



PHILIP MORRIS INTERNATIONAL

DECLARATION OF CARBON NEUTRALITY

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0 Carbon Neutrality declaration

The **Qualifying Explanatory Statement** (QES) contains all the required information on the carbon neutrality of the given subject. All information provided within this report has been **reviewed by a third party** (SGS) and is believed to be correct. If provided with any information affecting the validity of the following statements, this document will be updated accordingly to reflect the affiliate(s) current status towards carbon neutrality. This report is publicly available on a dedicated website <https://www.pmi.com/carbon-neutrality-declaration-2022-brazil>

This is the **first declaration** of achievement for **PHILIP MORRIS BRASIL IND. COM. LTDA**

Carbon Neutrality of the Scope 1 and 2 emissions under the direct operational control of **PHILIP MORRIS BRASIL IND. COM. LTDA** manufacturing operations, achieved by **PHILIP MORRIS BRASIL IND. COM. LTDA** in accordance with PAS2060:2014 on 31st December 2021 with a commitment to maintain to 31st December 2022 for the period commencing 1st January 2021, SGS United Kingdom Limited Certified.

Certification letter from SGS can be found in Annex A.

1 Introduction

This document forms the Qualifying Explanatory Statement (QES) to demonstrate that Philip Morris International (PMI) has achieved **carbon neutrality** for **PHILIP MORRIS BRASIL IND. COM. LTDA** manufacturing plant for the period starting 1st January 2021 and ending 31st December 2021, in accordance with PAS 2060:2014.

This has been achieved through:

- **Continuous carbon emissions reduction** through action plans under PMI direct controls: affiliates and fleet under affiliates' control. These reductions have been captured as part of the GHG inventory for 2021.
- **Compensation of remaining carbon emissions** for the period commencing 1st January 2021 and ending 31st December 2021.

This report includes the information which substantiates the declaration of PMI affiliates achievement of carbon neutrality for first application period (under PAS 2060:2014) and commitment on carbon neutrality up to 2025 (5 years, from 2021 the reference year) in compliance with PAS 2060:2014 standard.

PMI affiliates has also set up a **Carbon Management Plan** to **reduce the GHG emissions associated to the manufacturing processes** in order to demonstrate commitment to being carbon neutral in accordance with PAS2060:2014 standard.

1.1 General information

PAS 2060 Information requirement	Information as it relates to PMI affiliates
Entities making PAS 2060 declarations	PHILIP MORRIS BRASIL IND. COM. LTDA
Individual responsible for the evaluation and provision of the data necessary for the substantiation of the declaration (inc. preparing, substantiating, communicating and maintaining the declaration)	Gianluca Capodimonte
Subject of PAS 2060 declaration	Scope 1 & 2 Emissions under the operational control of PHILIP MORRIS BRASIL IND. COM. LTDA manufacturing plant. (complete list available in Annex C)
Function of subject	Factory manufacturing conventional products for PMI and its brands.
Activities required for subjects to fulfil its function	The activities required within the manufacturing process are: Manufacture of Tobacco Related Products;

	<p>Expanded Tobacco Processing;</p> <p>Flavor & Casing Processing;</p> <p>Improved Stem Processing;</p> <p>Cut Filler Processing;</p> <p>Filter Processing;</p> <p>Machine Cigarette Processing;</p> <p>Print Shop Activities;</p> <p>Quality Control Laboratory Activities;</p> <p>Warehousing Activities;</p>
Rationale for selection of the subjects	<p>PMI's ambition is to be carbon neutral for all of its direct operations (factories, fleet and offices) by 2025. In this journey, all subjects (factories) that have reached substantial emission reduction in the past years qualify to compensate residual emissions and become carbon neutral.</p>
Type of conformity assessment undertaken	I3P-3 Independent third-party certification - unified
Reference date for PAS 2060 programme	1 st of January 2021
Achievement period	1 st of January 2021 – 31 st of December 2021
Commitment period	1 st of January 2022 – 31 st of December 2025

Table 1.1 - General information

1.2 Scope

The **subject** for carbon neutrality is the following affiliate:

- **PHILIP MORRIS BRASIL IND. COM. LTDA**

The main business activity is the manufacturing of conventional products within PMI brands as reported in Annex C.

During the reporting period, the definition of the subject(s) remained unchanged. In the case that material change occurs to the subject(s) in the future, the process of determination and substantiation of the subject(s) and associated GHG emissions shall be re-started on the basis of newly defined subject(s).

1.3 Boundaries of the subject

The system boundaries considered for the organizational carbon footprint of the subject are **all the activities** occurring **within the physical perimeter of the affiliate** and **under the affiliate control** including:

- The manufacturing plant
- The office(s) and/or warehouse(s) included within the perimeter
- The fleet under the affiliate's control

GHG emissions associated to affiliate manufacturing process within the defined boundary from the periods of 1st January 2021 to 31st December 2021 have been quantified in accordance with GHG Protocol Corporate Accounting Standard (operational control), and verified by SGS.

The data for this first application period has been **verified by an independent third party**, SGS, who certifies that the Carbon Neutral Declaration set out in this QES is appropriately reported in accordance with the requirement of PAS 2060:2014.

The assurance letter issued by SGS can be found in Annex A.

2 Quantification of carbon footprint

2.1 Emissions results

The total GHG emissions related to scope 1 and 2 refer to manufacturing process during the year 2021 (1st application period) and represent a total of 1,758 **tons of CO₂ equivalent**.

GHG scope	GHG emissions [tCO ₂ eq]	Scope contribution
Scope 1 – Manufacturing	860	49%
Scope 1 – Fleet	0	0%
Scope 2 – Market based	0	0%
Scope 1 – DIET (Expanded Tobacco)	898	51%
Total carbon footprint	1,758	100%

Table 2.1 - GHG emissions overall results

2.2 Methodology

Total GHG emissions associated with PMI affiliate(s), 1st January 2021 to 31st December 2021, have been quantified according to GHG Protocol, Corporate Accounting and Reporting Standard, following the operational control approach. This methodology was chosen as it represents best practice in terms of organization carbon footprint inventory and PAS 2060:2014 endorses it as being fully compliant with its requirements.

The types of greenhouse gases (GHG) included in the Kyoto Protocol to the United Nations Framework Convention on Climate Change are required for reporting under the GHG Protocol Corporate Standard and the below listed were covered in the calculations:

- carbon dioxide (CO₂),
- methane (CH₄),
- nitrous oxide (N₂O).

The inventory accounts for 100% of GHG emissions of business activities and operations in which PMI affiliate(s) has direct operational control and the full authority to introduce and implement its operating policies.

All scope 1 and 2 greenhouse gas emissions relevant to the system boundary are included and quantified, in accordance with the GHG Protocol, Corporate Accounting and Reporting Standard, as confirmed by SGS verification.

2.2.1.1 Scope 1

GHG emissions related to scope 1 come from direct emissions from sources owned or controlled by the affiliate(s). In PMI context, scope 1 emissions are:

- Stationary combustion:
 - Natural gas
 - LPG, Propane and Butane
 - Diesel – (fuel oil)
 - Heavy fuel oil
 - Petrol
 - Biomass
- Mobile combustion
 - Petrol
 - Diesel
 - Biodiesel
 - Bioethanol
 - Natural Gas (Compressed)

2.2.1.2 Scope 2

GHG emissions related to scope 2 come from indirect emissions from the generation of purchased electricity, steam, heat and cooling consumed by the affiliate(s). In PMI context, scope 2 emissions are:

- Purchased electricity
- District steam
- District heating (inc. cooling)

2.2.1.3 Scope 3

GHG emissions related to scope 3 refer to all other indirect emissions as a consequence of the activities of the affiliate(s) that occur from sources not owned or controlled by the PMI affiliate are out of scope.

2.3 Data sources

Primary and secondary data has been used for the Carbon Quantification process. Primary data is used where possible, only where primary data was not, secondary data was used to quantify emission. For scope 1 and 2, primary data were exclusively used.

1. Primary Data source related to all inputs and outputs corresponding to steps under the affiliates control were directly provided. This includes measured energy inputs for production.
2. Emission Factors were sourced from recognized databases (DEFRA and GHG protocol).

Data sources (e.g. invoices) were reviewed by SGS through the inventory verification, and certification against PAS 2060:2014 processes.

2.4 Assumptions and estimations

All assumptions made to quantify the Greenhouse gas emission of PMI affiliates were reviewed by SGS through the GHG inventory verification process. For scope 1 and 2, no assumptions were made.

2.5 Exclusions

Annex C outlines all the inclusions and exclusions for GHG emissions; in order to ensure the coverage of any potential exclusions within the system boundary an additional 3% has been added to affiliate total Carbon Footprint to ensure the Carbon Neutrality program covers 100% of the GHG emissions.

2.6 Uncertainties

Generally, the use of secondary data throughout the assessment represents the major source of uncertainties on results. Actions taken to minimize these uncertainties are described below and were reviewed by SGS.

- Secondary emissions factors: uncertainty associated to the use of secondary emission factors is because they represent averages, rather than specific emissions. However, their use was appropriate, and care has been taken to use the best available datasets (DEFRA and GHG Protocol).

Result of the uncertainty calculation is reported in Annex D.

2.7 Comparison with baseline period results

This section will be completed in subsequent years as 2021 is the first PAS 2060:2014 certification year, therefore will be used as baseline period subsequently.

3 Carbon Management Plan

The carbon reduction management plan will consider a 5 year period (2021-2025) with the aim of maintaining a reduction in emissions, this means that the emission indicator must not increase along the period.

This target will be monitored periodically (annually) in order to check if the expected results are aligned to the actual results. In order to achieve the target a series of projects will be implemented.

Although PMI affiliates began its Carbon Management Programme for Carbon Neutrality in 2020, energy saving measures have been implementing since 2010 within the production plants (i.e. Klaipeda (Lithuania) PMP SA (Switzerland), Philip Morris Mexico Productos y Servicios (Mexico)). Others started later and will be considered in the boundaries of this study.

The following paragraphs explain in detail implemented (paragraph 3.2) and planned (paragraph 3.3) projects, that are mainly related to production plant GHG emissions reductions.

3.1 PMI best practice

In 2021, 37 out of 42 affiliates, 100% of electricity purchased came from renewable sources (electricity source for the affiliates in the carbon neutral factory certification are provided in annex F). Since 2017, we are gradually increasing the uptake of green electricity (as showed in below table) to reach 100% green electricity purchased for all our affiliates by 2025. By investing in renewable energy electricity, PMI overall avoided the emissions of **over 1,3 million ton of CO₂ equivalent**.

Indicator	2017	2018	2019	2020	2021	Total Value
CO2 Scope 2 (GHG emissions) - Manufacturing - Market based [t GHG]	217.563	149.757	111.508	65.289	41.157	585.273
CO2 Scope 2 (GHG emissions) - Manufacturing - Location based [t GHG]	414.126	395.371	398.332	357.670	336.964	1.902.463
Cumulative difference between location based and market based	196.563	245.615	286.824	292.382	295.807	1.317.190

Table 3.1 - Green electricity increase

3.2 Implemented GHG emissions reduction project repository

At PMI, emissions reduction project governance and budget approval comes from two distinctive main streams; one driven from central functions and another by the local team. Table 3.2 shows project implemented in the last few years, evaluated in 2021 Carbon Footprint assessment.

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Energy reduction projects		2015	Electricity LPG Fuel Oil	1.973,122

Implementation Project GEMT / E-Sight	Tool to monitor our consumption	2015	Electricity LPG Fuel Oil	260,601
Replacement of Nasch Vacuum Pumps by Busch	More efficient and lower-power vacuum pumps	2015	Electricity	372,287
Heater Exchange to Boilers	Heat exchanger to heat boiler inlet water	2015	Fuel Oil	798,426
Utility Automation / Boiler Automation	SCADA frequency inverter squees and optimization of inverters	2015	Fuel Oil Electricity	798,426
VSD to PF 55	Frequency inverter for DIET process fan	2015	Electricity	1,751
BMS Honeywell for CastLeaf Burners / Print Shop / DIET	Improvement in LPG burning system in dryers and furnace	2015	LPG	1.479,386
Energy reduction projects		2016	Electricity LPG Fuel Oil	1.080,990
Motor Replacement - PrintShop	Power optimization and frequency inverters	2016	Electricity	12,376
Replacement of conventional lamps by LED	Power optimization due to more efficient lamps.	2016	Electricity	61,634
Energy reduction projects		2018	Electricity LPG Fuel Oil	1.498,978
WWT Automation	Automation of the effluent treatment plant	2018	Electricity	8,022

Energy reduction projects		2019	Electricity LPG Fuel Oil	931,523
Replacement of Conventional Lamps by LED - Phase 2	Power optimization due to more efficient lamps.	2019	Electricity	31,756
Ruby Project	Cast Leaf process was discontinued in Q1 2019, the Dryer fuel was LPG. The consumption was 655 Ton/year	2019	Electricity LPG Fuel Oil	1.925,721
Biomass Boiler Project	Installation of one Biomass Boiler of 8 Ton/h steam capacity. Using wood chips as a fuel Emission reduction (Ton CO ² eq) ~ 2019/20 x 2021	2020 / 09	Fuel Oil	1.012,000
Energy reduction projects		2021	Electricity LPG Fuel Oil	375,000
Photovoltaic initiative	Installation of 320 solar panels to supply electric energy to Biomass Boiler System Emission reduction (Ton CO ² eq) ~ 2019/20 x 2021 = ~	2021	Electricity	12,000
Biomass Boiler Project	Installation of one Biomass Boiler of 8 Ton/h steam capacity. Using wood chips as a fuel Emission reduction (Ton CO ² eq) ~ 2019/20 x 2021	2021	Fuel Oil	4.377,000

Table 3.2 - Implemented GHG emissions reduction projects

3.3 Planned GHG emissions reduction initiatives

In order to achieve the above-mentioned target, PMI is committed to identifying and implementing carbon saving projects until 31/12/2025. Table 3.3 shows main initiatives identified and estimated reduction for the whole commitment period (2021-2025).

Initiative name	Description	Year planned	Type of energy used	Estimated reduction [kg CO2eq]
Reduction of compressed	ES12.04 - Reduction of compressed air guns operation pressure < 2.0 Bar	2022/2023	Electricity	3.778
Rebalancing in dust collection systems	Rebalancing in dust collection systems - air speed in CF feeding de-dusting pipe measured least once per two months (< 20 m/sec)	2022/2023	Electricity	3.361
Chilled water system upgrade	Cryogen X4 refrigerant loop cleaning, Interconnection of multiple cooling circuits and Chilled water system optimizer	2022/2023	Electricity	7.221
Replace softstarters	Replace softstarters with Tower/Diet inverters volume_up content_copy share star_border	2022/2023	Electricity	11.875
Lighting LED	ES06.02 Efficient Lighting - T5 to LED	2022	Electricity	20.696
AHU flow rate optimization	ES02.05 - AHU flow rate optimization - EC fans instead of AC	2023	Electricity	20.956

Table 3.3 - Planned GHG emissions reduction initiatives

Actual emissions reductions will be measured in terms of intensity metrics relating to production output.

4 Carbon offset program

4.1 Offset program for the first application period

PMI has an offsetting program in place to support the carbon neutrality, based on quality criteria aligned with the most rigorous international standards and targeting social and economic benefits.

Through collaborating with **myclimate** (internationally recognized stakeholders in carbon neutral strategies), PMI has invested into offsetting project “**BK Energia Itacoatiara Project /Electricity from FSC Wood Waste in the Amazon - Brazil - GS765 - CDM 168**”– that has been used to compensate outstanding emissions in this declaration of carbon neutrality.

Carbon neutrality is achieved by reducing and compensating Greenhouse Gases (GHG) emissions through supporting the development of sustainable climate solutions in developing countries. Compensation projects bring social, environmental and economic benefits, which contribute to United Nations Sustainable Development Goals (SDGs) and are labelled by independent carbon standards such as **Standard (VCS)**¹ , **Climate Community and Biodiversity Alliance (CCBA)**², **Gold Standard**³, and **other offsets as endorsed in PAS2060**.

Credits were retired on 24th June 2022

These credits are supported by publicly available project documentation on the [GSF Registry \(goldstandard.org\)](https://registry.goldstandard.org/credit-blocks?q=2296&page=1&sort_column=created_at&sort_direction=desc) https://registry.goldstandard.org/credit-blocks?q=2296&page=1&sort_column=created_at&sort_direction=desc⁴). The registry system is the central storehouse of data on all registered projects, and tracks the generation, retirement and cancellation of all credits. To register with the program, projects must show that they have met all standards and methodological requirements

4.2 Offsetting project(s)

Offsetting projects selected by **PHILIP MORRIS BRASIL IND. COM. LTDA** are:

BK Energia Itacoatiara Project /Electricity from FSC Wood Waste in the Amazon - Brazil - GS765 - CDM 168

¹ <https://verra.org/>

² <http://www.climate-standards.org/>

³ <https://www.goldstandard.org/>

⁴ <https://registry.goldstandard.org/projects?q=&page=1>

4.3 Amount of credits purchased

Credits have been purchased by PMI for the period covering 1st of January 2021 – 31st December 2021.

The amount of credits purchased is **1811** tonnes of CO₂ equivalent, it is composed by two contributions:

- **1758 tonnes of CO₂ equivalent**, amount evaluated for the first application period
- **53 tonnes of CO₂ equivalent**, that represent the overrate of 3% of the whole baseline carbon footprint to cover all the exclusions (Annex C) and precludes underestimation.

We can reasonably assume that PMI Factory Carbon Neutral covers 100% of the GHG emissions.

PMI portfolio offsetting credits is composed of:

Project **BK Energia Itacoatiara Project /Electricity from FSC Wood Waste in the Amazon - Brazil - GS765 - CDM 168– 100%**

The Gold Standard guarantee that the offsets **generated represent genuine, additional GHG** emission reductions. The projects are technically designed so as to enable the quantification of a specific number of emissions reductions/removals the carbon credits expected from each farm/forest. The Gold Standard label also guarantee that the project involved in delivering credits meet the criteria of additionality, permanence, leakage and double counting.

It also guarantee that the units were verified by an independent third-party that the credits were only issued after the emission reduction has taken place.

Originating project Name: **BK Energia Itacoatiara Project /Electricity from FSC Wood Waste in the Amazon Brazil - GS765 - CDM 168**

Quantity of retired credits: 1811

Transaction notification: CH-32322

Notification No 10000000010885

Unit Type 5-0-CER

Start block 150173826

End block 150175636

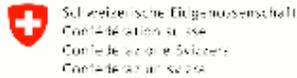
Retirement Date: 24th June 2022

Project ID: GS ID 765/ **CDM 168**

Project type: Biomass, or Liquid Biofuel - Electricity

Country: Amazon -Brazil

Retired on behalf of **PHILIP MORRIS BRASIL IND. COM. LTDA**, for offsetting unavoidable emissions, year 2021.



Federal Department of the Environment, Transport,
Energy and Communications DETEC
Federal Office for the Environment FOEN
Climate Division

Berne, 24 June 2022

Transaction notification CH-32322

Source account CH-100-81-0
81 - Stiftung myclimate

Destination account CH-230-656-2
Voluntary Cancellation Account CP2

Amount 1,811 (5-0-CER)

Transaction status 4-Completed

Transaction date 24.06.2022, 13:56:48

Transaction type 04-00-Voluntary cancellation

Notification No 1000000010885

Comment Philip Morris Brasil Industria e Comercio Ltda; Rua Victor Frederico Baumhardt, 505-Distrito Industrial, Santa Cruz do Sul, 96835-749/Brazil; Retired to compensate unavoidable emissions

Transaction history

Transaction status	Transaction date
Proposed	24.06.2022, 13:56:43
Checked (No Discrepancy)	24.06.2022, 13:56:48
Completed	24.06.2022, 13:56:48

Transferred Units

Country	Unit Type	Start block	End block	Applicable CP	Installation	Year	LULUCF	Project No	Track	Expiry date	Amount
BR	5-0-CER	150173826	150175636	2				158			1,811

Note: The content of this information is deemed to be correct unless the Emissions Trading Registry is notified of any error within 30 days in writing and giving reasons.

Swiss Emissions Trading Registry
FOEN, Climate Division, 3003 Berne
Telephone +41 (0)58 462 05 66
emissionsregistry@bafu.admin.ch
<https://www.bafu.admin.ch>

Transferred Units

Country	Unit Type	Start block	End block	Applicable CP	Installation	Year	LULUCF	Project No	Track	Expiry date	Amount
BR	5-0-CER	150173826	150175636	2				168			1,811

Credits  CER 1 — 29212

PROJECT ISSUED TO	BK Energia Itacoatiara Project (G5765)	VIEW PROJECT		
SERIAL NUMBER	BR-S-150149537-2-2-0-168 - BR-S-150178748-2-2-0-168			
STATUS	†† Issued		PRODUCT	CER
NUMBER OF CREDITS	29212		MONITORING PERIOD	Nov 01, 2016 — Dec 31, 2017
ISSUANCE DATE	Oct 25, 2019		VINTAGE	2017

HISTORY

1 — 29212

†† Issued 29212 CERs to BK Energia Itacoatiara Project

4.4 Compensation program for the second application period

For the second application period, PMI will cancel the volume of carbon credits required once the emission calculations are completed for that period. The volumes of credits required by PMI affiliates will be confirmed at later stage upon completion of the greenhouse gas inventory audit for this Application Period. The portfolio composition and share among projects will be determined based on the volume of credits.

5 Annex A – Carbon Neutral Assurance letter



Verification Statement Number:
CCP278808/22/06/2022

The Carbon Neutrality Declaration as presented in its Qualifying Explanatory Statement (QES), for the application period 01/01/2021 – 31/12/2021 of:

PHILIP MORRIS BRASIL IND. COM. LTDA
Brasil

has been verified by SGS United Kingdom Limited as conforming to the requirements of PAS 2060:2014: Specification for the demonstration of carbon neutrality (PAS 2060).

Lead Assessor: Lisa Gibson
Technical Reviewer: Andrew James Collins

Authorised by:



Pamela Chadwick
Business Manager
SGS United Kingdom Ltd

Verification Statement Date: 7th July 2022

This Statement is not valid without the full verification scope, objectives, criteria and conclusion available on pages 2 to 3 of this Statement

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**Schedule Accompanying Greenhouse Gas Verification Statement
CCP278808/22/06/2022**

Brief Description of Verification Process

SGS has been contracted by PHILIP MORRIS BRASIL IND. COM. LTDA, for the verification of their Carbon Neutrality Declaration as presented in its Qualifying Explanatory Statement (QES), for the application period 01/01/2021 – 31/12/2021, against the requirements of PAS 2060:2014: Specification for the demonstration of carbon neutrality (PAS 2060).

Roles and responsibilities

The management of PHILIP MORRIS BRASIL IND. COM. LTDA is responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information, preparation of reports, QES, and purchase and retirement of carbon offsets.

It is SGS' responsibility to express an independent opinion on the Carbon Neutrality Declaration as provided by the client for the application period 01/01/2021 – 31/12/2021.

SGS conducted a third-party verification following the requirements of ISO 14064-3: 2019 of the provided carbon neutral declaration and supporting QES during the period April – July 2022. The assessment was conducted via desk review. The verification was based on the verification scope, objectives and criteria as agreed between PHILIP MORRIS BRASIL IND. COM. LTDA and SGS.

Objectives:

The purpose of the verification exercise was, by review of objective evidence, to independently review and confirm:

- That the carbon neutrality declaration and QES conform to the requirements of PAS 2060
- That the emissions data reported in the QES are accurate, complete, consistent, transparent and free of material error or omission and have been determined in accordance with WRI/WBCSD GHG Protocol, Corporate Accounting and Reporting Standard
- That evidence is available to support information reported within the QES including carbon offset purchases and retirements.

Level of Assurance

The level of assurance agreed is reasonable.

Scope

This engagement covers verification of:

- PHILIP MORRIS BRASIL IND. COM. LTDA
- The organizational boundary was established following the operational control consolidation approach.
- Title or description of activities: Emissions for manufacturing facilities, warehousing, offices and operator-controlled fleet.
- Scope 1 & 2 emissions only
- Location/boundary of the activities: Single facility, Brasil
- First application period: Calendar Year 2021



Intended user of the verification statement: internal, customers, general public.

Materiality

The materiality required of the verification was considered by SGS to be below 5%.

We planned and performed our work to obtain the information, explanations and evidence that we considered necessary to provide a reasonable level of assurance that the CO₂ equivalent emissions, carbon neutrality declaration and QES for the first period 01/01/2021 – 31/12/2021 are fairly stated.

SGS' approach is risk-based, drawing on an understanding of the risks associated with compiling and reporting GHG emission information and the controls in place to mitigate these risks. Our examination included assessment, on a sample basis, of evidence relevant to the voluntary reporting of emission information and carbon neutrality.

Conclusion

PHILIP MORRIS BRASIL IND. COM. LTDA provided their carbon neutrality declaration based on the criteria outlined above. The carbon neutrality declaration and QES for the application period 01/01/2021 – 31/12/2021 are verified by SGS to a reasonable level of assurance, consistent with the agreed verification scope, objectives and criteria.

SGS concludes with reasonable assurance that the presented carbon neutrality declaration and supporting QES is materially correct and is a fair representation of the CO₂ equivalent data and information and conforms to the requirements of PAS2060 2014.

6 Annex B – Qualifying Explanatory Statements (QES) checklist



EHS.D.410.F02%20QE
S%20Check%20List%2

7 Annex C – Scope 1, 2 and 3 emissions inclusion and exclusion

Included and excluded emission sources related to the subject(s) are presented below, together with explanation for exclusions.

Scope	Emission source	Description	Inclusion exclusion	Justification of Exclusion
1.1	Stationary combustion	Combustion of fuels in boilers and furnaces for the generation of heat and steam, used for production processes and heating of buildings	Included	-
1.2	Mobile combustion sources	Transportation of employees and goods with cars under affiliate control.	Included	-
1.3	Process emissions	Emissions occurring during the production process (DIET)	Included	-
1.4	Fugitive emissions	Refrigerant gases losses	Excluded	Identified as below materiality threshold within the GHG inventory
2.1	Electricity consumption	Generation of purchased electricity	Included	-
2.2	Heat, steam and/or cold consumption	Purchase of heat, steam or cold energy not produced at operation site.	Included	-
3	Scope 3	All other indirect emissions	Excluded	Out of scope

Table 7.1 - Inclusions and exclusions

Table 8.1 - Uncertainty calculations

Uncertainties due to emission Factors and Activity Data				
1	2	3	4	5
Gas	Source category	Emission factor	Activity data	Overall uncertainty
CO ₂	Energy	7%	7%	10%
CO ₂	Industrial Processes	7%	7%	10%
CO ₂	Land Use Change and Forrestry	33%	50%	60%
CH ₄	Biomass Burning	50%	50%	100%
CH ₄	Oil and Nat. Gas Activities	55%	20%	60%
CH ₄	Rice cultivation	$\frac{3}{4}$	$\frac{1}{4}$	1
CH ₄	Waste	$\frac{2}{3}$	$\frac{1}{3}$	1
CH ₄	Animals	25%	10%	20%
CH ₄	Animal waste	20%	10%	20%
N ₂ O	Industrial Processes	35%	35%	50%
N ₂ O	Agricultural Soils			2 orders of magnitude
N ₂ O	Biomass Burning			100%

Note: Individual uncertainties that appear to be greater than ± 60% are not shown. Instead judgement as to the relative importance of emissions factor and activity data uncertainties are shown as fractions which sum to one

Source:
Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories: Reporting Instructions

Table 8.2 - IPCC uncertainty data

9 Annex E – Voluntary offset program

BK Energia Itacoatiara Project /Electricity from FSC Wood Waste in the Amazon Brazil - GS765 - CDM 168

The project generates electricity with a thermoelectric power plant (see picture below) using wood waste from an FSC certified forest and a wood processing company in the city of Itacoatiara, in the State of Amazonas, Brazil. The electricity is generated with a high-pressure boiler (42 bar – 420° C) and a multiple stage condensing steam turbine coupled with a 9 MWelt generator. The power plant replaces several diesel generators and supplies the local grid of the town of Itacoatiara (approx. 80,000 inhabitants) in a region supplied by 100% diesel fuelled electrical electricity generators.

In this annex, specific project sheet concerning the chosen offsetting projects are presented



Project 1 Electricity
From Fsc Wood Wast

All the relevant project documentations can be found at the following link:

- [GSF Registry \(goldstandard.org\)](https://registry.goldstandard.org)
- [SustainCERT Platform \(sustain-cert.com\)](https://sustain-cert.com)
- [CDM: EKXP17IBZD9FE0602C4OH8AKZKMD3V \(unfccc.int\)](https://unfccc.int/CDM/EKXP17IBZD9FE0602C4OH8AKZKMD3V)
- <https://registry.goldstandard.org/credit-blocks/details/50142>

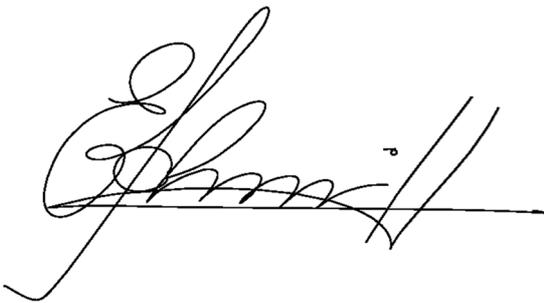
10 Annex F – Renewable Energy Certificates

10.1 PHILIP MORRIS BRASIL IND. COM. LTDA.



220524 PMI Brazil - 220620 Redemption
Philip Morris Brasil InStatement Philip Mori

On Behalf of Director Manufacturing (Vacant at the moment) Santa Cruz BR
13.07.2022
Eduardo Schmitt (Sustainability Manager)



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