

Qualifying Explanatory Statement (QES)

Declaration of achievement of carbon neutrality

Aligned with PAS 2060:2014

For period 15th March 2023 - 15th March 2024



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Introduction

South Pole was commissioned by Société des Produits Nestlé SA to provide an "other party validation" of its declaration of achievement of carbon neutrality, in line with the requirements of the British Standards Institution (BSI) Publicly Available Specification (PAS) 2060:2014: Specification for the demonstration of carbon neutrality.

It forms the Qualifying Explanatory Statement to demonstrate that Société des Produits Nestlé SA has achieved carbon neutrality for the entirety of its product range sold in the following geographies over the 2022/2023 cycle. The details of product in scope for carbon neutrality are the following:

Product name	Geography	
GUIGOZ BIO	France	
NAN ORGANIC	China	
NAN BIO	Greece, Bulgaria, Poland	
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, Switzerland, China, Greece, Austria, Germany, Bulgaria, Poland, Finland, Sweden.
	 Product format and manufacturing site: In powder format with tin cans, plastic lids and scoops produced in Konolfingen, Switzerland; In liquid format in tetra brick with plastic screw caps in Sevares, 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 goods 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, Poland NAN BIO 1 12 x 400g NAN BIO 2 12 x 400g NAN BIO 3 12 x 400g
<i>China</i> 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
<i>Finland, Sweden</i> NAN ORGANIC 1 6x200ml NAN ORGANIC 2 6x200ml
The following recipes are covered in the validation: <i>Manufactured in CH Konolfingen:</i> CHNWGB173 CHLEGB058 CHJNGB085 NWB122 LWB047 JEB011
Manufactured in ES Sevares: NWL028 LWL104 JNFL039

	The emissions in this QES report were calculated for the calendar year 2022 and concern the recipes and markets as listed above. The 2022 carbon footprint calculation has been 3 rd party reviewed by Quantis. The emissions from cradle-to-grave of the calendar year 2023 will be calculated and offset within Q1 2024 (for the products and markets where climate neutrality was claimed between 15 March '23 - 15 March '24, see section 3).
Rationale for selection of the subject	The validation of the organic ranges of our brands is an important step in NAN, BEBA and GUIGOZ's journey to achieving carbon reduction and Nestlé's sustainability goals for the majority of our portfolio by 2030 and is in 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	Other party validation
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 for the cycle 2022/2023, validated by South Pole Carbon Asset Management Ltd.	
Recorded carbon footprint of the subject	 11,873 T CO₂e, with an emissions intensity of 0,43 kg CO₂e / serving unit in the calendar year 2022. See section 4 for further details. This new footprint represents a 29% emissions intensity (kg CO₂e / serving unit) reduction from the 2019 updated baseline of 0.60 kg CO₂e / serving unit. (Original baseline at 0.63 kg CO₂e / serving unit 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 (renewal only)	See section 5	

Name of Senior Representative	Signature
Name: Claudia Thüring	
Role: Global Marketing Manager, NAN	Alandiat
Date: 30.03.2023	Jun /

Name of Senior Representative from South Pole	Signature
Name: Anne-Franziska Sinner	
Role: Global Head of Advisory	Ne-henda for
Date: 15th March 2023	

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

PAS 2060 requirement	Client's response
Declaration of on-going commitment - all markets except France	Nestlé commits to maintain carbon neutrality for: NAN, 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 Switzerland, China, Greece, Austria, Germany, Bulgaria, Poland, Finland, Sweden.
	In accordance with PAS2060 for the period of January 1st 2023 - December 31st 2023.
	The carbon footprint for these markets for the calendar year 2023 will be calculated in Q1 2024, and residual emissions offset.
Declaration of on-going commitment - France	Nestlé commits to reduce their climate impact in line with Science-Based Targets Initiative (SBTi) for:
	GUIGOZ, 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.
	For the period of January 1st 2023 - December 31st 2023.
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	See section 4

supporting this claim	
Location of the Carbon Footprint Management Plan	See section 5

Name of Senior Representative	Signature
Name: Claudia Thüring	
Role: Global Marketing Manager, NAN	Andret
Date: 30.03.2023	9 V)

Section 4: Quantification of Carbon Footprint

The assessment of the greenhouse gas (GHG) emissions associated with products covered by the validation 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 were measured using data provided by Nestlé. This was calculated based on data from actual 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 11,873 tCO₂e. For the emissions in the calendar year 2023, Nestlé will calculate and offset these within Q1 2024 (for the products and markets where climate neutrality was claimed between 15 March '23 - 15 March '24).

Life cycle stage	GHG emissions category	Emissions (tCO ₂ e)	%of total emissions
Raw materials	Scope 3: Purchased goods and services	8,900	75.0%
Transportation of raw materials	Scope 3: Upstream transportation and distribution	119	1.0%
Production	Scope 2: Electricity & purchased steam Scope 3: Fuel and energy related activities & waste	383	3.2%
Distribution	Scope 3: Downstream transportation and distribution	310	2.6%
Use	Scope 3: Use of sold products	2,414	20.3%
End of life	Scope 3: End-of-life of sold products	-782	-6.6%

Table 1: Breakdown of GHG emissions by life cycle stage

Overhead	Scope 3: Business travel, employee commuting, capital goods and purchased goods and services	527	4.4%
Total		11,873	100.0%

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 (kgCO₂e).

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)'.

СНС	GWP (100 years)
Carbon dioxide (CO ₂)	1
Methane (CH ₄)	28
Nitrous oxide (N ₂ O)	265
Hydrofluorocarbons (HFCs)	See IPCC AR6 p.73-79
Perfluorocarbons (PFCs)	See IPCC AR6 p.73-79
Sulphur hexafluoride (SF ₆)	23,500

Table 2: Global warming potential of GHGs

The GHG emissions include all relevant emissions to the scope of validation and are 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
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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	
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.

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 Secondary data for Austrian milk derivatives based on study of Raumberg- Gumpenstein 	 Emission factors from: Agri-Footprint 6.3 Ecoinvent 3.9 Cool Farm Tool World Food LCA Database 3.5 Raumberg- Gumpenstein Distance and mode of transport from EcoTransit 	
Packaging materials	 Packaging materials, quantity and sizes. Recycled content Supplier locations 	- Emission factors from Ecoinvent 3.9	
Production	 Production resourced used Renewable electricity proportions Production waste quantity and treatment 	 Emission factors from: Ecoinvent 3.9 UK BEIS International Energy Agency AIB 	
Distribution	 Market distribution for each product Mode of transportation 	 The mode of transportation proportions to transport the product to consumers' homes 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 	

Table 4: Primary and secondary data by life cycle stage

Bad goods	-	- Usage of Circular Footprint Formula (CFF) to follow Nestle's methodological guideline.
Use	- Product preparation instructions	 Emission factors from: Ecoinvent 3.9 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.

Key assumptions

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.

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, Switzerland, China, Greece, Austria, Germany, Bulgaria, Poland, Finland, Sweden. In accordance with PAS2060 for the period of March 15, 2023 to March 15, 2024 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 (7% year-on-year reductions)	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 29% emissions intensity reduction from our 2019 baseline: Use of 100% renewable electricity in Konolfingen and Sevares factories. 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 formula 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.
- 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.
	 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	11,873 T CO2e for the 2022 GHG footprint
	Carbon offsets purchased: 20'500 T CO2e (172.6% of current calculated footprint) Further details available in Section 6
	The emissions from cradle-to-grave of the calendar year 2023 will be calculated and offset within Q1 2024 (for the products and markets where climate neutrality was claimed between 15 March '23 - 15 March '24)

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	<u>Link</u>
Rimba Raya	Indonesia	REDD+	2018	VCS CCB	5'500	<u>Link</u>
Kariba	Zimbabwe	REDD+	2017-2019	VCS CCB	7'500	2017 - <u>Link</u> 2018 - <u>Link</u> 2019 – <u>Link</u>
Caribbean Guatemala: The Conservation Coast	Guatemala	REDD+	2017	VCS CCB	2'500	Link
Total			•	•	20'500	

Retired credits equivalent to 172.6% of carbon footprint covered by this validation.



Certificate of Achievement and Commitment

Société des Produits Nestlé SA

has demonstrated their product(s), listed below, meet(s) the South Pole criteria of a Carbon Neutral Product. This means they have calculated the footprint covering all material emissions, have detailed a reduction plan in line with science and have offset remaining emissions to achieve carbon neutrality in the 2022/2023 cycle, in accordance with:

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

Nestlé NAN BEBA GUIGOZ Organic Ranges

Furthermore, it is committed to maintaining carbon neutrality for product(s), listed above, marketed in all markets except France in the 2023/2024 cycle. For products marketed in France, it is committed to reducing their climate impact in line with Science-Based Targets Initiative (SBTi) in the 2023/2024 cycle.

Awarded: 15th March 2023

Valid until: 15th March 2024

South Pole certificate number: 606037-2023

Signed on behalf of South Pole

Renat Heuberger CEO, South Pole