Qualifying Explanatory Statement (QES) entitled:

"WASA Brand Carbon Neutrality PAS 2060 Qualifying Explanatory Statement"

Issued by the organization

Barilla G. e. R. Fratelli S.p.A.

Via Mantova, 166 - 43122 Parma (PR) – Italy

on the 3th December 2019 claiming the second carbon neutrality declaration of achievement for **Wasa brand products** (here-after "the PAS 2060 subject") during the second application period commencing at 1st January 2018 and ending at 31st December 2018 and with the commitment to maintain the carbon neutrally until, at least, the 31st December 2020.

DNV GL has verified, according to the International Standard ISO 14064-3 "Specification with guidance for the validation and verification of greenhouse gas assertions":

- the methodology used by the organization to quantify the carbon footprint of the PAS 2060 subject during the second application period, as described in the internal document entitled "Wasa brand carbon neutrality: GHG determination and Carbon Footprint quantification -year 2018" dated 21st November 2019
- the GHG emission reduction plan, as described in the document entitled "Wasa brand carbon neutrality: Carbon Management Plan-year 2019" dated 21st November 2019 associated to the PAS 2060 subject.
- The offsetting of the residual GHG emissions - after the GHG emission reduction plan- associated to the PAS2060 subject through Voluntary Emission Reductions (VERs) generated by the VCS/CCBA project entitled "Madre de Dios Amazon REDD+" in the Peruvian Amazon and the VCS project "Bundled solar power by Vector Green Energy Private Limited" in India.

with the verification result that the above referred Qualifying Explanatory Statement complies with the requirements of the International Standard PAS 2060:2014 "Specification for the demonstration of carbon neutrality".

Place and date:
Vimercate (MB), 13 December 2019

For the Certification Body

Zeno Beltrami
Management Representative

La validità del presente Certificato è subordinata al rispetto delle condizioni contenute nel Contratto di Certificazione/
Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
DNV GL Business Assurance Italia S.r.l. Via Energy Park, 14, 20871 Vimercate (MB), Italy. Tel: 039 68 99 905. www.dnvgl.it/businessassurance

8 ANNEX B

8.1 Qualifying explanatory statements (QES) checklist

Following table refers to QES checklists requested by PAS 2060:2014.

Table 8.1 Checklist for QES supporting declaration of commitment to carbon neutrality

	Items	Status	Section in the 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.	✓	Section 3.1
2	Identify the entity responsible for making the declaration.	✓	Section 3.1
3	Identify the subject of the declaration.	✓	Section 3.1
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)).	✓	Section 3.1
5	Define the boundaries of the subject.	✓	Section 3.4
6	Identify all characteristics (purposes, objectives or functionality) inherent to that subject.	✓	Section 2
7	Identify and take into consideration all activities material to the fulfilment, achievement or delivery of the purposes, objectives or functionality of the subject.	✓	Section 2
8	Select which of the 3 options within PAS 2060 you intend to follow.	✓	Section 3.3
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.	✓	Section 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.	✓	Section 0
11	Provide justification for the selection of the methodology chosen. (The methodology employed shall minimize uncertainly and yield accurate, consistent and reproducible results.	✓	Section 0
12	Confirm that the selected methodology was applied in accordance with its provisions and the principles set out in PAS 2060.	✓	Section 0
13	Describe the actual types of GHG emissions, classification of emissions (Scope 1, 2 or 3) and size of carbon footprint of the subject exclusive of any purchases of carbon offsets.	✓	Section 0
	a) All greenhouse gases shall be included and converted into tCO2e.	✓	Section 0
	b) 100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint.	✓	Section 0
	c) 100% Scope 2 (indirect) emissions relevant to the subject shall be included when determining the carbon footprint	✓	Section 0
	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	✓	Section 4.4
	e) Scope 1, 2 or 3 emission sources estimated to be more that 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. (Emission sources estimated to constitute less than 1% may be excluded on that basis alone.)	✓	Section 4.4 and 4.5
	f) The quantified carbon footprint shall cover at least 95% of the emissions from the subject.	✓	Section 4.5
	g) Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions.	NA	
	h) Any exclusion and the reason for that exclusion shall be documented.	✓	Annex
14	Where the subject is an organization/company or part thereof, ensure that:	✓	Section 0
	a) Boundaries are a true and fair representation of the organization's GHG emissions (i.e. shall include all GHG emissions relating to core operations including subsidiaries owned and operated by the organization). *It will be important to ensure claims are credible – so if*	✓	Section 0

	Items	Status	Section in the QES
	an entity chooses a very narrow subject and excludes its carbon intensive activities or if it outsources its carbon intensive activities, then this needs to be documented.		
	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.	✓	Section 0
15	Identify if the subject is part of an organization or a specific site or location and treat as a discrete operation with its own purpose, objectives and functionality.	NA	
16	Where the subject is a product or service, include all Scope 3 emissions (as the lifecycle of the product/service needs to be taken into consideration).	NA	
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/lifecycle models) then GHG emissions shall be calculated using emission 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.*	✓	Section 4
18	Provide details of, and explanation for, the exclusion of any Scope 3 emissions.	✓	Annex
19	Document all assumptions and calculations made in quantifying GHG emissions and in the selection or development of greenhouse gas emission factors. (Emission factors used shall be appropriate to the activity concerned and current at the time of quantification.)	✓	Section 4.4
20	Document your assessments of uncertainty and variability associated with defining boundaries and quantifying GHG emissions including the positive tolerances adopted in association with emission 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)).*	✓	Section 4.6
21	Document Carbon Footprint management plan:	✓	Section 5
	a) Make a statement of commitment to carbon neutrality for the defined subject.	✓	Section 5
	b) Set timescales for achieving carbon neutrality for the defined subject.	✓	Section 5
	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.	✓	Section 5
	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.	✓	Section 5
	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.	✓	Section 0
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.*	✓	Section 5
23	Where the subject is a non-recurring event such as weddings or 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.	NA	
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.	NA	
25	Record the number of times that the declaration of commitment has been renewed without declaration of achievement.	✓	Section 1
26	Specify the type of conformity assessment:	✓	Section 3.1

	Items	Status	Section in the QES
	a) independent third-party certification; b) other party validation; c) self-validation.		
27	Include statements of validation where declarations of commitment to carbon neutrality are validated by a third-party certifier or second party organizations.	✓	Annex A
28	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).	✓	Section 1
29	Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g. via websites).	✓	Section 1
30	Update the QES to reflect changes and actions that could affect the validity of the declaration of commitment to carbon neutrality.	✓	Section 1

Table 8.2 Checklist for QES supporting declaration of achievement to carbon neutrality

	Items	Status	Section in the QES
1	Define standard and methodology use to determine its GHG emissions reduction.	✓	Section 0
2	Confirm that the methodology used was applied in accordance with its provisions and the principles set out in PAS 2060 were met.	✓	Section 0
3	Provide justification for the selection of the methodologies chosen to quantify reductions in the carbon footprint, including all assumptions and calculations made and any assessments of uncertainty. *(The methodology employed to quantify reductions shall be the same as that used to quantify the original carbon footprint. Should an alternative methodology be available that would reduce uncertainty and yield more accurate, consistent and reproducible results, then this may be used provided the original carbon footprint is re-quantified 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).*	✓	Section 4
4	Describe the means by which reductions have been achieved and any applicable assumptions or justifications.	NA	
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.)	✓	Section 3.1
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 (e.g. per specified unit of product or instance of service)).	NA	
7	State the baseline/qualification date.	✓	Section 4.1
8	Record the percentage economic growth rate for the given application period used as a threshold for recognising reductions in intensity terms.	NA	
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.	NA	
10	Select and document the standard and methodology used to achieve carbon offset.	✓	Section 0
11	Confirm that:	✓	Section 0
	a) Offsets generated or allowance credits surrendered represent genuine, additional GHG emission reductions elsewhere.	✓	Section 0
	b) Projects involved in delivering offsets meet the criteria of additionality, permanence, leakage and double counting. (See the WRI Greenhouse Gas Protocol for definitions of additionality, permanence, leakage and double counting).	✓	Section 0
	c) Carbon offsets are verified by an independent third-party verifier.	✓	Section 0
	d) Credits from Carbon offset projects are only issued after the emission reduction has taken place.	✓	Section 0
	e) Credits from Carbon offset projects are retired within 12 months from the date of the declaration of achievement.	✓	Section 0
	f) Provision for event related option of 36 months to be added here.	✓	Section 0

	Items	Status	Section in the QES
	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.	✓	Section 0
	h) Credits from Carbon offset projects are stored and retired in an independent and credible registry.	✓	Section 0
12	Document the quantity of GHG emissions credits and the type and nature of credits actually purchased including the number and type of credits used and the time period over which credits were generated including:	✓	Section 0
	a) Which GHG emissions have been offset.	✓	Section 0
	b) The actual amount of carbon offset.	✓	Section 0
	c) The type of credits and projects involved.	✓	Section 0
	d) The number and type of carbon credits used and the time period over which the credits have been generated.	✓	Section 0
	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.	✓	Section 0
	f) Information regarding the retirement/cancellation of carbon credits to prevent their use by others including a link to the registry or equivalent publicly available record, where the credit has been retired	✓	Section 0
13	Specify the type of conformity assessment: a) independent third-party certification; b) other party validation; c) self-validation.	✓	Section 1 Annex A
14	Include statements of validation where declarations of achievement of carbon neutrality are validated by a third-party certifier or second party organizations.	✓	Annex A
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).	✓	Section 1
16	Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g. via websites).	✓	Section 1

Table 8.3 QES openness and clarity

Entities should satisfy themselves that the QES		
1	Does not suggest a reduction which does not exist, either directly or by implication.	✓
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.	✓
3	Is not likely to be misinterpreted or be misleading as a result of the omission of relevant facts.	✓
4	Is readily available to any interested party.	✓

9 ANNEX C

9.1 List of Wasa brand products contributing to Wasa Carbon Footprint quantification

The list of all Wasa brand products covered by the subject is below:

Product	Format
AUTHENTIQUE	275 g
BALLASTSTOFFE	230 g
BIO ROGGENVOLLKORN	180 g
BISCUIT CEREAL	250 g
BRUNGRÄDDAT	740 g
CHILI & HAVSSALT 220G NC	220 g
CRISP 'N LIGHT	110 g
CRISP'N LIGHT RYE	10 g
CRISP'N LIGHT 7 GRAINS	140 g
CRISP'N LIGHT WHOLESOME WHEAT	140 g
CRISP'N WHEAT	110 g
DELICATE CRACKERS BLACK & GREEN OLIVE	150 g
DELICATE CRACKERS SEA SALT	180 g
DELICATE CRACKERS TOMATO E OREGANO	180 g
DELICATE CRISP ROSEMARY & SEA SALT	190 g
DELICATE CRISP SESAM & SEA SALT	190 g
DELICATE ROUNDS FRENCH HERBS	205 g
DELICATE ROUNDS SESAM & MEERSALZ	235 g
DELIKATESS	270 g
	540 g
DELIKATESS SESAM	285 g
DIN STUND CHIA & HAVSSALT	260 g
DUN ROGGE VOLKOREN	220 g
EKO KRISPIG RÅG	1050 g
	180 g
EKO SPRÖD VETE	1200 g
	180 g
ENJOY	150 g
FALU GROV RAGRUT	235 g
FALU RAGRUT	235 g
	470 g
FALU RAGRUT TRAY	1020 g
FIBER	230 g
FIBER BALANCE	230 g
FIBRE	230 g
FIBRES	230 g
FLAXSEEDS	215 g
FRENCH HERBS	205 g
FRUKOST	1340 g
	240 g
	480 g
	625 g
FRUKOST FULLKORN	320 g
	490 g
GAMMELGÅRDEN ORIGINAL	610 g
GLUTEN FREE ORIGINAL	155 g
GLUTEN FREE SESAME & SEA SALT	175 g
GLUTENFREE & LACTOSEFREE CLASSIC	240 g
GLUTENFREE SESAME & SEA SALT	175 g
GLUTENFRI & LAKTOSFRI NATURELL	240 g
GLUTENFRI SESAM & HAVSSALT	240 g
GOUDBRUIN	245 g
GRILJERMEL	400 g
HAPPY	150 g
HARMONI	260 g
HAVER	220 g
HAVRE	1280 g
	280 g
	300 g
	560 g
	600 g
HEARTY	275 g
HUSMAN	1100 g
	260 g
	520 g
INTEGRALE	270 g
JULKNÄCKE	300 g
KÖSTLICH	230 g

KANEL	330 g
KAVRINGER	400 g
KRÖGARENS	330 g
LEGER	270 g
LEKKIE 7 ZIAREN	140 g
LEKKIE PSZENNE	140 g
LEKKIE ZYTNIE	140 g
LICHTGEWICHT	300 g
LIGHT RYE	270 g
MÜSLI GOURMET	220 g
MEHRKORN	275 g
MINERAL PLUS	200 g
MJÖLK	10 g
	230 g
	460 g
MUESLI CRUNCH SENSATION	220 g
MULTIGRAIN	275 g
NORMALGRÄDDAT	740 g
ORIGINAL	275 g
ORIGINAL CRISP	200 g
PROTEINE	225 g
QUINOA & TEFF	245 g
RÅGI	1150 g
	275 g
	550 g
RAGRUT BOX	1180 g
ROBUUST TARWE	245 g
ROGGEN DÜNN	22 g
	205 g
	410 g
ROGGEN TRADITIONELL	235 g
RUGSPRO HAVRE	180 g
RUGSPRO ORIGINAL	200 g
RUISRASKI	305 g
RUNDA PEPPARKAKA	245 g
RUSTIEK	215 g
RUSTIKAL	275 g
SANDWICH BRUNOST	36 g
SANDWICH CHEESE	30 g
SANDWICH CHEESE & CHIVES	37 g
SANDWICH CHEESE & FRENCH HERBS	37 g

SANDWICH CHEESE & PAPRIKA	37 g
SANDWICH CHEESE TOMATO & BASIL	40 g
SANDWICH HUMMUS	32 g
SANDWICH MILD CHEESE	30 g
SESAM & HAVSSALT NC	290 g
SESAM & SEA SALT INT	290 g
SESAM	13 g
	200 g
	250 g
	27 g
	400 g
SESAM CRUNCH SENSATION	220 g
SESAM GOURMET	220 g
SESAME	200 g
SKORPA FULLKORN	300 g
SOURDOUGH	275 g
SPELT & CHIA	230 g
SPORT	1180 g
	275 g
	550 g
SPORT+	225 g
	450 g
STRÖBRÖD	400 g
SURDEG FLERKORN	275 g
	550 g
SURDEG GOURMET	300 g
	660 g
SURDEG RÅG	305 g
THINS SESAME & SEA SALT	190 g
VEZELRIJK	300 g
VITALITÉ	280 g
VOLKOREN	260 g
VOLLKORN	260 g
WASA 100	245 g
WHOLEGRAIN	260 g
WIELOZIARNISTE	215 g
Z BLONNIKIEM	230 g
Z SESAMEM	220 g
ZUURDESEM MEERGRANEN	210 g
ZUURDESEM ROGGE	235 g
ZYTNIE	210 g

10 ANNEX D

10.1 Scope 1, 2 and 3 emissions inclusion and exclusion

Included and excluded emission sources related to the subject are presented below, together with explanation for exclusions.

Scope	Emission source	Description	Inclusion or exclusion	Justification of Exclusion
1.1	Stationary combustion sources	Combustion of fuels in boilers and furnaces for the generation of heat and steam, used for production processes and heating of buildings	Included	-
1.2	Mobile combustion sources	Transportation of employees with cars under Wasa brand control.	Included	-
1.3	Process emissions	Emissions occurring during the production process	Excluded	Carbon dioxide produced and loosed during warm fermentation and ethanol combustion is lower than 1%.
1.4	Fugitive emissions	Refrigerant gases losses	Included	-
2.1	Electricity consumption	Generation of purchased electricity	Included	-
2.2	Heat, steam or cold consumption	Purchase of heat, steam or cold energy not produced at operation site	Excluded	Wasa brand does not purchase any heat, steam or cold energy.
3.1	Purchased goods and services	Extraction or production of raw materials for recipe, packaging materials, auxiliary materials and purchased final products from copackers purchased or acquired by the reporting company in the reporting year	Included	-
3.2	Capital goods	Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year	Excluded	The evaluation of the emissions arising from the purchase of capital goods during the reporting year is considered cost effective for the purpose of this exercise.
3.3	Fuel and energy related activities	Upstream emissions of purchased fuels and electricity, Transmission and distribution (T&D) losses	Included	-
3.4	Upstream transportation and distribution	transportation of any material to operations and sold products distribution up to shelf, made by third party distribution services	Included	-
3.5	Waste generated in operations	Waste production and management	Included	-

Scope	Emission source	Description	Inclusion or exclusion	Justification of Exclusion
3.6	Business travel	Transportation of employees for business-related activities during the reporting year	Included	-
3.7	Employees commuting	Transportation of employees between their homes and their worksites during the reporting year	Included	-
3.8	Upstream leased assets	Operation of assets leased by the reporting company (lessee) in the reporting year	Excluded	Following the operational approach, these emissions are evaluated in scope 1 – mobile combustion.
3.9	Downstream transportation	Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)	Excluded	Sold products distribution are considered as managed by Wasa brand (thought third party distribution service) and evaluated in category 4; consumer transportation is not considered because it is strictly related to consumer behaviour and out of Wasa brand control.
3.10	Processing of sold products	Processing of intermediate products sold in the reporting year by downstream companies	Excluded	The product is ready to eat, it does not need any additional process after its sale.
3.11	Use of sold products	End use of goods and services sold by the reporting company in the reporting year	Excluded	The product is ready to eat, it does not need any preparation.
3.12	End of life treatment pf sold products	Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life	Included	-
3.13	Downstream leased assets	Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year	Excluded	Wasa brand does not lease any assets.
3.14	Franchises	Operation of franchises in the reporting year	Excluded	Wasa brand does not franchise or outsource any assets
3.15	Investments	Operation of investments (including equity and debt investments and project finance) in the reporting year	Excluded	During 2018, Wasa brand did not invest in any non-profit driven projects, other than plant investment

11 ANNEX E

11.1 Voluntary GHG program

In this annex, specific project sheet concerning the chosen offsetting projects are presented.

11.2 VCS[4]

The VCS Program is the world's most widely used voluntary GHG program. More than 1300 certified VCS projects have collectively reduced or removed more than 200 million tonnes of carbon and other GHG emissions from the atmosphere.

By using the carbon markets, entities can neutralize, or offset, their emissions by retiring carbon credits generated by projects that are reducing GHG emissions elsewhere. Of course, it is critical to ensure, or verify, that the emission reductions generated by these projects are actually occurring. This is the work of the VCS Program – to **ensure the credibility of emission reduction projects**.

Once projects have been certified against the VCS Program's rigorous set of rules and requirements, project developers can be issued tradable GHG credits that we call **Verified Carbon Units** (VCUs). Those VCUs can then be sold on the open market and retired by individuals and companies as a means to offset their own emissions. Over time, this flexibility channels financing to clean, innovative businesses and technologies.

Projects developed under the VCS Program must follow a **rigorous assessment process in order to be certified**. VCS projects cover a diverse range of sectors, including renewable energy (such as wind and hydroelectric projects), forestry (including the avoidance of deforestation), and others. Emission reductions certified by our program are eligible to be issued as VCUs, with one VCU representing one metric tonne of greenhouse gas emissions reduced or removed from the atmosphere.

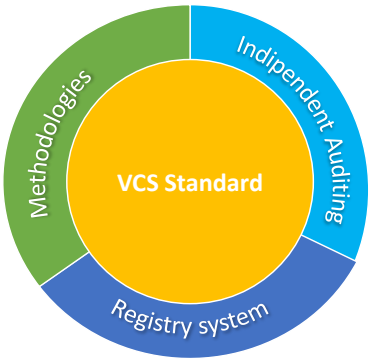

Figure 11-1 The 3 main guarantee of the VCS labelled projects

[4] Extract from https://verra.org/

All VCS projects are subject to desk and field **audits by both qualified independent third parties and Verra staff** to ensure that standards are met and methodologies are properly applied.

The **registry system** is the central storehouse of data on all registered projects, and **tracks the generation, retirement and cancellation of all VCUs**. To register with the program, projects must show that they have met all standards and methodological requirements.

While VCS projects typically include a discrete set of activities, governments are now establishing policies and programs to mitigate GHG emissions across entire national or subnational jurisdictions. In the forest sector, these programs (called REDD+ programs) can be accounted for and credited using the world's first jurisdictional-scale framework, the Verra Jurisdictional and Nested REDD+ (JNR) framework. JNR integrates government-led and project-level REDD+ activities and establishes a clear pathway for subnational- and project-level activities to be incorporated within broader REDD+ programs.

11.3 CCBA[5]

The **CCBA** is a unique partnership of leading international NGOs that was founded in 2003 with a mission to stimulate and promote land management activities that credibly mitigate global climate change, improve the well-being and reduce the poverty of local communities, and conserve biodiversity. The CCBA brings together diverse stakeholders through a transparent and inclusive participatory process to develop standards and tools that stimulate, identify and promote high quality multiple-benefit land management activities. CCBA initiatives include:

- **Climate, Community & Biodiversity (CCB) Standards**, for site-based projects, developed by the CCBA and managed by the Verified Carbon Standard (VCS) since November 2014
- **REDD+ Social and Environmental Standards (REDD+ SES)**, for government-led strategies and actions to reduce emissions from deforestation and degradation
- Sustainable Landscapes Rating Tool (under development)

The Climate, Community and Biodiversity Standards (CCB Standards) evaluate land management projects from the early stages of development through implementation. The CCB Standards were developed by the CCBA and have been managed by the VCS since November 2014. The CCB Standards foster the integration of best-practice and multiple-benefit approaches into project design and implementation.

The CCB Standards:

- Identify projects that simultaneously address climate change, support local communities and smallholders, and conserve biodiversity.

[5] Extract from http://www.climate-standards.org/

- Promote excellence and innovation in project design and implementation.
- Mitigate risk for investors and offset buyers and increase funding opportunities for project developers.

The CCB Standards identify land management projects that deliver **net positive benefits for climate change mitigation, for local communities and for biodiversity**. The CCB Standards can be applied to any land management project, including projects that reduce greenhouse gas emissions from deforestation and forest degradation or from avoided degradation of other ecosystems, and projects that remove carbon dioxide by sequestering carbon (e.g., reforestation, afforestation, revegetation, forest restoration, agroforestry and sustainable agriculture) or other land management, from design through implementation and monitoring.

12 ANNEX F

12.1 Uncertainty calculation

Uncertainties around the quantification of the carbon footprint have been assessed throughout the assessment following the guidelines released by ISO and available in the "GHG Protocol's Measurement and Estimation Uncertainty of GHG Emissions tool" (supporting worksheet file "Uncertainty_Calculation_Tool")[6]; since the uncertainties are not known for all the parameters (activity data and emission factors), a pedigree matrix approach is used.

It considers a 95% confidence interval, considering also the percentage contribution of each activity to the total emission. Results are showed in Table 12.1.

The main contributor to squared geometric standard deviation is the basic uncertainty, related to the process type considered. This is due to the main contributor to the Wasa brand GHG emissions: raw material (mainly from agricultural process) and transportation services, having the higher basic uncertainty factor.

Table 12.1 – Total GHG emissions and 95% confidence intervals

Geometric Standard Deviation	
(lnGSD)2	0.0149
GSD	1.1300
GSD2	1.2768

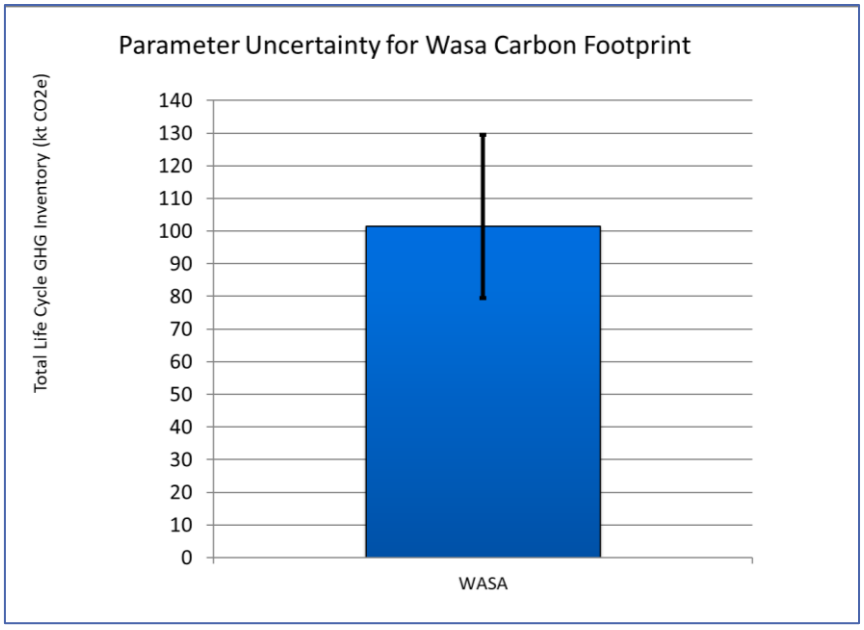

Figure 12.1 Uncertainty value for WASA 2018 Carbon Footprint

[6] https://ghgprotocol.org/calculation-tools

13 ANNEX G

13.1 Electricity source written declaration

Celle plant

DB NETZE

Zertifikat über Grünstrombeschaffung für 2018

Zertifikatsnummer: DBE 18 21 002

Hiermit wird bestätigt, dass das Unternehmen

Barilla Deutschland GmbH
Wasastraße 10
29229 Celle

Barilla
The Italian Food Company. Since 1877.

die von der DB Energie GmbH im Jahr 2018 gelieferte Strommenge zu **100% aus erneuerbaren Energien** und damit vollständig CO_2-neutral bezieht.

Das Grünstromprodukt „**Option Grün 100**" von der DB Energie GmbH ist die umweltfreundliche Alternative für Unternehmen, die sich für eine nachhaltige Unternehmenspolitik einsetzen und gleichzeitig Verantwortung für den Klimaschutz übernehmen wollen.
Der Strom für „**Option Grün 100**" wird in umweltschonenden Wasserkraftwerken klimaneutral produziert und in das europäische Verbundnetz eingespeist.
Die Herkunftsnachweise für den Strom sind im Herkunftsnachweisregister des Umweltbundeamtes registriert.

Barilla setzt damit ein deutliches Zeichen für einen nachhaltigen, bewussten und ressourcenschonenden Umgang mit der Umwelt.

Frankfurt am Main, 19. Januar 2018

Andreas Borst
Leiter Vertrieb stationäre Energien und Dienstleistungen
Key Account Management

Andre Krieger
Senior Key Account Manager

DB Energie – bringt voran.

DB Energie GmbH • Pfarrer-Perabo-Platz 2 • 60326 Frankfurt

Filipstad plant

Scandem

INTYG

HÄRMED INTYGAS ATT

BARILLA SVERIGE AB

ORG.NR. 556518-4503

VIA SCANDEM MARKET AB KÖPER EL PRODUCERAD AV

100 % VATTENKRAFT

MOTSVARANDE HELA SITT BEHOV AV EL

AVTALET GÄLLER FR O M 2018-01-01 – 2019-12-31.
ÖREBRO FEBRUARI 2018

ARNE JANSSON
VD, SCANDEM MARKET AB

14 ANNEX H

14.1 Wasa brand distribution market

Distribution markets	Sold volume – %
Nordics market	53%
Sweden market	*30%*
Norway market	*15%*
Denmark – Iceland market	*7%*
Finland market	*1%*
Germany Market	21%
Netherland Market	8%
USA Market	4%
France Market	4%
Italy Market	3%
Poland Market	2%
Austria Market	1%
Switzerland Market	1%
Belgium Market	1%
Spain Market	1%
Canada Market	1%
Central East Market	1%
Greece Market	<1%
Other Asia Market	<1%
Other Export Market	<1%
Israel Market	<1%
Slovenia Market	<1%
Croatia Market	<1%
Baltics Market	<1%
South Adriatic Market	<1%
GCC Market	<1%
South East Asia Market	<1%
Latam Market	<1%
Portugal Market	<1%
Not Institutional Market	<1%
Lebanon Market	<1%
South East Europe Other Market	<1%
Other Middle East Market	<1%
Other Russia Market	<1%
UK & Ireland Market	<1%
Brazil Market	<1%
China Market	<1%
Africa Market	<1%
Australasia Market	<1%