Qualifying explanatory statement

Carbon neutral product

Aligned with PAS 2060:2014

For period 15 March 2022 - 15 March 2023

South Pole
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Introduction

This document is prepared for Nestlé by South Pole to provide a framework for compliance with the Qualifying Explanatory Statement (QES) requirement of PAS 2060:2014 as set out within the requirements of the BSI Standard, "BSI: PAS 2060:2014: Specification for the demonstration of carbon neutrality".

It forms the Qualifying Explanatory Statement to demonstrate that Nestlé has achieved carbon neutrality for the entirety of the next generation of product ranges to be launched over the period commencing 15 March 2022 to 15 March 2023. The details of product in scope for carbon neutrality are the following:

Product name	Geography
GUIGOZ BIO	France
NAN ORGANIC	China, Vietnam
NAN NATURA	Taiwan, Saudi Arabia, United Arab Emirates, Kuwait, Qatar
NAN BIO	Greece, Bulgaria
BEBA BIO	Switzerland, Austria, Germany
NAN EKOLOGISK LUOMO	Finland, Sweden

Section 1: General Information

PAS 2060 requirement	Client's response
Entity making PAS 2060 declaration	Société des Produits Nestlé SA
Subject of PAS 2060 declaration	**Product and geographies sold:** Organic certified Infant Formula, Follow-on and Growing-up milk / Young Child Formula products under the following brands: Nestlé NAN, BEBA, GUIGOZ. Geographies covered include France, China, Vietnam, Taiwan, Saudi Arabia, United Arab Emirates, Kuwait, Qatar, Greece, Bulgaria, Switzerland, Austria, Germany, Sweden, Finland **Product format and manufacturing site:** - In powder format with tin cans, plastic lids and scoops produced in Konolfingen Factory, Switzerland; - In liquid format in tetra brik with plastic screw caps in Sevares Factory, Spain. **Scope included under GHG protocol:** Scope 1 (direct) and Scope 2 (indirect) emissions from operations under direct operational control. Scope 3 (indirect) emissions including purchased good and services, upstream transport, manufacturing, downstream transport and distribution, storage, use of sold products, end-of-life treatment of sold products and overheads. More details are available in Section 4.
Description of Subject	Organic certified Infant Formula, Follow-on Formula and Growing-up Milk / Young Child Formula products under the following brands: Nestlé NAN, BEBA, GUIGOZ. The following SKUs are included: *France*: GUIGOZ BIO 1 6 x 800g GUIGOZ BIO 2 6 x 800g GUIGOZ BIO 3 6 x 800g GUIGOZ BIO 1 3(6x500ml)

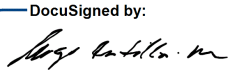
	GUIGOZ BIO 2 3(6x500ml) GUIGOZ BIO 3 3(6x500ml) GUIGOZ BIO 3 4x1L *Greece, Bulgaria* NAN BIO 1 12 x 400g NAN BIO 2 12 x 400g NAN BIO 3 12 x 400g *China, Vietnam* NAN ORGANIC 1 6 x 800g NAN ORGANIC 2 6 x 800g NAN ORGANIC 3 6 x 800g NAN ORGANIC 3 12 x 380g *Austria, Switzerland, Germany* BEBA BIO PRE 6 x 800g BEBA BIO 1 6 x 800g BEBA BIO 2 6 x 800g BEBA BIO 2 200 x 33g BEBA BIO 12+ 6 x 800g BEBA BIO 12+ 200 x 33g BEBA BIO 18+ 6 x 800g *Taiwan, Saudi Arabia, United Arab Emirates, Kuwait, Qatar* NAN NATURA 1 6 x 800g NAN NATURA 2 6 x 800g NAN NATURA 3 6 x 800g *Finland, Sweden* NAN ORGANIC 1 6x200ml NAN ORGANIC 2 6x200ml The following recipes are covered in the certification: *Manufactured in CH Konolfingen:* CHNWGB173 CHNWGB173C CHLEGB058 CHJNGB085 CHJNGB085C NWB122 LWB047 JEB011 *Manufactured in ES Sevares:*

	NWL028-4 LWL104-3 JNFL039-2 JNFL039-3 The carbon footprint was calculated and certified by South Pole based sales projections for 2022 for products to be renovated or launched with planned recipes, changes consumer use instructions, packaging changes, but with actual manufacturing, transportation, overhead emissions from 2021. The footprint will be corrected for actual 2022 emissions from cradle-to-grave within Q1 2023. The carbon footprint calculation has also been 3rd party reviewed by Quantis.
Rationale for selection of the subject	The certification of the organic ranges of our brands is an important step in NAN, BEBA and GUIGOZ's journey to achieving carbon neutrality for the majority of our portfolio (products manufactured in Europe) by 2030 and is line with the overall ambition of Nestlé to achieve net zero emissions by 2050. The scope of PAS2060 includes all emissions based on the operational control principle defined in the 2014 WRI GHG Protocol Corporate Accounting Standard. The footprint was calculated in accordance with: - Greenhouse Gas Protocol (GHG Protocol): Product Life Cycle Accounting and Reporting Standard - PAS2050 - ISO14067 The footprint calculations are aligned with the requirements of PAS2060 and ISO14067.
Type of conformity assessment	Independent third-party certification

Baseline date for PAS 2060 programme	2019

Section 2: Declaration of Achievement of Carbon Neutrality

PAS 2060 requirement	Client's response
Declaration of achievement	Carbon neutrality of the organic products of NAN, GUIGOZ, BEBA brands has been achieved by Société des Produits Nestlé SA in accordance with PAS 2060 at 15.03.2022 for the period 15.03.2022-15.03.2023, certified by South Pole Carbon Asset Management Ltd.
Recorded carbon footprint of the subject during the period stated above	18'887 MT CO_2e, with an emissions intensity of 17,28 kg CO_2e / kg product in the year 2022. See section 4 for further details. This new footprint represents a 21,3% emissions intensity (kg CO_2e / kg product) reduction from the 2019 updated baseline of 21,95 kg CO_2e / kg product. (Original baseline at 23,77 kg CO_2e/kg product prior to methodological updates)
Carbon footprint reduction target	Annual emissions intensity reduction planned with a target of 12% emissions intensity reduction from 2022 footprint by 2026.
Location of GHG emissions report supporting this claim	*See section 4*
Location of the Carbon Footprint Management Plan	*See section 5*
Location of the details describing the carbon offsets	*See section 6*
Location of the details describing internal reductions achieved (recertification only)	*Not applicable, first period.*

Name of Senior Representative	Signature
Name: Angela Madlangbayan	DocuSigned by:  DBC8D6C139694B9...

Role: Global Marketing Manager, NAN	
Date: 15.03.2022	

Section 3: Declaration of On-going Commitment to Carbon Neutrality

PAS 2060 requirement	Client's response
Declaration of on-going commitment	Nestlé commits to maintain carbon neutrality for: NAN, GUIGOZ, BEBA branded organic infant formula, follow-on formula and growing-up milk / young child formula products manufactured at Konolfingen factory, Switzerland (Powder) and Sevares factory, Spain (Liquid), marketed in France, China, Vietnam, Taiwan, Saudi Arabia, United Arab Emirates, Bahrain, Qatar, Greece, Romania, Bulgaria, Poland, Ukraine, Switzerland Austria, Germany, Hungary, Czech Republic, Finland, Sweden, Norway, Denmark. In accordance with PAS2060 for the period of March 15, 2022 to March 15, 2023 and in succeeding years.
Carbon footprint of the subject for the period immediately prior to the start of the commitment	17'999 MT CO_2e for all organic products sold in 2019 with an emissions intensity of 21,95 kg CO_2e / kg product. 12'265 MT CO_2e for organic products sold in 2019 still being sold today (Bulgaria, Switzerland, Greece, France, China, Finland, Sweden) with an emissions intensity of 20,2 kg CO_2e / kg product.
Carbon footprint reduction target for period	Annual emissions intensity reduction planned with a target of 12% emissions intensity reduction from 2022 footprint by 2026.
Location of GHG emissions report supporting this claim	*See section 4*
Location of the Carbon Footprint Management Plan	*See section 5*

Name of Senior Representative	Signature
Name: Angela Madlangbayan	DocuSigned by: DBC8D6C139694B9...

Role: Global Marketing Manager, NAN	
Date: 15.03.2022	

Section 4: Quantification of Carbon Footprint

The assessment of the greenhouse gas (GHG) emissions associated with products covered by the certification scope for the calendar year 2022 has been performed in a transparent way according to 'The Greenhouse Gas Protocol: A Product Life Cycle Accounting and Reporting Standard' (GHG Protocol) and adapted with the 'EU Product Environmental Footprint Method' (EU PEF Method) for recycling-related activities. The EU PEF Method was developed by considering both 'ISO 14067:2018 Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification' and GHG Protocol. This method was chosen because it provides an internationally recognized approach to calculating carbon dioxide equivalent (CO_2e) emissions and meets the requirements of PAS2060 for the verification of GHG emissions (PAS 2060: 5.2.2 to 5.2.4).

The GHG emissions was measured using data provided by Nestlé. This was calculated based on data from projected sales volumes for 2022 and used the agreed recipes and packaging specifications for the products to be produced. The total GHG emissions to offset was 18,887 tCO_2e. However, Nestlé will reevaluate the total GHG emissions by Q1 2023 to adjust the total GHG emissions according to the actual sales volumes in 2022.

Table 1: Breakdown of GHG emissions by life cycle stage

Life cycle stage	GHG emissions category	Emissions (tCO_2e)	%of total emissions
Raw materials	Scope 3: Purchased goods and services	12,551	66%
Transportation of raw materials	Scope 3: Upstream transportation and distribution	181	1%
Production	Scope 2: Electricity & purchased steam	460	2%
	Scope 3: Fuel and energy related activities & waste	45	<1%
Distribution	Scope 3: Downstream transportation and distribution	656	3%
Use	Scope 3: Use of sold products	4,993	26%
End of life	Scope 3: End-of-life of sold products	-774	-4%
Overhead	Scope 3: Business travel, employee commuting, capital goods and purchased goods and services	775	4%
Total		18,887	100%

Within the scope of this assessment, the product's impact on climate change is analysed. The chosen indicator is the global warming potential (GWP) for a 100-year time horizon (IPCC, 2014). The GWP emissions are expressed in kilogram carbon dioxide equivalent ($kgCO_2e$).

The GWP is a measure of the climate impact of a GHG compared to carbon dioxide over a time horizon. GHG emissions have different GWP values depending on their efficiency in absorbing longwave radiation, and on the atmospheric lifetime of the gas. The GWP values used in GHG accounting include the six GHGs covered by the United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol and combinations of these, as presented in Table 2. These are the GWP based on the 'Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5)'.

Table 2: Global warming potential of GHGs

GHG	GWP (100 years)
Carbon dioxide (CO_2)	1
Methane (CH_4)	28
Nitrous oxide (N_2O)	265
Hydrofluorocarbons (HFCs)	See IPCC AR6 p.73-79
Perfluorocarbons (PFCs)	See IPCC AR6 p.73-79
Sulphur hexafluoride (SF_6)	23,500

The GHG emissions includes all relevant emissions to the scope of certification and is summarized in Table 3 below. Where GHG emissions have been estimated, they have been done in a conservative approach to avoid underestimation. 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.

Table 3: Description of GHG emissions

Life cycle stage	Description	GHG emissions category	Excluded emissions & Justification
Raw materials	The stage starts when raw materials, which include ingredients and packaging materials, are acquired from each source (i.e., the ingredients' production (e.g., farm-related impacts) and preliminary processing) and ends when raw materials are ready for use.	Scope 3: Purchased goods and services	Packaging of raw and packaging materials delivered to the manufacturing site are excluded because they are assumed as non-significant.

Transportation of raw materials	The stage starts when raw materials leave the raw materials/intermediate products' manufacturing facilities and ends when the raw materials arrive at the infant formula production factory.	Scope 3: Upstream transportation and distribution	
Production	The stage starts when raw materials arrive at the infant formula production factory and ends when the product is ready to leave the factory.	Scope 2: Electricity Scope 3: Fuel and energy related activities & waste	Cleaning materials and process for cleaning the production
Distribution	The stage starts when products leave the factory gate and ends when products arrive at the consumers' homes.	Scope 3: Downstream transportation and distribution	
Use	The stage starts when the product arrives at consumers' homes and ends when the product has served its function.	Scope 3: Use of sold products	Washing the bottle after consuming the product because it is considered included when washing the bottle before use.
End of life	The stage starts when the product packaging leaves consumers' homes and ends when the packaging waste has been treated.	Scope 3: End-of-life of sold products	
Overhead	Overhead to a product	Scope 3: Business travel, employee commuting, capital goods and purchased goods and services	

Data inventory

Data sources used for the study include a mix of primary and secondary data. Where possible, primary data was used. Because the products are not yet in production, calculations were based on data from projected sales volumes for 2022 and used the agreed recipes and packaging specifications for the products to be produced. Secondary data was used only when primary data was not available or where the relative impact on the GHG emissions were deemed non-significant.

Table 4: Primary and secondary data by life cycle stage

Life cycle stage	Primary data	Secondary data

Raw materials	- Recipes (type and quantity of ingredients used for each product - Sourcing location of ingredients - Material losses - Primary farm data for milk from Spain and Switzerland, as captured using the Cool Farm Tool	- Emission factors from: • Agri-Footprint 5.0 • Ecoinvent 3.8 • Cool Farm Tool • World Food LCA Database 3.5 • Raumberg Gumpenstein Berger - Distance and mode of transport from EcoTransit
Packaging materials	- Packaging materials, quantity and sizes. - Recycled content - Supplier locations	- Emission factors from Ecoinvent 3.8
Production	- Production resourced used - Renewable electricity proportions - Production waste quantity and treatment	- Emission factors from: • Ecoinvent 3.8 • UK BEIS • Internatial Energy Agency • AIB
Distribution	- Market distribution for each product - Mode of transportation	- The mode of transportation proportions to transport the product to consumers' home follow the approach given in the PEFCR (European Commission, 2017). - Emission factors from UK BEIS
Storage	-	- The energy at the DCs and retailers for storage used default energy consumption values from European Commission (2017). - Emission factors from IEA and AIB
Bad goods	-	- Usage of Circular Footprint Formula (CFF) to follow Nestle's methodological guideline.
Use	- Product preparation instructions	- Emission factors from: • Ecoinvent 3.8 • IEA • AIB
End of life	- Market distribution for each product	- Waste treatment rate data from EuroStat for European countries and World Bank (2018) for rest of the world.

		- Usage of Circular Footprint Formula (CFF) to follow EU PEF Method.
Overhead	- NAN/ BEBA / GUIGOZ Organic production volume	- Overheads emissions from the NAN Global figures in 2019.

Data quality and uncertainties

In general, the total emissions in 2022 are closely related to the sales volumes in 2022. In this report, the sales volumes were projected from the actual sales volumes in 2021 for the existing markets and projected sales volumes in 2022 for the new markets. Nestle will review this sales figures in the end of the period to ensure the carbon neutrality of these products are not compromised.

Where primary data is not available, assumptions were made to fill the data gaps. This is the list of the key assumptions made in the calculations.

Table 5: Description of key assumptions by life cycle stage

Life cycle stage	Description	Key Assumptions
Raw materials	Emission factor	Where no country-specific emission factor available, a global emission factor was used.
Raw and packaging materials	Upstream transport of raw materials	According to Nestle's internal methodological guidelines, transports of packaging materials are modelled using trucks with 50% load.
Production	Transport distance to the waste treatment facility	The transport distance to waste treatment facility was assumed to be 50 km for recycling and 100 km for other waste treatment.
Distribution	Transport distance from local DC to retailers and from retailers to consumer's homes	The transport distance from local DC to retailers was assumed as 200 km for small markets, 500 km for medium markets and 720 km for large market following Nestle's internal methodological guidelines. The transportation distance of the products to the consumer's home was 5 km and the maximum product volume transported per passenger car is 0.2 m^3.

Storage	Storage time	The assumed storage time for dry or ambient temperature products at DC and retailer is 4 weeks each according to Nestle's methodological guidelines.
Storage	Emission factor	The emission factors for the local energy mix of the respective markets are applied, assuming no green energy following a conservative approach.
Use	Share of households with dishwasher	A Nestlé French market study indicated a 20% use of bottle steriliser in 2020. As such, both China and France were assumed to have 20% share of bottle steriliser use, where other markets are assumed to have 10%.
End of life	Waste treatment method	Landfilling practices were assumed to be sanitary landfill for EU countries and dry open sump for non-EU countries. Only Switzerland was assumed to use the fly ash method for its municipal incineration processes.
End of life	Transport distance to the waste treatment facility	The transport distance to waste treatment facility was assumed to be 50 km for recycling and 100 km for other waste treatment.
Overhead	Proportions of overhead emissions	The overhead emissions was calculated by using the production volume proportions of NAN Natura in Konolfingen and Sevares.
Sales volumes	Projected sales volume	2021 sales volumes in the existing markets were used to project 2022 sales volumes. For new markets, projected sales volumes were provided by Nestle.

Section 5: Carbon Management Plan

PAS 2060 requirement	Client's response
Statement of commitment to carbon neutrality for the defined subject	Nestlé commits to maintain carbon neutrality for: NAN, GUIGOZ, BEBA branded organic infant formula, follow-on formula and growing-up milk / young child formula products manufactured at Konolfingen factory, Switzerland (Powder) and Sevares factory, Spain (Liquid), marketed in France, China, Vietnam, Taiwan, Saudi Arabia, United Arab Emirates, Bahrain, Qatar, Greece, Romania, Bulgaria, Poland, Ukraine, Switzerland Austria, Germany, Hungary, Czech Republic, Finland, Sweden, Norway, Denmark In accordance with PAS2060 for the period of March 15, 2022 to March 15, 2023 and in succeeding years. Future sales for this product range in new territories will be considered in succeeding carbon footprint calculations.
Timescale for achieving carbon neutrality	2022, with yearly reductions planned
Targets for GHG reduction	Annual emissions intensity reduction planned with reaching a 12% emissions intensity reduction from 2022 footprint by 2026
Planned means of achieving and maintaining GHG emissions reduction	The following initiatives are already being applied and have contributed to the 21% emissions intensity reduction from our 2019 baseline: - Use of 100% renewable electricity in Konolfingen factory. - Purchase of 100% renewable grid electricity equivalent what is used for the NAN / BEBA / GUIGOZ organic liquid volumes in Sevares factory. - Use of plant-based plastic resins for lids and scoops in the tin can formats and the selection of packaging materials designed for recycling.

	- Optimization of our formulae through expert selection of ingredients that provide good and quality nutrition while having a lower carbon emissions intensity. This includes the use of whey protein sources that retain more natural lactose in the processing, leading to less waste, and the increase in proportion of plant-derived ingredients. - Optimization of our preparation instructions to follow WHO recommendations on safe formula preparation while offering a more energy efficient approach. This includes advocacy and education to our consumers on other approaches such as the use of commercial sterilizers to maintain the safety and quality of the formula in a less energy intensive way. To achieve our reduction targets by 2026, we commit to implement the following initiatives and programs, consistent with the roadmap of Nestlé to achieve its own reduction targets overall: - Continue optimizing energy use and increasing renewable electricity use in all Nestlé owned manufacturing sites to 100% by 2025, especially as we expand our manufacturing footprint for our organic product lines beyond Konolfingen and Sevares factories. - Optimization of packaging materials and design including progressing in our ambition to make 100% of our packaging recyclable or reusable by 2025 and continuing to reduce or eliminate unnecessary packaging materials. - Increase the use of renewable resources or the proportion of recycled content in our packaging

	materials. - Continue the optimization of our formulations to maintain high quality and nutritional value of our products while reducing the use of more carbon intensive ingredients. The formula ranges for China, Taiwan, Vietnam in particular are planned in scope for change from 2024. - Reducing carbon emissions and improving carbon sequestration through further implementation of the latest technologies and practices that complement organic farming practices. This includes partnerships with suppliers of our organic dairy materials such as our multi-year partnership with Prolactal ICL working with the nonprofit Raumberg institute to conduct research and support the implementation of interventions towards net zero carbon farming with organic farms in Austria, and on-going engagements with fresh organic milk dairy farms in Spain and Switzerland. More partnerships are being set-up to support this. - Optimization of transport and distribution networks, including increasing the use of renewable electricity used in Nestlé owned distribution centers to 100% by 2025 - Progress against the plan will be regularly monitored by the sustainability and brand team and carbon footprints will be recalculated annually. The 2022 footprint will be recalculated by early 2023. - On-going review and use of best available emissions factors, with focus on primary data where available and updated third party databases. The outcome of the reviews will be validated with third party reviewers to ensure the

	robustness of the analysis.
Offset strategy	18'887 MT CO_2e Carbon offsets purchased: 20'500 MT CO_2e (108,5% of current calculated footprint) *Further details available in Section 6*
Statement that PAS 2060 certification has been provided by a third party verifier	PAS2060 certification issued by South Pole

Section 6: Carbon Credits

Project name	Country	Type of project	Vintage	Standard	Volume (tCO2e)	Retired credits - registry link
Qianxinan Project	China	ARR	2017-2019	VCS CCB	5'000	Link
Rimba Raya	Indonesia	REDD+	2018	VCS CCB	5'500	Link
Kariba	Zimbabwe	REDD+	2017-2019	VCS CCB	7'500	2017 - Link 2018 - Link 2019 – Link
Caribbean Guatemala: The Conservation Coast	Guatemala	REDD+	2017	VCS CCB	2'500	Link
Total					20'500	

Retired credits equivalent to 108,5% of carbon footprint covered by this certification