

# Qualifying Explanatory Statement According to PAS 2060:2014 Commitment to Carbon Neutrality

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A large, stylized world map composed of small green dots, serving as a background for the lower half of the page.

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## 1.0 Introduction

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Royal Canin was founded in 1968 and is a subsidiary of Mars, Incorporated. Since its creation, Royal Canin has developed more than 550 different nutritional offers to deliver tangible health benefits to each cat and dog. As part of its purpose, Royal Canin manufactures dry products – kibbles - and wet products - pâtés. The company makes it possible not only through precise nutrition, but also through services delivered in collaboration with pet professionals. Thanks to science, observation and partnerships, the company acquires knowledge that it shares globally in order to promote health and well-being of pets. Today, Royal Canin operates in more than 100 markets with over 7,800 Associates.

This document forms the PAS 2060 Qualifying Explanatory Statement to demonstrate that ROYAL CANIN® brand Start of Life, Feline Care Nutrition, and Breed Health Nutrition (XSmall) product ranges will commit to carbon neutrality in accordance with PAS 2060:2014 for the period of January 1, 2022 through December 31, 2022. All information provided within this report has been reviewed and certified by a third party.

This is the first declaration of either commitment or achievement towards carbon neutrality by ROYAL CANIN® for its pet food products.

This document will be updated at least every 12 months to reflect ROYAL CANIN®'s status toward its carbon neutrality targets. The report will be made publicly available.

## 2.0 Declaration of commitment to carbon neutrality

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ROYAL CANIN® is fully committed to carbon neutrality for the specific wet and dry pet food products in the scope of this certification, in all formats, as of 2022 and to maintain this commitment through at least 2022. We are pleased to have reached this goal through a variety of high-impact carbon credits projects, as documented and independently certified below. The use of removals-based credits is aligned with the SBTi (Science Based Targets) Net Zero Foundations paper. This approach will help neutralizing the carbon footprint in the short term while significant emission reductions are initiated in order to contribute to Mars' commitment to achieve Net Zero greenhouse gas emissions across its full value chain by 2050.



PAS 2060: 2014 Other Party Validation Requirement	Response
Entity making declaration:	Royal Canin
Subject of PAS 2060 declaration:	ROYAL CANIN® brand Start of Life, Feline Care Nutrition, and Breed Health Nutrition (XSmall) product ranges launched and relaunched in 2022
Description of subject:	See Table 2
Function of Subject:	Food for pets
Rationale for selection of the subject:	In 2021, Royal Canin announces its commitment that select ROYAL CANIN® brand products will be carbon neutral in 2025 with its first product range aiming to be certified in 2022. The first product ranges are among the iconic products of ROYAL CANIN® that are launched or relaunched in 2022. The scope and subject of this PAS 2060 includes entire product life cycle emissions, including the following: (i) raw material extraction and processing (ii) offices, manufacturing and packaging, (iii) product distribution, retail and consumption and (iv) end-of-life.
Boundaries of the subject	The scope and subject of this PAS 2060 includes entire product life cycle emissions including the following: (i) raw material extraction and processing (ii) offices, manufacturing and packaging, (iii) product distribution, retail and consumption and (iv) end-of-life. These boundaries exactly match the full value chain carbon accounting and the scope of the Mars Net Zero commitment by 2050.
What type of conformity assessment has been undertaken?	I3P-3: Independent third-party certification – unified
Confirmation that methodology was applied in conformance with PAS 2060:2014	The application of the methodology conforms to principles set out in clause 6.1.2 of PAS 2060:2014.
Baseline period for PAS 2060: 2014 program:	1 <sup>st</sup> January 2022 – 31 <sup>st</sup> December 2022
Achievement period:	-
Commitment period:	1 <sup>st</sup> January 2022 – 31 <sup>st</sup> December 2022
Standard for assessment of GHG emissions	GHG Protocol Product Life Cycle Accounting and Reporting Standard; ISO 14040:2006 and ISO 14044:2006
Justification of assessment method	The methodology prescribed in the guidelines aligns with WRI’s Product Life Cycle Accounting and Report Standard, meets PAS 2060 requirements, and is specific to the product sector.
Product Carbon Footprint Results	See Table 2, and Section 3
Corporate Officer Signature / Date	Fabrice Mathieu, Royal Canin Global Sustainability Director <i>Fabrice Mathieu</i> Fabrice Mathieu (Jan 4, 2022 08:51 GMT+1) Jan 4, 2022

## 3.0 Wet and Dry Pet Food Carbon Footprint

### 3.1 Introduction

The foundation of a carbon neutral certification is a full lifecycle carbon footprint analysis. This section describes the carbon footprint for wet and dry pet food products. Analysis of the carbon footprint allows

prioritization of key action areas for greenhouse gas emissions reduction in both the short term and long term.

The terms “carbon emissions” and “greenhouse gas (GHG) emissions” are used interchangeably throughout the report.

### 3.2 Methodology

The methodology for the product carbon footprint accounting followed WRI GHG Protocol Product Standard<sup>1</sup>, in conformance with the requirements of PAS 2060:2014<sup>2</sup>. The methodology for quantifying product footprints in the underlying assessment meets the accounting requirements, and the publication of this document on the ROYAL CANIN® website meets the communication requirements of WRI’s Product Life Cycle Accounting and Reporting Standard, a GHG assessment standard<sup>3</sup>.

The assessment includes GHG emissions across the product life cycle for the following phases: (i) raw material extraction and processing, (ii) offices, manufacturing and packaging, (iii) product distribution, retail and consumption and (iv) end-of-life. These calculations were made and reported prior to the purchase of any carbon credits by Royal Canin.

The Scope 1-3 categorization of the WRI GHG Protocol does not apply to product carbon footprints (PCF). This PCF considers all emissions, direct and indirect, with the exception of those related to exclusions, see section 3.4.4, across the product life cycle.

The wet and dry pet food products carbon footprint was conducted by Marion Sarteel, Global Climate lead and LCA expert employed by Royal Canin SAS.

**Table 1.** General information and scope of the PCF.

<b>Product Assessed</b>	ROYAL CANIN® brand Start of Life, Feline Care Nutrition, and Breed Health Nutrition (XSmall) product ranges. These products are manufactured and packed in 14 of our 16 factories worldwide:	
	<b>Regions</b>	<b>Countries</b>
	Europe (EU)	France Poland
	Asia-Pacific (APAC)	Russia South Korea China Japan (packing only)
	North America (NAM)	United States of America Canada
Latin America (LATAM)	Brazil Argentina	

<sup>1</sup> Greenhouse Gas Protocol. Product Life Cycle Accounting and Reporting Standard. World Resources Institute, and World Business Council for Sustainable Development. 2013.

<sup>2</sup> The British Standards Institution. (2014). PAS 2060:2014: Specification for the demonstration of carbon Royal Caninity.

<sup>3</sup> See Appendix A in WRI’s Product Life Cycle Accounting and Report Standard.

	Emerging & Seeds (E&S, new markets)	South Africa
	They are mainly sold in North America, China, Russia and France.	
Unit of Analysis	1 kg of ROYAL CANIN® pet food products	
Reference Flow	1 kg of Royal Canin pet food products	
Type of GHG Inventory	Cradle-to-Grave	
Time Period	Calendar year, January 1, 2022 to December 31, 2022	

Emissions are reported in kilograms (kg) CO<sub>2</sub>e, in line with PAS 2060, and includes the emissions of all applicable Kyoto protocol pollutants, namely Carbon Dioxide, Methane, Nitrous Oxide, Sulfur Hexafluoride and refrigerants.

### 3.2.1 The Product System under Study

ROYAL CANIN®’s Start of Life, Feline Care Nutrition, and Breed Health Nutrition (XSmall) product ranges principal products distributed from their multiple factory locations. For dry and wet products, the functional unit is: feeding pets with one (1) kilogram of Royal Canin products. The product system was modeled based on primary data and information. The study included several key data requirements:

- Raw material inputs (type and quantity) to wet and dry pet food products, including raw material extraction, processing and transport from suppliers’ production sites to factories;
- Data for Royal Canin operations, including energy use and waste generation, and purchased packaging materials;
- Transportation data for wet and dry pet food products from factory to markets, retail and consumption; and
- End of life

Life cycle modeling for the study referenced above was divided into the following distinct life cycle phases:

- Raw materials: Feed and crop production begins with agricultural production of the primary raw materials used in the pet food recipes including but not limited to wheat, corn, rice, soy, pork, poultry, beef, and fish and their associated fertilizers, pesticides, energy, and water inputs. Next stage is the processing of raw materials into ingredients usable by Royal Canin factories and the associated impacts from transportation from farm to manufacturing facility.
- Offices, product Manufacturing and Packaging: This stage represents the impact of offices, tertiary activities, and manufacturing each ROYAL CANIN® pet food product using the appropriate recipe. The raw material extraction of primary, secondary, and tertiary packaging is also included.
- Distribution, Retail and Use: Transport of finished products from factories to warehouses and retail markets is included. Retail represents the impacts from ambient storage of ROYAL CANIN® products that are sold to vets, specialty stores, pet professionals and online. The storage and refrigeration (for wet products) and any hand washing, or dishwashing conducted at a consumer’s home are also included.
- End-of-Life: The end-of-life treatment (e.g., landfill, recycling, incineration) for the primary packaging of ROYAL CANIN® products.

### 3.2.2 Allocation Procedures

**Table 2.** Allocation and Attribution rules applied

Stages	Type of allocation and attribution
Farm	Crop/Straw: economic
	Milk/culled cows/surplus calves: biophysical
Slaughterhouse	Economic
Suppliers' gate	Economic
Inbound logistics	Volume
Factories	Mass
Outbound logistics	Volume
Retail	Economic
Use	Volume
End of life	Cut-off

#### At farm

Depending on the stages, different allocation and attribution rules applied. The allocation rules differ according to the type of production:

- Crop/Straw: economic. There are no recommendations in the EU petfood Product Environmental Footprint Category Rules (PEFCR) version 9 May 2018, regarding crop byproducts. However, economic allocation is recommended by the EU PEFCR for the feed industry<sup>4</sup> and consistent with the allocation rules at other stages.
- Milk/culled cows/surplus calves: biophysical. Based on the International Dairy Federation (IDF) biophysical allocation method (2015) attributing the burdens according to the physiological feed energy requirements of the dairy cows to produce milk and meat. Consistent with the PEFCR and consensual considering the scientific publications on dairy LCA.
- Other animal-based raw materials like poultry (broilers), pork or beef: no allocation is needed as there is no coproducts at farm level but rather at slaughterhouse level.

#### At slaughterhouse

The economic allocation is applied to reflect the different functions of the coproducts and the reality of the market, in compliance with the PEFCR version 9 May 2018.

It worth noticing that there is no consensus on the type of allocation that should be used between the meat and coproducts industries. Economic allocation and mass allocation are the most used allocation rules:

<sup>4</sup> [https://ec.europa.eu/environment/eusds/smgp/pdf/PEFCR\\_feed.pdf](https://ec.europa.eu/environment/eusds/smgp/pdf/PEFCR_feed.pdf)

- The economic allocation is recommended by existing standards such as the PEFCR for petfood, the PEFCR for leather<sup>5</sup> and the Livestock Environmental Assessment and Performance (LEAP) guidelines.
- The mass allocation is preferred by the European Livestock and Meat Trades Union (UECBV)<sup>6</sup>, although the position of the meat (food grade) industry is unknown in the absence of a sectorial PEFCR.

Although the economic allocation is the least preferred allocation approach according to the ISO 14044:2006<sup>7</sup> and the PAS 2050:2008<sup>8</sup>, scientific publications and databases such as the World Food Life Cycle database uses the economic allocation as well as the mass allocation. A consortium led by the INRA, the French National Institute for Agronomic Research, also showed that all types of allocation are appropriate and have pros and cons<sup>9</sup>.

### Suppliers' gate

The economic allocation is applied, consistent with the slaughterhouse stage, as recommended by the PEFCR for the feed industry. There is no recommendation regarding that stage in the petfood PEFCR.

### Logistics

For both inbound and outbound logistics, the impacts are attributed according to the volume applied. It allows consideration of the fact that very different products can be transported in the same transport vehicle. The fill rate is calculated according to the number of pallets that are loaded vs the total number of pallets possible to load.

### Factories

The impacts are estimated at factory level and then attributed according to the mass of products. Each factory produces a single petfood technology (dry or wet). It is not possible to differentiate the type of product within a factory due to insufficient metering and/or resource. This is compliant with the PEFCR.

### Retail

Here only specialized stores are considered as a proxy in absence of information on the impact of the other channels of distribution (veterinarians, pet professionals, online store). This is possible because products available in specialized stores represent more than 60% of our volume (t). Retailers such as specialized

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<sup>5</sup> [https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR\\_leather.pdf](https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR_leather.pdf)

<sup>6</sup> <http://www.uecbv.eu/UECBV/documents/FootprintCategoryRulesRedMeat16661.pdf>

<sup>7</sup> Environmental management -- Life cycle assessment -- Requirements and guidelines section 4.3.4.2

<sup>8</sup> published by British Standards Institute Oct, 2008, section 8.1.1

<sup>9</sup> Espagnol S, Gac A, Renoir A, Aubin J, Wilfart A, (2017), Allocations pour l'affectation de l'impact environnemental entre les produits et co-produits carnés. France AgriMer, 81p.

<http://idele.fr/services/outils/publication/idelesolr/recommends/allocations-pour-l'affectation-de-l'impact-environnemental-entre-les-produits-et-coproducts-carnes.html> or EN: <https://www.ifip.asso.fr/sites/default/files/pdf-documentations/gac2014-iclca-2.pdf>



stores sell very different types of products. It is usually not possible to distinguish these products. So, the impacts should be allocated according to their economic value.

### Use

A volume attribution is used for hand wash and dishwasher. Compliant with the PEFCR.

### End-of-Life

Cut-off. The benefits related to the use of recycled material, if any, is included in the calculation of the impact of packaging. The impacts are attributed according to the rules specified in the PEFCR.

#### 3.2.3 Cut-off Criteria

- Technical representativeness: the assessment takes into account the technologies related to the two types of products that are manufactured in Royal Canin's factories (dry and wet petfood);
- Temporal validity of the data and results and update frequency: The data used for the footprint is valid for one year, from January 1<sup>st</sup> to December 31<sup>st</sup>. Should any modification within the supply chain lead to a variation of the impact higher than 10% of the footprint, the footprint will be updated sooner.
- Completeness: the products in scope of the certification represent all the technologies manufactured by Royal Canin: wet products and dry products, produced in separated factories (one factory > one technology).
- Reliability: a clear and robust data validation procedure is in place to ensure the robustness and reliability of the data. See below.

#### 3.2.4 Carbon Footprint Methodology and Interpretation Used

Greenhouse gas indicators are calculated as the product of the 100-year GWP and the mass of greenhouse emissions, summed over all contributing greenhouse gases and for all sources and sinks within the life cycle system boundary for the assessed product. Results are reported in units of kilograms (kg) CO<sub>2</sub> eq across the life cycle, as well as by contributing life cycle phase. Greenhouse gas emissions are also summarized separately for fossil and biogenic carbon sources and sinks. Additionally, GHG emissions arising from changes in land use and carbon uptake by soil, are reported. All results are calculated. The IPCC 2013 metrics are used for calculation of results.

### 3.3 Product lifecycle boundaries

This footprint includes "cradle-to-grave" GHG emissions associated with wet and dry pet food products in all forms and packaging. The entire lifecycle of wet and dry pet food products from raw ingredients through final consumption by consumers are within the boundaries of the product lifecycle.

### **3.4 Total carbon footprint**

The product carbon footprint for the ROYAL CANIN® brand Start of Life, Feline Care Nutrition, and Breed Health Nutrition (XSmall) product ranges for which this certification applies can be found below.

**Table 3.** Greenhouse gas (GHG) emissions for ROYAL CANIN®'s wet and dry pet food products

Project name	Year	Range	Product	Species	Technology	Packaging	Specific recipe	GHG emissions				Annually, this has the same impact as driving the following distance (km)
								Average feeding guide g/day/pet	kg CO <sub>2</sub> e/kg product	g CO <sub>2</sub> e/day <sup>10</sup>	kg CO <sub>2</sub> e/year <sup>11</sup>	
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Appetite Control Care	Cat	DRY	Bag		53	2,0	106	39	226
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Appetite Control Care (in loaf)	Cat	WET	Large Can		230	1,3	309	113	659
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Appetite Control Care (in gravy)	Cat	WET	Pouch		230	1,3	307	112	655
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Appetite Control Care (in jelly)	Cat	WET	Pouch		230	1,4	318	116	678
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Appetite Control Care (in loaf)	Cat	WET	Pouch		230	1,4	315	115	672
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Dental Care	Cat	DRY	Bag		53	2,0	105	38	224
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Digestive Care	Cat	DRY	Bag		53	2,3	124	45	264
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Digestive Care (in gravy)	Cat	WET	Can		99	1,3	133	49	284
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Digestive Care (in gravy)	Cat	WET	Pouch		94	1,3	126	46	269
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Digestive Care (in loaf)	Cat	WET	Can		99	1,4	134	49	287
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Digestive Care (in loaf)	Cat	WET	Pouch		85	1,4	117	43	250
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hair & Skin Care	Cat	DRY	Bag		53	2,4	127	46	272
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hair & Skin Care (in gravy)	Cat	WET	Pouch		94	1,5	139	51	296
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hair & Skin Care (in jelly)	Cat	WET	Pouch		94	1,4	128	47	272
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hair & Skin Care (in loaf)	Cat	WET	Can		94	1,5	146	53	311
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hair & Skin Care (in loaf)	Cat	WET	Large Can		94	1,5	146	53	311
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hair & Skin Care (in loaf)	Cat	WET	Pouch		85	1,5	127	46	270
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hairball Care	Cat	DRY	Bag		53	2,3	124	45	266

<sup>10</sup> Every serving of the ROYAL CANIN® product results in the emissions of xx g CO<sub>2</sub> eq. /day

<sup>11</sup> Every serving of the ROYAL CANIN® product results in the emissions of xx g CO<sub>2</sub> eq. /year

Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hairball Care (in gravy)	Cat	WET	Can		94	1,3	125	45	266
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hairball Care (in gravy)	Cat	WET	Pouch		94	1,3	125	45	266
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Hairball Care (in jelly)	Cat	WET	Pouch		85	1,3	114	42	244
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care	Cat	DRY	Bag		53	1,9	100	36	213
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care (in gravy)	Cat	WET	Can		99	1,4	134	49	285
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care (in gravy)	Cat	WET	Large Can		99	1,4	134	49	285
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care (in jelly)	Cat	WET	Pouch		94	1,4	127	46	271
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care (in jelly)	Cat	WET	Pouch		94	1,4	130	48	278
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care (in loaf)	Cat	WET	Large Can		94	1,4	131	48	280
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Light Weight Care (in loaf)	Cat	WET	Pouch		94	1,4	131	48	281
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Urinary Care	Cat	DRY	Bag		53	2,1	110	40	236
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Urinary Care (in gravy)	Cat	WET	Can		94	1,3	121	44	258
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Urinary Care (in gravy)	Cat	WET	Pouch		94	1,3	121	44	258
Feline Care Nutrition (FCN) 2022	2022	Feline Care Nutrition (FCN)	Urinary Care (in jelly)	Cat	WET	Pouch		85	1,3	110	40	236
Breed Health Nutrition (BHN) X-Small 2022	2022	Breed Health Nutrition (BHN) X-Small	Maltese Adult	Dog	DRY	Bag		70	2,1	145	53	309
Breed Health Nutrition (BHN) X-Small 2022	2022	Breed Health Nutrition (BHN) X-Small	Maltese Puppy	Dog	DRY	Bag		68	2,1	145	53	309
Breed Health Nutrition (BHN) X-Small 2022	2022	Breed Health Nutrition (BHN) X-Small	Toy Poodle Adult	Dog	DRY	Bag		60	2,1	124	45	264
Breed Health Nutrition (BHN) X-Small 2022	2022	Breed Health Nutrition (BHN) X-Small	Toy Poodle Adult 8+	Dog	DRY	Bag		60	2,2	131	48	281
Breed Health Nutrition (BHN) X-Small 2022	2022	Breed Health Nutrition (BHN) X-Small	Toy Poodle Puppy	Dog	DRY	Bag		60	2,2	130	47	277
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten	Cat	DRY	Bag		70	2,6	180	66	385
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in gravy)	Cat	WET	Can		97	1,5	143	52	306
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in gravy)	Cat	WET	Pouch		99	1,5	146	53	312
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in gravy)	Cat	WET	Pouch	Pork free	99	1,5	150	55	320
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in jelly)	Cat	WET	Pouch		94	1,4	130	47	277

Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in loaf)	Cat	WET	Can		94	1,4	134	49	286
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in loaf)	Cat	WET	Large Can		94	1,5	137	50	293
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten (in loaf)	Cat	WET	Pouch		99	1,5	144	53	308
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten Sterilised	Cat	DRY	Bag		70	2,1	150	55	319
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten Sterilized (in gravy)	Cat	WET	Pouch		99	1,4	137	50	293
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Kitten Sterilized (in jelly)	Cat	WET	Pouch		99	1,3	132	48	281
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Mother & Babycat	Cat	DRY	Bag		70	2,4	168	61	358
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Mother & Babycat (mousse)	Cat	WET	Can		99	1,5	144	53	308
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Mother & Babycat (mousse)	Cat	WET	Large Can		99	1,5	144	53	308
Start of Life 2022	2022	Feline Health Nutrition (FHN)	Mother & Babycat (mousse)	Cat	WET	Can		99	1,4	141	52	302
Start of Life 2022	2022	Growth	Giant Junior	Dog	DRY	Bag		574	2,4	1364	498	2912
Start of Life 2022	2022	Growth	Giant Puppy	Dog	DRY	Bag		749	2,3	1704	622	3636
Start of Life 2022	2022	Growth	Kitten	Cat	DRY	Bag		70	2,6	180	66	385
Start of Life 2022	2022	Growth	Maxi Puppy	Dog	DRY	Bag		408	2,3	940	343	2005
Start of Life 2022	2022	Growth	Maxi Puppy	Dog	DRY	Bag	Beef recipe	408	3,1	1277	466	2727
Start of Life 2022	2022	Growth	Maxi Puppy	Dog	DRY	Bag	Pork recipe	408	2,1	876	320	1869
Start of Life 2022	2022	Growth	Maxi Puppy Active	Dog	DRY	Bag		408	2,2	910	332	1942
Start of Life 2022	2022	Growth	Medium Puppy	Dog	DRY	Bag		212	2,5	533	195	1138
Start of Life 2022	2022	Growth	Medium Puppy	Dog	DRY	Bag	Beef recipe	212	3,3	700	256	1494
Start of Life 2022	2022	Growth	Medium Puppy	Dog	DRY	Bag	Pork recipe	212	2,2	474	173	1011
Start of Life 2022	2022	Growth	Mini Puppy	Dog	DRY	Bag		124	2,5	312	114	665
Start of Life 2022	2022	Growth	Mini Puppy	Dog	DRY	Bag	Beef recipe	124	3,5	430	157	917
Start of Life 2022	2022	Growth	X-Small Puppy	Dog	DRY	Bag		75	2,4	180	66	385
Start of Life 2022	2022	Reproduction	Queen	Cat	DRY	Bag		53	2,4	128	47	272
Start of Life 2022	2022	Reproduction	Giant Starter - Mother & Babydog	Dog	DRY	Bag		574	2,5	1421	519	3034

Start of Life 2022	2022	Reproduction	HT 42d Large Dog	Dog	DRY	Bag		342	2,1	734	268	1566
Start of Life 2022	2022	Reproduction	HT 42d Small Dog	Dog	DRY	Bag		92	2,3	212	77	453
Start of Life 2022	2022	Reproduction	Maxi Starter - Mother & Babydog	Dog	DRY	Bag		408	2,6	1054	385	2250
Start of Life 2022	2022	Reproduction	Medium Starter - Mother & Babydog	Dog	DRY	Bag		212	2,5	529	193	1129
Start of Life 2022	2022	Reproduction	Mini Starter - Mother & Babydog	Dog	DRY	Bag		124	2,4	304	111	648
Start of Life 2022	2022	Reproduction	Mother & Babycat	Cat	DRY	Bag		70	2,4	168	61	358
Start of Life 2022	2022	Size Health Nutrition (SHN) Giant	Junior Giant	Dog	DRY	Bag		574	2,4	1364	498	2912
Start of Life 2022	2022	Size Health Nutrition (SHN) Giant	Puppy Giant	Dog	DRY	Bag		749	2,3	1704	622	3636
Start of Life 2022	2022	Size Health Nutrition (SHN) Wet	Puppy Maxi (in gravy)	Dog	WET	Pouch		1653	1,3	2181	796	4656
Start of Life 2022	2022	Size Health Nutrition (SHN) Maxi	Puppy Maxi	Dog	DRY	Bag	Beef recipe	408	3,1	1277	466	2727
Start of Life 2022	2022	Size Health Nutrition (SHN) Maxi	Puppy Maxi	Dog	DRY	Bag	Pork recipe	408	2,1	876	320	1869
Start of Life 2022	2022	Size Health Nutrition (SHN) Maxi	Puppy Maxi	Dog	DRY	Bag	Poultry recipe	408	2,3	940	343	2005
Start of Life 2022	2022	Size Health Nutrition (SHN) Wet	Puppy Medium (in gravy)	Dog	WET	Pouch		890	1,5	1343	490	2866
Start of Life 2022	2022	Size Health Nutrition (SHN) Medium	Puppy Medium	Dog	DRY	Bag	Beef recipe	212	3,3	700	256	1494
Start of Life 2022	2022	Size Health Nutrition (SHN) Medium	Puppy Medium	Dog	DRY	Bag	Pork recipe	212	2,2	474	173	1011
Start of Life 2022	2022	Size Health Nutrition (SHN) Medium	Puppy Medium	Dog	DRY	Bag	Poultry recipe	212	2,5	533	195	1138
Start of Life 2022	2022	Size Health Nutrition (SHN) Wet	Puppy Mini (in gravy)	Dog	WET	Pouch		179	1,4	251	92	536
Start of Life 2022	2022	Size Health Nutrition (SHN) Mini	Puppy Mini	Dog	DRY	Bag	Beef recipe	124	3,5	430	157	917
Start of Life 2022	2022	Size Health Nutrition (SHN) Mini	Puppy Mini	Dog	DRY	Bag	Poultry recipe	124	2,5	312	114	665
Start of Life 2022	2022	Size Health Nutrition (SHN) Mini	Puppy Mini Indoor	Dog	DRY	Bag		103	2,4	245	89	523
Start of Life 2022	2022	Size Health Nutrition (SHN) X-Small	Puppy X-Small	Dog	DRY	Bag		75	2,4	180	66	385
Start of Life 2022	2022	Size Health Nutrition (SHN) Wet	Puppy X-Small (in gravy)	Dog	WET	Pouch		382	1,4	540	197	1153
Start of Life 2022	2022	Size Health Nutrition (SHN) Wet	Starter (mousse)	Dog	WET	Can		112	1,5	163	59	347

Start of Life 2022	2022	Size Health Nutrition (SHN) Wet	Starter (mousse)	Dog	WET	Large Can		112	1,5	163	59	347
Start of Life 2022	2022	Size Health Nutrition (SHN) Giant	Starter Giant	Dog	DRY	Bag		574	2,5	1421	519	3034
Start of Life 2022	2022	Size Health Nutrition (SHN) Maxi	Starter Maxi	Dog	DRY	Bag		408	2,6	1054	385	2250
Start of Life 2022	2022	Size Health Nutrition (SHN) Medium	Starter Medium	Dog	DRY	Bag		212	2,5	529	193	1129
Start of Life 2022	2022	Size Health Nutrition (SHN) Mini	Starter Mini	Dog	DRY	Bag		124	2,4	304	111	648

**Table 4.** Product Carbon Footprint Summary Table

	# of products	Emissions (ktCO <sub>2</sub> e)
Wet	43	23
Dry	52	387
<b>TOTAL</b>	<b>95</b>	<b>409</b>

### 3.4.1 Exclusions

The packaging of raw materials before and after being processed was negligible and excluded. Manufacturing of secondary packaging (e.g., pulp and paper) and handling and transport of tertiary packaging was negligible and excluded. Energy consumption related to storage warehouse was negligible and excluded. Co-manufacturers logistics were negligible and excluded in addition to product losses. Transportation from retailer to consumer home is excluded in addition to the impacts associated with petfood dish production. The end-of-life treatment of secondary and tertiary packaging is negligible and excluded. Finally, any food losses that occur at any stage of the product lifecycle are excluded, except for the manufacturing stage where a 2% loss is considered.

## 4.0 Royal Canin’s Carbon Management Plan

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### 4.1 Introduction

The ROYAL CANIN® brand is committed to neutralizing the GHG emissions of the specific dry and wet pet food products in the scope of this 2022 “carbon neutrality commitment” certification (total: 95 products). The carbon neutrality will be achieved by February 28, 2023. Meanwhile, Royal Canin has developed a greenhouse gas reduction plan in order to contribute to Mars, Incorporated’s Net Zero greenhouse gas emissions target.

### 4.2 Wet and dry pet food products base year carbon footprint

The ROYAL CANIN® brand is certifying 95 products among the Start of Life, Breed Health Nutrition (XSmall), and Feline Care Nutrition product ranges. Of the 95, 52 are dry products and 43 are wet. The average carbon footprint of the dry pet food products in the scope of this certification is 2.6 kg CO<sub>2</sub>e per kilogram of product. The average carbon footprint of wet pet food products in the scope of this certification is 1.4 kg CO<sub>2</sub>e per kilogram of product. The main contributors are raw materials for both dry and wet products. While raw materials represent 76% of the impact for dry products, raw materials represent a lower share for wet products with about 40% of the impact, packaging being the second largest contributor with nearly 20%.




### 4.3 Future emissions reduction plan

To be carbon neutral, our highest priority is to urgently reduce our greenhouse gas emissions. To do so, the four action areas Royal Canin is working on to be carbon neutral are as follows:

- **Transitioning to renewable energy:** This work has been underway across Royal Canin for two decades as part of our Sustainable In a Generation plan for direct operations. We are working towards 100% renewable electricity across our factories by 2040, while reducing energy consumption overall. Currently 72% of the business’ electricity comes from renewable sources, and we are exploring solutions to move away from fossil gas;
- **Procuring sustainable ingredients:** The brand seeks to reduce its greenhouse gas emissions through the reformulation of its products, including switching to lower carbon intensity ingredients without compromising quality or safety. For example, ROYAL CANIN®’s sourcing of Brazilian soy for the products in the scope of the 2022 certification manufactured in its European factories is already 100% certified by ProTerra, an independent standard which fosters sustainable agricultural practices and contributes to halt deforestation. In addition, the brand is also working with its rice, wheat and poultry supply chains as a priority to identify, support and activate regenerative agriculture practices. Key suppliers will be invited to join Mars, Incorporated’s S-LOCT initiative, which supports suppliers in identifying their footprint and setting science-based targets.
- **Reducing waste and boosting circularity:** In line with the Ellen Mc Arthur Efforts Foundation new plastic economy framework, efforts are underway to significantly boost recyclability, compostability and the use of reusable packaging. Starting in 2022, a mono-material plastic packaging will be introduced which will be recyclable where the infrastructure exists. Additionally, we will drive down the packaging carbon footprint by progressively integrating recycled content and through the reduction of the amount of packaging material used;
- **Climate-smart business transformation:** We are working on the integration of climate-smart management practices in order to embed climate in our business model and be accountable to committed greenhouse gas reductions internally and externally. For instance, Senior Executive pay and remuneration is linked to climate actions and delivering emissions cuts; and Royal Canin is setting an internal price on carbon to generate resources and drive action in every project we develop. We want to create a work environment where innovation and internal and external collaboration is significantly mobilized to drive creativity in rising to the climate challenge.

### 5.0 Declaration of Commitment of carbon neutrality for 2022

PAS 2060: 2014 Other Party Validation Requirement	Response
Commitment period	1 <sup>st</sup> January 2022- 31 <sup>st</sup> December 2022
Carbon footprint of the subject during the Commitment period	409 kt CO2e

Means by which reductions will be achieved	Carbon offsetting
Standard and methodology used to achieve carbon offset	See Section 6.
Carbon offsetting information required to comply with clause 9.1.2	See Section 6
What type of conformity assessment has been undertaken?	I3P-3 Independent third-party certification – unified
Standard for assessment of GHG emissions	The methodology prescribed in the guidelines aligns with WRI’s Product Life Cycle Accounting and Report Standard.
Corporate Officer Signature / Date	Fabrice Mathieu, Royal Canin Global Sustainability Director  <small>Fabrice Mathieu (Jan 4, 2022 08:51 GMT+1)</small> Jan 4, 2022

## 6.0 Carbon offsetting

The ROYAL CANIN® brand is committed to carbon neutrality for the period of January 1, 2022 through December 31, 2022. Royal Canin will purchase and retire verified carbon removal credits sufficient to offset the footprint of products in the scope of the 2022 “carbon neutrality commitment” certification through a procurement due diligence process facilitated by third-party experts. The request for proposal was sent to credible credit providers in July 2021, and the due diligence process will include a review for red flags associated with each project submitted. Projects will be evaluated according to key criteria for high-quality carbon removal: additionality, carbon accounting, durability, leakage avoidance, and social and environmental impacts.

The projected carbon footprint for the ranges of pet food in 2022 is 409 kt CO<sub>2</sub>e. The actual carbon footprint based on 2022 production quantities will be determined in 2023. At that time, the carbon offsets will be retired and the achievement of carbon neutrality for 2022 will be validated.

## Appendix A: Carbon Footprint Assurance Statement



### Industrial Ecology Consultants

#### Self-declaration of Verification Independence and PCF & LCA Competencies

I, the signatory, the verifier of the Product Carbon Footprint (PCF) & Life Cycle Assessment of:

Product carbon footprint report: As part of Royal Canin's product life cycle assessment (LCA), October 2021.

hereby declare that I will:

- demonstrate competence and due professional care consistent with their roles and responsibilities;
- be independent;
- avoid any actual or potential conflicts of interest with the responsible party and the intended users of the Greenhouse Gas (GHG) information;
- demonstrate ethical conduct throughout the validation and verification;
- reflect truthfully and accurately validation and verification activities, conclusion and reports;
- meet the requirements of the standards or the GHG program(s) to which the responsible party subscribes.

My competencies relevant to the PCF validation at hand include knowledge of and proficiency in:

- ISO 14064-1,-2, -3 - GHG Accounting and Verification Standards
- ISO 14067 - GHG Carbon Footprint of Products - Requirements and Guidelines for Quantification
- BSI PAS 2050 Specification of GHG Emissions of Goods and Services
- WRI/WBCSD GHG Product Protocol
- ISO 14040 and ISO 14044 - Life Cycle Assessment (LCA) Standards
- ISO/TS 14071 - Environmental management - Life Cycle Assessment - Critical Review Processes and Reviewer Competencies: Additional requirements and guidelines to ISO 14044
- Technical and other relevant performance aspects of the product system(s) assessed
- Language used for the study

I declare that the above statements are truthful and complete. I will immediately notify all parties involved (commissioner of the verification, practitioner of the PCF & LCA study, fellow reviewer(s)), as applicable, if the validity of any of these statements changes during the course of the review process.

Date: **October 30, 2021**

Name (print): **Thomas Gloria**

Signature:  Digitally signed by Thomas Gloria  
Date: 2021.10.30 17:15:15 +04'00'

## Appendix B: Qualifying explanatory statements (QES) checklists

In accordance with PAS 2060: 2014 requirements, the QES checklist to support declaration of commitment to carbon neutrality is provided in the table below.

**Table B1.** Checklist for QES supporting declaration of commitment to carbon neutrality (based on Table B.1 of the PAS 2060: 2014 standard).

QES Checklist Requirements	Response
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.	Refer to Section 2 (add signature line)
2) Identify the entity responsible for making the declaration.	Refer to Section 2
3) Identify the subject of the declaration.	Refer to Section 2
4) Explain the rationale for the selection of the subject.	Refer to Section 2
5) Define the boundaries of the subject.	Refer to Section 2
6) Identify all characteristics (purposes, objectives or functionality) inherent to that subject.	Refer to 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.	Refer to Sections 2 and 3
8) Select which of the 3 options within PAS 2060 you intend to follow.	Refer to section 2
9) Identify the date by which the entity plans to achieve the status of “carbon neutrality” of the subject and specify the period for which the entity intends to maintain that status.	Refer to 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.	Refer to section 2
11) Provide justification for the selection of the methodology chosen.	Refer to section 2
12) Confirm that the selected methodology was applied in accordance with its provisions and the principles set out in PAS 2060.	Refer to section 2
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.	Refer to section 3
a) All greenhouse gases shall be included and converted into tCO <sub>2</sub> e.	Refer to section 3
b) 100% Scope 1 (direct) emissions relevant to the subject shall be included when determining the carbon footprint.	Refer to section 3. Scope categorization not applicable to product footprint
c) 100% Scope 2 (indirect) emissions relevant to the subject shall be included when determining the carbon footprint.	Refer to section 3. Scope categorization not applicable to product footprint.
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.	Refer to section 3. Scope categorization not applicable to product footprint.
e) Scope 1, 2 or 3 emission source estimated to be more than 1% of the total carbon footprint shall be taken into consideration unless evidence can be provided to demonstrate that such quantification would not be technically feasible or cost effective.	Refer to section 3.
f) The quantified carbon footprint shall cover at least 95% of the emissions from the subject.	Refer to section 3.
g) Where a single source contributes more than 50% of the total emissions, the 95% threshold applies to the remaining sources of emissions.	No source contributes over 50% of emissions. Refer to section 3.
h) Any exclusion and the reason for that exclusion shall be documented.	Refer to section 3.
14) Where the subject is an organization/company or part thereof, ensure that:	Subject is not an organization.

QES Checklist Requirements	Response
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).	Subject is not an organization.
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.	Subject is not an organization.
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.	Subject is not an organization.
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).	Refer to section 3. Scope categorization not applicable to product footprint.
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.	Refer to section 3.
18) Provide details of, and explanation for, the exclusion of any Scope 3 emissions.	Refer to section 3. Scope categorization not applicable to product footprint.
19) Document all assumptions and calculations made in quantifying GHG emissions and in the selection or development of greenhouse gas emission factors.	Refer to section 3
20) Document your assessments of uncertainty and variability associated with defining boundaries and quantifying GHG emissions including the positive tolerances adopted in association with emission estimates.	Refer to section 3
21) Document carbon footprint management plan:	Refer to section 4.
a) Make a statement of commitment to carbon neutrality for the defined subject.	Refer to sections 2 and 4.
b) Set timescales for achieving carbon neutrality for the defined subject.	Refer to section 4.
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.	Refer to section 4.
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.	Refer to section 4.
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.	Refer to section 6
22) Implement a process for undertaking periodic assessments of performance against the Plan and for implementing corrective action to ensure targets are achieved.	Refer to section 4.
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 minimization in emissions has been achieved.	Not applicable
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: <ul style="list-style-type: none"> <li>• the period from which these reductions are to be included;</li> <li>• that the required data is available and that calculations have been undertaken using the same methodology throughout;</li> <li>• 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.</li> </ul>	Not applicable
25) Record the number of times that the declaration of commitment has been renewed without declaration of achievement.	Not applicable

QES Checklist Requirements	Response
26) Specify the type of conformity assessment: a) independent third party certification; b) other party validation; c) self-validation.	Independent third party certification
27) Include statements of validation where declarations of commitment to carbon neutrality are validated by a third party certifier or second party organizations	Validated by SCS Global Services (other party/second party)
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).	Refer to section 2
29) Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g. via websites).	Final QES to be made publicly available via the Mars.com website
30) Update the QES to reflect changes and actions that could affect the validity of the declaration of commitment to carbon neutrality.	Not Applicable

# Royal Canin\_QES\_122821\_final\_s

Final Audit Report

2022-01-04

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