



PHILIP MORRIS INTERNATIONAL

DECLARATION OF CARBON NEUTRALITY

MANUFACTURING ENTITIES CLUSTER 2

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List of factors:

Reporting entity	Current legal entity
KZ (TATAY)	Philip Morris Kazakhstan LLP
PM (PMTC Bulgaria)	PMTC Inc. Bulgaria Part
TR (PMTM)	Philip Morris Tobacco Marketing Services LLC & Annon. Japan
ZA (LEONARD BINGCHER)	Philip Morris South Africa Company & Annon. (Pty) Ltd

Carbon Neutrality of the Scope 1 and Scope 2 emissions under the first operational control of Cluster 2 achieved by Cluster 2 in 2024 under the PAS2081 2014 in the remainder 2024 with a commitment to maintain to 31st December 2025 in the next contract of 7th January 2024. The achievement of Cluster 2 facilities with a neutrality has been certified by SGS (www.sgs.com/climatechange) and is available on the website. Certification with the SGS can be found at Annex A.

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:

[Sustainability resources | PMI](#)

In 2022, due to continuous growth of our community of factories that are joining carbon neutral declaration process, we decided to cluster facilities under the same declaration of commitment and achievement. From 2024 there will be three Clusters, group of manufacturing entities Cluster 1, Cluster 2 and Cluster 3.

This is the **second** 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 2024** with a commitment to maintain to 31st **December 2025** for the period commencing 1st **January 2024**. 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 2024 and ending 31st December 2024** 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 2024).
- **Compensation of remaining carbon emissions** for the period commencing 1st January 2024 and ending 31st December 2024

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 (1 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 table 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)	Chiara Rizzi
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):

Rationale for selection of the subjects	<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; <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 2024
Achievement period	1 st of January 2024– 31 st of December 2024
Commitment period	1 st of January 2025 – 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 and 2024, 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 2024 to 31st December 2024** 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) - 2024 MARKET based [t GHG]
KZ (Almaty)	0	12,097	-	2224.54	-	2,225	353.96	2,579
PH (PMFTC Batangas)	0	36,256	-	3509.79	1,928	3,510	88.18	3,598
TR (PMTM)	0	90,212	-	5827.02	-	5,827	387	6,214
ZA (LEONARD DINGLER)	0	5,182	-	233.86	-	234	6.56	240

The total GHG emissions in scope 1 and 2 of **PMI Cluster 2** of manufacturing entities during the **year 2024** (first application period) represent a total of **12631 tons of CO₂ equivalent**.

GHG scope	2024 GHG emissions [tCO ₂ eq]	2024 Scope contribution [%]
CO ₂ Scope 1 Fuels (GHG emissions) – Manufacturing [t GHG]	11795	93%
CO ₂ Scope1 – Fleet emissions - Vehicles [t GHG]	835	7%
CO ₂ Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	0	0%
Sub Total [tCO₂eq]	12631	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 2024 to 31st December 2024** 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

2024 is the second year for the PAS2060:2014 certification for this Cluster 2 (Group of Manufacturing entities/Factories as mentioned previously in paragraph 0).

GHG scope	2023 GHG emissions [tCO ₂ eq]	2024 GHG emissions [tCO ₂ eq]	2024 Scope contribution [%]
CO ₂ Scope 1 Fuels (GHG emissions) – Manufacturing [t GHG]	15626	11795	93%
CO ₂ Scope1 – Fleet emissions - Vehicles [t GHG]	950	835	7%
CO ₂ Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]		-	0%
Sub Total [tCO₂eq]	16,576	12,631	100%
3%	427	379	
Total Carbon footprint [tCO₂eq] with 3% (rounded up based on the decimals)	17,073	13,010	

	Year 2023	Year 2024
Absolute emission [tCO₂eq]	16,576	12,631
Absolute reduction		24%
Intensity [t CO₂/mio Cig eq]	0.121	0.088
Intensity reduction		27%

3 Carbon Management Plan

The carbon reduction management plan considers a **1-year period (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 (3.2 paragraph0) and planned (3.3 paragraph 0) projects, that are mainly related to production plant GHG emissions reductions.

3.1 PMI best practice

In 2024, all reporting entities sourced 100% of their electricity from renewable sources, with the exception of Russia, Ukraine, and partially South Korea. Since 2017, we have gradually increased the uptake of green electricity (as shown in below table). By investing in renewable energy electricity, PMI overall avoided emissions of **over 2,2 million ton of CO₂ equivalent**.

Table 3.1 - Green electricity increase

Indicator	2017	2018	2019	2020	2021	2022	2023	2024	Total Value
CO ₂ Scope 2 (GHG emissions) - Manufacturing - Market based [t GHG]	217,563	149,757	111,508	65,289	41,157	27,909	16,186	30,495	659,863
CO ₂ Scope 2 (GHG emissions) - Manufacturing - Location based [t GHG]	414,126	395,371	398,332	357,670	336,964	333,553	346,113	352,073	2,934,202
Cumulative difference between Location based and Market based	196,563	245,615	286,824	292,382	295,807	305,644	329,927	321,579	2,274,339

Table 3.2 - Green electricity increase

3.2 Implemented GHG emissions reduction project repository

At PMI, emissions reduction project governance and budget approval come 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 Carbon Footprint assessment. For the ease of reference, the projects have been split by entity:

Table 3.23 - Implemented GHG emissions reduction projects.

Philip Morris Kazakhstan LLP

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ e]
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	2019	Natural Gas	125141
Building insulation project	Improving the thermal insulation of wall and window panels of Administrative and Industrial buildings	2019	Natural Gas	132759
Insulation of boiler room	Installation of thermal covers on boiler room and heating station equipment	2021	Natural Gas	7537
Insulation of Primary's equipment	Installation of thermal cases on Primary's equipment	2021	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
Compressed Air - Centralized controller	Wave 2 Compressed Air - Centralized controller (ES8; ES16; Optimizer 4.0)	2021	Electricity	19354
Baseload assessment and reduction	Baseload assessment and reduction - automatic baseload reports in GEMT	2021/2022	Electricity	46254

High-pressure sodium and metal halide to LED	Wave 2 Efficient Lighting (exterior lighting) - High-pressure sodium and metal halide to LED	2023	Electricity	3204
Compressors with VSD	Wave 3 Compressors with Variable Speed Drive	2021	Electricity	25486
Uptime Improvement-high	Uptime Improvement- high speed	2022/2023	Electricity	25984

PMFTC Inc., Batangas Plant

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Chilled Water System Improvements	Optimization and improvements on Chiller, AHU, FCU, heat exchanger and other system using Chilled water	2021 - 2023	Electricity	1250254
Steam System improvements	Includes Improvement of Boiler system, Steam traps and process optimization	2021- 2024	Fuel	302832
Compressed air System Improvements	Includes improvements on Compressed air Pressure Setting, Leak audit, use of Optimizer 4.0 and process improvement	2022- 2023	Electricity	78355
Upgrade of Facility lighting	Upgrade of High-pressure sodium, Metal Halide High Bay lamp and T8 bulb to LED.	2021 - 2023	Electricity	68862
Solar Farm- Roof mounted	Installation of Solar power Farm 2023	2023- 2024	Electricity	1333215
Production consumption improvement	Improvement on production uptime and equipment optimizations	2021 - 2023	Electricity	354059
Vacuum machine Optimization	Vacuum machine Pressure reduction	2021/2022	Electricity	12002
AUH flow Optimization	AHU flow rate optimization - EC fans instead of AC	2024	Electricity	266948
Steam System Improvement	Wave 3 Steam Trap and other Steam improvement	2024	Fuel	46670
Consolidated Energy Project	FE Consolidated 2024 project	2024 - 2025	Electricity	1354205
AI HVAC	HVAC AI Phase2	2024 - 2025	Electricity	516099

Furnace Improvement	Batangas furnace	2024 - 2025	Fuel	109137
Solar Farm Improvement	Upgrade of Solar Inverters	2024 - 2025	Electricity	289750
Production Equipment Improvement	Project one - Individual LU Energy KPI	2024 - 2025	Electricity	271397

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 shut down 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 makeup 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
Solar wall Implementation	Implementation of Solar Wall to decrease natural gas consumption in IS rotary dryer in Primary Plant.	2024	Natural Gas	29500
Electric Boiler	Installation of electric Boiler to decrease the Scope 1 emissions that comes from primary steam demand of the plant (3 ton/h electric boiler) decreasing the natural gas demand.	2025	Electricity	3655000
Photovoltaic powerplant	Photovoltaic powerplant	2024	Electricity	6047000

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

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Primary Working pattern Optimization	Primary pipe reduced running pattern from four days to two days in a week.	2024	Gas	143374
Replacement of gas forklift to electrical rechargeable forklifts	Transition from using gas forklift to electrical rechargeable forklift to reduce gas emission (phase 2)	2023/2024	Gas	145648
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

3.3 Planned GHG emissions reduction initiatives

Table 0 shows main initiatives identified and their estimated reduction for the commitment period to 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]
Energy audit	Conduction of energy audit of boiler house equipment	2024	Gas/diesel	TBD
FTD Main Engine Start-up Optimization	Optimization of the start-up process of the main engine in FTD between batches	2026	Electricity	5630
HVAC System Upgrade	Upgrade of air conditioning system and airflow regulation	2025	Electricity	6840
VSD Installation on HVAC Motor in Primary - CAPEX Request Submission - Awaiting Approval	Installation of Variable Speed Drive on HVAC motor in Primary	2026	Electricity	11256

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Local Installation Primary	Duster in Installation of local duster to minimize use of centralized dust collection system in Primary	2026	Electricity	18956

PMFTC Inc., Batangas Plant

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Culler System improvement	Chilled water system upgrade - Cryogen X4 refrigerant loop cleaning	2025 - 2026	Electricity	89184
CA improvement in Dust collection	Dust collection system compressed air system Optimization - Riedel Soft	2025 - 2026	Electricity	63703
2025 Consolidated project	FE Consolidated 2025 project	2025 - 2026	Electricity	229757
Chiller System upgrade	Wave 3 Chilled water system upgrade - Use of Turbocore chillers	2025 - 2026	Electricity	764442
Solar Farm project	Solar Power Farm Phase 2 - 2024 (e-boiler productivity)	2025 - 2026	Electricity	579277
2026 Consolidated project	FE Consolidated 2026 project	2025 - 2026	Electricity	484146
Production Energy optimization primary	Baseload assessment and reduction - Primary energy centerlines	2025 - 2026	Electricity	63703
Production Energy optimization Secondary	Leakage reduction in Compressed Air system - Individual CA meter	2025-2026	Electricity	47565

Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi

Project name	Description	Year	Type of energy used	Emission reduction [kg CO ₂ eq]
Flash Tower Dryer Heat Recovery	Project to install condensing economizer in the FTD chimney to recover the thermal energy existed in the flue gas. The recovered thermal energy is utilized to heat up the boilers' feedwater.	2026	Natural Gas	51000

	It includes the cost of the piping and the installation of the condensing economizer.			
EC Fan Phase 2	Intention with this retrofit application, is to change outdated technology and aged components of Double Inlet centrifugal radial fans with wedge belt type power transmission with low efficiency class AC motors with modern technology EC-Motor Fan.	2026	Electricity	145000
Production Energy optimization - primary	Baseload assessment and air loss reduction	2025 - 2026	Electricity	18000
Production Energy optimization – Secondary	Leakage reduction in Compressed Air system	2025-2026	Electricity	33000
Cooling Down Air Compressor Room	Project to decrease the temperature of air that is sucked via eight air compressors. Target is to decrease the electricity consumption of air consumption around %2.	2025	Electricity	75000
Efficient Air Compressor Motor upgrade	Intention of the renewal of electric motor of air compressor with more efficient one is to decrease the electric consumption by changing efficiency level from IE2 to IE5.	2026	Electricity	121000

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

Project name	Description	Year	Type of energy used	Emission reduction [kg CO2eq]
Green electricity Purchasing	Green electricity on yearly basis purchasing	2025/2026	Electrical	TBD
Energy Efficiency Plan	The energy efficiency plan encompassed, i.e.: Flash Steam Recovery, and Heat Recovery from CA Plant.	2025/2026	Gas	94449
Motor Replacement	Purchase and installation of more energy efficient motors.	2025/2028	Electrical	131164
Replacement of Big Air Compressor (200Kva)	Replacement of the Big Air compressor with VSD compressor (160Kva)	2026/2027	Electricity	TBC
Vaccudyne Process Elimination	Move the Snuff leaf conditioning to DCC and decommissioning Vaccudyne (High Gas Consumption vs DCC)	2025/2026	Gas	TBC

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

4 Carbon offset program

4.1 Offset program for 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 **Voluntary Carbon Standard (VCS)**¹, **Climate Community and Biodiversity Alliance (CCBA)**², **Gold Standard**³, and other offsets as endorsed in PAS2060.

To compensate 2024 GHG emissions, PMI has selected a set of carbon projects as described in paragraph 4.2.

Credits were retired by **24th September 2025**

These projects are supported by publicly available project documentation 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.

4.2 Offsetting project(s)

Offsetting projects selected by PMI Cluster 2 for compensating the 2024 emissions are:

#	Project Name	Carbon credits allocation		Official project link
		tons	%	
1	UNITOR REDD+ PROJECT	4206	32.3	https://registry.verra.org/app/projectDetail/VCS/2508
2	Pacajai REDD+ Project	8804	67.7	https://registry.verra.org/app/projectDetail/VCS/981
		13010	100%	

¹ <https://verra.org/>

² <http://www.climate-standards.org/>

³ <https://www.goldstandard.org/>

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

Reporting Entity	Credits allocated for compensation (tons)	Vintage	Vintage
KZ (Almaty)	2656	UNITOR REDD+ PROJECT	2018
PH (PMFTC Batangas)	3706	Pacajai REDD+ Project; UNITOR REDD+ PROJECT	2017, 2018
TR (PMTM)	6401	Pacajai REDD+ Project	2017
ZA (LEONARD DINGLER)	248	Pacajai REDD+ Project; UNITOR REDD+ PROJECT	2017
TOTAL	13010		

4.3 Amount of credits purchased

Credits have been ordered by PMI for the period covering **1st of January 2024 31st December 2024**

The amount of credits purchased is **13010 tons of CO₂ equivalent**, it is composed by two contributions:

- **12631 tons of CO₂ equivalent**, amount evaluated for this application period
- **379 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

VERRA guarantees 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 VERRA label also guarantees that the projects involved in delivering credits meet the criteria of additionality, permanence, leakage and double counting.

It also guarantees 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 2024.**

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=133959>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=312380>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=160101>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=132007>

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.

Verification Statement Number:
AS072025 PMI 2024 2025USA

THE ABOVE VERIFICATION STATEMENT IS PROVIDED AS AN INFORMATIONAL SERVICE ONLY. IT DOES NOT CONSTITUTE AN ENDORSEMENT OR A GUARANTEE OF ANY KIND.

Philip Morris International ("PMI") Group of companies ("Group") is pleased to announce that it has been awarded the "Carbon Neutrality" award for the year 2024.

PMI is proud to be recognized as a leader in the industry for its commitment to sustainability and carbon neutrality. This award is a testament to the Group's dedication to reducing its carbon footprint and achieving net-zero emissions.

Philip Morris International
1000 Avenue of the Americas
New York, NY 10020-1097

Philip Morris International

Philip Morris International

Philip Morris International

Philip Morris International

Philip Morris International

Philip Morris International

5 Annex A – Carbon Neutrality Assurance letter



Verification Statement Number:
CCP267919.PMI.2024.20251024

The Carbon Neutrality Declaration as presented in its Qualifying Explanatory Statement (QES), for the application period 01/01/2024 – 31/12/2024 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: Andrew James Collins

Authorised by:



Pamela Chadwick
Business Manager
SGS United Kingdom Ltd

Verification Statement Date: 31 October 2025

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 0000 Fax +44 (0)151 350 0000
Climate Change Programme ukclimatechange@sgs.com www.sgs.com
Member of SGS Group

Registered in England No. 1193985 Registered Office: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN



Schedule Accompanying Greenhouse Gas Verification Statement
CCP267919.PMI.2024.20251024

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 01/01/2024 – 31/12/2024, against the requirements of PAS 2060:2014: Specification for the demonstration of carbon neutrality (PAS 2060).

Role 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 01/01/2024 – 31/12/2024.

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 July to October 2025. 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
- Second application period: Calendar Year 2024

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



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 01/01/2024 – 31/12/2024 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 01/01/2024 – 31/12/2024 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

included and excluded emission sources related to the subject(s) are presented below. Explanatory statements for excluded sources are provided in the table below.

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

Scope	Emission source	Description	Inclusion/Exclusion	Justification of Exclusion
1.1	Stationary combustion	Combustion of fuel 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, trucks, and other vehicles	Included	
1.3	Process emissions	Emissions occurring during the production process (OBT)	Included	
1.4	Fugitive emissions	Refrigerant gases losses	Included	Identified as below materiality
2.1	Electricity consumption	Generation of purchased electricity	Included	
2.2	Heat steam and/or cold water consumption	Purchase of heat steam and cold energy (e.g. produced in industrial operation site)	Included	
3	Scope 3	All other indirect emissions	Excluded	Out of scope

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

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 **2024 emissions**.

#	Project Name	Official project link
1	UNITOR REDD+ PROJECT	https://registry.verra.org/app/projectDetail/VCS/2508
2	Pacajai REDD+ Project	https://registry.verra.org/app/projectDetail/VCS/981



Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 24 Sep 2025, 5,000 Verified Carbon Units (VCUs) were retired on behalf of:

Manufacturing Cluster 2 - see Retirement Reason Details for full list

Project Name
Pacajai REDD+ Project

VCU Serial Number
9738-128442183-128447182-VCS-VCU-259-VER-BR-14-981-01012017-31122017-0

Additional Certifications

Powered by  APX



Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 24 Sep 2025, 1,401 Verified Carbon Units (VCUs) were retired on behalf of:

Manufacturing Cluster 2 - see Retirement Reason Details for full list

Project Name
Pacajai REDD+ Project

VCU Serial Number
9709-126066954-126068354-VCS-VCU-259-VER-BR-14-981-01012017-31122017-0

Additional Certifications

Powered by APX



Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 24 Sep 2025, 2,403 Verified Carbon Units (VCUs) were retired on behalf of:

Manufacturing Cluster 2 - see Retirement Reason Details for full list

Project Name
Pacajai REDD+ Project

VCU Serial Number
9738-128474429-128476831-VCS-VCU-259-VER-BR-14-981-01012017-31122017-0

Additional Certifications

Powered by APX



Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 24 Sep 2025, 4,206 Verified Carbon Units (VCUs) were retired on behalf of:

Manufacturing Cluster 2 - see Retirement Reason Details for full list

Project Name

UNITOR REDD+ PROJECT

VCU Serial Number

13195-478045616-478049821-VCS-VCU-262-VER-BR-14-2508-26042018-31122018-0

Additional Certifications

Powered by APX

10 Annex F – Renewable Energy Certificates

Philip Morris Kazakhstan LLP



The International Tracking Standard Foundation
Founders of I-REC

This Redemption Statement has been produced for

PHILIP MORRIS KAZAKHSTAN LLP.

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

11 067.000000

I-REC Certificates, representing 11 067.000000 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

2024-01-01 to 2024-12-31

The stated Redemption Purpose is

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

PMFTC Inc. Batangas Plant



This Redemption Statement has been produced for

PMI COMPANY PMFTC INC

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

33 131.000000

**I-REC Certificates, representing 33 131.000000 MWh of
electricity generated from renewable sources**

This Statement relates to electricity consumption located at or in

**Factory Batangas and Factory Marikina
Philippines**

in respect of the reporting period

2024-01-01 to 2024-12-31

The stated Redemption Purpose is

**Scope 2 Reporting and CDP disclosure for PMI company PMFTC Inc. Factory Batangas and Factory
Marikina**



PURCHASE STATEMENT

RENEWABLE ENERGY CERTIFICATES FOR PHILIPPINES

*With this certificate Enel X confirms that PMI has purchased 3283
MWh IRECs*

*The certificates were issued for the production of renewable
electricity generated in Philippines for the sole benefit of PMI
company factory PH (PMFTC Marikina)*

Volume 3283

Technology: Large Hydro

Origin: Philippines

Period of consumption covered: Jan24 - Jun24

Production period: Jan24 - Dec24

Commissioning year: _



PURCHASE STATEMENT

RENEWABLE ENERGY CERTIFICATES FOR PHILIPPINES

*With this certificate Enel X confirms that PMI has purchased 11134
MWh IRECs*

*The certificates were issued for the production of renewable
electricity generated in Philippines for the sole benefit of PMI
company factory PH (PMFTC Batangas)*

Volume 11134

Technology: Large Hydro

Origin: Philippines

Period of consumption covered: Jan24 - Jun24

Production period: Jan24 - Dec24

Commissioning year: _



CERTIFICATE OF ORIGIN

This is to certify that no biogenic LIQUID CARBON DIOXIDE, 99.9%, manufactured by the ABSOLUT DISTILLERS, INC. located in Bg. Mambayahan, Linao-4216, Batangas, was supplied to Philip Morris Fortune Tobacco Corporation (PMFTC), Inc. from January to March 2024 (Quarter 1 of 2024).

Further certified that the biogenic liquid CO₂ was obtained from the extraction and purification of the raw carbon dioxide obtained via alcoholic fermentation. The distill 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 14th day of October 2024, this certificate will remain valid given that there are no major changes in the involved raw materials.

Signed
ALVIN C. CHAVEZ, RCh
QA/QC Manager

Noted
Engr. LERENA P. ANTONIO
AVP - Process




BALAYAN DISTILLERY, INC.
BGY. TALISAY, CALACA, BATANGAS
TEL. NOS. (043) 213-7416 / 27 / 30

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **BALAYAN DISTILLERY, INC.** supplies Biogenic CO₂ amounting to **195,000.00 kg**, to PMFTC Inc. The biogenic CO₂ is sourced from the **fermentation of sugarcane molasses** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **2nd of April 2024 for 1st Quarter**.

Signed by
E. Ogorda
ELENITA OGORIDA
QA HEAD



HANNIBAL INDUSTRIES CORPORATION

CERTIFICATE OF ORIGIN

This document confirms and certifies that **HANNIBAL INDUSTRIES CORPORATION** supplies Biogenic CO₂ amounting to **181,310 kg** for the first quarter of 2024, to PMFTC Inc. The biogenic CO₂ produced at our distillery is sourced from the fermentation of Progress Agricoop into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **October 17, 2024**.

David E. Ong
DAVID EMMANUEL ONG
Quality Assurance Manager
HANNIBAL INDUSTRIES CORPORATION




LPSVILLE TRADING

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **LPSVILLE TRADING** supplies Biogenic CO₂ amounting to **555,930.09 kg** to PMFTC Inc. The biogenic CO₂ is sourced from the **MAIN MATERIAL CO₂ is extracted from** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **January 2024 until September 2024**.


Signed by
Dietha Aranda
Dietha Aranda
Assistant QA



PHILIPPINE CO₂ INDUSTRY, INC.
525 M Havel Street, Navotas City
Tel Nos: 8281 7062, 8281 7973 | Telefax: 8781 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 **80,000 kgs** to PMFTC Inc. 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 **January 2024 to March 2024**.

Signed by:

Lindsey Loyalim
Manager



CERTIFICATE OF ORIGIN

This is to certify that the biogenic LIQUID CARBON DIOXIDE, 99.9%, manufactured by the **ABSOLUT DISTILLERS, INC.**, located in Bo. Malabuhay, Lan-4218, Batangas, amounting to **11,110.00 kilograms** was supplied to Philip Morris Fortune Tobacco Corporation (PMFTC) Inc. from April to May 2024 (Quarter 2 of 2024).

Further certified that the biogenic liquid CO₂ was obtained from the extraction and purification of the raw carbon dioxide, obtained via alcoholic fermentation. The distill 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 the 14th day of October 2024, this certificate will remain valid, given that there are no major changes in the involved raw materials.

Signed:

ALWIN J. ALARICO, JR.
QA/CC Manager

Noted:


Engr. LEREN P. ANTONIO
AVP-Process



BALAYAN DISTILLERY, INC.
ROY TALISAY, CALACA, BATANGAS
TEL. NOS. (043) 223-7426 / 27 / 30

CERTIFICATE OF ORIGIN


This document confirms and/or certifies that **BALAYAN DISTILLERY, INC.** supplies Biogenic CO₂ amounting to **165,000.00 kgs** to PMFTC Inc. The biogenic CO₂ is sourced from the **fermentation of sugarcane molasses** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **3rd of July 2024 for 2nd Quarter**.

Signed by:

EZENITA OGORIDA
QA HEAD




CERTIFICATE OF ORIGIN


This document confirms and/or certifies that **LEVILLE TRADING** supplies Biogenic CO₂ amounting to **596,480.00 KG** to PMFTC Inc. The biogenic CO₂ is sourced from the **MAIN MATERIAL CO₂ is extracted from** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **January 2024 until September 2024**.

Signed by:

Daria Avana
Assistant QA

CERTIFICATE OF ORIGIN

This document confirms and certifies that **HANNIBAL INDUSTRIES CORPORATION** supplies Biogenic CO₂ amounting to **93,599 kgs for the 1st quarter of 2024** to PMFTC Inc. The biogenic CO₂ produced at our distillery is sourced from the fermentation of Progreen Agricorn into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **October 17, 2024**.



DAVID EMMANUEL ONG
Quality Assurance Engineer
HANNIBAL INDUSTRIES CORPORATION



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 **154,220 kgs** to PMFTC Inc. 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 **April 2024 to June 2024**.

Signed by:

Lindsey Loyd Lim
Manager



CERTIFICATE OF ORIGIN

This is to certify that the biogenic **LIQUID CARBON DIOXIDE, 99.9%**, manufactured by the **ABSOLUT DISTILLERS, INC.**, located in So. Malarhatan, Lian-4216, Batangas, amounting to **324,960.00 kilograms** was supplied to Philip Morris Fortune Tobacco Corporation (PMFTC), Inc. from July to September 2024 (Quarter 3 of 2024).

Further certified that the biogenic liquid CO₂ was obtained from the extraction and purification of the raw carbon dioxide, obtained via 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 **14th day of October 2024**. This certificate will remain valid given that there are no major changes in the involved raw materials.

Signed

ALVIN M. ALAMO, RCh
QA/CC Manager

Noted

Engr. LERENA P. ANTONIO
AVP - Process




BALAYAN DISTILLERY, INC.
BGY. TALISAY, CALACA, BATANGAS
TEL. NOS. (043) 223-7426 / 27 / 30

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **BALAYAN DISTILLERY, INC.** supplies Biogenic CO₂ amounting to **135,000.00 kgs**, to PMFTC Inc. The biogenic CO₂ is sourced from the **fermentation of sugarcane molasses** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **1st of October 2024 for 3rd Quarter**.

Signed by:


EZENITA A. OGORIDA
QA HEAD



HANNIBAL INDUSTRIES CORPORATION

CERTIFICATE OF ORIGIN

This document confirms and certifies that **HANNIBAL INDUSTRIES CORPORATION** supplies Biogenic CO₂ amounting to **93,490 kgs for the third quarter of 2024** to PMFTC Inc. The biogenic CO₂ produced at our distillery is sourced from the fermentation of Prugreen Agricorp into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **October 17, 2024**.


DAVID EMMANUEL ONG
Quality Assurance Engineer
HANNIBAL INDUSTRIES CORPORATION



www.lpsvilletrading.com | 1-800-888-8888
 878 871 8000 | 812 31427
 2100 South Street, Suwanee, GA 30088


CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **LPSVILLE TRADING** supplies Biogenic CO2 amounting to **596,480.00 KG** to PMFTC Inc. The biogenic CO2 is sourced from the **MAN MATERIAL CO2 is extracted from** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **January 2024 until September 2024**.

Signed by:




David Avena
Assistant QA



HANNIBAL INDUSTRIES CORPORATION

CERTIFICATE OF ORIGIN

This document confirms and certifies that **HANNIBAL INDUSTRIES CORPORATION** supplies Biogenic CO2 amounting to **71,280 kg** for the **second quarter of 2024** to PMFTC Inc. The biogenic CO2 produced at our distillery is sourced from the fermentation of Progreen Agricorp into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **October 17, 2024**.



 DAVID EMMANUEL ONG
 Quality Assurance Engineer
 HANNIBAL INDUSTRIES CORPORATION



CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **L'ORVILLE TRADING** supplies Biogenic CO2 amounting to **511,390.00 KG** to PMFTC Inc. The biogenic CO2 is sourced from the **MAIN MATERIAL CO2 is extracted from** into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **January 2024 until September 2024**.

Signed by:
Daria Avena
Daria Avena
Assistant QA



PHILIPPINE CO₂ INDUSTRY, INC.
535 M. Rizal Street, Quezon City
Tel Nos. 8281-7968, 8281-7973, Telefax: 8281-7953
Email address: info@pcid.com.ph Website: www.pcid.com.ph

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **Philippine CO₂ Industry, Inc.** supplies Biogenic CO₂ amounting to **71,780 kgs** to PMFTC Inc. 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 **July 2024 to September 2024**.

Signed by:
Lindsey Boyd Lim
Lindsey Boyd Lim
Manager



BALAYAN DISTILLERY, INC.
BOY TALIBAY, CALACA, DATAGOAB
TEL. NOS. (043) 223-7437/30 * (043) 419-2046


CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **BALAYAN DISTILLERY, INC.** supplies Biogenic CO₂ amounting to **266,671.00 kgs**, to PMFTC Inc.

The biogenic CO₂ produced at our distillery is sourced from the **fermentation of sugarcane molasses** into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this **27th of January 2025 for the 4th Quarter of 2024**.

Signed by:
Elenita A. Ogorida
ELENITA A. OGORIDA
QA Head



HANNIBAL INDUSTRIES CORPORATION

CERTIFICATE OF ORIGIN

This document confirms and certifies that **HANNIBAL INDUSTRIES CORPORATION** supplies Biogenic CO₂ amounting to **18,290 kgs for the fourth quarter of 2024**, to PMFTC Inc. The biogenic CO₂ produced at our distillery is sourced from the fermentation of Progreen Agricutop into bio-ethanol. No other materials or source have been used other than the above stated. Issued this **January 13, 2025**.

Signed by:
David Emanoel Ong
DAVID EMMANUEL ONG
Quality Assurance Engineer
HANNIBAL INDUSTRIES CORPORATION



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

by
ELTEK ELEKTRİK ENERJİSİ İTH İHR VE TOPTAN TİC AS

confirming the Redemption of

6 012.510000

I-REC Certificates, representing 6 012.510000 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

2024-12-01 to 2024-12-31

The stated Redemption Purpose is

Disclosure for Scope 2 Reporting

Redeemed Certificates

Production Device Details

Device	Country of Origin	Energy Source	Technology Supported	Commissioning Date	Carbon (CO ₂ / MWh)	
Karavutlu HEPP	Turkey	Hydro-electric	Run of river	No	2012-12-18	0.000000

Redeemed Certificates

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000 0220 6193 6141 000000	0000 0220 6194 2153 509999	6 012 510000	Incl	2024-04-01 - 2024-04-30	Foton

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 4 7 5 3 2 5 4

<https://api.international-REC.com/public/certificates/en/211A1a1uN1b1Th19dAM15d1d1u1S1E1d1u1g1T1M1P1C1W1d1g1W1L1N1L1Y1W1D1C1P1P>

Auditor's Notes

This statement is proof of the secure and unique redemption of the I-RECs stated above for the named beneficiary to be reported against consumption in the country during the reporting year stated. I-RECs are assigned to a beneficiary at redemption and cannot be further assigned to a third party. All support costs of these I-RECs is valid under the I-REC Standard.

Where offset attributes are listed, the device responsible, who exclusively holds the environmental attribute rights, has undertaken never to release carbon offsets in association with these I-RECs. I-REC credits can be offset's relating to these I-RECs may be traded independently at some point in the future.

Thermal plants emit carbon as part of the combustion process, while this is not zero carbon, it is generally recognized as a low-carbon source where it is source is recent biomass.

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
2 227 000000

**I-REC Certificates, representing 2 227 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

2024-01-01 to 2024-12-31

The stated Redemption Purpose is

**Scope 2 Reporting and CDP disclosure for Philip Morris South Africa Operations Leonard Dingler
(Pty) Ltd, Factory Leonard Dingler**



Ev. QR Code Verification
Verify the status of this Redemption Statement by entering the QR code on the left and entering in the
Verification Key below.
Verification Key
2 1 0 6 6 7 2 1

CLUSTER 2 CARBON NEUTRAL DECLARATION

END OF THE DOCUMENT

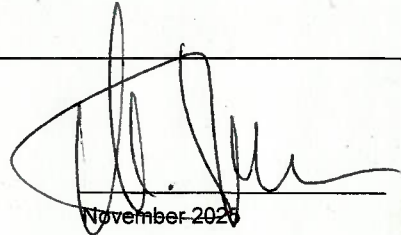


November 2025

Irene Pinto

Director Manufacturing Sustainability

PMI Operations



November 2025

Michael Scharer

VP Global Manufacturing

PMI Operations

