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**DECLARATION OF CARBON  
NEUTRALITY**

**MANUFACTURING ENTITIES CLUSTER 2**

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## 0 Carbon Neutrality declaration

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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 Manufacturing Entities Manufacturing Entities 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. This Cluster, Manufacturing Entities Manufacturing Entities Cluster 2 will be continued for 2025-emissions year declaration.

This is the third declaration of achievement of carbon neutrality for the following list of factories that we will call in this document “Manufacturing Entities Manufacturing Entities Cluster 2 “

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 the factories included in **Cluster 2**, was achieved on 31<sup>st</sup> **December 2025** with a commitment to maintain to it from 1<sup>st</sup> January 2025 until **31<sup>st</sup> December 2026**. The achievement of Manufacturing Entities Manufacturing Entities Cluster 2 facilities’ Carbon Neutrality has been verified by SGS United Kingdom Limited.

### Verification Criteria:

- Determination of emissions and reductions in accordance with the WRI/WBCSD GHG Protocol, Corporate Accounting and Reporting Standard for the baseline year and subsequent years.
- Transparent definition of the scope and boundary of activities included within the subject of the Carbon Neutral claim
- Establishment and Implementation of a Carbon footprint management plan targeting emissions reductions by defined actions
- Quantifiable reductions in emissions have been achieved year on year based on actions taken as part of the Carbon footprint management plan



- Carbon Neutral declaration produced that provides sufficient detailed information for the claim, quantification methodology, scope, carbon management plan, reductions and offsets to be fully transparent.
- Offsetting of residual emissions has been undertaken with carbon credits that:
  - Have been verified by an independent third-party verifier
  - Have been retired or cancelled via an independent and credible registry
  - Are only issued after the reduction associated with the project has taken place (ex-post)
  - Represent genuine additional reductions elsewhere
  - Meet the criteria of permanence, leakage, additionality and permanence as defined in the WRI/WBCSD GHG Protocol for project accounting
  - Are supported by publicly available project documentation available on a registry or equivalent that provides details of the offset project, the quantification methodology and the validation and verification procedures.

Verification opinion from SGS can be found in Annex A.

## 1 Introduction

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This document forms the Qualifying Explanatory Statement (QES) to demonstrate that Philip Morris International (PMI) “Manufacturing Entities Cluster 2” group of manufacturing affiliates has achieved carbon neutrality for the below mentioned manufacturing processes for the period starting 1<sup>st</sup> January 2025 and ending 31<sup>st</sup> December 2025.

PAS 2060:2014 is no longer available as a certifiable standard as of 2026. While this QES applies the methodological principles of PAS 2060:2014 to ensure consistency, it does not constitute nor claim certification under PAS 2060:2014. PMI adheres to the methodological principles and requirements of PAS2060:2014.

In line with our commitment made in 2022 to achieve Carbon Neutrality by 2025, this QES continues to ensure methodological rigor and transparency in how we account for and communicate our carbon-neutrality progress.

The Carbon Neutrality declaration is based on rolling twelve-month data for the 2025 reporting year. Following completion of the reconciliation process, the declaration will be amended to reflect the finalized full-year 2025 data.



This has been achieved through:

- **Continuous carbon emissions reduction** through action plans under PMI direct controls: affiliates and fleet under affiliates' control
- **Compensation of remaining carbon emissions** for the period commencing 1<sup>st</sup> January 2025 and ending 31<sup>st</sup> December 2025.

This report includes the information which substantiates the declaration of PMI Manufacturing Entities Manufacturing Entities Cluster 2 achievement of carbon neutrality for this application period and commitment on carbon neutrality up to 2026.

PMI affiliates grouped in Manufacturing Entities Manufacturing Entities 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.

### 1.1 General information regarding Carbon Neutrality

Information requirement	Information as it relates to PMI Manufacturing Entities Cluster 2 affiliates
Entities in scope of declaration	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 the declaration	Carbon Neutrality of the Scope 1 and 2 emissions under the direct operational control of PMI Manufacturing Entities Manufacturing Entities Cluster 2 Factories (complete list available in Annex B)
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 Manufacturing Entities Manufacturing Entities Cluster 2 factories): <ul style="list-style-type: none"> <li>• Manufacture of Tobacco Related Products;</li> <li>• Flavour &amp; Casing Processing;</li> <li>• Improved Stem Processing;</li> <li>• Cut Filler Processing;</li> </ul>



	<ul style="list-style-type: none"> <li>• Filter Processing;</li> <li>• Machine Cigarette Processing;</li> <li>• Quality Control Laboratory Activities;</li> <li>• Warehousing Activities;</li> <li>• Mentholated Alu Foil Processing;</li> <li>• Other Tobacco Products Processing;</li> <li>• Expanded Tobacco Processing;</li> <li>• Basic Blend Strips Processing;</li> </ul>
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	1 <sup>st</sup> of January 2025
Achievement period	1 <sup>st</sup> of January 2025 31 <sup>st</sup> of December 2025
Commitment period	1 <sup>st</sup> of January 2026 – 31 <sup>st</sup> of December 2026

Table 1.1 - General information

## 1.2 Scope

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

### 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 B).

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 **Manufacturing Entities Cluster 2**, to include them under a same declaration of commitment and achievement.

**Manufacturing Entities 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 case any 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 Manufacturing Entities 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 **Manufacturing Entities Cluster 2** of manufacturing affiliates within the defined boundary from the period **of 1<sup>st</sup> January 2025 to 31<sup>st</sup> December 2025** 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 verified that the Carbon Neutral Declaration set out in this Declaration QES is appropriately reported in accordance with our criteria in paragraph "0 Carbon Neutrality declaration".

The verification opinion issued by SGS can be found in Annex A.



## 2 Quantification of carbon footprint

### 2.1 Emissions results R12M 2025 PMS (Q1,Q2,Q3 2025+Q4 2024)

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 Fugitive Emissions from Replenishment and Estimation [t GHG]	Total CO2 Emissions - Market based [t GHG]	Fleet Vehicles - Total CO2 scope1 (GHG Emissions) [t GHG]	Total CO2 Emissions - Market based [t GHG] (Including Fugitive & Fleet)
KZ (Almaty)	1597.76	12,814.6	0	2,230.0	-	1.4	2231.35	361	2,592.04
PH (PMFTC Batangas)	0	39,904.1	0	4,117.8	2,533.4	0	4117.79	81	4,199.26
TR (PMTM)	0	92,631.6	0	3,932.6	-	71.25	4003.82	385	4,388.92
ZA (LEONARD DINGLER)	0	5,394.6	0	246.9	-	0	246.89	5.25	252.14
		<b>150,744.86</b>		<b>10,527.20</b>		<b>72.7</b>	<b>10,599.9</b>	<b>833</b>	<b>11,432.4</b>



The total GHG emissions in Scope 1 and 2 of **PMI Manufacturing Entities Cluster 2** of manufacturing entities during the **Rolling 12 Months (R12M) year 2025** represent a total of **11,432.4 tons of CO2 equivalent**.

	<b>R12M 2025 GHG emissions Including fugitive emissions [tCO2eq]</b>	<b>R12M 2025 Scope contribution [%]</b>	<b>R12M 2025 GHG emissions excluding fugitive emissions [tCO2eq]</b>	<b>R12M 2025 Scope contribution [%]</b>
<b>CO2 Scope 1 Fuels (GHG emissions) - Manufacturing [t GHG]</b>	<b>10,527.2</b>	<b>92%</b>	<b>10,527.2</b>	<b>92.67%</b>
<b>CO2 Scope1 - Fleet emissions -Vehicles [t GHG]</b>	<b>833</b>	<b>7%</b>	<b>833</b>	<b>7.33%</b>
<b>Fugitive Emissions [t GHG]</b>	<b>72.7</b>	<b>1%</b>		
<b>CO2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]</b>	<b>0</b>			
	<b>11,432.4</b>	<b>100%</b>	<b>11,360</b>	<b>100%</b>
<b>3% overrate</b>	<b>343</b>			
<b>Total GHG emissions with 3% overrate rounded up with decimal</b>	<b>11,776</b>			

Table 2.1 –Manufacturing Entities Cluster 2 GHG emissions overall results

Biogenic CO<sub>2</sub> for some DIET Expanded Tobacco Process (in PH (PMFTC Batangas) plant) were accounted as zero as verified by SGS.

**Renewable electricity in R12M 2025** is covered by renewable energy certificates as verified by SGS.

## 2.2 Methodology

Total GHG emissions associated with PMI affiliates in Manufacturing Entities Cluster 2 for the period from 1<sup>st</sup> January 2025 to 31<sup>st</sup> December 2025 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.

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

- carbon dioxide (CO<sub>2</sub>),
- methane (CH<sub>4</sub>),
- nitrous oxide (N<sub>2</sub>O).



The inventory accounts for 100% of GHG emissions of business activities and operations in which PMI affiliates within Manufacturing Entities 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 Manufacturing Entities 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)

In reporting year 2025, PMI affiliates incorporated fugitive emissions into the GHG inventory. Previously, these emissions were included within the 3% overrate, as they were not reported separately.

This refinement does not alter the established boundaries or scope of the Carbon Neutrality process and further enhances the transparency and accuracy of our reporting. The 3% overrate has not been altered following this addition.

#### 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 Manufacturing Entities 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 Manufacturing Entities Cluster 2 that occur from sources not owned or controlled by each of the affiliates within Manufacturing Entities Cluster 2 and are out of scope.



## 2.3 Data sources

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

1. Primary Data source related to all inputs and outputs corresponding to steps under the affiliates in Manufacturing Entities 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 inventory verification.

Source of data was reviewed by SGS through the GHG Protocol verification process.

## 2.4 Assumptions and estimations

All assumptions made to quantify the greenhouse gas emission of PMI affiliates in Manufacturing Entities 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 B 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 Manufacturing Entities Cluster 2;

Result of the uncertainty calculation is reported in Annex C.

## 2.7 Comparison with baseline period results

2025 is the third year for the reporting and verification for this Manufacturing Entities Cluster 2 (Group of Manufacturing entities/Factories as mentioned previously in paragraph 0).

GHG emissions in the table are excluding fugitive emissions.



GHG scope	2023 GHG emissions [tCO <sub>2</sub> eq]	2024 GHG emissions [tCO <sub>2</sub> eq]	R12M 2025 GHG emissions [tCO <sub>2</sub> eq]
<b>CO2 Scope 1 Fuels (GHG emissions) – Manufacturing [t GHG]</b>	15626	11795	<b>10,527</b>
<b>CO2 Scope1 – Fleet emissions -Vehicles [t GHG]</b>	950	835	833
<b>CO2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]</b>		-	-
<b>Sub Total [tCO<sub>2</sub>eq]</b>	<b>16,576</b>	<b>12,631</b>	<b>11,360</b>

	Year 2023	Year 2024	R12M Year 2025
<b>Absolute emission [tCO<sub>2</sub>eq] excluding fugitive emissions</b>	16,576	12,631	11,360
<b>Absolute reduction</b>		24%	10%
<b>Intensity [t CO<sub>2</sub>/mio Cig eq]</b>	0.121	0.088	0.075
<b>Intensity reduction</b>		27%	10%

GHG emissions in the table are including Fugitive emissions:



Manufacturing Entities Cluster 2 GHG scope	2023 GHG emissions [tCO2eq]	2023 Scope contribution [%]	2024 GHG emissions [tCO2eq]	2024 Scope contribution [%]	R12M 2025 GHG emissions [tCO2eq]
CO2 Scope 1 Fuels (GHG emissions) – Manufacturing [t GHG]	15626	94%	11,795	93%	<b>10,527</b>
CO2 Scope1 – Fleet emissions -Vehicles [t GHG]	950	6%	836	7%	<b>833</b>
Total Fugitive Emissions from Replenishment and Estimation [t GHG]					<b>72.7</b>
CO2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	0	0.00%	-	0%	0
<b>Sub Total [tCO2eq]</b>	<b>16,576</b>	100%	<b>12,631</b>	100%	<b>11,432</b>
<b>3%</b>	497		379		343
<b>Total Carbon footprint [tCO2eq] with 3% (rounded up based on the decimals)</b>	<b>17,073</b>		<b>13,010</b>		<b>11,776</b>

	Year 2023	Year 2024	R12M Year 2025
<b>Absolute emission [tCO2eq] excluding fugitive emissions</b>	16,576	12,631	11,432
<b>Absolute reduction</b>		24%	9%
<b>Intensity [t CO2/mio Cig eq]</b>	0.121	0.088	0.076
<b>Intensity reduction</b>		27%	9%



### 3 Carbon Management Plan

The carbon reduction management plan considers a year period 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 2025, all reporting entities sourced 100% of their electricity from renewable sources, with the exception of Russia and Ukraine. Since 2017, we have gradually increased the uptake of green electricity (as shown in the table below). By investing in electricity generated by renewable sources, PMI overall avoided emissions of **over 2,5 million ton of CO<sub>2</sub> equivalent**.

Indicator	2017	2018	2019	2020	2021	2022	2023	2024	2025 (R12M)	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	30,495	30,276	690,139
CO2 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	345,952	3,280,154
<i>Cumulative difference between Location based and Market based [t GHG]</i>	196,563	245,615	286,824	292,382	295,807	305,644	329,927	321,579	315,676	2,590,016

Table 3.1 - 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 3.2 shows projects implemented in Manufacturing Entities Cluster 2 in the last years, evaluated in Carbon Footprint assessment. For the ease of reference, the projects have been split by entity:

Table 3.22 - Implemented GHG emissions reduction projects.

#### Philip Morris Kazakhstan LLP

Project name	Description	Year	Type of energy used	Emission reduction [kg CO <sub>2</sub> eq]
<b>Pressure optimization</b>	Reducing steam pressure in the facility management system steam supply from 6.7 bar to 6.5 bar	2023	Natural Gas	140000
<b>Compressed Air - Centralized controller</b>	Wave 2 Compressed Air - Centralized controller (ES8; ES16; Optimizer 4.0)	2021	Electricity	19354
<b>Baseload assessment and reduction</b>	Baseload assessment and reduction - automatic baseload reports in GEMT	2021/2022	Electricity	46254
<b>High-pressure sodium and metal halide to LED</b>	Wave 2 Efficient Lighting (exterior lighting) - High-pressure sodium and metal halide to LED	2023	Electricity	3204
<b>Compressors with VSD</b>	Wave 3 Compressors with Variable Speed Drive	2021	Electricity	25486
<b>Energy audit</b>	Conduction of energy audit of boiler house equipment	2025	Gas/diesel	TBD
<b>FTD Main Drive Optimization: Idle-Time RPM Reduction</b>	Reduce the FTD main motor's energy consumption by automatically lowering RPM during idle between batches while preserving start-up reliability and product quality.	2025	Electricity	3315
<b>HVAC System Upgrade</b>	Upgrade of air conditioning system and airflow regulation	2025	Electricity	6840
<b>Dust collector system optimization and synchronization with production plan</b>	Optimize the dust collection (aspiration) system and synchronize its operation with the production schedule to cut energy consumption while maintaining product quality and safe air conditions.	2025	Electricity	5687



<b>Installation adiabatic cooling system for model line chiller 3</b>	Implement an adiabatic humidification (pre-cooling) system on air-cooled chiller condensers to lower intake air temperature during hot periods, improve COP/EER, and reduce electricity use and peak demand	2025	Electricity	6460
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**PMFTC Inc., Batangas Plant**

<b>Project name</b>	<b>Description</b>	<b>Year</b>	<b>Type of energy used</b>	<b>Emission reduction CO2eq</b>	<b>[kg]</b>
<b>Chilled Water System Improvements</b>	Optimization and improvements on Chiller, AHU, FCU, heat exchanger and other system using Chilled water	2021 - 2023	Electricity	1250254	
<b>Steam System improvements</b>	Includes Improvement of Boiler system, Steam traps and process optimization	2021- 2024	Fuel	302832	
<b>Compressed air System Improvements</b>	Includes improvements on Compressed air Pressure Setting, Leak audit, use of Optimizer 4.0 and process improvement	2022- 2023	Electricity	78355	
<b>Upgrade of Facility lighting</b>	Upgrade of High-pressure sodium, Metal Halide High Bay lamp and T8 bulb to LED.	2021 - 2023	Electricity	68862	
<b>Solar Farm- Roof mounted</b>	Installation of Solar power Farm 2023	2023- 2024	Electricity	1333215	
<b>Vacuum machine Optimization</b>	Vacuum machine Pressure reduction	2021-2022	Electricity	12002	
<b>AHU flow Optimization</b>	AHU flow rate optimization - EC fans instead of AC	2024	Electricity	266948	
<b>Consolidated Energy Project</b>	FE Consolidated 2024 project	2024 - 2025	Electricity	1354205	
<b>AI HVAC</b>	HVAC AI Phase2	2024 - 2025	Electricity	516099	
<b>Furnace Improvement</b>	Batangas furnace	2024 - 2025	Fuel	109137	
<b>Solar Farm Improvement</b>	Upgrade of Solar Inverters	2024 - 2025	Electricity	289750	
<b>2025 Consolidated project</b>	FE Consolidated 2025 project	2025 - 2026	Electricity	506462	
<b>Production Energy optimization - primary</b>	Baseload assessment and reduction - Primary energy centerlines	2025 - 2026	Electricity	27011	
<b>Insulation of Primary equipment</b>	Insulation of Steam piping and equipment	2025 - 2026	FUEL	43179	
<b>Production Energy optimization Secondary</b>	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 <sub>2</sub> eq]
<b>Solar wall Implementation</b>	Implementation of Solar Wall to decrease natural gas consumption in IS rotary dryer in Primary Plant.	2024	Natural Gas	29500
<b>Electric Boiler</b>	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
<b>Photovoltaic powerplant</b>	Photovoltaic powerplant	2024	Electricity	6047000
<b>FTD Boiler Idle Mode Optimisation</b>	Idle FTD boiler consumption decreased to '0'	2025	Natural Gas	200000
<b>Start-up &amp; Shut-Down Optimization</b>	Structural Checklist for startup-shutdown activities	2025	Electricity & Natural Gas	103000
<b>Individual Energy Monitoring of Production Machines</b>	LU based compressed energy flowmeters installed, KPI's of each LU defined and tracked	2025	Electricity	326180

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

Project name	Description	Year	Type of energy used	Emission reduction [kg CO <sub>2</sub> eq]
<b>Primary Working pattern Optimization</b>	Primary pipe reduced running pattern from four days to two days in a week.	2025	Gas	143374
<b>Replacement of gas forklift to electrical rechargeable forklifts</b>	Transition from using gas forklift to electrical rechargeable forklift to reduce gas emission (phase 2)	2024	Gas	145648
<b>Shutdown Management</b>	Implementation of a management system to optimize the	2025	Gas	160423



	operating periods of utility equipment, such as: AHUs and Steam Boilers.			
<b>Green electricity Purchasing</b>	Green electricity on yearly basis purchasing	2025	Electrical	2740603
<b>LED Lighting</b>	Replacement of lighting with LED technologies (90% completion)	2025	Electrical	528
<b>Energy Efficiency Plan</b>	The energy efficiency plan encompassed, i.e.: Flash Steam Recovery, and Heat Recovery from CA Plant.	2025	Gas	94449

### 3.3 Planned GHG emissions reduction initiatives

Table 3.30 shows main initiatives identified and their estimated reduction for the commitment period to 2025 for PMI factories included in Manufacturing Entities Cluster 2. For ease of reading, the initiatives have been split by entity:

Table 3.3 - Planned GHG emissions reduction initiatives in Manufacturing Entities Cluster 2

#### Philip Morris Kazakhstan LLP

Project name	Description	Year	Type of energy used	Emission reduction [kg CO <sub>2</sub> eq]
<b>Local duster installation in Primary</b>	Installation of local duster to minimize use of centralized dust collection system in Primary	2026	Electricity	18956
<b>Installation adiabatic cooling system for chillers</b>	Implement an adiabatic humidification (pre-cooling) system on air-cooled chillers condensers to lower intake air temperature during hot periods, improve COP/EER, and reduce electricity use and peak demand	2026	Electricity	12920
<b>VSD Installation on HVAC Motor in Primary - CAPEX Request Submission – Awaiting Approval</b>	Installation of Variable Speed Drive on HVAC motor in Primary	2027	Electricity	11256



Project name	Description	Year	Type of energy used	Emission reduction [kg CO <sub>2</sub> eq]
<b>Admin Building Conservation: Closing Unused Areas &amp; Cutting Systems Energy Use</b>	Reduce annual energy use and peak demand by closing/isolating unused floor area and setting building systems (HVAC, lighting, DHW, plug loads, etc.) to energy-saving modes.	2026	Electricity \ Fuel	135000

#### PMFTC Inc., Batangas Plant

Project name	Description	Year	Type of energy used	Emission reduction [kg CO <sub>2</sub> eq]
<b>Solar Farm project</b>	Solar Power Farm Phase 2 - 2024 (e-boiler productivity)	2026 - 2027	Electricity	579277
<b>Chiller System upgrade</b>	Wave 3 Chilled water system upgrade - Use of Turbocore chillers	2026 - 2027	Electricity	764442
<b>Steam Trap Upgrade</b>	Upgrade of Float type Steam trap to Venturi steam trap	2026 - 2027	Fuel	365199
<b>Boiler Operation Matrix</b>	Boiler Operation Matrix for efficient steam supply	2026 - 2027	Fuel	105744
<b>2026 Consolidated project</b>	FE Consolidated 2026 project	2026 - 2027	Electricity	424690

#### Philip Morris Tütün Mamulleri Sanayi ve Ticaret Anonim Şirketi

Project name	Description	Year	Type of energy used	Emission reduction [kg CO <sub>2</sub> eq]
<b>Flash Tower Dryer Heat Recovery</b>	Installation of 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
<b>EC Fan Phase 2</b>	Retrofit application to change outdated technology 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
<b>Production Energy optimization - primary</b>	Baseload assessment and air loss reduction	2025 - 2026	Electricity	18000
<b>Production Energy optimization - Secondary</b>	Leakage reduction in Compressed Air system	2025-2026	Electricity	33000



<b>Dedusting Area Compressed Air Reduction</b>	Implementation of new pulse valve on dedusting systems both improve system efficiency and compressed air consumption	2026	Electricity	223206
<b>Efficient Air Compressor Motor upgrade</b>	Renewal of electric motor of air compressor with more efficient one 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 CO <sub>2</sub> eq]
<b>Green electricity Purchasing</b>	Green electricity on yearly basis purchasing	2026	Electrical	TBD
<b>LED Lighting</b>	Replacement of lighting with LED technologies (project still in progress)	2026	Electrical	59
<b>Motor Replacement</b>	Purchase and installation of more energy efficient motors.	2026/2027	Electrical	131164
<b>Replacement of Big Air Compressor (200Kva)</b>	Replacement of the Big Air compressor with VSD compressor (160Kva)	2026/2027	Electricity	TBC
<b>Vaccudyne Process Elimination</b>	Move the Snuff leaf conditioning to Direct Conditioning Cylinder and decommissioning Vaccudyne (High Gas Consumption vs Direct Conditioning Cylinder)	2026/2027	Gas	TBC

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



## 4 Carbon offset program

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### 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)**<sup>1</sup>, **Climate Community and Biodiversity Alliance (CCBA)**<sup>2</sup>, **Gold Standard**<sup>3</sup>.

To compensate R12M 2025 GHG emissions, PMI has selected a set of carbon projects as described in paragraph 4.2.

Credits were **retired on 28th January 2026**.

These projects are supported by publicly available project documentation on the [GSF Registry \(goldstandard.org\)](https://www.goldstandard.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.

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<sup>1</sup> <https://verra.org/>

<sup>2</sup> <http://www.climate-standards.org/>

<sup>3</sup> <https://www.goldstandard.org/>



## 4.2 Offsetting project(s)

Offsetting projects selected by PMI Manufacturing Entities Cluster 2 for compensating the R12M 2025 emissions are:

#	Project Name	Carbon credits allocation		Official project link
		tons	%	
1	GS1247 VPA 103 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes Malawi	2500	21.23	<a href="https://registry.goldstandard.org/projects/details/1478">https://registry.goldstandard.org/projects/details/1478</a>
2	Henan Funiushan Solar Cooker Project Phase I	707	6.00	<a href="https://registry.goldstandard.org/projects/details/1654">https://registry.goldstandard.org/projects/details/1654</a>
3	WWF Mamize Firewood-Saving Cook Stove Project I	2569	21.82	<a href="https://registry.goldstandard.org/projects/details/69">https://registry.goldstandard.org/projects/details/69</a>
4	WWF Meigu High Efficient Cook Stove Project	6000	50.95	<a href="https://registry.goldstandard.org/projects/details/839">https://registry.goldstandard.org/projects/details/839</a>
		<b>11776</b>	<b>100%</b>	

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

Reporting Entity	Credits allocated for compensation (tons)	Project chosen for compensation	Vintage
KZ (Almaty)	1963	WWF Mamize Firewood-Saving Cook Stove Project I	2017
	707	Henan Funiushan Solar Cooker Project Phase I	2019
PH (PMFTC Batangas)	606	WWF Mamize Firewood-Saving Cook Stove Project I	2017
	1000	WWF Meigu High Efficient Cook Stove Project	2017
	2100	WWF Meigu High Efficient Cook Stove Project	2018
	619	WWF Meigu High Efficient Cook Stove Project	2019
TR (PMTM)	2500	GS1247 VPA 103 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes Malawi	2019
	2021	WWF Meigu High Efficient Cook Stove Project	2019
ZA (LEONARD DINGLER)	260	WWF Meigu High Efficient Cook Stove Project	2019
<b>TOTAL</b>	<b>11776</b>		



### 4.3 Amount of credits purchased

Credits have been purchased by PMI for the period covering **1<sup>st</sup> of January 2025 31<sup>st</sup> December 2025**

The amount of credits purchased is **11776 tons of CO<sub>2</sub> equivalent**, it is composed by two contributions:

- **11432 tons of CO<sub>2</sub> equivalent**, amount evaluated for this application period
- **344 tons of CO<sub>2</sub> equivalent**, that represent an **additional 3%** of the baseline carbon footprint to **cover all the exclusions** (Annex B) and **to preclude underestimation**.

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

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

The Gold Standard and 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 Gold Standard and 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 *Manufacturing Entities Cluster 2* of manufacturing entities, for offsetting unavoidable emissions, **in year 2025**.

<https://registry.goldstandard.org/batch-retirements/details/232488>

<https://registry.goldstandard.org/batch-retirements/details/232489>

<https://registry.goldstandard.org/batch-retirements/details/232490>

<https://registry.goldstandard.org/batch-retirements/details/232495>

<https://registry.goldstandard.org/batch-retirements/details/232497>

<https://registry.goldstandard.org/batch-retirements/details/232511>



## 5 Annex A – Carbon Neutrality Verification opinion



**Verification Statement Number:**  
CCP267920MC2.PMI.2025.2026.02.15

The Carbon Neutrality Declaration Report as presented, for the application period  
01/01/2025 – 31/12/2025 by:

**Phillip Morris International Manufacturing Entities Cluster 2, as defined in the  
scope section of this opinion and comprising manufacturing related activities  
of:**

Reporting entity
KZ (Almaty)
PH (PMFTC Batangas)
TR (PMTM)
ZA (LEONARD DINGLER)

has been verified by SGS United Kingdom Limited as Carbon Neutral and in  
accordance with current best practice for carbon neutrality claims as per the  
verification criteria detailed below.

Lead Assessor: Lisa Gibson  
Technical Reviewer: Andrew Collins

Authorised by:

James McGurk  
Managing Director  
SGS United Kingdom Ltd

Verification Statement Date: 15 February 2026

This Statement is not valid without the full verification scope, objectives, criteria and conclusion available on pages 2 to 4  
of this Statement

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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**  
CCP267920MC2.PMI.2025.2026.02.15

**Brief Description of Verification Process**

SGS has been contracted by Philip Morris International for the verification of their Carbon Neutrality Declaration Report for Manufacturing Entities Cluster 2, for the application period 01/01/2025 – 31/12/2025

**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, determination of GHG emissions reductions, preparation of reports and purchase and retirement of appropriate 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.

SGS conducted a third-party verification following the requirements of ISO 14064-3:2019 of the provided carbon neutral declaration report during the period September 2025 to February 2026. 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.

**Verification Criteria:**

- Determination of emissions and reductions in accordance with the WRI/WBCSD GHG Protocol, Corporate Accounting and Reporting Standard for the baseline year and subsequent years.
- Transparent definition of the scope and boundary of activities included within the subject of the Carbon Neutral claim
- Establishment and Implementation of a Carbon footprint management plan targeting emissions reductions by defined actions
- Quantifiable reductions in emissions have been achieved year on year based on actions taken as part of the Carbon footprint management plan
- Carbon Neutral declaration produced that provides sufficient detailed information for the claim, quantification methodology, scope, carbon management plan, reductions and offsets to be fully transparent.
- Offsetting of residual emissions has been undertaken with carbon credits that:
  - Have been verified by an independent third-party verifier
  - Have been retired or cancelled via an independent and credible registry
  - Are only issued after the reduction associated with the project has taken place (ex-post)
  - Represent genuine additional reductions elsewhere
  - Meet the criteria of permanence, leakage, additionality and permanence as defined in the WRI/WBCSD GHG Protocol for project accounting
  - Are supported by publicly available project documentation available on a registry or equivalent that provides details of the offset project, the quantification methodology and the validation and verification procedures.

**Objectives**

- The purpose of the verification exercise was, by review of objective evidence, to independently review and confirm:
- That the carbon neutrality declaration report and company actions conform to the specified verification criteria
- That the emissions data reported in the declaration, including reductions, are accurate, complete, consistent, transparent, and free of material error or omission and have been



determined in accordance with .WRI/WBCSD GHG Protocol, Corporate Accounting and Reporting Standard

- That evidence is available to support information reported within the carbon neutrality declaration report 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
- The environmental information provided was based on a combination of historical data, estimation methodologies and data extrapolation considered representative of calendar year 2025. Data is actual for January to September 2025 and estimated for October to December 2025, with the exception of markets environmental data which is actual for January to June 2025 and estimated for July to December 2025.

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

PMI affiliates included:  
KZ (Almaty)  
PH (PMFTC Batangas)  
TR (PMTM)  
ZA (LEONARD DINGLER)



**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 CO<sub>2</sub> equivalent emissions and carbon neutrality declaration report for the period 01/01/2025 – 31/12/2025 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 report based on the criteria outlined above. The carbon neutrality declaration report for the application period 01/01/2025 – 31/12/2025 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 report is materially correct and is a fair representation of the CO<sub>2</sub> equivalent data and information and conforms to the specified verification criteria.

Note: This Opinion is issued, on behalf of Client, by SGS United Kingdom Ltd, Rossmore Business Park, Inward Way, Ellesmere Port, Cheshire, CH65 9EN ("SGS") under its General Conditions for GHG Validation and Verification Services. The findings recorded hereon 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 – 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	Included	As of 2025 reporting year.
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 6.1 - 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 <sub>2</sub>	Energy	7%	7%	10%
CO <sub>2</sub>	Industrial Processes	7%	7%	10%
CO <sub>2</sub>	Land Use Change and Forrestry	33%	50%	60%
CH <sub>4</sub>	Biomass Burning	50%	50%	100%
CH <sub>4</sub>	Oil and Nat. Gas Activities	55%	20%	60%
CH <sub>4</sub>	Rice cultivation	$\frac{3}{4}$	$\frac{1}{4}$	1
CH <sub>4</sub>	Waste	$\frac{2}{3}$	$\frac{1}{3}$	1
CH <sub>4</sub>	Animals	25%	10%	20%
CH <sub>4</sub>	Animal waste	20%	10%	20%
N <sub>2</sub> O	Industrial Processes	35%	35%	50%
N <sub>2</sub> O	Agricultural Soils			2 orders of magnitude
N <sub>2</sub> 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 7.2 - IPCC uncertainty data



## 8 Annex D – Voluntary offset program

In this annex, shortlist of projects chosen for compensation of **2025 R12M emissions**.

#	Project Name	Official project link
1	GS1247 VPA 103 Improved Kitchen Regimes Multi-Country PoA- Kasungu Boreholes Malawi	<a href="https://registry.goldstandard.org/projects/details/1478">https://registry.goldstandard.org/projects/details/1478</a>
2	Henan Funiushan Solar Cooker Project Phase I	<a href="https://registry.goldstandard.org/projects/details/1654">https://registry.goldstandard.org/projects/details/1654</a>
3	WWF Mamize Firewood-Saving Cook Stove Project I	<a href="https://registry.goldstandard.org/projects/details/69">https://registry.goldstandard.org/projects/details/69</a>
4	WWF Meigu High Efficient Cook Stove Project	<a href="https://registry.goldstandard.org/projects/details/839">https://registry.goldstandard.org/projects/details/839</a>



PHILIP MORRIS  
INTERNATIONAL

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MANUFACTURING ENTITIES CLUSTER 2 CARBON NEUTRAL DECLARATION

END OF THE DOCUMENT

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