

TABLE OF CONTENT

INTRODUCTION	3
GENERAL INFORMATION	4
DECLARATION OF ACHIEVEMENT OF CARBON NEUTRALITY	6
CARBON FOOTPRINT BREAKDOWN	7
CARBON MANAGEMENT PLAN	15
CARBON OFFSETS	17
FIGURE 1: PAS 2060 CERTIFICATION PROCESS	19
FIGURE 2: ORGANISATIONAL CARBON FOOTPRINTING	19
FIGURE 3: PRODUCT CARBON FOOTPRINT	21
FIGURE 4: PRODUCT CARBON FOOTPRINT	21
FIGURE 5: CERTIFICATE OF ACHIEVEMENT OF NEUTRALITY	21

INTRODUCTION

At Nespresso, we believe that coffee can be a force for good, positively impacting the lives of our customers, the farmers we work with, the planet and nature. We have a responsibility to protect the future of coffee, and the communities that depend on it. Because of this, sustainability has been at the heart of everything we do for 30 years.

We are on a journey to achieve net zero carbon emissions by 2050, building on our commitment that every Nespresso cup of coffee will be certified fully carbon neutral by the Carbon Trust by the end of 2022. Fully unlocking the potential of these actions will take time, which is why Nespresso committed to first become carbon neutral by 2022 certified by the Carbon Trust.

The framework of this document has been created by the Carbon Trust to comply with the Qualifying Explanatory Statement (QES) requirement of PAS 2060:2014 as set out within the requirements of the BSI Standard, "BSI: PAS 2060:2014: Specification for the demonstration of carbon neutrality".

This document forms the Qualifying Explanatory Statement to demonstrate that Nestle Nespresso has achieved and is committed to maintaining carbon neutrality for all the capsules sold across the markets globally over the period commencing 1st of January 2021 to 31st of December 2021.

SECTION 1

GENERAL INFORMATION

PAS 2060 Requirement	Client Response
Entity making PAS 2060 declaration:	Nestle Nespresso
Subject of PAS 2060 declaration:	Nestle Nespresso's Coffee capsules sold across all the markets globally. The scope includes all GHG emissions across the product lifecycle from green coffee production, logistics, manufacturing (coffee roasting & grinding), machine production, packaging, distribution, use phase, and end of life (cradle to grave). The cup washing has been excluded from the scope of Carbon Neutrality. Refer to figure 4.
Description of Subject:	Nestlé Nespresso SA is the pioneer and reference for highest-quality portioned coffee. Headquartered in Lausanne, Switzerland, Nespresso operates in 82 countries and offers to consumers 76 permanent coffees across 3 systems. The permanent coffees are available in 3 ranges: Original Line, Vertuo Line and Professional Line. Original line and Professional lines propose coffees in 25 ml, 40ml and 110 ml; Vertuo line proposes coffees in 40 ml,150 ml 230 ml and 535 ml. Since 2005, Nespresso has taken climate actions across the full scope of activities from farm to the end of life to act on the causes and consequences of climate change. By end 2020, the Nespresso 40 ml original capsule footprint decreased by 24% vs. 2009. You can discover more of the Nespresso sustainability initiatives here.
Rationale for selection of the subject:	In September 2020 Nespresso announced the commitment that every cup of Nespresso coffee will be carbon neutral by end of 2022. The scope includes all GHG emissions across the value chain from green coffee production, logistics, manufacturing (coffee roasting & grinding), machine production, packaging, distribution, use phase, and end of life (cradle to grave). The cup

	washing has been excluded from the scope of Carbon Neutrality. Refer to figure 4.
Control Approach	Cradle-to-grave
Type of conformity assessment:	Independent third-party conformity assessment. Carbon Footprint and Carbon neutrality certified by the Carbon Trust Assurance according to ISO 14067 and PAS 2060 respectively.
Baseline date for PAS 2060 programme:	January 1st, 2021 - December 31st, 2021
Individuals responsible for evaluation and provision of data necessary for declaration:	Manu Jindal: Nespresso, Climate and Inclusive Program Manager Christophe Boussemart: Nespresso, Sustainability Development Program Manager Cécile Guignard: Quantis, Environmental accountant

SECTION 2

DECLARATION OF ACHIEVEMENT OF CARBON NEUTRALITY

PAS 2060 Requirement	Client Response
Declaration of achievement:	Carbon neutrality for all the coffee capsules sold across all the Nespresso markets globally has been achieved by Nestle Nespresso in accordance with PAS 2060 on 13 th of July 2022 for the period commencing from January 1 st , 2021 to December 31 st , 2021 certified by the Carbon Trust Assurance.
Recorded carbon footprint of the subject during the period stated above	1,391,886.84 TCO ₂ e
Location of GHG emissions report supporting this claim:	Section 4
Location of the Carbon Footprint Management Plan:	Section 5
Location of the details describing the carbon offsets:	Section 6
Name of Senior Representative	Senior Representative Signature
Name: Jerome Perez	
Role: Head of Sustainability	H
Date: 13.07.2022	

SECTION 3 CARBON FOOTPRINT BREAKDOWN

Guidance: PAS 2060 requires every individual/organisation to provide an appropriate carbon footprint breakdown by scope in their Qualifying Explanatory Statement (QES) in accordance with Greenhouse Gas Protocol guidelines.

The ISO 14067 standard was used to quantify the GHG emissions associated with products covered by the certification scope, using data representing operations between January 2021 and December 2021. This method was chosen as it provides an internationally recognised 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). The product CO2e footprints have been reviewed and assured by an independent third party, the Carbon Trust (see Annex, Figure 5) of this report for the assurance statement).

The carbon footprint was modelled using data provided by Nespresso and completed, where needed by secondary data. The product carbon footprint was calculated based on 2021 data and sales volumes. The footprint to offset in 2021 covers all capsules sold across the markets globally by Nespresso, covering Original, Vertuo and Pro lines. The sum of product carbon footprint of Nespresso is 1,470,000 TCO2e for 2021 when including the cup washing and 1,391,886 TCO2e when excluding the cup washing. The cup washing being for this year excluded from the carbon neutrality scope, the total carbon footprint to offset is therefore 1,391,886 TCO2e for 2022 carbon neutrality.

GHG emissions that are accounted for in the study are based on the 100 year Global Warming Potential figures published in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, 2014 (1) and include those required by the GHGP Product Standard, which specifies emissions to and removals from the atmosphere of: carbon dioxide (CO2); methane (CH4); nitrous oxide (N2O); sulphur hexafluoride (SF6); perfluorocarbons (PFCs); and hydrofluorocarbons (HFCs).

All relevant emissions to the scope of certification are included in the footprint and are summarised in Table 1 and 2 below. Where GHG emissions have been estimated, these have been determined based on a conservative approach that precludes underestimation. GHG emissions have been estimated for the use and end-of-life phases. In the absence of data, emissions have been estimated based on conservative assumptions (e.g. for end-of-life, fate of retail waste has been considered the same as domestic waste whereas waste recycling may be greater at retail areas).

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.

⁽¹⁾ www.ipcc.ch

Table 1. Quantification of GHG emissions per life cycle stage

Life cycle stage	Description	Emissions	Excluded emissions & Justification*
Green coffee supply	Coffee cultivation in farm, post- harvest treatment (cherries processing), green coffee transport from farms to Nespresso factories	661,206 tCO2e	Green coffee packaging as assumed to be negligible
Packaging production	Production of capsules, sleeves and packaging for transport. Delivery of packaging to Nespresso factories	182,195 tCO2e	Packaging of raw material as assumed to be negligible
Manufacturing	Consumption of energy, water, protecting atmosphere gases at factories. Wastes generated at factories, employee commuting and business travels.	14,238 tCO2e	Cleaning material for production lines are neglected as assumed to be negligible
Overheads	Activities (building, energy and water consumption, wastes, employee commuting and business travels, IT equipment and services costs) at Nespresso headquarter. Same activities at market head offices, market call centers and market after sales centers	179,590 tCO2e	

Distribution	Transport from factories to market distribution centers (DC), DC activities (same elements as for market head offices), transport from DC to consumer via: Nespresso boutiques: transport from DC to boutiques, boutiques activities (same elements as for market head offices), shopping trip of consumer going to boutiques Post: transport from DC to post office, internet order (electricity consumption), postal delivery from post office to consumer Pick-up point: transport from DC to pick-up point, internet order (electricity consumption), shopping trip of consumer going to pick-up point	70,520 tCO2e	
Machine production fraction	Machine production and distribution up to consumer, machine treatment at end-of-life	95,653 tCO2e	
Use stage	Machine use (coffee brewing), machine cleaning, cup production and disposal	122,262 tCO2e	Cup washing as it is out of the scope
End-of-life	Packaging and coffee grounds end-of-life treatment	66,223 tCO2e	
Total		1391,887 tCO2e	

*Delivery packaging for green coffee and packaging materials as well as cleaning materials at factories are assumed to have a negligible contribution. These elements are neglected in most studies and if integrated they are usually not a hotspot. These delivery packaging are not expected to have a higher impact than the tertiary packaging for the final products which correspond to 1% of the global footprint. Given the expectation of low contribution and the difficulties to collect robust data on these elements, they were excluded from the assessment for efficiency reasons. These elements will be integrated in the next year

assessment done for Nespresso, where the aim of improving the granularity of the calculations will be the focus in addition to collecting more primary data in place of secondary data.

Table 2. Quantification of GHG emissions broken down by SKU (excluding cup washing).

SKU	Geographic Area	Net kg CO2e	gCO2 per cup
Original - Ristretto 25ml	Global	23,569,856	117.13
Original - Ristretto 25ml, Espresso 40ml	Global	385,823,743	90.82
Original - Espresso 40ml	Global	152,671,936	78.58
Original - Espresso 40ml, Lungo 110ml	Global	167,955,430	131.46
Original - Lungo 110ml	Global	158,678,855	123.57
Professional - Ristretto 25ml	Global	18,211,799	81.30
Professional - Ristretto 25ml, Espresso 40ml	Global	11,072,115	119.79
Professional - Espresso 40ml	Global	12,525,609	80.23
Professional - Espresso 40ml, Lungo 110ml	Global	46,073,955	90.50
Professional - Lungo 110ml	Global	14,277,003	91.12
Vertuo - Espresso 40ml	Global	35,482,284	125.55
Vertuo - Double Espresso 80ml	Global	19,166,510	192.32

Vertuo - Gran Lungo 150ml	Global	37,097,992	172.70
Vertuo - Mug 230ml	Global	300,349,016	214.79
Vertuo - Mug 414ml	Global	7,778,299	216.29
Vertuo - Carafe 535ml	Global	1,152,441	317.27
	Total:	1,391,886,841	

4.2 DATA METHODS

The assessment is based on a mix of primary and secondary data when no primary data were available.

Primary data were used for the following life cycle stage:

- Green coffee supply: blend of origin countries, share of arabica and robusta coffee, amount of coffee per cup, cultivation of green coffee in Brazil and Colombia
- Packaging production: amount of the different material, forming of capsules
- Manufacturing: factories activities (amount of energy, water, gases used, employees' activities, etc.), green coffee to roast and ground coffee yield, production volumes
- Distribution: sales volumes in the different markets, transport from factory to market distribution centers, distribution centers activities, transport from distribution centers to boutiques, to post office or pick-up point, boutiques activities
- Machine production fraction: machine mass and composition, machine lifetime (estimate by Nespresso)
- Use stage: energy and water use for the coffee brewing
- End-of-life: capsules recycling rates in the different markets

Secondary data were used for the following life cycle stage:

- Green coffee supply: coffee cultivation (based on generic databases), except for AAA coffee in Brazil and Colombia
- Packaging production: sleeves forming and transportation packaging forming
- Distribution: electricity consumption for internet order, transport for shopping trip, transport for postal delivery
- Machine production fraction: machine recycling, incineration and landfilling rates in the different markets
- Use stage: machine cleaning, cup production and disposal
- End-of-life: incineration and landfilling rates for non-recycled wastes in the different markets, cardboard recycling rate in the different markets

Data quality and uncertainties

The use of secondary data for coffee cultivation is the element influencing the most the results. However, the secondary data used is coming from a reliable database and land use change has been adapted to Nespresso coffee origins to improve the representativeness. In the coming years it is foreseen to collect primary data on farms and to replace these secondary data by primary data.

Table 3. Key assumptions per life cycle stages

Figure 4 in annex provides the breakdown of the product footprint in 2021.

Life cycle stage	Description	Key Assumptions
Green coffee supply	Coffee cultivation in farm, post-harvest treatment (cherries processing), green coffee transport from farms to Nespresso factories	Cultivation for some origin is based on another origin (except for land use change) due to a lack of data.
Packaging production	Production of capsules, sleeves and packaging for transport. Delivery of packaging to Nespresso factories	
Manufacturing	Consumption of energy, water, protecting atmosphere gases at factories. Machinery use, wastes generated at factories, employee commuting and business travels.	
Overheads	Activities (building, energy and water consumption, wastes, employee commuting and business travels, IT equipment and services costs) at Nespresso headquarter. Same activities (excluding services costs) at market head offices, market call centers and market after sales centers	Cost input-output database is used to assess the purchased services footprint.
Distribution	Transport from factories to market distribution centers (DC), DC activities (same elements as for market head offices), transport from DC to consumer via: Nespresso boutiques: transport from DC to boutiques, boutiques activities (same elements as for market head offices), shopping trip of consumer going to boutiques Post: transport from DC to post office, internet order (electricity consumption), postal delivery from post office to consumer Pick-up point: transport from DC to pick-up point, internet order (electricity consumption), shopping trip of consumer going to pick-up point	

Machine production fraction	Machine production and distribution up to consumer, machine treatment at end-of-life	Lifetime of the machine in terms of number of cups prepared is an estimate from Nespresso considering a 2 cups/day consumption.
Brewing	Machine use (coffee brewing), machine cleaning, cup production and disposal	
End-of-life	Packaging and coffee grounds end-of-life treatment	

SECTION 4 CARBON MANAGEMENT PLAN

PAS 2060 Requirement	Client Response
Targets for GHG reduction for the defined subject	As described below, the efforts of reduction and removal aim to achieve a Carbon reduction of 50% by 2030 vs. 2018 baseline
Planned means of achieving and maintaining GHG emissions reduction including:	We identified 6 levers of actions to reduce GHG emissions and remove carbon from the atmosphere 1.REGENERATIVE COFFEE PRODUCTION: Supporting coffee farmers that supply to Nespresso in transition towards regenerative farming practices and continue to work towards ensuring zero deforestation 2.ECODESIGN: Focus on circularity and innovation • Using secondary (recycled) and low carbon Aluminium within Coffee capsules • Increasing the use of recycled plastic and, improving the weight and materials used for machine packaging, promoting refurbished machines • Optimising the packaging of our accessories and increase the use of recycled /recyclable materials 3.RENEWABLE ENERGY: Continue to increase energy efficiency and move towards 100% renewable electricity across all Nespresso sites and boutiques, moving towards 100% renewable electricity in all Nespresso boutiques and Nespresso factories 4.RECYCLING: Increasing the capsules recycling and improving the valorisation of the coffee grounds 5.LOGISITICS OPTIMISATION: Continue to work closely with our supply chain partners to introduce solutions and innovations that reduce carbon emissions throughout our operations, transport and delivery of our materials, goods, and products

	6. TREE PLANTING AND REFORESTATION : Scale our track record of 5 million tree planting within and around the coffee farms to further remove carbon from atmosphere in and around the regions where we source coffee
Offset strategy	The quantity to offset the GHG emissions for 2022 scope: 1.392 Million tCO2e. All the details related to 14 projects that would provide Carbon offsets has been provided in Section 6.
Statement on the fact that PAS 2060 certification has been provided by a third-party verifier	Independent 3 rd Party verification to PAS 2060 has been provided by the Carbon Trust.

SECTION 5

CARBON OFFSETS

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration					
Offset methodology	ALL the carbon offsets are either VCS (+CCB) or Gold standard certified.					
Offset Confirmation	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 3 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 Table 4.					

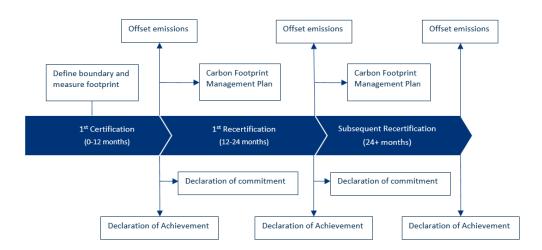
Table 4. Offsets purchased

Project name	Country	Type of credits	Standard	Generatio n Period	Retireme nt date	Reference No and link to registry	Volume (tCO2e)	Retired credits - registry link
Jubilacion Segura	Peru	Remova Is	VCS	2014- 2019	10/05/2 2	ID: <u>1496</u>	83,500	Retired credits - 1
La Fazenda	Brazil	Remova Is	VCS	2009- 2015	10/05/2 2	ID: <u>665</u>	56,500	Retired credits - 1
Kenya Burn	Kenya	Avoidan ce	Gold S.	2017+	10/05/2 2	ID: <u>5642</u>	70,771	Retired credits - 1 Link - 2 Link - 3 Link - 4
Qori Q'oncha	Peru	Avoidan ce	Gold S.	2017+	10/05/2 2	ID: <u>1049</u>	75,000	Retired Credits - Link 1

Kariba	Zimbab we	Avoidan ce	VCS- CCB	2016- 2018	21/06/2	ID: <u>902</u>	396,000	Retired Credits - 1 Link - 2 Link - 3 Link - 4 Link - 5 Link - 6 Link - 7
Rimba Raya	Indonesi a	Avoidan ce	VCS- CCB	2014	21/06/2 2	ID: <u>674</u>	170,000	Retired credits - 1 Link - 2 Link - 3
Mai Ndombe	Democr atic Republic of Congo	Avoidan ce	VCS- CCB	2016	21/06/2	ID: <u>934</u>	150,000	Retired Credits - 1 Link - 2
TIST Programm e	Kenya	Remova Is	VCS- CCB	2017	21/06/2	ID: <u>737</u>	40,000 10290	Retired credits - 1 Link - 2 Link - 3 Link - 4
Vichada	Colombi a	Remova Is	Gold S.	2019	21/06/2 2	ID: <u>GS4221</u>	40,000	Retired credits - 1
Jialing Biogas	China	Avoidan ce	Gold S	2018- 2019		ID: <u>1239</u>	114525	Retired Credits - 1
Maputo Cookstove s	Mozam bique	Avoidan ce	Gold S.	2017+		ID: 10777	50268	Retired Credits - 1
Goloks Grassland	China	Remova Is	VCS- CCB	2018+		ID: <u>2458</u>	70000	Retired Credits -1 Link - 2 Link - 3
Katingan Peatland	Indonesi a	Remova I and Avoidan ce	VCS- CCB	2018- 2020		ID: 1477	66146	Retired Credits - 1 Link - 2 Link - 3 Link - 4
							1393000	

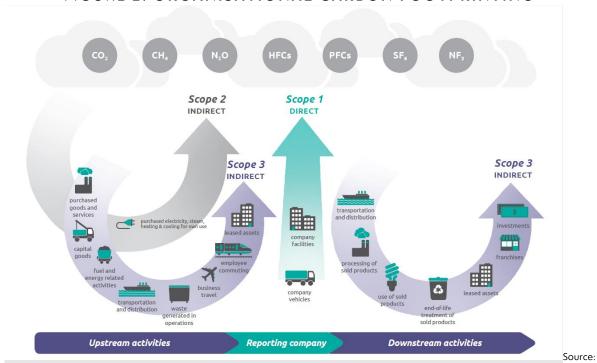
USEFUL ADDITIONAL INFORMATION

FIGURE 1: PAS 2060 CERTIFICATION PROCESS



Source: the 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 FOOTPRINTING



Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting & Reporting Standard. Available from:

Scope3 Calculation Guidance 0.pdf (ghgprotocol.org)

FIGURE 3: PRODUCT CARBON FOOTPRINT

Figure [1.1] The relationship between the Corporate, Scope 3, and Product Standards for a company manufacturing product A

upstream scope 3 emissions

scope 3 emissions

product A

material acquisition
& pre-processing

production

distribution
& starage

as end-of-life

scope 1 and 2 emissions required by the Corporate Standard

scope 3 emissions required by the Scope 3 Standard

product life cycle emissions required by the Product Standard

Source: Greenhouse Gas Protocol: Product Life Cycle Accounting and Reporting Standard. Available from $\frac{\text{https://ghgprotocol.org/sites/default/files/standards/Product-Life-Cycle-Accounting-Reporting-Standard}{\text{O41613.pdf}}$

FIGURE 4: PRODUCT CARBON FOOTPRINT OF NESPRESSO

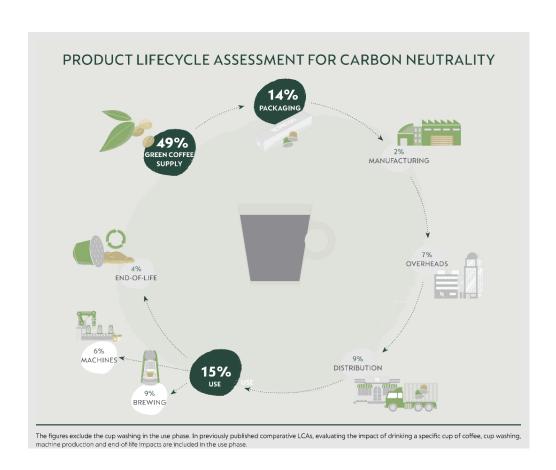


FIGURE 5: CERTIFICATE OF ACHIEVEMENT OF NEUTRALITY



Certificate of Achievement

Nestlé Nespresso S.A.

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

Nespresso capsules

Carbon Trust Assurance Limited certifies that Nestlé Nespresso S.A. has calculated the carbon footprint representing 16 coffee capsule SKUs Cradle-to-Grave sold Business-to-Consumer and Business-to-Business and marketed globally, 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-13313.

Awarded: 14 July 2022 Valid Until: 14 July 2023

for and on behalf of Carbon Trust Assurance Ltd,

Hugh Jones, Managing Director

This certificate is far 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 preparty of Certifion Trust Assurance Limited and is bound by the conditions of the contract. Information and Contract: Certifion Trust Assurance Limited in Englated and Wales under Company number 06547658 with its Registered Office at Darset House, Stamford Street, London, SET 9NT. Telephone: 444 (0):20 7-170-7000. Carbon Trust Assurance Limited in a fully owned subsidiary of the Carbon Trust.