



PHILIP MORRIS INTERNATIONAL

DECLARATION OF CARBON NEUTRALITY

MANUFACTURING ENTITIES CLUSTER 2

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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)**. If provided with any information affecting the validity of the following statements, this document will be updated accordingly to reflect the Cluster 2 (group of affiliates) current status towards carbon neutrality.

This report is publicly available on a dedicated website:

https://www.pmi.com/resources/docs/default-source/carbon-neutrality-declarations/240802_cluster-2-carbon-neutrality-declaration.pdf?sfvrsn=8b91a2c9_2

In 2022, due to continuous growth of our community of factories that are joining carbon neutral declaration process, we decided to cluster them under the same declaration of commitment and achievement. From this year there will be two Clusters, group of manufacturing entities Cluster 1 and Cluster 2.

This is the first declaration of achievement of carbon neutrality for the following list of factories that we will call in this document "Cluster 2", as per PAS 2060:2014 standard.

List of factories:

Reporting entity	Current Legal Entity
KZ (Almaty)	Philip Morris Kazakhstan LLP
PH (PMFTC Batangas)	PMFTC Inc., Batangas Plant
TR (PMTM)	Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi
ZA (LEONARD DINGLER)	Philip Morris South Africa Operations Leonard Dingler (Pty) Ltd.

Carbon Neutrality of the Scope 1 and Scope 2 emissions under the direct operational control of **Cluster 2**, achieved by **Cluster 2** in accordance with PAS2060:2014 at **31st December 2023** with a commitment to maintain to **31st December 2024** for the period commencing **1st January 2023**. The achievement of Cluster 2 facilities' carbon neutrality has been certified by SGS United Kingdom Limited.

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) "Cluster 2" group of manufacturing affiliates has achieved **carbon neutrality** for the below mentioned manufacturing processes for the period starting **1st January 2023 and ending 31st December 2023** 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 2023).
- **Compensation of remaining carbon emissions** for the period commencing 1st January 2023 and ending 31st December 2023

This report includes the information which substantiates the declaration of PMI **Cluster 2** achievement of carbon neutrality for this application period (under PAS 2060:2014) and commitment on carbon neutrality up to 2025 (2 years, from 2023 the reference year) in compliance with PAS 2060:2014 standard.

PMI affiliates grouped in **Cluster 2** have 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 PAS 2060:2014 standard.

1.1 General information

PAS 2060 Information requirement	Information as it relates to PMI Cluster 2 affiliates
Entities making PAS 2060 declarations	PMI Factories Cluster 2, including factories as per mentioned tabel in paragraph 0.
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	Carbon Neutrality of the Scope 1 and 2 emissions under the direct operational control of PMI Cluster 2 Factories (complete list available in Annex C)
Function of subject	Factories and/or stemmeries manufacturing conventional cigarettes and Smoke Free Products for PMI and its brands.
Activities required for subjects to fulfil its function	The activities required within the manufacturing process are (note that not all the processes listed are present in all the Cluster 2 factories):

	<ul style="list-style-type: none"> • Manufacture of Tobacco Related Products; • Flavour & Casing Processing; • Improved Stem Processing; • Cut Filler Processing; • Filter Processing; • Machine Cigarette Processing; • Quality Control Laboratory Activities; • Warehousing Activities; • Mentholated Alu Foil Processing; • Other Tobacco Products Processing; • Expanded Tobacco Processing; • Basic Blend Strips Processing;
Rationale for selection of the subjects	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.
Type of conformity assessment undertaken	I3P-3 Independent third-party certification - unified
Reference date for PAS 2060 programme	1 st of January 2023
Achievement period	1 st of January 2023– 31 st of December 2023
Commitment period	1 st of January 2024 – 31 st of December 2025

Table 1.1 - General information

1.2 Scope

The **subject** for carbon neutrality is manufacturing entities grouped in the following **Cluster 2** or group of entity.

Philip Morris International, Manufacturing entities grouped in Cluster 2:

Reporting entity	Production Type	Current Legal Entity
KZ (Almaty)	CC	Philip Morris Kazakhstan LLP
PH (PMFTC Batangas)	CC	PMFTC Inc., Batangas Plant
TR (PMTM)	CC	Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi
ZA (LEONARD DINGLER)	CC	Philip Morris South Africa Operations Leonard Dingler (Pty) Ltd.

The main business activity is the manufacturing of conventional (CC means conventional cigarettes) and RRP/SFP (Smoke free products) products under PMI brands (as reported in Annex C).

In 2023, we continued to group our factories that have been joining carbon neutral declaration process, we decided to cluster a second group of them under **Cluster 2**, to include them under a same declaration of commitment and achievement.

Cluster 2 declaration includes four Manufacturing reporting entities (the reporting entities are mainly defined as Conventional cigarettes sites).

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 Cluster 2 and under the affiliates' 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 with **Cluster 2** of manufacturing affiliates within the defined boundary from the period of **1st January 2023 to 31st December 2023** have been quantified in accordance with GHG Protocol Corporate Accounting Standard (operational control), and verified by SGS.

The data for this 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

Reporting entity	RRP P1 Stick Production Volume [Mio Sticks]	Total Production (Mio Cigarettes Equivalent) [Mio Cig]	CO2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	CO2 Scope 1 Fuels (GHG emissions) - Manufacturing [t GHG]	CO2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco - Certified Biogenic CO2 [t GHG]	Total CO2 Emissions - Market based [t GHG]	Fleet Vehicles - Total CO2 scope1 (GHG Emissions) [t GHG]	Total CO2 (GHG emissions) - 2023 MARKET based [t GHG]
KZ (Almaty)		12280.23		2153.23		2153.23	377.53	2,531
PH (PMFTC Batangas)	0	35347.06	0	3731.23	1989.9	3731.23	180.15	3,911
TR (PMTM)		83467.92		9489.41		9489.41	385.19	9,875
ZA (LEONARD DINGLER)		5730.04		252.01		252.01	6.98	259

Table revised based on Diesel consumption revision based on ZA site invoices for 2023 year.

The total GHG emissions in scope. 1 and 2 of PMI Cluster 2 of manufacturing entities during the year 2023 (first application period) represent a total of **16576 tons of CO₂ equivalent**.

GHG scope	GHG emissions [tCO ₂ eq]	Scope contribution [%]
CO ₂ Scope 1 Fuels (GHG emissions) - Manufacturing [t GHG]	15626	94%
CO ₂ Scope1 - Fleet emissions - Vehicles [t GHG]	950	6%
CO ₂ Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	0	0%
Sub Total [tCO ₂ eq]	16576	100%

Table 2.1 – Cluster 2 GHG emissions overall results

Biogenic CO₂ for some DIET Expanded Tobacco Process (in Philippines Batangas plant) were accounted as zero as Biogenic CO₂ covered as per evidence in the Annex F.

2.2 Methodology

Total GHG emissions associated with PMI affiliates in **Cluster 2, 1st January 2023 to 31st December 2023** 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 affiliates within Cluster 2 have 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 each of the affiliates within Cluster 2. 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 affiliates in Cluster 2. 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 affiliates in Cluster 2 that occur from sources not owned or controlled by each of the affiliates within Cluster 2 and are out of scope.

2.3 Data sources

Primary and secondary data has been used for the Carbon Quantification process. For scope 1 and 2 of PMI affiliates in **Cluster 2 primary data was exclusively used.**

1. Primary Data source related to all inputs and outputs corresponding to steps under the affiliates in Cluster 2 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.

Source of data was reviewed by SGS through the GHG Protocol verification process and certification against the requirements of PAS 2060:2014.

2.4 Assumptions and estimations

All assumptions made to quantify the greenhouse gas emission of PMI affiliates in **Cluster 2** 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 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 main source of uncertainties of 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).
- No other secondary data has been used for Cluster 2;

Result of the uncertainty calculation is reported in Annex D.

2.7 Comparison with baseline period results

This section will be completed in the subsequent years as 2023 is the first year for the PAS 2060:2014 certification for this Cluster 2 (Group of Manufacturing entities/factories as mentioned previously in paragraph 0).

GHG scope	2023 GHG emissions [tCO ₂ eq]	2023 Scope contribution [%]
CO ₂ Scope 1 Fuels (GHG emissions) – Manufacturing [t GHG]	15626	94%
CO ₂ Scope1 – Fleet emissions - Vehicles [t GHG]	950	6%
CO ₂ Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	0	0%
Sub Total [tCO₂eq]	16576	100%
3%	497	
Total Carbon footprint [tCO₂eq] with 3% (rounded up based on the decimals)	17,073	

3 Carbon Management Plan

The carbon reduction management plan considers a **2-year period (2023-2025)** with the aim of reducing emissions and energy intensity. Performance against the target will be monitored annually to review whether anticipated reductions have been achieved.

In order to achieve the targeted reductions a series of project will be implemented.

Although PMI affiliates began their Carbon Management Program for Carbon Neutrality in 2020, energy saving measures have been implemented since 2010 within the production plants. In 2022, due to continuous growth of our community of factories that are joining the carbon neutral declaration process, we decided to cluster them under the same declaration.

The following paragraphs explain in detail implemented (paragraph 0) and planned (paragraph 0) projects, that are mainly related to production plant GHG emissions reductions.

3.1 PMI best practice

In 2023, 39 out of 41 reporting entities, purchased 100% of electricity from renewable sources (electricity source for the affiliates in the carbon neutral factory certification are provided in annex F). Since 2017, we have gradually increased the uptake of green electricity (as showed in below table) and have a target to reach 100% green electricity purchases for all our affiliates by 2025. By investing in renewable energy electricity, PMI overall avoided emissions of **over 1,9 million ton of CO₂ equivalent**.

Indicator	2017	2018	2019	2020	2021	2022	2023	Total Value
CO2 Scope 2 (GHG emissions) - Manufacturing - Market based [t GHG]	217,563	149,757	111,508	65,289	41,157	27,909	16,186	629,368
CO2 Scope 2 (GHG emissions) - Manufacturing - Location based [t GHG]	414,126	395,371	398,332	357,670	336,964	333,553	346,113	2,582,129
Cumulative difference between Location based and Market based	196,563	245,615	286,824	292,382	295,807	305,644	329,927	1,952,761

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 distinct streams: one driven by central functions and another by local teams. Table 0 shows project implemented in Cluster 2 in the last years, evaluated in 2022 Carbon Footprint assessment. For the ease of reference, the projects have been split by entity:

Table 3.2 - Implemented GHG emissions reduction projects

Philip Morris Kazakhstan LLP

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Gasification project	Gasification of the Greenfield Philip Morris Kazakhstan	2016	Diesel to gas	3859170
Pressure optimization	Reducing steam pressure in the steam supply system from 8.5 bar to 6.7 bar	2018	Natural Gas	1333000
Condensate turnover	Return of previously lost steam condensate from industrial air conditioners	May-19	Natural Gas	125141
Building insulation project	Improving the thermal insulation of wall and window panels of Administrative and Industrial buildings	Nov-19	Natural Gas	132759
Insulation of boiler room	Installation of thermal covers on boiler room and heating station equipment	Mar-21	Natural Gas	7537
Insulation of Primary's equipment	Installation of thermal cases on Primary's equipment	Dec-21	Natural Gas	17662
Pressure optimization	Reducing steam pressure in the facility management system steam supply from 6.7 bar to 4 bar during production absence	2022	Natural Gas	177777
Pressure optimization	Reducing steam pressure in the facility management system steam supply from 6.7 bar to 6.5 bar	2023	Natural Gas	140000
Green electricity	Continue to purchase green electricity from 2021	2023	Electricity	4884

PMFTC Inc., Batangas Plant

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Vacuum Pressure reduction	Cigarette Making Vacuum Pressure reduction	2021/2022	Electricity	12002
Compressed Air - Centralized controller	Wave 2 Compressed Air - Centralized controller (ES8; ES16; Optimizer 4.0)	2022/2023	Electricity	21305
High-pressure sodium and metal halide to LED	Wave 2 Efficient Lighting (exterior lighting) - High-pressure sodium and metal halide to LED	2022/2023	Electricity	5253
Chilled water upgrade	Chilled water system upgrade - Automatic staging/cascading of multiple chillers	2021/2022	Electricity	614089
Air Handling Unit flow rate optimization	AHU flow rate optimization – Electronically Commutated fans instead of AC	2022/2023	Electricity	164369
Miura Boiler Operation Efficiency	Miura Boiler Operation Efficiency	2021/2022	Fuel	11903
Baseload assessment and reduction	Baseload assessment and reduction - automatic baseload reports in GEMT	2021/2022	Electricity	100014
Baseload assessment and reduction	Baseload assessment and reduction - reduce Vacuum during reduced production periods	2021/2022	Electricity	70010
Dust Collection Compressed Air purging Cycle reduction	Dust Collection Compressed Air purging Cycle reduction	2021/2022	Electricity	12002
Condensate return Loss	Condensate return Loss	2021/2022	Electricity	1950
High bay Lamp to LED	Replacement of High bay lamp to LED	2021/2022	Electricity	12002
Fan Coil Unit removal in Product Development Area	Fan Coil Unit removal in Product Development area	2021/2022	Electricity	13402
Chilled Water Tertiary pump operation	Chilled Water Tertiary pump operation optimization	2021/2022	Electricity	21003
Steam reheat removal in FTD (Flash Tower Dryer) cooling	Steam reheat removal in FTD (Flash Tower Dryer) cooling	2021/2022	Electricity	12002
Air Handling Unit Fan speed reduction	AHU fan speed reduction	2021/2022	Electricity	185527
Compressed Air Heat exchange Temperature	Increase in Compressed Air Heat exchange Temperature	2021/2022	Electricity	50307
KDF3 cascade Project	Filter Maker machine KDF3 cascade Project	2021/2022	Electricity	122018

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ e/q]
DIET (Dry Ice Expanded Tobacco) Compressor Chilled water Cooling optimization	DIET Compressor Chilled water Cooling optimization	2021/2022	Electricity	28504
Primary Exhaust fan Reduce operation	Optimization on the use of primary exhaust fan operation	2021/2022	Electricity	51607
FTD (Flash Tower Dryer) Removal of Cooling Process	FTD Removal of Cooling Process	2022	Electricity	80188
Boiler Operation Matrix	Boiler Operation Matrix	2022	Electricity	258633
Switching off of Finished Goods and Leaf Buffer Warehouse AHU, Mezzanine	Switching off of FG and LBW AHU, Mezzanine	2022/2023	Electricity	92865
Uptime Improvement- high	Uptime Improvement- high speed	2022/2023	Electricity	34292
Uptime Improvement- Mid peed	Uptime Improvement- Mid speed	2022/2023	Electricity	27725
Wave 3 Steam system equipment upgrade - Insulation of return condensate lines	Wave 3 Steam system equipment upgrade - Insulation of return condensate lines	2022/2023	FUEL	3264
Wave 3 Leakage reduction in Compressed Air system - Individual CA meter and CA KPI per every secondary machine	Wave 3 Leakage reduction in Compressed Air system - Individual Compressed Air meter and Compressed Air Key Performance Indicator per every secondary machine	2022/2023	Electricity	8551
Wave 3 Compressors with VSD	Wave 3 Compressors with Variable Speed Drive	2022	Electricity	36497
Wave 3 Steam Trap Monitoring and other Steam improvement	Wave 3 Steam Trap Monitoring and other Steam improvement	2023/2024	FUEL	15080
Solar power Farm 2023	Solar power Farm 2023	2023/2024	Electricity	1333215

Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Trigeneration Plant Shutdown	In 2022 Existing 2 natural gas engines of trigeneration plant that is used to supply electricity to the plant was shutdown to decrease CO ₂ emissions.	2023	Natural Gas	14000000
Second Economizer on 3 ton/h Miura Boilers	Miura steam generators are designed with single economizer. After eco of Miura, the flue gas temperature will be around 120 C. Installation of second economizer for each generator will help PMTM to improve overall system efficiency (the goal is heating up the make up water).	2023	Natural Gas	36000
Low load steam Boilers installation	Replacement of existing low efficient conventional steam boilers with %9 higher thermal efficiency low load boilers.	2023	Natural Gas	590000

Philip Morris South Africa Operations Leonard Dingler (Pty) Ltd.

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Steam Boilers Replacement	Install one new boiler with higher energy efficiency and dimensioned according to planned future needs (5 Ton/h) replacing the old coal boiler.	2019	Gas	266724
Energy Efficiency Plan 2016	The energy efficiency plan 2017 encompassed, i.e.: New Heat Changer Recover for gas exhaust boiler.	2019	Gas	391648
Shutdown Management	Implementation of a management system to optimize the operating periods of utility equipment, such as: AHUs and Steam Boilers.	2022/ 2023	Gas	160423
LED Lighting	Replacement of lighting with LED technologies	2023/2024	Electrical	587
Insulation of condensate line	Insulation of condensate return line 120 meters of 2" with insulation materials.	2021	Gas	4

3.3 Planned GHG emissions reduction initiatives

Table 0 shows main initiatives identified and their estimated reduction for the commitment period to 2023/2025 for PMI factories included in Cluster 2. For ease of reading, the initiatives have been split by entity:

Table 3.3 - Planned GHG emissions reduction initiatives in Cluster 2

Philip Morris Kazakhstan LLP

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Project 1 in Primary	Analysis of electricity consumption for each type of equipment, and elimination of defects in the steam supply system	2023-2024	Gas/diesel/energy	204
Energy audit	Conduction of energy audit of boiler house equipment	2024	Gas/diesel	n/a

PMFTC Inc., Batangas Plant

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Consolidated 2024 projects	ESI Initiatives and Loss Analysis Topics	2024/2025	Electricity	1725259
Wave 3 Steam Trap Monitoring and other Steam improvement	Installation of Steam traps across primary	2024/2025	Fuel	53951
Wave 3 Chilled water system upgrade - Use of Turbocore chillers	Installation of magnetic bearing type chiller	2024/2025	Electricity	735701
HVAC AI Phase2	HVAC automation for non-production	2024/2025	Electricity	564037
Batangas furnace	Installation of new efficient furnace	2024/2025	Fuel	148057
Upgrade of Solar Inverters	Increased solar harvest for ground mounted solar farm	2024/2025	Electricity	343327
Solar Power Farm Phase 2 - 2024	Use of Electric boiler during solar production	2024/2025	Electricity	712567

Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
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Electric Boiler	In order to decrease the Scope 1 emissions that comes from primary steam demand of the plant 3 ton/h electric boiler will be installed to decrease the natural gas demand.	2024	Electricity	2700000
Flash Tower Dryer Heat Recovery	The goal of the project is to install condensing economizer in the FTD chimney in order to recover the thermal energy existed in the flue gas. The recover thermal energy is utilized to heat up the boilers' feedwater. The project includes the cost of the piping and the installation of the condensing economizer.	2024	Natural Gas	51000
Solarwall	Implementation of SolarWall in order to decrease natural gas consumption in IS rotary dryer in Primary Plant.	2024	Natural Gas	29500
EC Fan Phase 2	Intention with this retrofit application, is to change outdated technology and also aged components of DoubleInlet centrifugal radial fans with wedge belt type power transmission with low efficiency class AC motors with new technology EC-Motor Fan.	2024	Electricity	145000
Photovoltaic powerplant	Photovoltaic powerplant	2024	Electricity	4200000
Wind Power Plant	In order to decrease the purchased electricity from grid by offsetting, 12.8 mW Wind Power Plant will be installed as soon as the legal approvals completed.	2026	Electricity	17500000

Philip Morris South Africa Operations Leonard Dingler (Pty) Ltd.

Project name	Description	Year	Type of energy used	Emission reduction [kg CO2eq]
Energy Efficiency Plan 2019	The energy efficiency plan 2019 encompassed, i.e.: Flash Steam Recovery, and Heat Recovery from CA Plant.	2025/2026	Gas	94449
Solar Park	Installation of solar panels. Estimated installed power 1.29MWp north facing solar.	2025/2026	Electrical	96500
Motor Replacement	Purchase and installation of more energy efficient motors.	2025/2028	Electrical	131164
Energy Efficiency Plan 2024	The energy efficiency plan 2024 encompassed, i.e.: New thermal valve jackets isolation	2024	Gas	30

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 this application period

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

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 Standard³**, and **other offsets as endorsed in PAS2060**.

To compensate 2023 GHG emissions, PMI has selected a set of carbon projects as described in paragraph 4.2.

Credits were retired by **July 16th, 17th, 18th 2024**

These projects are supported by publicly available project documentation on the [GSF Registry \(goldstandard.org\)⁴](https://registry.verra.org/) and on <https://registry.verra.org/>. 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.

¹ <https://verra.org/>

² <http://www.climate-standards.org/>

³ <https://www.goldstandard.org/>

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

4.2 Offsetting project(s)

Offsetting projects selected by PMI Cluster 2 for compensating the 2023 emissions are:

#	Project Name	Carbon credits allocation		Official project link
		tons	%	
1	<p>Katingan Peatland Restoration and Conservation Project - VCS 1477</p> <p>The Katingan Restoration and Conservation Project protects and restores 149,800 hectares of peatland ecosystems, to offer local communities sustainable sources of income, and to tackle global climate change. The project lies within the districts of Katingan and Kotawaringin Timur in Central Kalimantan Province and covers one of the largest remaining intact peat swamp forests in Indonesia</p>	8621	50.5%	https://registry.verra.org/app/projectDetail/VCS/1477
2	<p>Rimba Raya – VCS 674</p> <p>The Rimba Raya Biodiversity Reserve Project, an initiative by InfiniteEARTH, State/Province Central Kalimantan</p>	8452	49.5%	https://registry.verra.org/app/projectDetail/VCS/674
		17073	100%	

The offsets are allocated to the individual entities as per following table:

Reporting Entity	Credits allocated for compensation (tons)	Vintage	Vintage
KZ (Almaty)	2607	Rimba Raya Biodiversity Reserve Project	2017
PH (PMFTC Batangas)	4028	Rimba Raya Biodiversity Reserve Project	2017
ZA (LEONARD DINGLER)	267	Rimba Raya Biodiversity Reserve Project	2017
TR (PMTM)	8621	Katingan Peatland Restoration and Conservation Project	2016
TR (PMTM)	1550	Rimba Raya Biodiversity Reserve Project	2017
TOTAL	17073		

4.3 Amount of credits purchased

Credits have been ordered by PMI for the period covering 1st of January 2023 31st December 2023

The amount of credits purchased is 17073 tons of CO₂ equivalent, it is composed by two contributions:

- o 16576 tons of CO₂ equivalent, amount evaluated for this application period
- o 497 tons of CO₂ equivalent, that represent an additional 3% of the baseline carbon footprint to cover all the exclusions (Annex C) and to preclude underestimation.

We can reasonably assume that this amount covers 100% of PMI Cluster 2 GHG emissions.

PMI Cluster 2 Manufacturing entities portfolio offsetting credits is composed as per the table in paragraph 4.2

The Gold Standard and VERRA 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 and VERRA label also guarantee that the projects 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 and that the credits were only issued after the emission reduction has taken place.

Retired credits certificates are attached on behalf of PMI for *Cluster 2* of manufacturing entities, for offsetting unavoidable emissions, in year 2023.

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=251874>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=252199>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=252003>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=252202>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=252004>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=252197>

4.4 Compensation program for the subsequent application periods

For subsequent application periods, PMI will retire the volume of carbon credits required once the emission calculations are completed for the period. The volumes of credits required by **PMI affiliates grouped in Cluster 2** will be confirmed upon completion of the greenhouse gas inventory audit for that Application Period. The portfolio composition and share among projects will be determined based on the volume of credits.

5 Annex A – Carbon Neutrality Assurance letter



Verification Statement Number:
CCP267919.PMI.2023.V12.20243007

The Carbon Neutrality Declaration as presented in its Qualifying Explanatory Statement (QES), for the application period 01/01/2023 – 31/12/2023 of:

Philip Morris International "Cluster 2" group of manufacturing affiliates
(as defined in the scope section of this opinion)

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: Abdullah Buhidma

Authorised by:



Pamela Chadwick
Business Manager
SGS United Kingdom Ltd

Verification Statement Date: 30th July 2024

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

SGS United Kingdom Ltd | Rossmore Business Park, Ellesmere Port, Cheshire CH65 3EN. Tel +44 (0)151 350 6666 Fax +44 (0)151 350 6600
Climate Change Programme ulclimatechange@sgs.com www.sgs.com
Member of SGS Group

Registered in England No. 1192825 Registered Office: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN



**Schedule Accompanying Greenhouse Gas Verification Statement CCP267919.PMI.
2023.V12 20243007**

Brief Description of Verification Process

SGS has been contracted by Philip Morris International for the verification of their Carbon Neutrality Declaration as presented in the Qualifying Explanatory Statement (QES) for "Cluster 2" group of manufacturing affiliates, for the application period 01/01/2023 – 31/12/2023, against the requirements of PAS 2060:2014: Specification for the demonstration of carbon neutrality (PAS 2060).

Roles and Responsibilities

The management of Philip Morris International (PMI) 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 01/01/2023 – 31/12/2023.

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 June to July 2024. The assessment was conducted via desk review. The verification was based on the verification scope, objectives and criteria as agreed between Philip Morris International 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 the 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:

- The organizational boundary was established following the operational control consolidation approach for each of the manufacturing affiliates.
- 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: as per list below
- First application period: Calendar Year 2023

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

SGS

Manufacturing affiliates:

Affiliate	Legal Entity
KZ (Almaty)	Philip Morris Kazakhstan LLP
PH (PMFTC Batangas)	PMFTC Inc., Batangas Plant
TR (PMTM)	Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi
ZA (LEONARD DINGLER)	Philip Morris South Africa Operations Leonard Dingler (Pty) Ltd.

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 01/01/2023 – 31/12/2023 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 International provided their carbon neutrality declaration based on the criteria outlined above. The carbon neutrality declaration and QES for the application period 01/01/2023 – 31/12/2023 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.

Note: This Opinion is issued, on behalf of Client, by SGS United Kingdom Ltd, Rosemore Business Park, Inward Way, Ellesmere Port, Cheshire, CH65 3EN (SGS) under its General Conditions for GHG Validation and Verification Services. The findings recorded herein are based upon an audit performed by SGS. This Opinion does not relieve Client from compliance with any bylaws, federal, national, or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.

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

8 Annex D – Uncertainty calculation

8.1 Uncertainty calculation

Uncertainties around the quantification of the carbon footprint have been assessed throughout the assessment following the guidelines released by ISO and available in the “GHG Protocol’s Measurement and Estimation Uncertainty of GHG Emissions tool” (supporting worksheet file “Uncertainty_Calculation_Tool”)⁵; since the uncertainties are not known for all the parameters (activity data and emission factors), the IPCC Guideline for National Greenhouse Inventories Reporting Instructions was used:

- Activity data: 7%
- Emission factor: 7%

All information can be accessed in the below file attached:



Uncertainty Cluster
2_210624.xlsx

Outcome of the uncertainty calculation (from uncertainty Cluster 2 attached file)

A	B	C		D		E		F		G		H		I	J	K	L
		Activity Data (eg Quantity of fuel used)	Unit used to measure Activity Data	Uncertainty of activity data (%) (Confidence Interval expressed in percent)	GHG emission factor	Unit of GHG emission factor (eg kg CO ₂ e)	Uncertainty of emission factor (Confidence Interval expressed in percent)	CO ₂ e emissions in kg	CO ₂ e emissions in metric tonnes	Uncertainty of calculated emissions	Confidence Ranking	Auxiliary Variable 1	Auxiliary Variable 2				
Example: Thermal	6000.00	kg	-4.5%	98.50	kg CO ₂ e/kg	-4.5%	594000.00	594.00	0.59	Good	97%	97%	Good				
Example: Chemical Manufacturing	2000000.00	kg	-4.5%	0.05	kg CO ₂ e/kg	-4.5%	100000.00	100.00	0.10	Good	97%	97%	Good				
Example: Electricity	1000000.00	kWh	-4.5%	0.0005	kg CO ₂ e/kWh	-4.5%	500.00	0.50	0.00	Good	97%	97%	Good				
Example: Fuel	1000000.00	liters	-4.5%	2.35	kg CO ₂ e/liter	-4.5%	2350000.00	2350.00	2.35	Good	97%	97%	Good				
Example: Waste	1000000.00	kg	-4.5%	0.0001	kg CO ₂ e/kg	-4.5%	100.00	0.10	0.00	Good	97%	97%	Good				
Example: Transport	1000000.00	km	-4.5%	0.000001	kg CO ₂ e/km	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: Air Travel	1000000.00	kg	-4.5%	0.000001	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: Business Travel	1000000.00	kg	-4.5%	0.000001	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: Fleet	1000000.00	liters	-4.5%	2.35	kg CO ₂ e/liter	-4.5%	2350000.00	2350.00	2.35	Good	97%	97%	Good				
Example: Energy	1000000.00	kWh	-4.5%	0.0005	kg CO ₂ e/kWh	-4.5%	500.00	0.50	0.00	Good	97%	97%	Good				
Example: Fleet Fuel	1000000.00	liters	-4.5%	2.35	kg CO ₂ e/liter	-4.5%	2350000.00	2350.00	2.35	Good	97%	97%	Good				
Example: Fleet Fuel Storage	1000000.00	liters	-4.5%	2.35	kg CO ₂ e/liter	-4.5%	2350000.00	2350.00	2.35	Good	97%	97%	Good				
Example: CO ₂ e from Plant Biogenic	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
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Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
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Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
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Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
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Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
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Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg	-4.5%	0.00	kg CO ₂ e/kg	-4.5%	1.00	0.00	0.00	Good	97%	97%	Good				
Example: CO ₂ e from Process	1000000.00	kg															

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 – Voluntary offset program

In this annex, shortlist of projects chosen for compensation of 2023 emissions.

#	Project Name	Official project link
1	Katingan Peatland Restoration and Conservation Project - VCS 1477	https://registry.verra.org/app/projectDetail/VCS/1477
2	Rimba Raya – VCS 674	https://registry.verra.org/app/projectDetail/VCS/674

10 Annex F – Renewable Energy Certificates

Philip Morris Kazakhstan LLP



This Redemption Statement has been produced for

PHILIP MORRIS KAZAKHSTAN LLP.

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

9 986.000000

I-REC Certificates, representing 9 986.000000 MWh of
electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**Factory Almaty
Kazakhstan**

in respect of the reporting period

2023-01-01 to 2023-12-31

The stated Redemption Purpose is

Scope 2 Reporting and CDP disclosure for Philip Morris Kazakhstan LLP. Factory Almaty

Ev.



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

Verification Key

1 4 3 1 1 8 9 6

<https://api-internal.evident.app/public/certificates/en/pyQw1StpODr8lEP9uW7eX%2BkIfyuC3LduyYnCMd1dYPT4SCEold14dRCjsuGky>

PMFTC Inc., Batangas Plant



CONFIRMATION OF RENEWABLE ENERGY SUPPLY

This certifies that 100% of the imported energy requirement of the facility of
PMFTC, Inc – Batangas and Marikina site

was supplied by Shell Energy Philippines, Inc. RES License No. RES-7-2021-0076RS from renewable energy sources as defined in DOE DC2009-05-0008 for the period August 26, 2022 to June 25, 2023

Certificate No.: SEPH-55552-001

Date: July 13, 2023



Jennifer Jao
Chief Commercial Officer
Shell Energy Philippines Inc




CONFIRMATION OF RENEWABLE ENERGY SUPPLY

This certifies that 100% of the imported energy requirement of the facility of
PMFTC, Inc – Batangas and Marikina site

was supplied by Shell Energy Philippines, Inc. RES License No. RES-7-2021-0076RS from renewable energy sources as defined in DOE DC2009-05-0008 for the period June 26, 2023 to August 25, 2023.

Certificate No.: SEPH-55552-002
Date: October 10, 2023



Bernd Krukenberg
President
Shell Energy Philippines Inc

enel x

**PURCHASE STATEMENT
RENEWABLE ENERGY CERTIFICATES FOR PHILIPPINES**

*With this certificate Enel X confirms that PMI has purchased 2,370
MWh Philippines IRECs*

*The IRECs were issued for the production of renewable electricity
generated by Hydro power plants in Philippines for the sole benefit
of PMI company PMFTC Inc., factory Batangas.*

*Volume: 2,370
Technology: Hydro
Origin: Philippines
Period of consumption covered: Jan23- Sep23
Production period: Jan23 – Dec23
Commissioning year: 2003
Capacity: 435 MW*

enel x

**PURCHASE STATEMENT
RENEWABLE ENERGY CERTIFICATES FOR PHILIPPINES**

*With this certificate Enel X confirms that PMI has purchased 6,628
MWh Philippines IRECs*

*The IRECs were issued for the production of renewable electricity
generated by Hydro power plants in Philippines for the sole benefit
of PMI company PMFTC Inc., factory Batangas.*

*Volume: 6,628
Technology: Hydro
Origin: Philippines
Period of consumption covered: Oct23- Dec23
Production period: Jan23 – Dec23
Commissioning year: 2003
Capacity: 435 MW*



CERTIFICATE OF ORIGIN

This is to certify that the biogenic LIQUID CARBON DIOXIDE, 99.9%, manufactured by the ABSOLUT DISTILLERS, INC., located in Bo. Malaruhatan, Lian-4218, Batangas, amounting to 258,960 kilograms was supplied to Philip Morris Fortune Tobacco Corporation (PMFTC), Inc. from the period of January to December 2023.

Further certified that the biogenic liquid CO₂ product was obtained from the extraction and purification of the raw carbon dioxide, the by-product of the alcoholic fermentation. The direct process involved in the production is the Fermentation of molasses as feedstock, through the aid of yeast (*Saccharomyces cerevisiae*) culture. No other raw materials or sources have been used other than the above stated.

The undersigned hereby declares that the above details are true and correct, issued this 12th day of December 2023, this certificate will remain valid, given that there are no major changes in the involved raw materials.

Signed:


ALWIN J. ALAMA, RCh
QA/QC Supervisor



ISO 9001:2015 Certified since 2021 | CO₂ Plant HALAL Certified since 2021
Plant Office: Bay Malaruhatan, Lian, Batangas | Landline No. 0917 184 6750 | absolutdistillersinc@yahoo.com



CERTIFICATE OF ORIGIN

This document confirms and/or certifies that BALAYAN DISTILLERY, INC. supplies Biogenic CO₂ amounting to 1,327,050 kgs. from January 2023 to December 2023 to PMFTC Inc.

The biogenic CO₂ produced at our distillery is sourced from ethanol fermentation using black strap molasses wherein sugar gets transformed into carbon dioxide and bioethanol. No other materials or source have been used other than the above stated.

Issued this 11th of December 2023.

Signed by:


ELENITA R. OGORIDA
QA Head



HANNIBAL INDUSTRIES CORPORATION

CERTIFICATE OF ORIGIN

This document confirms and certifies that **HANNIBAL INDUSTRIES CORPORATION** supplies Biogenic CO₂ amounting to **24,853 kgs** FROM **January 2023 to December 2023** to **PMFTC Inc.** The Biogenic CO₂ produced at our distillery is sourced from the fermentation of **Progen Agricorn** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **February 3, 2024**.


Daniel Emmanuel Ong
 Quality Assurance Engineer
 HANNIBAL INDUSTRIES CORPORATION

Plant Address: Sitio Sagay, Orza, Zamboanga
 Marikina, Marikina, Marikina
 Office: 11400 Marikina, Marikina City, Philippines 1908
 Telephone: +63 (0)43811 / +63 (0)43811
 Mobile: +63 94222011



sgs@carbonic.com | info@carbonic.com
 0917 871 5522 | 813 2749
 270 D. Rizal Street, Quezon City, 1103 Philippines

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **LPGVILLE TRADING** supplies Biogenic CO₂ amounting to **771,750 kgs**, to **PMFTC Inc.** from **June 2023 to December 2023**. The Biogenic CO₂ is sourced from the **by-product of fermentation activity of living organism (yeast) added to sugar or molasses solution**. No other materials or source have been used other than the above stated. Issued this **29th day of December 2023**.

Signed by:


Darla Avena
 OPERATIONS MANAGER



PHILIPPINE CO₂ INDUSTRY, INC.
525 M. Naval Street, Navotas City
Tel Nos.: 8281-7962; 8281-7973 Telefax: 8281-7951
Email address: info@co2.com.ph Website: www.co2.com.ph

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **Philippine CO₂ Industry, Inc.** supplies Biogenic CO₂ amounting to 830,090 Kgs to PMFTC Inc., from January 2023 to December 2023. The biogenic CO₂ is sourced from the fermentation of sugarcane into bio-ethanol. No other materials or source have been used other than the above stated. Issued this December 29, 2023.

Signed by:


Lindsey Lim
Manager

PHILSA, Philip Morris Sabancı Sığara ve Tütüncülük Sanayi ve Ticaret A.Ş.



This Redemption Statement has been produced for
PHILSA PHILIP MORRIS SABANCI SİĞARA VE TÛTÛNCÛLÛK SAN. VE TİC. A.Ş.

by

ELTEK ELEKTRİK ENERJİSİ İTH İHR VE TOPTAN TİC AS

confirming the Redemption of

43 497.420000

I-REC Certificates, representing 43 497.420000 MWh of
electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**7 Eylül Mah. Philsa Cad. No:32 35860 Torbalı İZMİR
Turkey**

in respect of the reporting period

2023-01-01 to 2023-09-30

The stated Redemption Purpose is

Disclosure for Scope 2 Reporting

Ev.



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

Verification Key

2 6 6 5 3 7 2 7

<https://api-internal.evident.app/public/certificates/en/ZZuF1Cp79jupOnyOP00Y7JCMYgkjbMhtGBWcCSg8kaHvIEr23%2FCGdnytpf4dv8N>

ok

 THE INTERNATIONAL
REC STANDARD

This Redemption Statement has been produced for
PHILSA PHILIP MORRIS SABANCI SİĞARA VE TÛTÛNCÛLÛK SAN. VE TİC. A.Ş.

by

ELTEK ELEKTRİK ENERJİSİ İTH İHR VE TOPTAN TİC AS

confirming the Redemption of

18 005.380000

I-REC Certificates, representing 18 005.380000 MWh of
electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**7 Eylül Mah. Philsa Cad. No:32 35860 Torbalı İZMİR
Turkey**

in respect of the reporting period

2023-10-01 to 2023-12-31

The stated Redemption Purpose is

Disclosure for Scope 2 Reporting

Ev.



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and en
tering in the Verification Key below

Verification Key

6 6 8 2 7 4 2 9

<https://api-internal.evident.app/public/certificates/en/0w7CEAJVSECKJXku1tdvrEGF2AIPsXYjwZSTCQu0TJRA2wymr9Yl1hg7KMmTYg3t>

Philip Morris South Africa Operations Leonard Dingler (Pty) Ltd.



This Redemption Statement has been produced for
PHILIP MORRIS SOUTH AFRICA OPERATIONS LEONARD DINGLER (PTY) LTD

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

2 395.000000

I-REC Certificates, representing 2 395.000000 MWh of
electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**Factory Leonard Dingler
South Africa**

in respect of the reporting period

2023-01-01 to 2023-12-31

The stated Redemption Purpose is

**Scope 2 reporting and CDP disclosure for Philip Morris South Africa Operations Leonard Dingler
(Pty) - Factory Leonard Dingler**

Ev.



QR Code Verification

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

Verification Key

5 3 0 1 8 7 8 8

<https://api-internal.evident.app/public/certificates/en/SzRzQFeY44FEAGUK7y94Cq8V55QNMOFGa96DY5GgTaliHGFFk7OTXijSMPf%2F3Az>

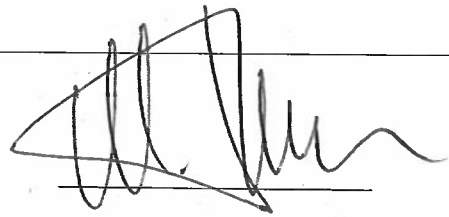
CLUSTER 2 CARBON NEUTRAL DECLARATION

END OF THE DOCUMENT



Lausanne, 26 August 2024

Stephanie Thery
Head of Sustainability - Global Manufacturing
PMI Operations



Lausanne, 26 August 2024

Michael Scharer
VP Global Manufacturing
PMI Operations