Danone Karicare: Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2

Qualifying Explanatory Statement in support of the

Achievement of and Ongoing Commitment to Carbon Neutrality

Application Period: 1st January 2021 - 31st December 2021

Date: 15/11/2022

1. Executive Summary

This document is the Qualifying Explanatory Statement (QES) which provides collected evidence in support of the declaration that Danone Karicare: Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2:

- 1. has achieved carbon neutrality for its 7 SKUs as listed in table below for the period commencing 1st January 2021 to 31st December 2021 (see Section 3); and
- 2. is committed to maintaining carbon neutrality for its 7 SKUs as listed in table below (see section 4).

Range	SKU name	Market sold	SKU number
GoldPlus Organic	Karicare Gold Plus Organic Stage 1- Infant Formula	AU & NZ	162922
GoldPlus Organic	Karicare Gold Plus Organic Stage 2 - Follow On Formula	AU & NZ	162924
GoldPlus Organic	Karicare Gold Plus Organic Stage 3 - Toddler Milk Drink	AU & NZ	162926
GoldPlus A2	Karicare Gold Plus A2 Stage 1 - Protein Milk Infant Formula	AU & NZ	168436
GoldPlus A2	Karicare Gold Plus A2 Stage 2 - Protein Milk Follow-On Formula	AU & NZ	168437
GoldPlus A2	Karicare Gold Plus A2 Stage 3 - Protein Toddler Milk Drink	AU & NZ	168438
GoldPlus A2	Karicare Gold Plus A2 Stage 4 - Protein Junior Milk Drink	AU & NZ	168439

The carbon neutrality declaration has been made and the collected supporting evidence has been provided in accordance with the requirements prescribed by PAS 2060:2014 – Specification for the demonstration of carbon neutrality.

Specification for the demonstration of carbon neutrality.	
Kathy Cavill - Consumer Marketing Director	

Approval date:

Signature:

2. General information

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration		
Entity making PAS 2060 declaration:	Danone Karicare: Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2.		
Subject of PAS 2060 declaration:	The project scope involved calculating the carbon footprint of the 7 SKUs: 3 Karicare Gold Plus+ Organic and 4 Karicare Gold Plus+ A2, sold in Australia and New Zealand markets. Specifically: * 162922 - Karicare Gold Plus Organic Stage 1 - Infant Formula * 162924 - Karicare Gold Plus Organic Stage 2 - Follow-On Formula * 162926 - Karicare Gold Plus Organic Stage 3 - Toddler Milk Drink * 168436 - Karicare Gold Plus A2 Stage 1 - Protein Milk Infant Formula * 168437 - Karicare Gold Plus A2 Stage 2 - Protein Milk Follow-On Formula * 168438 - Karicare Gold Plus A2 Stage 3 - Protein Toddler Milk Drink * 168439 - Karicare Gold Plus A2 Stage 4 - Protein Junior Milk Drink These products have been footprinted cradle-to- grave. Data was collected in January 2022, based on data from 01 January to		
	31 December 2021. The product Carbon Footprint was performed in January 2022 via the DanPrint tool, which follows the principles and requirements for conducting life cycle assessments specified by the NF EN ISO 14040: 2006 and EN ISO 14044: 2006.		
Description of Subject:	The 7 SKUs within the scope of this certification are powder milk formula products produced in New Zealand and sold in New Zealand and Australian markets. 3 SKUs belong to the Gold Plus+ Organic range, and 4 SKUs belong to the Gold Plus+ A2. As it can be seen from the name, the products cover the different stages of life of the babies (Stage 1 is for babies from 0-6 months, Stage 2 for 6-12 months, Stage 3 for 12-24 months, and Stage 4 for following moments of life). Only sales of the SKUs in New Zealand and Australia is included in the scope of this certification. Sales in all other markets are not included in the scope of this neutrality claim.		
Rationale for selection of the subject:	To further support Karicare Toddler's positioning to make a positive impact, we have a roadmap to achieve a carbon neutral position for the brand by 2030. Given the cost and complexity of simultaneously certifying every Karicare Toddler SKU, the process will be addressed in stages with the first products identified for carbon neutrality being the Karicare Gold Plus+ Organic and Gold Plus+ A2 ranges.		
Control approach:	Cradle-to-grave		

Type of conformity assessment:	Independent third-party certification (see Appendix 2)
Baseline date for PAS 2060 programme:	1 st January - 31 st December 2021 (12 months)
Individuals responsible for evaluation and provision of data necessary for declaration:	Rachel Wakefield – Karicare Brand Manager Ximena Ramirez Arango – Head of Core Milks & Kids Phoebe Mitch – Supply Chain Performance Analyst

3. Declaration of achievement to carbon neutrality

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Carbon neutrality of 7 Karicare SKUs achieved by Danone & Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 in with PAS 2060 at 21/11/22 for the period commencing 1st 2021, certified by the Carbon Trust.	
Recorded carbon footprint of the subject during the period stated above	The footprint resulted in absolute terms, based on total sales of Danone Karicare for the 7 SKUs withing the scope of this certification in 4,599.5 tCO ₂ e from 1 st January to 31 st December 2021. See section 3.2 for further details.
Carbon offsets purchased	4,738 (tCO ₂ e). The total carbon footprint in absolute value is 4,599.5 tCO2e but we chose to take a 3% security margin and buy more carbon credits. See section 3.2 for further details.

3.1. Carbon footprint methodology

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Description of the standard and	Period of application: The period of application is from 1 st January 2021 to 31 st December 2021
methodology	Standard chosen and emission sources:
used to determine GHG emissions and reductions	The Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard (GHGP Product Standard) was used to quantify the GHG emissions associated with products covered by the certification scope, using data representing operations between 1st January and 31st December 2021.

The products CO2e footprints have been assessed by Carbon Trust Advisory team. The footprints have been reviewed and assured by Carbon Trust Assurance team.

GHG emissions that are accounted for in the study are based on the 100-year time horizon global warming potentials (GWP) published by the Intergovernmental Panel on Climate Change (IPCC) and reported in the Fourth Assessment Report, 2007 (AR4) (2). These include emissions required by Section 6.2 of the GHG Protocol Product Life Cycle Accounting and Reporting Standard (GHG Product Protocol): carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulphur hexafluoride (SF6), perfluorocarbons (PFCs) and hydrofluorocarbons (HFCs). For more information, please see the IPCC website (www.ipcc.ch).

Data:

Data sources used for the study include a mix of primary and secondary sourced data. Where possible, primary data were sourced. Secondary data were sourced only where primary data were not available or where the relative impact on the carbon footprint result was nominal.

Primary data were provided by Karicare team, for all activity encompassing: products recipes; operational data and production output from Aintree and Balclutha plants; sales data in NZ & Australia; packaging material inputs; incoming material transport distances (upstream logistics); and distribution modes of transport down to the distribution warehouses located in NZ & Australia. Distribution routes and distances were estimated based on primary data sources from Aintree plant to Danone DC or Distributor DC/customers.

Secondary data coming from reputable published LCA databases, were used for: Use of sold product phase (energy used at Retail DC, Retail Store and at home by consumers) and End of life (average country specific waste management rates for packaging materials).

All the input data are listed in the 7 DanPrint files under their relevant process sheet. Primary data collected by the Karicare team is available in the project folder. The main point of contact for the data was *Phoebe Mitch* (Nature Lead, Auckland Factory)

Representativeness:

The time reference for the primary data collected for the products is 2021, from 1st January to 31st December. The information about the technology we use for processing and its impact was primarily internally available information but when not, available industry standards were used. The geographic reference is New Zealand and Australia. All 7 SKUs are produced in

New Zealand (base powder in Danone Balclutha factory, finished product packed in Danone Aintree factory) and sold in both New Zealand and Australia.

Measurement unit(s) applied:

The chosen unit of analysis for the assessment of the 7 Karicare SKUs is kg. The defined functional unit for it is therefore 1 kg of milk powder produced in New Zealand and sold in New Zealand (scenario 1) or in Australia (scenario 2).

Methodology:

Danone Karicare has carried out carbon footprint calculations through the tool DanPrint V2.1.4 (manually adjusted version¹) developed by EcoAct and following the Life Cycle Assessment principles, according to the European Commission's most recent guidelines (PEFCR) and following the international standard ISO 14040 and ISO 14044 (DanPrint methodology book p.11). The tool measures carbon footprint emissions according to the GHG Protocol and encompasses direct emissions of Danone's sites (scope 1), indirect emissions due to the production of electricity, steam, heating, and cooling consumed by Danone's sites (scope 2) and all other indirect emissions that occur in Danone's value chain (scope 3). Footprint's results are provided in intensity and absolute terms.

Methodological choices include:

- Carbon Storage (basis on whether any carbon storage was calculated)
 not applicable
- Land use change (statement on LUC data approach and sources) not applicable
- Exclusions on basis of materiality (any emission sources that are defined as below 1% threshold and thus excluded from model) -please refer to table 4 in section 3.2 for all the processes which are excluded from the study
- Energy sources and emission factors for sources (natural gas and electricity) – all energy data refer to the country where energy consumption takes place (New Zealand and Australia). Please refer to DanPrint methodology book p. 28

¹ While running the first carbon foot printing of the Karicare products, some bugs were found in DanPrint V2.1.4. Therefore, with the support of Danone Central Nature Team, the DanPrint template has been *manually adjusted* specifically in the following sections:

Tab 'EF Combined Dairy ingredients': correction of the formula in column V, W, X, Y to have "Dry Matter Content of Dairy ingredient / Dry Matter Content Raw Milk used in Dairy ingredient" and not the opposite

o **Tab 'Waste generated in operations'**: correction of the formulas in column G 'Imported quantities' to make it work even if only one or two factories are chosen for the SF products

o Tab 'FE_Use_of_sold_P': 'ELN NEW ZEALAND' is now called 'SN New Zealand' to make work the 'use of sold products' tab.

- Use phase analysis (method of assessing and modelling use phase).
 Please refer to DanPrint methodology book p. 51, paragraph 4.13. In the 7 DanPrint for the purpose of this study, no additional "other energy consumption" is added in the section Use of Sold Product
- Allocation of emissions (co-allocation of emissions, can state 100% allocation to the product and none to co-allocation):
 - o In the case of DanPrint:
 - Production of ingredients: Allocation per dry matter content
 - Manufacturing of products: Allocation to each product based on a volume basis
 - Storage of products (warehouses or stores): Allocation to each product based on a volume basis
 - End-of-life: A dedicated section of DanPrint methodology book (p.25, section 3.6.5) will describe the procedure
- Recycling (statement that materials assumed to be virgin/landfill and food products EoL don't have a treatment) - Methodology for taking into account recycling and the end of life of materials: Circular Footprint Formula (CFF) - see p. 25 of DanPrint methodology book
- Data sources (sources of data for EFs) please see section 4. Data Requirements

Info on methodology used to classify Ingredients – specific for SN division – due to base powder produced in-house (applicable to all 7 SKUs).

Due to the complexity of Specialized Nutrition division, and the more simplistic approach of the DanPrint tool, some decisions had to be made to allow the DanPrint tool to work appropriately.

DanPrint requires to input data of Bill of Materials, for a total of 100% of the weight of the finished recipe (which is in *powder* in the case of SKU involved in this study).

Specialized Nutrition's infant formula products are the result of a spray drying process. Namely, the initial Bill of Material contains liquid ingredients, which amount to a higher weight than the weight of the finished product in powder weight. Therefore, for the purpose of DanPrint foot printing we took the decision to input all ingredients data in powder equivalent. For this reason, the *Milk* tab is left empty and liquid ingredients (e.g., Skim Milk, whole milk, Cream) used in factory 1 (Balclutha) to produce the semi-finished base powder are reported in the *Dairy Ingredients* tab in powder equivalent. To make sure the BoM amounts to 100%, we had to recalculate the % of each ingredient in powder equivalent as a part of the total finished product (base powder recipe + additional other raws added in factory 2). Implications of this choice are an overestimation of energy data (double counting) for the liquid ingredients

which are spray dried in-house. In fact, as these ingredients are reported under *Dairy Ingredients* category, the EF associated includes energy data from processing, on top of the energy data from production in-house (Balclutha factory) which are calculated in the *Factory* tab.

Emission Factors in DanPrint:

1) **Danone default emissions factors:** Standard Emission Factors are sourced mostly from authoritative LCI databases and aligned with values used in *Greentrack*, Danone company GHG emissions reporting tool (DanPrint methodology book, p. 20).

The *Greentrack* methodology is detailed in a document called: "Danone Carbon Methodology Design".

This document provides guidance on:

- Perimeter considered for data collection
- Origin of data
- Ownership of data input
- Use of data within calculations
- Management of emission factors

Emission Factors are defined by business unit or by site and were reduced to the functional unit by ECOACT.

2) Supplier Specific Emission Factor:

For all the 7 SKUs, the Karicare team managed to gather **supplier specific emission factors** for all dairy ingredients in the bill of materials. The supplier specific EFs are collected as part of Danone' Procurement Team's effort to move from default primary data (e.g., national, regional, FAO EF) to supplier specific data, more precise and representative of suppliers' farm pools CO2 footprint. These emission factors are calculated at supplier level via local tools (e.g., Cool Farm) or national program LCA tools (e.g., overseer, FarmES). The supplier specific EFs used in DanPrint Karicare date back to 2020 data collection within Danone suppliers CO2 monitoring process. These are regularly updated (every 1-2 years) through continuous engagement between Danone and their suppliers.

The emission factors refer to **on farm liquid milk** and have been added in DanPrint via the button: *EF suppliers*.

3) Combined emission factors: to calculate Dairy Ingredients emission factors including milk transportation and processing, DanPrint users can create a customized emission factor by combining several standard EFs to describe the process. This had to be done to calculate the emissions from the processing of the Milk into Dairy Ingredients. Therefore, the Supplier specific emission factors (mentioned in point 2 above) have to be combined with additional "Danone default values" for transport and energy data from processing.

Assumptions

Although comprehensive primary data was provided by Danone Karicare, a small number of assumptions on data were made and these are explained in below table. For more extensive assumptions proper of the DanPrint tool, please refer to the DanPrint methodology book.

Process Step	Assumption	
Dairy Ingredients	As explained above: all dairy ingredients (including liquid skim milk, whole milk, and cream) have been put under tab "Dairy ingredients" and reported in powder equivalents – to comply with the 100% BoM requirement from DanPrint tool Cream has been categorized as "Whole Milk Powder" Whole Milk has been categorized as "Whole Milk Powder"	
	Skim Milk has been categorized as "Skimmed Milk Powder"	
Other Raw ingredients have been grouped accord to category they belong to (e.g., Minerals, Vitami When indicating the country of origin, the country the ingredient in the category with the highest percentage was reported (e.g., vitamin A, quantity 0, from China; vitamin B, quantity 0,005%, from Germany; vitamin C, quantity 0,001%, from Netherlands à all are reported as: Vitamins, quantity 0,106%, from China)		
Packaging Our can body and can bottom come from Korea, but the country is not an option in the DanPrint "Origin country column. Therefore, the closest country (namely, Japan been selected, for all 7 SKUs		
Production	All SKUs produced in the Balclutha and Aintree factories are assumed to consume the same amount of energy during production processes. That is why the Balclutha and Aintree energy data was equally applied to all of the 7 SKUs	
For DC storage: DanPrint limitation. A bug has been for in the DanPrint formulas which does not allow to include scenarios. This is not an easy fix that can be done		

		
	manually within the time period of this certification	
	process. Therefore, we assume that NZ and Australia DCs	
	have same energy consumption in both scenarios (sold in	
	Australia and sold in NZ). New Zealand energy	
	consumption is being used.	
	All transports are assumed to be conducted in third	
	party vehicles. In the case of the current study only	
	Danone default EFs have been used (more on this EF	
	in section 4. Data Requirements). Logistics Emission	
	Factors depend on the transport mode, fuel type	
	combination and flow location. Data come from	
	Ecoinvent, Ademe, or Danone internal computations	
Downstream	for road transport, based on DEFRA and ICCT	
transport	datasets and internal assumptions regarding loading	
	rate, empty return rate, transported load. Electric Rail	
	and Mix Diesel Rail emission factors come from	
	location-based electricity values by country, assumed	
	to be the country of delivery of the final product.	
	Multiple sources means that we had use several of	
	those databases to find the emissions factors.	
	DanPrint assumption: Water heating at Home: energy	
	requirements for heating SN milk powder and its	
	resulting emissions are driven by the heating of water	
Use of sold	with which the power is mixed. It is therefore	
product	necessary to determine a specific energy	
product	consumption value for heating a liter of water from	
	room temperature to boiling point, and a standard	
	powder to water ratio (1:7 based product information)	
	– see p. 52 DanPrint methodology book	
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Assessment of data quality

Data quality is scored on a scale from **A** to **D** (A being very good; D being poor). A single data quality score was assigned based on the criteria below for primary data and secondary data. The quality of the overall dataset was appraised according to table attached in **Appendix 4**. Based on this table, confidence in activity data is considered to be good to very good. Confidence in emission factor data is considered to be fair to good.

Assessment of uncertainty

The emissions figures provided in this report have been calculated in accordance with the requirements of GHG Protocol Product Life Cycle Accounting and Reporting Standard, ISO 14040, and ISO 14044, using the primary and secondary sources of data specified above. All inputs for which data are available are included in the LCI of the product, thus most of the time 100% of the input will be taken into account. On the specific point of view in the

study, the cut-off rule of 5% of the total mass of the product was checked throughout the life cycle analysis. In other words, the proportion of modelled elements represents at least 95% of the total mass of the product, throughout the life cycle analysis (DanPrint methodology book, p. 20). However, readers should be aware that even primary sources of data are subject to variation over time, and the figures given in this report should be considered as our best estimates, based on reasonable cost of evaluation.

This methodology was developed to be in accordance with the requirements of Life Cycle Assessment principles, according to the European Commission most recent guidelines (PEFCR) and following the international standard ISO 14040 and ISO 14044.

The provisions of the methodology for calculating the carbon footprint were applied as detailed and the principles set out in PAS 2060 were met.

Justification for the selection of the methodologies chosen

The Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard (GHGP Product Standard) was used to quantify the GHG emissions associated with products covered by the certification scope, using data representing operations between 1st January 2021 to 31st December 2021. This method was chosen as it provides an internationally recognized approach to the calculation of representative product CO2e footprints and meets the requirements of PAS 2060 for the substantiation of GHG emissions (PAS 2060: 5.2.2 to 5.2.4).

3.2. Carbon footprint breakdown

Carbon Footprint (for latest foot printing year)	Information Relating to the Carbon Neutral Declaration
Total Carbon Footprint	4,599.389 tCO ₂ e
Weighted average	9.93 tCO₂e /tonne of sold product

Table 1a. Product footprint emissions broken down by product per functional unit, Australia SKUs

Region	SKU	Total SKU emissions (kg CO2e)	Emissions per kg product (kg CO2e)
Australia	162922 – Karicare Gold Plus+ Organic Stage 1	31,650.198	9.166
Australia	162924 - Karicare Gold Plus+ Organic Stage 2	34,397.67	9.170
Australia	162926 - Karicare Gold Plus+ Organic Stage 3	39,573.162	8.759
Australia	168436 - Karicare Gold Plus+ A2 Stage 1	110,775.616	10.522
Australia	168437 - Karicare Gold Plus+ A2 Stage 2	174,268.374	10.563
Australia	168438 - Karicare Gold Plus+ A2 Stage 3 432,065.457		9.819
Australia	168439 - Karicare Gold Plus+ A2 Stage 4	87,308.815	9.383

Table 1b. Product footprint emissions broken down by product per functional unit, New Zealand SKUs

Region	SKU	Total SKU emissions (kg CO2e)	Emissions per kg product (kg CO2e)
New Zealand	162922 – Karicare Gold Plus+ Organic Stage 1	29,698.5	9.138
New Zealand	162924 - Karicare Gold Plus+ Organic Stage 2	37,627.56	9.144
New Zealand	162926 - Karicare Gold Plus+ Organic Stage 3	39,715.248	8.744
New Zealand	168436 - Karicare Gold Plus+ A2 Stage 1	592,847.07	10.518
New Zealand	168437 - Karicare Gold Plus+ A2 Stage 2	807,549.756	10.558
New Zealand	168438 - Karicare Gold Plus+ A2 Stage 3	1,343,635.656	9.812
New Zealand	168439 - Karicare Gold Plus+ A2 Stage 4 838,276.779 9.381		9.381

3.2.1. Data methods

Data sources

To ensure the study meets data quality requirements, primary data comprises the majority of information in the inventory, supplemented with secondary background only where primary data was not available or where the relative impact on the carbon footprint result was nominal.

Primary data were sourced to support the main lifecycle stages, such as:

- **Products recipes:** Sourced from factory Bill of Materials showing breakdown of each raw ingredients proportion in the recipe.
- Dairy ingredients: data for skimmed milk and cream came from Danone Actimel Cool Farm Tool.
- **Packaging:** Weights of our packaging were calculated and linked to emission factors from secondary data built into the DanPrint 2021 File.
- Production: data based on production output from Aintree and Balclutha plants.
- Distribution and storage: data shows actual distribution modes of transport down to the distribution warehouses located in NZ & Australia, with distribution routes and distances estimated based on primary data sources from Aintree plant to Danone DC or Distributor DC/customers.

Secondary data were sourced to support various lifecycle stages, such as:

- **Use of sold product**: data for the energy used at Retail DC, Retail Store and at-home by consumers was came from reputable published LCA databases.
- **End of life:** the end-of-life data used was for the average country specific waste management rates for packaging materials coming from reputable published LCA databases.

All the input data are listed in the 7 DanPrint files under their relevant process sheet. Primary data collected by the Karicare Toddler team is available in the project folder. The main point of contact for the data was **Phoebe Mitch** (Nature Lead, Aintree factory).

Table 2: Data quality and uncertainties

Data quality is the following for each life-cycle stage:

Life cycle stage	Data quality	Explanation
Material acquisition and pre-processing	Very good	Time representativeness: very good Technological representativeness: good Geographic representativeness: very good Improvements: • Engage with suppliers to provide primary emission factors (or data to calculate) for condensed milk, powdered milk, and other ingredients currently using secondary sources. • Better understand the carbon impacts from suppliers packaging i.e., the energy intensity of their processes and whether they procure renewable energy
Production	Very good	Time representativeness: very good Technological representativeness: very good Geographic representativeness: very good Improvements: Provide metered process-specific energy consumption at the factory per SKU
Distribution and storage	Very good	Time representativeness: very good Technological representativeness: very good Geographic representativeness: very good Improvements: Better understand 3PL carbon reduction plans
Use	Good	<u>Time representativeness</u> : good <u>Technological representativeness</u> : good <u>Geographic representativeness</u> : good

	Good	<u>Time representativeness</u> : good <u>Technological representativeness</u> : good <u>Geographic representativeness</u> : good
End of life		Improvements: • By 2025, all Karicare packaging will be either recyclable, reusable or compostable.

- Any exclusion and the reason for that exclusion shall be documented, including for the exclusion of any Scope 3 emissions.
- 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.)
- The quantified carbon footprint shall cover at least 95% of the emissions from the subject.
- Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions.

The country of sales are as follows:

Table 3. List of country of sales

Country of Sales
Australia
New Zealand

Table 4. Description of GHG emissions

Life cycle stage	Description	GHG Emissions Category	Excluded emissions & Justification
Material acquisition and pre- processing	Material acquisition and pre- processing of the products is included in the scope of certification. It includes: • Production of raw materials, comprising extraction and transportation of raw materials; processing to packaging base materials; and fabrication of packaging • Upstream Transport of all ingredients and raw materials from suppliers to factory 1 (Balclutha - ingredients for base powder) and factory 2 (Aintree - additional ingredients & packaging for finished product)	Scope 3 – indirect emissions Scope 1 – Stationary and mobile combustion Scope 2 – Purchased electricity (market- based)	 Exclusion of the following emissions coming from: Capital goods and infrastructure (i.e., manufacture and maintenance of buildings and machinery). Ink weight and varnish on the Karicare Toddler tins. Such emissions have been excluded because they are considered non-attributable to the product. The following emissions have been excluded because of low materiality compared to main packaging: Production dye, ink and other printing and cutting materials.'
Production	 Production of base-powder in Danone factory 1 (Balclutha) Production of finished product in Danone Factory 2 (Aintree) Management of waste and losses in factory 1 and 2 	Scope 1 – Stationary and mobile combustion Scope 2 – Purchased electricity (market- based) Scope 3 – indirect emissions	Exclusion of the following emissions coming from:

			Production dye, ink and other printing and cutting materials.
Distribution and storage	 Distribution of the finished product from factory 2 (Aintree) to the customer including: Transport to third party DC Storage at DC Transportation from third party Dc to final client DC 	Scope 3 – indirect emissions Scope 1 – Stationary and mobile combustion Scope 2 – Purchased electricity (market- based)	Capital goods and infrastructure (i.e., manufacture and maintenance of buildings and machinery). Personnel activities (i.e., commuting to and from work). Such emissions have been excluded because they are considered nonattributable to the product, and data was not available.
Use	Karicare Toddler infant milk powder is used by consumers to feed their babies. This stage includes: • Ambient storage of milk powder at consumer's home. • Heating of the water to prepare the product for consumption.	Scope 3 – indirect emissions	Transport of consumers up to selling point given that such distance data isn't relevant at the product's scale. Consumers' routes vary a lot for reasons independent from the single product itself, as well as the type of transportation used to get to the store for example. Impacts related to customers' consumption habits whose occurrence is independent from the product itself have also been excluded. Production and washing of the dishes used with the product are excluded from the analysis. Such emissions have been excluded because they are considered nonattributable to the product, and data was not available.

End of life	At end of life, primary, secondary, and tertiary waste packaging can be recycled, incinerated for energy recovery, incinerated without energy recovery, or landfilled. The following processes are included in the boundary of this life cycle stage: Transportation of waste packaging to a waste management facility. Waste packaging treatment and processing via recycling, incineration with energy recovery or incineration without energy recovery.	Scope 3 – indirect emissions	Emissions linked to food wastage at retail points and at home are not considered in the project. Such emissions have been excluded because they have low materiality.
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3.3. Carbon offsets

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration		
Offset methodology	The offset methodology is based on the purchase of carbon credits from South Pole. These credits are certified by Gold Standard, and all correspond to an effective and verified Wind Power project.		
Offset Confirmation	correspond to an effective and verified Wind Power project. The offsets generated represent genuine, additional GHG emission reductions elsewhere. Projects involved in delivering offsets meet the criteria of additionality, permanence, leakage, and double counting. Carbon offsets are verified by an independent third-party verifier. The credits from the selected carbon offset projects are: only issued after the emission reduction has taken place. retired within 12 months from the date of the declaration of achievement. supported by publicly available project documentation on a registry which provides information about the offset project, quantification methodology and validation and verification procedures. stored and retired in an independent and credible registry.		
Offsets	Full details of the carbon offsets included in making this declaration are provided in Appendix 1.		

4. Declaration of ongoing commitment to carbon neutrality

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Declaration of on-going commitment:	Danone Karicare: Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 commits to maintain carbon neutrality for Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 ranges in accordance with PAS 2060 for the period from January 1 st to December 31 st , 2022. Carbon neutrality for Danone Karicare: Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 for the period January 1 st to December 31 st .
	Karicare Gold Plus+ A2 for the period January 1 st to December 31 st 2022, will be achieved by June 30th, 2023.

4.1. Carbon management plan

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Targets for GHG reduction for the defined subject appropriate to the timescale for achieving carbon neutrality	The average reduction target by 2022 is 2% average reduction across all SKUs per year in tCO2e/tons of Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 product sold, over the baseline. We will apply a reduction plan based on the weighted average of 9.2 tCO ₂ e/tonne of sold product. The weighted average has been calculated as follows: Total emissions divided by total tons of product sold in 2021 (4,599.389 tCO ₂ e/463,112 tonnes = 9.93 tCO ₂ e/tonne product).
	Danone Karicare: Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 has set an average reduction target of 2% per year in tCO2e/tons. To reach this goal, four categories of projects will be implemented over the years starting in 2021 to reduce emissions. These projects concern milk and dairy ingredients, packaging, factory, and transport related activities. In detail;
Planned means of achieving and maintaining GHG emissions reduction	I. Projects
	 Milk and dairy ingredients Friesland Campina dairy ingredient supplier CO2 roadmap (we are investing in on-farm projects to pay a premium on our supply, specific on-farm projects are at the supplier discretion). The reduction target is contractually agreed to reach 9% reduction between 2020 and 2023. Main projects the supplier is investing in include:

- Eliminate deforestation linked to imported soy for feed through local protein alternatives or traceability and certifications.
- Use feed additives to reduce methane emissions during enteric fermentation.
- Implement regenerative agriculture practices that protect soil water and increase biodiversity (reduce inputs from chemical fertilizers and increase yield).
- Arla and Glanbia dairy ingredient suppliers CO2 roadmap, working towards a target of 30% reduction on farm emissions between 2020-2030. This is aligned with suppliers' own commitments and not included in B2B agreement. Work in progress with these suppliers to define clear roadmap with precise list of projects for the next 3 to 5 years. Main focus areas are:
 - Feed production: increase crop yield, and reduce imported protein linked to deforestation.
 - Enteric fermentation: improve herd management, increase cow efficiency, and optimise diet.
 - Manure management: manure transformation.

2) Packaging

- Our total Karicare Toddler range to be 100% recyclable, reusable or compostable by 2023. To achieve this ambition, we have a pipeline of recyclability projects to implement within this time frame, including:
 - ARL logo implementation on pack across the full range in 2023.
 - Portfolio optimisation and rationalisation, with the delist of Karicare+ sachets and Karicare Gold+ Organic in 2023.
- Change to local sourcing of can ends by Q1 2023.
- Increase cartons per layer stacking to increase efficiency by Q1 2023.

3) Factory

- New biomass boiler to be installed at Balclutha plant in 2022.
- Balclutha plant to become a carbon neutral factory by 2025. To achieve this ambition, we have a roadmap of projects within this time frame, including:
 - New biomass boiler to be installed in 2022.
 - Use only 100% renewable energy on site.
 - Write off reductions.
 - Waste reduction and recycling improvements on site.

4) Transport

 Aintree transport project: Move warehouse to be connected to plant allowing reduction of one truck movement for all FG in 2022.

I. Tracking progress and target management

- Performance indicators have been set up to monitor the progress of the reduction plan on an annual basis. Plus, in the context of "One Planet One Health" Danone strategy, sustainable targets are more and more important for Danone employees.
- The evolution of the average carbon price in the coming years is also considered in the strategic forecasting.
- Meetings are planned with the core team and the stream leaders, in charge of reduction projects, on a regular basis.
 Objective of these meetings is to further work on our long-term reduction plan by:
 - Monitoring/follow-up on implementation of validated projects.
 - Further assess/evaluate projects to have them validated for implementation.
 - Unlock new reduction opportunities through our different pillars.
- A roadmap for each workstream has been created. Project descriptions, CO2 impacts, dates of implementation are completed in this document and updated on a regular basis.

The offset strategy to be adopted

To meet the requirements of PAS2060 we are required to offset 4,599.389 tCO2e. However, we decided to take a 3% security margin. The total of credits we purchase represents 4,738 tCO2e. The nature of the projects will be Wind Power projects. Projects are certified by Gold Standard.

Appendix of qualifying explanatory statement

Appendix 1: Offsets

Project name	Country	Project type	Standard	Type of credits	Total credits	Generation period	Retirement date	Reference No. & link to registry	Offset volume (tCO ₂ e)
Mersin Wind	Turkey	Wind Power	Gold Standard	Voluntary Emission Reduction (VER)	4,738	Vintage 2020 from Project Mersin Wind Farm Project	26/10/2022	300203 GSF Registry (goldstand ard.org)	4,738
							Total tonnes (tCO ₂ e)	4,738



We are delighted to confirm the retirement of

4738 Verified Emission Reductions (VERs)

South Pole Carbon Asset Management Ltd.

on 26/10/2022

Nutricia Australia Pty Ltd

Project: Mersin Wind Farm Project

These credits have been retired, saving 4738 tonnes of CO2 emissions from being released into the atmosphere.

Thank you for investing in a safer climate and more sustainable world.

Gold Standard

Retirement certificates are hosted on the Gold Standard Impact Registry, view your certificate.

Gold Standard | Chemin de Balexert 7-9 1219 Châtelaine, International Environnment House 2, Switzerland | goldstandard.org. +41 22 788 70 80, help@goldstandard.org

Appendix 2: Independent third-party assurance



Certificate of Achievement

Nutricia Australia Pty Limited

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

Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 ranges

Carbon Trust Assurance Limited certifies that Nutricia Australia Pty Limited has calculated the carbon footprint representing the Karicare Gold Plus+ Organic and Karicare Gold Plus+ A2 ranges sold Cradle-to-Grave (Business-to-Consumer) and marketed in Australia and New Zealand, in accordance with:

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

A detailed list of certified results can be found in the associated Certification Letter CERT-13363.

Awarded: 21 November 2022 Valid Until: 20 November 2023

for and on behalf of Carbon Trust Assurance Ltd,

Hugh Jones, Managing Director

This certificate is for presentation purposes only. Please do not copy or circulate this certificate without the Certification Letter and associated Annexes where full details on the scope of the certification are documented. This certificate remains the property of Carbon Trust Assurance Limited is bound by the conditions of the contract. Information and Contact: Carbon Trust Assurance Limited is registered in England and Wales under Company number 16647658 with its Registered Office at Dorset House, Stamford Street, London, SE1 9NT. Telephone: +44 (0) 20 7 170 7000. Carbon Trust Assurance Limited is a fully owned subsidiary of the Carbon Trust.

Appendix 3: Additional supporting information for interested parties

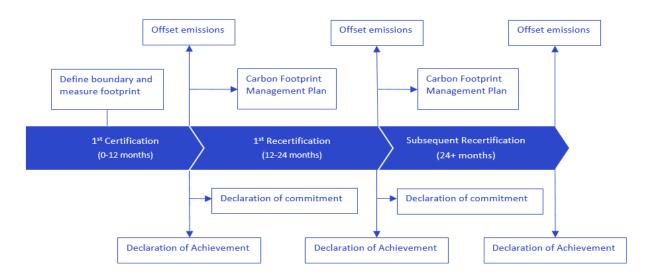


Figure 1. PAS 2060 certification process

Source: Carbon Trust. Adapted from "BSI - PAS 2060:2014: *Specification for the demonstration of carbon neutrality: Figure 1 – Illustration of the cyclical process for demonstrating carbon neutrality, taking into account permitted baseline period exceptions".* [Simplified version]

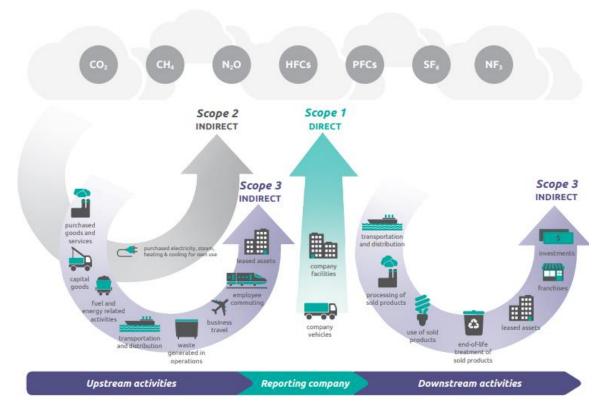


Figure 2. Organisational carbon foot printing

Source: Greenhouse Gas Protocol: http://ghgprotocol.org/

Appendix 4: Data quality assesment table

Data quality score	Data quality category	Criteria for primary data	Criteria for secondary data
Α	Very good	Data based on measurement within Karicare's scope	Data coming from a specialized professional association, specific by country and /or local geography, updated less than 10 years ago
В	Good	Converted/averaged data based on measurement within Karicare's scope	Data coming from the general public organization and or governmental organization, specific by country and /or local geography but not specific to the process, updated less than 10 years ago
С	Fair	Estimated value coming from Danone comparable factory/product located in the same geographical area	Data coming from general public organization and/or governmental organization, not specific to the process nor the local geography and/or updated more than 10 years ago
D	Poor	Estimated value coming from Danone comparable factory/product with more than 5 years of difference or from previous available edition, or from an overseas perimeter	Estimations based on general benchmark (newspapers, external companies' publications).