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DECLARATION OF CARBON NEUTRALITY

MANUFACTURING ENTITIES CLUSTER1

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0 Carbon Neutrality declaration

The **Qualifying Explanatory Statement** (QES) contains all the required information on the carbon neutrality of the given subject. All information provided within this report has been **reviewed by a third party** (SGS). If provided with any information affecting the validity of the following statements, this document will be updated accordingly to reflect the Cluster 1 (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 the carbon neutral declaration process, we decided to cluster factories under the same declaration of commitment and achievement. This Cluster, Cluster 1 will be continued for 2024-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 "Cluster 1", as per PAS 2060:2014 standard.

List of factories:

Reporting entity	Current Legal Entity
PT (TABAQUEIRA)	Tabaqueira Empresa Industrial de Tabacos S.A.
CH (PMP SA Neuch)	Philip Morris Products SA
LT (Klaipeda)	UAB Philip Morris Lietuva
CZ (Kutna Hora)	Philip Morris CR, a.s.
AR LF (MASSALIN Lrm)	MASSALIN PARTICULARES SRL, Lerma
BR (Santa Cruz)	Philip Morris Brasil Industria e Comercio Ltda.
GR (PAPASTRATOS)	Papastratos Cigarette Manufacturing Company, S.A.
SN (Dakar)	Philip Morris Manufacturing Senegal S.A.R.L.
PK LF (PMPK Mard)	Philip Morris (Pakistan) Limited, Mardan Factory
ID (SAMP Sukorejo)	PT Hanjaya Mandala Sampoerna, Tbk. Sukorejo Plant
ID (PTSIS Sukorejo)	PT Sampoerna Indonesia Sembilan, Sukorejo Pasuruan
ID SKT (Malang SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Malang
ID SKT (Rungkut 1 SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Rungkut 1
ID SKT (Rungkut 2 SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Rungkut 2
ID SKT (Kraksaan SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Kraksaan
ID (PTPMI Karawang)	PT Philip Morris Indonesia Karawang International, Karawang
ID (SAMP Karawang)	PT Hanjaya Mandala Sampoerna, Tbk., Karawang Plant
AR (MASSALIN Merlo)	MASSALIN PARTICULARES S.R.L., Merlo
RS (DIN)	Philip Morris Operations a.d. Nis
JO (Amman)	Philip Morris Investments B.V. Jordan
RO (Bucharest)	Philip Morris Romania SRL

Carbon Neutrality of the Scope 1 and Scope 2 emissions under the direct operational control of Cluster 1, achieved by Cluster 1 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 1 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 1" 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
- 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 1 achievement of carbon neutrality for this application period (under PAS 2060:2014) and commitment on carbon neutrality up to 2025 (3 years, from 2022 the reference year) in compliance with PAS 2060:2014 standard.

PMI affiliates grouped in Cluster 1 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 1 affiliates
Entities making PAS 2060 declarations	PMI Factories Cluster 1, 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 1 Factories (complete list available in Annex C)
Function of subject	Factories and 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 1 factories): • 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; • Stemmery Processes; • Print Shop Activities; • Manufacturing of Reduced Risk Products; • Mentholated Inner Liner Processing; • Other Tobacco Products Processing; • Cast Leaf Processing; • Manufacturing of Heated Tobacco sticks; • Manufacture of Hand-Rolled Cigarettes; • Clove Processing; • Reconstituted Tobacco & Clove Processing; • Expanded Tobacco Processing; • Basic Blend Strips Processing;
Rationale for selection of the subjects	PMI's ambition is to be carbon neutral for all of its direct operations (factories, fleet and offices) by 2025. In this journey, all subjects (factories) that have reached substantial emission reduction in the past years qualify to compensate residual emissions and become carbon neutral.
Type of conformity assessment undertaken	I3P-3 Independent third-party certification - unified
Reference date for PAS 2060 program	1st of January 2024
Achievement period	1st of January 2024– 31st of December 2024
Commitment period	1st of January 2025 – 31st of December 2025

Table 1.1 - General information

1.2 Scope

The **subject** for carbon neutrality is manufacturing entities grouped in the following Cluster 1 or group of entity.

Philip Morris International, Manufacturing entities grouped in Cluster 1:

Reporting entity	Production Type	Current Legal Entity
PT (TABAQUEIRA)	CC	Tabaqueira Empresa Industrial de Tabacos S.A.
CH (PMP SA Neuch)	CC	Philip Morris Products SA
LT (Klaipeda)	CC	UAB Philip Morris Lietuva
CZ (Kutna Hora)	CC	Philip Morris CR, a.s.
AR LF (MASSALIN Lrm)	CC	MASSALIN PARTICULARES SRL, Lerma
BR (Santa Cruz)	CC	Philip Morris Brasil Industria e Comercio Ltda.
GR (PAPASTRATOS)	SFP (RRP)	Papastratos Cigarette Manufacturing Company, S.A.
SN (Dakar)	CC	Philip Morris Manufacturing Senegal S.A.R.L.
PK LF (PMPK Mard)	CC	Philip Morris (Pakistan) Limited, Mardan Factory
ID (SAMP Sukorejo)	CC	PT Hanjaya Mandala Sampoerna, Tbk. Sukorejo Plant
ID (PTSIS Sukorejo)	CC	PT Sampoerna Indonesia Sembilan, Sukorejo Pasuruan
ID SKT (Malang SAMPOERNA)	CC	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Malang
ID SKT (Rungkut 1 SAMPOERNA)	CC	PT Hanjaya Mandala Sampoerna, Tbk. -SKT Plant Rungkut 1
ID SKT (Rungkut 2 SAMPOERNA)	CC	PT Hanjaya Mandala Sampoerna, Tbk., SKT Plant Rungkut 2
ID SKT (Kraksaan SAMPOERNA)	CC	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Kraksaan
ID (PTPMI Karawang)	CC	PT Philip Morris Indonesia Karawang International, Karawang
ID (SAMP Karawang)	CC	PT Hanjaya Mandala Sampoerna, Tbk., Karawang Plant
AR (MASSALIN Merlo)	CC	MASSALIN PARTICULARES S.R.L., Merlo
RS (DIN)	CC	Philip Morris Operations a.d. Nis
JO (Amman)	CC	Philip Morris Investments B.V. Jordan
RO (Bucharest)	SFP (RRP)	Philip Morris Romania SRL

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 2022, due to continuous growth of our community of factories that have been joining carbon neutral declaration process, we decided to cluster them under the same declaration of commitment and achievement.

Cluster 1 declaration includes *twenty-one* Manufacturing reporting entities (nineteen reporting entities are mainly defined as Conventional cigarettes sites and two reporting entities are mainly producing SFP/RRP).

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 1** 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 1 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 (GHG emissions) - Manufacturing - Market based [t GHG]	Fleet Vehicles - Total CO2 scope1 (GHG Emissions) [t GHG]	Total CO2 (GHG emission) 2024 MARKET based
AR (MASSALIN Merlo)		17148.1		1864.09		1864.09	88.86	1953
AR LF (MASSALIN Lrm)		39818.14		3870.52		3870.52	50.07	3921
BR (Santa Cruz)		18535.95	1124.034	1345.15	0	2469.18	0.91	2470
CH (PMP SA Neuch)	1812.98	12988.99		1061.75		1061.75		1062
CZ (Kutna Hora)		39889.7		2247.25		2247.25	60.12	2307
GR (PAPASTRATOS)	25649.12	25649.12		11621.59		11621.59	50.45	11672
ID (PTPMI Karawang)		20531.36		710.3		710.3	1.03	711
ID (PTSIS Sukorejo)		458.57		7.06		7.06		7
ID (SAMP Karawang)	4134.836	28071.08		5407.4		5407.4	44.52	5452
ID (SAMP Sukorejo)		39991.33	0	3696.56	2115.88	3696.56	76.11	3773
ID SKT (Kraksaan SAMPOERNA)		2050.85		1.23		1.23	21.14	22
ID SKT (Malang SAMPOERNA)		788.54		0.53		0.53	1.77	2
ID SKT (Rungkut 1 SAMPOERNA)		617.91		0.29		0.29	45.75	46
ID SKT (Rungkut 2 SAMPOERNA)		2481.33		0.60		0.60	11.82	12
JO (Amman)		3565.74		267.25		267.25	8.26	276
LT (Klaipeda)		31281.76		842.24	147	147	23	170
PK LF (PMPK Mard)		0		1186.33		1186.33	209.94	1396
PT (TABAQUEIRA)		44700.91		3387.72		3387.72	51.85	3440
RO (Bucharest)	27319.24	28226.41		17114.04		17114.04	42.25	17156
RS (DIN)		56242.56		4108.43		4108.43	102.56	4211
SN (Dakar)		4166.53		247.62		247.62	31.21	279

The total GHG emissions in scope 1 and 2 of Philip Morris International Cluster 1 of manufacturing entities during the **year 2024** (third application period) represent a total of **60339 tons of CO_2 equivalent**.

GHG scope	2024 GHG emissions [tCO_2eq]	2024 Scope contribution [%]
CO_2 Scope 1 Fuels (GHG emissions) – Manufacturing [t GHG]	58293	96.6%
CO_2 Scope1 – Fleet emissions - Vehicles [t GHG]	922	1.6%
CO_2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	1124	1.8%
Sub Total [tCO_2eq]	**60339**	100%

Table 2.1 – Cluster 1 GHG emissions overall results

Biogenic CO_2 for some DIET Expanded Tobacco Process (in Indonesia plant - ID SAMP Sukorejo) were accounted as zero as Biogenic CO_2 covered as per evidence in the Annex F.

695 tons of CO_2eq related to **Natural gas in 2024** are covered by green gas certificates in **Lithuania (Klaipeda)** plant as per evidence provided in Annex F.

2.2 Methodology

Total GHG emissions associated with PMI affiliates in Cluster 1, 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 (CO_2),
- methane (CH_4),
- nitrous oxide (N_2O).

The inventory accounts for 100% of GHG emissions of business activities and operations in which PMI affiliates within Cluster 1 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 1. 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 1. 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 1 that occur from sources not owned or controlled by each of the affiliates within Cluster 1 and are out of scope.

2.3 Data sources

Primary and secondary data has been used for the Carbon Quantification process. Primary data is used where possible, only where primary data was not available, secondary data was used to quantify emissions. For scope 1 and 2, **exclusively primary data was used,** except for the calculation of emissions from fleet where secondary data was used only for UAB Philip Morris Lietuva, Philip Morris CR a.s. and Philip Morris Investments B.V. Jordan. For these three cases the fuel consumption and emissions have been determined by using the PMI available data for Fleet in the respective country. Taking the average fuel consumption per vehicle, this value has been multiplied by the number of vehicles in the factory. The total fuel consumption was then multiplied using DEFRA coefficient to determine the emissions.

1. Primary Data source related to all inputs and outputs corresponding to steps under the affiliates in Cluster 1 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 1 were reviewed by SGS through the GHG inventory verification process. For scope 1 and 2, no assumptions were made. For fleet of the three reporting entities mentioned in 2.3 paragraph the fuel consumption and emissions have been determined by using the PMI available data for Fleet in the respective country taking the average fuel consumption per vehicle, this value has been multiplied by the number of per vehicles in the factory. The total fuel consumption is then multiplied using DEFRA coefficient to determine the emissions.

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, except the fleet emission for three entities mentioned in paragraph 2.3.

Result of the uncertainty calculation is reported in Annex D.

2.7 Comparison with baseline period results

2024 is the third year for the PAS 2060:2014 certification for this Cluster 1 (Group of Manufacturing entities/factories as mentioned previously in paragraph 0).

SFP (RRP) products are converted to mio cigarette equivalent volumes using the relative efficiency in the 2022 year baseline period.

GHG scope	2022 GHG emissions [tCO2eq]	2023 GHG emissions [tCO2eq]	2024 GHG emissions [tCO2eq]
CO_2 Scope 1 Fuels (GHG emissions) - Manufacturing [t GHG]	58018.4	61321.9	**58,293**
CO_2 Scope1 - Fleet emissions -Vehicles [t GHG]	855.7	1001.0	**922**
CO_2 Scope 1 Emissions from DIET (GHG emissions) Expanded Tobacco [t GHG]	1712.9	1268.3	**1,124**
Sub Total [tCO2eq]	**60,587**	**63,591**	**60,339**
3%	1818	1908	1810
Total Carbon footprint [tCO2eq] with 3% (rounded up based on the decimals)	**62,405**	**65,499**	**62,149**

	Emission Year 2021	Emission Year 2022		
SFP (RRP) Intensity (CO_2 t/mio Cig eq)	0.639	0.688		
CC Intensity	0.129	0.101		
Conversion factors	4.97	**6.85**		
	Year 2021	**Year 2022**	**Year 2023**	**Year 2024**
new Denominator	463,628	590,236	684,777	**726,830**
	Emission Year 2021	**Emission Year 2022**	**Emission Year 2023**	**Emission Year 2024**
New Intensity per Cluster 1 [CO_2 t/ new Denumerator]	0.132	0.103	0.093	0.083
Intensity reduction		**22%**	**10%**	**10,6%**

3 Carbon Management Plan

The carbon reduction management plan considers a 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 (paragraph 3.2) and planned (paragraph 3.3) projects, that are mainly related to production plant GHG emissions reductions.

3.1 PMI best practice

In 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 CO_2 equivalent.**

Indicator	2017	2018	2019	2020	2021	2022	2023	2024	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*	659,863
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*	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 3.1 - 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 3.2 shows projects implemented in Cluster 1 in the last years, evaluated in 2024 Carbon Footprint assessment. For the ease of reference, the projects have been split by entity:

Table 3.2 - Implemented GHG emissions reduction projects.

Philip Morris SA - Neuchatel

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Primary insulation improvement	Insulate remaining steam pipes and valves to reduce heat losses	2023	Gas	8710
Project One	Install meters on each production line and implement a reporting tool to follow-up and reduce overconsumption at the production side	2024	Gas	22000
AI HVAC (Artificial Intelligence Heating Ventilation Air Conditioning) Phase 2	Optimize gas consumption used for ensuring humidity in production are using Artificial Intelligence tools.	2024	Gas	25000

UAB Philip Morris Lietuva

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
AI HVAC	Artificial intelligence system for Air Handling Units which optimizes cooling, heating and humidification usage. ZOOM-HVAC phase 2 Roll-out 2021 (OPP-018796).	2023/2024	Electricity/Fuel	96000
Chilled Water Low dT	Chilled water system upgrade - low dT control on AHU cooling coil (BMS dT control or simple stand-alone controller) (OPP-017023).	2023/2024	Electricity	21303 (Avoided)
Air Flow Control	AHU flow rate optimization – Fresh air intake controlled based on actual dedusting system exhaust (OPP-017176)/	2023/2024	Electricity	69911 (Avoided)
Thermal Insulation	Additional installation on boilers, steam and condensate supply lines in production and technical areas. (OPP-024774)	2024	Fuel	47 764
Chilled Water Optimizer	Cloud base central plant control software for cooling system automation optimization (OPP-021539).	2024	Electricity	47 282 (Avoided)
LED Lights	Light replacement to LED in Primary & Secondary infeed zones (OPP-100567)	2024	Electricity	7 881

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
				(Avoided)
Motor Refurbishment	Motor replacement to higher efficiency in cooling system – roof dry-coolers (OPP-100559).	2024	Electricity	43 736 (Avoided)
Solar Power Plant	Installation of solar park with capacity of 1.85MW (OPP-025412).	2024/2025	Electricity	178 965 (Avoided)
Passive Coolers	Replace freezers with air heat exchanges for Focke electrical cooling boxes (OPP-021425).	2024	Electricity	4 526 (Avoided)
Parallel Pumps	Cooling system optimization: parallel pump controller to synchronize central pump work (OPP-025372).	2023/2024	Electricity	3 076 (Avoided)
Smart Cooling Valves	Installation of Belimo energy valves (OPP-025371).	2024	Electricity	1 509 (Avoided)
AI HVAC	Phase 2 of the Artificial intelligence project for Air handling Units. The system upgrade brough enhanced machine learning algorithms which reduced additional consumption.	2024/2025	Electricity Fuel	15 166 (Avoided) 34 241
Project One	Initiative to reduce energy consumption in production by installing metering on production machinery, establishing daily monitoring systems, and encouraging technical personnel to generate energy reduction initiatives in their daily work-related activities (OPP-100198).	2024	Electricity Fuel	5 896 (Avoided) 10 671

Philip Morris CR a.s.

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Energy Saving Initiatives: Project ONE - Individual Compressed Air metering per secondary machines	Installation of individual compressed air consumption meters per linkup. Evaluation of individual KPIs and follow up actions.	2024 - 2025	Electricity	Green electricity (CO_2 equivalent of 352 MWh electricity / 12 months)
Energy Saving Initiatives: Steam system equipment	Insulation of steam equipment	2023-2025	Fuel	24775

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
upgrade - Insulation of return condensate lines				
Energy Saving Initiatives: Steam system equipment upgrade - VSD controlled boiler feed water pumps	VSD controlled boiler feed water pumps improve boiler economizers efficiency	2024-2025	Fuel	19000
ES07.02 Heat Recovery in Vacuum System	Installation of heat exchanger for heat recovery from vacuum pumps.	2024 - 2025	Fuel	20000
ES07.01 Heat Recovery in CA System (dryers)	Installation of heat pumps for heat recovery from compressed air dryers.	2024-2025	Fuel	24000

Tabaqueira - Empresa Industrial de Tabacos, S.A. (Tabaqueira EIT, S.A.)

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Primary Process Optimization	Reduction of steam consumption through the resizing of the production line and implementation of new technologies.	2020/ 2023	Gas	407000
Solar Park	Implemented photovoltaic solar plant, which covers an area of 5525 m^2 with a production capacity of 1MW, which guarantees the integration of 7% of electric energy for self-consumption. This solar park also powers 12 own charging stations for plug in vehicles in Tabaqueira fleet.	2021/ 2023	Electrical	Avoided CO2 emission 800 t per year
Efficient Lighting	Replacement of 80% of total factory indoor lighting by LED technology	2023	Electricity	194000
Steam infrastructure insulation	Deployment of insulation jackets for steam network equipment	2023	Gas	149000
Turbocore Chiller	Replacement of 2 air cooled chillers by 1 water cooled turbocore chiller in cooling plant 2	2023	Electricity	150000
Chilled Water Optimizer	Machine learning algorithm to improve efficiency on chilled water system	2023	Electricity	100000
Venturi Steam Traps	Replacement of mechanical steam traps by venturi style ones	2023	Gas	269000

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Steam Plant Pressure SP reduction	Sustained reduction of pressure setpoint for steam plant from 9,2bar to 8,5bar	2023	Gas	188000
Adiabatic humidification	A robust and more efficient control of temperature and humidity in all production areas through the direct injection of humidity into the space instead of steam in the ducts.	2024	Gas	360000
Solar thermal system - Changing rooms	Replacement of conventional NG (Natural Gas) boiler to heat water for showering by renewable solar thermal heating system	2024	Gas	15600

Massalin Particulares S.R.L., Salta, Argentina

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Steam Pipe Insulation	Installation of 50 meters of 2" steam pipe insulation to avoid leakages.	2023	Gas	1372
Motor Replacement	Purchase and installation of more energy efficient motors.	2024/2025	Electricity	131164

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Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Optimization of administrative spaces	Optimization of administrative spaces	2024	Electricity	1524
Baseload assessment and reduction - internal energy audits	Audits and daily control of KPIs via boards and PROXIMA	2024	Electricity	2931
Baseload assessment and reduction – Primary AND secondary and Print Shop energy centerlines	Audits and daily control of KPIs via boards and PROXIMA	2024	Electricity	7480
Baseload assessment and reduction - GEMT	Audits and daily control of KPIs via boards and PROXIMA	2024	Electricity	7285

Project name	Description	Year	Type of energy used	Emission reduction [kg CO2eq]
level 4 - Secondary Link-Up and Primary Process				
Automatic Chillers' Cleaning	Project to Energy and Water consumption reduction	2024	Electricity	1000
Steam Traps Upgrade	Project to Energy consumption reduction	2024	Electricity	1000
Adiabatic Humidification	Project to Energy consumption reduction	2024	Electricity	6000
Shutdown CAEs ADM das 11h-14h	Shutdown of air conditioning in administrative areas at certain times	2024	Electricity	17349
Print Shop	Automation of the operation of exhaust fans to reduce consumption and Electro pneumatic valve Installation	2024	Electricity	901 +852 +295
Reduction cold water valve C1A and C1B	Centerline tuning	2024	Electricity	15812
Centralization of Dust central of Diet and Primary Process	Centralization of dust central	2024	Electricity	4125
Baseload Reduction (Trafo Removal-Print Shop)	Removal trafo 750KVA	2024	Electricity	7830
Lighting Print Shop	Lighting Print Shop	2024	Electricity	6879

Papastratos Cigarette Manufacturing Company, S.A.

Project name	Description	Year	Type of energy used	Emission reduction [kg CO2eq]
Scirocco	Better insulation under the dryer belt	2024	Gas	68000

Philip Morris Manufacturing Senegal S.A.R.L.

Project name	Description	Year	Type of energy used	Emission reduction [kg CO2eq]
IREC Renewable Electricity	Purchase IREC Certificates Green Electricity	2023	Electricity	Green Electricity

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Ultrasonic leakage detection		2023	Electricity	48914
Variable speed drive air compressors		2023	Electricity	155805
Adiabatic system installation		2023	Diesel	896795
Energy Saving Initiative	HVAC Overhaul	2024	Electricity	819409

Green Leaf Threshing Plant, Philip Morris (Pakistan) Limited, Mardan Pakistan

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2eq]
Energy Conservation Projects carried out in Line I & II	Execution of Piggyback Classifier (CF) system to reduce energy consumption CO_2 emissions	2013/ 2023	Diesel Oil	436167
Project Line Optimization, 1st Phase	- 1st Phase executed, 1st two CF changed and during processing season single line used; - Dust Recovery Fan main ducting is redesigned to make system energy efficient and reduce CO_2 emissions	2014/ 2023	Diesel Oil	136554
Project Line Optimization, 2nd Phase	Complete Line upgraded, through put (TP) increased from 10Tons Per Hr to 14.7 Tons per Hr;	2015/ 2023	Diesel Oil	4264319
Energy Conservation	Replaced Pneumatic Transport with Manual Band Conveyor Energy Saving of 34KW Per Hr + Lighting system at Warehouses inside GLT upgraded	2017/ 2023	Diesel Oil	813882
Automation of Steam Control Valve at Stem re-dryer	Automation of Steam Control Valve at Stem re-dryer & Improvement to recover condensate heat, Pipe network improved	2020/ 2023	HFO & LPG	483777
LPG Boiler Fuel Conversion Project	LPG Boiler Fuel Conversion Project, Fuel of Boiler changed from HFO to LPG	2021/ 2023	LPG	747435
LPG Energy Saving-Loss Analysis	Installation of Air Pre Heater, Condensate Line Optimization, Insulation of Steam Line, Oxygen Analyzer	2022/ 2023	LPG	63326
Electricity Supply & Load Management during low throughput processing	Power shifting to local grid, Line load reduction, Stem packing in one shift only	2022/ 2023	Electricity & Diesel Oil	158260

PT. HM Sampoerna & PT. Sampoerna Indonesia Sembilan, Sukorejo Plant, Indonesia

Project name	Description	Year	Type of energy used	Emission reduction [kg CO2eq]
Controlling SKJ-AHU Fan Speed	Control the frequency of FAN AHU Motor using VSD (Variable Speed Drive) as an indicator of energy saving	2023	Electricity	182817
Optimizing Chiller	Monitoring the running of electric chillers, chiller absorbers, CWP, CHWP, and Cooling Towers through real time and several devices (Using Software)	2023	Electricity	201098
Installing AHU EC FAN	Changing the AHU Fan from motor to EC Motor type (Will reduce consumption of electricity)	2023	Electricity	1087111
Installing SKM Ripping Machine without using Steam	Eliminate steam consumption in riper engines	2023	Gas	151055
Biomass Boiler (ZCT Project)	Implementation boiler process to produce steam by using biomass fuels (wood palette as a source of boiler energy)	2023	Wood palette	3637381
Solar Panel (ZCT Project)	Implementing renewable energy by using sunlight as a source of energy	2023	Renewable Energy	5278652
Install Compressor Optimizer and Linkup pipe to SPP	Install Optimizer in Compressor to optimize compressor running and install Compressed Air pipe to SPP Department.	2023	Electricity Energy	808964
Lighting Upgrade in Clove, Primary, and Secondary Process	Replacing non-LED lights with Led Lighting	2023	Electricity	640

PT. HM Sampoerna - Sigaret Kretek Tangan (SKT) Malang

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2024	2024	Electricity	59082.4
Solar Panel	Implementing renewable energy by using sunlight as a source of energy	2024	Renewable Energy	30644
Optimize Utilization of lighting & Air Conditioning	Enhance lighting & Air Conditioning (AC) by installing timer/presence sensor at production unit Warehouse, Offices, Toilet, Server Room, Production.	2023	Electricity	393

Optimize utilization of utility	Optimize running time of Exhaust Fan, Optimize room temperature for server room (25^0 C), Variable speed drive (VSD) for exhaust > 5 KW	2023	Electricity	344

PT. HM Sampoerna - Sigaret Kretek Tangan (SKT) Rungkut-1

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2024	2024	Electricity	29541.2
Solar Panel	Implementing renewable energy by using sunlight as a source of energy (capacity 190 Kwp dan 39 Kwp)	2024	Renewable Energy	3675
Optimize Utilization of lighting & Air Conditioning	Optimize lighting & Air Conditioning (AC) by installing timer/presence sensor at production unit Warehouse, Offices, Toilet, Server Room, Production.	2023	Electricity	1683
Optimize utilization of utility	Optimize running time of Exhaust Fan, Optimize room temperature for server room (25^0 C), Variable speed drive (VSD) for exhaust > 5 KW	2023	Electricity	1473

PT. HM Sampoerna - Sigaret Kretek Tangan (SKT) Rungkut-2

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2024	2024	Electricity	129825
Solar Panel	Implementing renewable energy by using sunlight as a source of energy (capacity 155 Kwp)	2024	Renewable Energy	131268
Optimize Utilization of lighting & Air Conditioning	Optimize lighting & Air Conditioning (AC) by installing timer/presence sensor at production unit Warehouse, Offices, Toilet, Server Room, Production.	2023	Electricity	11800
Optimize utilization of utility	Optimize running time of Exhaust Fan, Optimize room temperature for server room (25^0 C), Variable speed drive (VSD) for exhaust > 5 KW	2023	Electricity	10325

PT. HM Sampoerna - Sigaret Kretek Tangan (SKT) - Kraksaan

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2024	2024	Electricity	122051
Optimize Utilization of lighting & Air Conditioning	Optimize lighting & Air Conditioning (AC) by installing timer/presence sensor at production unit Warehouse, Offices, Toilet, Server Room, Production.	2023	Electricity	9217
Optimize utilization of utility	Optimize running time of Exhaust Fan, Optimize room temperature for server room (25^0 C), Variable speed drive (VSD) for exhaust > 5 KW	2023	Electricity	8065 Reduced the energy to 37 GJ / year

PT. Hanjaya Mandala Sampoerna Tbk, Karawang Plant, Indonesia

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2024	2024	Electricity	22578644
High efficiency chiller	High efficiency chiller and VSD installation aimed to increase utility system efficiency	2023/ 2024	Electricity	1218594
Idle/sleep mode for Secondary Equipment	Setting equipment in secondary area into idle/sleep mode during no production	2023/ 2024	Electricity	235779
AHU Improvement	Improvement aimed at reducing AHU energy by installing EC fans instead of AC, replacement existing AHU's coil, and AHU flowrate optimization	2022/ 2024	Electricity	682567
Improvement Compressor Efficiency	Install high efficiency compressor in 2019, 2023 and 2024 for all production area	2019/ 2024	Electricity	137689
Switch CA line at printing unit	Switching compressed air line for printing unit used on impression roll into independent compressor	2024	Electricity	65211
Increase flow air process temperature and reduce	Balancing of heating air flow to reduce steam consumption on annular dryer	2024	Gas	34898

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
steam consumption				
New Layout CSF Dryer	Replacement drying process on CSF from electric dryer to existing clove dryer	2024	Electricity	344372

PT Phillip Morris Indonesia - Karawang Plant

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Solar Cell	Solar cell installed since 2017/2018 generates CO2 reduction in 2024	2018/2024	Electricity	274838
Green electricity	Buying green electricity since 2019 generates CO2 reduction in 2024	2024	Electricity	13862595
Idle/sleep mode for Primary Equipment	Setting equipment in primary area into idle/sleep mode during no production	2024	Electricity	223986
Maintenance switch installation for LOTO application	Install maintenance switch for energy segregation for LOTO application during CIL & Start Up Shutdown implemented in 2023 and 2024	2023/2024	Electricity	46859
Optimization lighting at Feeding and Cutting Area	Regroup lighting at feeding and cutting area to ensure optimal utilization	2024	Electricity	28104
HVAC AI	Optimize HVAC operation through utilization of AI	2024	Electricity	221619

Massalin Particulares S.R.L, Merlo, Argentina

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Chilled water replacement	Install 3-way valves into 2-way valves that will modulate according to temperature area	2023	Electricity	16073
Transformer efficiency	Power transformer removal. Associated circuits will be relocated among the rest of the low voltage distribution cabinets	2023	Electricity	17235

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Flash steam recovery	Heat recovery equipment installation in condensate return line. This energy will be used to reheat boiler water (55° to 80°)	2023	Gas	13089
Burner air preheating (Heat recovery vacuum)	Recover heat in vacuum systems exhaust. This energy will be recovered as boiler's burner air preheating. New pipes will be installed, and automation will be implemented	2023	Gas	4109
Steam traps	Steam system equipment upgrade. Installation of Venturi steam traps	2024	Gas	106125
Heat recovery in a steam system	Recovery of condensate water from the steam line.	2024	Gas	50501

Philip Morris Operations a.d. Niš

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Electricity Green certificate	The acquisition of electricity green certificate on a yearly basis ensure that electricity consumed in the factory is produced by 100% renewable sources. Initiative started in 2018 and gives continuous contribution year by year.	2024	Electricity	2411921
Adiabatic Humidification	Usage of high pressurize water for air humidification inside HVAC instead of steam.	2024	Gas	74322
Steam system equipment upgrade – Venturi steam traps	Upgrade of steam system equipment and implementing new steam traps.	2024	Gas	131157
Optimization of mechanical dry system	Direct drive for cooling towers opening.	2024	Electricity	11920
Baseload assessment and reduction	Secondary compressed air reduction.	2024	Electricity	22338

Phillip Morris Investments B.V. Jordan

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Centralized Quality Laboratory	Quality Laboratory and primary laboratory centralized in one laboratory to reduce the electrical load and consumption	2024	Electricity	33298
Ultrasonic humidification system in tobacco storage area and non-tobacco material buffer area	Replace the Steam System with Ultrasonic humidification system in tobacco storage area and non-tobacco material buffer area	2024	Electricity	58578

Philip Morris Romania SRL

Project name	Description	Year	Type of energy used	Emission reduction [kg CO_2 eq]
Project One - Secondary production consumption KPI	Monitoring and improvement of production equipment consumption based on the of LV 3 meters installed on equipment	2024	Electricity	1122784
Project One - Primary production consumption KPI	Monitoring and improvement of Primary production equipment consumption based on the of LV 3 meters installed on equipment	2024	Gas	471346
AI HVAC	Optimize electricity consumption for conditioning by using AI tools	2024	Electricity	470581
AI HVAC	Optimize gas consumption used for ensuring humidity in production by using AI tools.	2024	Gas	257089
Utilities efficiency improvement	Improve performance of chilled water and compressed air system by elimination losses during operation	2024	Electricity	567242
Utilities efficiency improvement	Improve performance of steam system by eliminating losses during operation	2024	Gas	285097
Multiple Energy Saving initiatives	ES08.05 - Deaerator Vent Condenser ES08.09 - Open condensate tank Vent Condenser	2024	Gas	31482

3.3 Planned GHG emissions reduction initiatives

Table 3.3 shows main initiatives identified and their estimated reduction for the commitment period to 2023/2025 for PMI factories included in Cluster 1. For ease of reading, the initiatives have been split by entity:

Table 3.3 - Planned GHG emissions reduction initiatives in Cluster 1

Philip Morris SA – Neuchatel

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Compressed air heat recovery	With the installation of the new compressor 315VSD, add the heat recovery	2025	Gas	30000
Venturi Steam Traps	Remove hydrostatic steam traps and install venturi steam traps to decrease steam losses	2025	Gas	633000
Solar thermal panels installation for hot water production	Implement solar thermal panels on the roofs of the Production buildings	2026	Gas	296000

UAB Philip Morris Lietuva

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Heat recovery via Heat pump - On Secondary dedusting	Heat pump installation on dedusting system.	2025	Fuel	78784
Baseload assessment and reduction - installation of low load steam generator	Installation of electrical type steam generator. Steam boilers use gas constantly, generators can turn on/off without preheating.	2025	Fuel	65449
Baseload assessment and reduction - GEMT level 4 - Secondary Link-Ups (Phase 2)	Project One – operation energy – KPI transfer and reduction of energy consumption in production area	2024/2025	Electricity/Fuel	174000
Cooling efficiency increase due to new plant - CU44	Refurbishment of old cooling plant by replacing main chiller to new turbo core technology-based chiller	2024/2025	Electricity	41000
Heat recovery via Heat pump	On compressed air system loop	2025	Electricity/Fuel	76654

Philip Morris CR a.s.

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
ES16.25 Steam system equipment upgrade - installation of Venturi steam traps	Installation of steam traps	2025-2026	Fuel	59000
ES21 Thermal insulation in Primary equipment	Insulation of steam equipment in Primary	2025-2026	Fuel	19000
Project ONE	Activities focused on production equipment efficiency improvement. Metering, KPIs, reporting tools development. Focus in secondary: Compressed air + electricity. Focus in Primary: Natural Gas (Fuel) + Steam (Fuel) + Electricity + Compressed air (electricity).	2025 – 2026 - 2027	Fuel, Electricity	To be evaluated

Tabaqueira - Empresa Industrial de Tabacos, S.A. (Tabaqueira EIT, S.A.)

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Energy Efficiency Plan 2022 - 2025	Implementation of approximately 20 energy saving projects	2022/2025	Gas	750000
Venturi steam traps	Replacement of normal steam traps by Venturi technology to reduce the steam leakages to atmosphere	2023/2025	Gas	284809
Adiabatic humidification	Implementation of direct area humidification via water atomization to reduce steam consumption for HVAC	2023/2026	Gas/Electricity	588998
FTD heat recovery	Implementation of a heat exchanger on exhaust gas from Flash Tower Dryer to reduce gas consumption	2023/2025	Gas	25505
Photovoltaic Park	Installation of photovoltaic panels for solar energy use	2025/2026	Electricity	3735.2

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Hybrid Boiler	Installation of a boiler that runs on gas and electricity	2025/2026	Gas/Electricity	1150000
Primary Energy Efficiency	Process improvement to increase energy efficiency in primary processes	2025/2026	Gas/Electricity	17846
Airquest Project	Reduction of humidity parameters in productive areas	2025/2026	Gas/Electricity	26837

Massalin Particulares S.R.L., Salta, Lerma Argentina

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Solar Park	Installation of solar panels. Estimated installed power 1MW. 0.7 MW for own consumption and 0.3MW to inject into the electrical grid	2024/2025	Electricity	593000
Steam Pipe Insulation	Installation of 150 meters of 2" steam pipe with insulation materials	2024/2025	Gas	4116
Installation of GEMT meters	Installation of energy meters Level 1 & 2 for consumption monitoring and improvement	2024/2025	Electricity/Gas	110000
Boiler burner optimization	Implementation of controllers to improve the performance of boiler burners + Installation of gas meter	2024/2025	Gas	190477

PHILIP MORRIS BRASIL IND. COM. LTDA

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Steam system equipment upgrade - Condensate recovery	Steam Reduction consumption	2025	Steam	5000
Upgrade CAG Trane / Chiller Optimizer	Upgrade electronic	2025	Electricity	13759
AHU Flowrate optimization EC Fans (Secondary and Print Shop)	Flowrate optimization gaining in Thermal load	2025	Electricity	108000

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Solar Thermal Renewable (Boilers)	Steam Reduction consumption	2025	Steam	38000
ES CO2EQ recovery system (DIET balloon)	Recovery System for CO2EQ	2026	Electricity	6859
Energy recovery to Diet process (Heat)	Heat energy	2026	Electricity	150175

Papastratos Cigarette Manufacturing Company, S.A.

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Installation of GEMT meters	Installation of energy meters Level 4	2025	Gas	10000
Installation of GEMT meters	Installation of energy meters Level 4	2025	Gas	10000
Venturi steam traps	Reduce steam loss from regular steam traps.	2025	Gas	150000
Zero carbon technology project	Installation of electric boiler and Heat pumps to reduce the fuel consumption	2027	Gas	9500000

Philip Morris Manufacturing Senegal S.A.R.L.

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Energy Saving Initiative	HVAC Revamp	2025	Electricity	819409

Green Leaf Threshing Plant, Philip Morris (Pakistan) Limited, Mardan Pakistan

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Energy Purchase from WAPDA	Offsetting 25-70% (annual) electricity generation from Gensets via purchase from WAPDA. Machine Operation via WAPDA Power (Water and Power Development Authority)	2023/2025	Diesel Oil	1068271
Solar Power Project	Generating 48% of daytime electrical energy via Solar Power	2024/2026	Diesel Oil/ Electricity	70800 (estimated saving in 2024 YE)

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Electricity conservation Initiatives	Packed WH Temp Automation -Automatic regulation of Cooling Hall temperature to avoid idle running of ventilation fans	2023/2025	Electricity	1887
Electricity conservation Initiatives	MPT batteries Utilization -Utilization of Motorized Pallet Trolley batteries during off-season for security lights	2023/2025	Electricity	1045
LPG Conservation Initiative	Conversion of Boiler #1 on LPG – for low throughput grades and installation of water heating jacket on boiler	2023/2025	LPG	176402 +96127
LPG Conservation Initiative	Condensate recovery Improvements -Increase Storage Capacity of Feed Water Condensate Tank	2023/2025	LPG	24696
LPG Conservation Initiative	Insulation Steam Energy Line -Insulation of Steam control valves & condensate line and tank	2023/2025	LPG	40202
LPG Conservation Initiative	Automation of Stem Dryer	2023/2025	LPG	19404
LPG Conservation Initiative	Seat regeneration Steam Valves -Seat regeneration/repair of all steam control valves	2023/2025	LPG	40202
Diesel Conservation Initiative	Optimize Cleaning with Air -Separate cleaning air points and reduce air pressure to avoid losses and installation of no loss drain traps on air storage tanks	2023/2025	Diesel Oil	496
ECO Driving	ECO driving awareness through practical defensive & commentary drive training session	2023/2025	Petrol	500
Environment friendly vehicles procurement	Evaluation of GHG emissions of new vehicles to be procured	2022/2025	Petrol	1200
Engine idling monitoring	Reduction in fleet CO2 EQ emissions through monitoring of fleet telematics engine idling violation	2022/2025	Petrol	500
ECO driving through telematics	Eco-driving Through Telematics	2021/2025	Petrol	250
Inverter AC	Replacement of Non-Inverter AC with Inverter AC to save electricity	2025/2026	Electricity	380.5

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
O2 Analyzer	Installation of O2 sensor on Boiler # 2 to reduce fuel consumption	2025	LPG	30
Inverter Fans	Replacement of fans with Inverter Fans	2025	Electricity	837
Redundant Lines Removal of CA	Removal of redundant lines in compressed air system to reduce losses	2025	Electricity	415

PT. HM Sampoerna, Sukorejo Plant, Indonesia and **PT. Sampoerna Indonesia Sembilan – Sukorejo Plant, Indonesia**

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Wireless Steam Trap Monitoring System	Install steam trap monitoring system to reduce loss in steam usage	2024/2025	Gas	154093
VFD on every pump above 5 kW	optimized pump based On Best Efficiency Point of Pump	2024/2025	Electricity	113825
VFD on every fan above 5 kW	Install VSD to optimize electricity usage in pump	2024/2025	Electricity	223950
Dust Collector CL SKM1-2	Create Center Line for Dust Collector based on number of LU's Running	2024/2025	Electricity	101667
Baseload assessment and reduction - GEMT level 4 - Secondary Link Up (SKJ)	Install metering in every linkup to optimized energy usage	2024/2025	Electricity	232116
HVAC AI Phase 2 - HMS Sukorejo	HVAC AI Phase to (Static logic to reinforcement Logic)	2024/2025	Electricity	102479
Chilled water optimizers	Optimized chiller system using AI	2024/2025	Electricity	360062

PT. HM Sampoerna - Sigaret Kretek Tangan (SKT) Malang, Rungkut 1, Rungkut 2, Kraksaan.

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]

Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2025	2025	Electricity	29541
Solar Panel	Implementing renewable energy by using sunlight as a source of energy in Plant Malang, Plant Rungkut 1 & Plant Rungkut 2	2025	Renewable Energy	3675

PT Hanjaya Mandala Sampoerna Tbk, Karawang Plant, Indonesia

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO2 eq]
Steam Optimization	Reduce Steam flow from 400 kg/h to 350 kg/h for conditioning CRES line	2025	Gas	202008
Temperature Distribution Optimization	Adjustment air flow distribution in cut filler area that impact to shutdown 1 AHU	2025	Electricity	111951
Piping distribution optimization	Re-design piping distribution PPK-PPK-PPW-Clove- Clove & PPK-PPW- Clove	2025	Electricity	90475
FTD optimization	Automatic preheating FTD	2025	Electricity	80341
EC Fan installation	Installation EC fan for cut filler kretek production area	2025	Electricity	135312
Dryer Optimization on Primary SFP	Optimization driver on primary SFP by shutting down dryer during BCO and CIL	2025	Electricity	89958
Upgrade chilled water insulation	Upgraded material insulation for better insulation performance on chilled water utilities	2025	Electricity	29081
High efficiency compressor utilization	Utilization of high efficiency compressor as main supply for plant compressed air	2025	Electricity	89909
Green electricity	Buying green electricity from state-owned electricity company generates CO2 reduction in 2025 (based on yearly estimation).	2025	Electricity	37131068
Biomass Boiler	Biomass boiler implementation to produce steam by using biomass fuels (wood palette)	2026	Palm Kernel Shell / Wood palette	4298910

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO2 eq]
Chiller Absorption	Chiller absorption installation which reuses heat from the new biomass boiler.	2026	Palm Kernel Shell / Wood palette	2655774
Steam Turbine	Steam turbine installation which uses steam from biomass boiler to rotate the turbine. Operated parallel with electricity supplied from state owned electricity company	2026	Palm Kernel Shell / Wood palette	12897963

PT Philip Morris Indonesia -Karawang International

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Optimization lighting at Feeding and Cutting Area	Regroup lighting at feeding and cutting area to ensure optimal utilization implemented in 2024 still generates CO2 reduction	2025	Electricity	28104
Optimization filter storage temperature	Adjusting air conditioner for filter non menthol storage temperature from 25C to 27C – 30C	2025	Electricity	12158
Optimization lighting at Secondary Production	Scheduling shut off lighting area at Secondary Production during standby hours (Friday Prayer)	2025	Electricity	496
Optimization Air Conditioning at meeting room	Scheduling shut off air conditioning meeting room secondary production on weekend	2025	Electricity	536
Optimization equipment operation	Shut off S-TRS during CIL and Friday Prayer	2025	Electricity	8096
Optimization vacuum usage	Optimization through switching venturi to centralized vacuum for CWL LU area	2025	Electricity	22513
Green electricity	Buying green electricity generates CO2EQ reduction in 2025 (based on yearly estimation)	2025	Electricity	11493614
Solar cell	Solar cell installed since 2017/2018 generates CO2EQ reduction in 2025 (based on yearly estimation)	2025	Electricity	150744
Biomass Boiler	Biomass Boiler installation to produce steam by using biomass fuels (wood palette)	2026	Palm Kernel Shell / Wood palette	584255

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Chiller Absorption	Chiller absorption installation that reuses heat from the new biomass boiler.	2026	Palm Kernel Shell / Wood palette	1235374
Steam Turbine	Steam turbine installation uses steam from biomass boiler to rotate the turbine. Operated parallel with electricity supplied from state owned electricity company.	2026	Palm Kernel Shell / Wood palette	6160725

Massalin Particulares S.R.L, Merlo plant, Argentina

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Solar Plant	Install photovoltaic solar plant	2025/2026	Electricity	376886

Philip Morris Operations a.d. Niš

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO2 eq]
Electricity Green certificate	The acquisition of electricity green certificate on a yearly basis ensure that electricity consumed in the factory is produced by 100% renewable sources. Initiative started in 2018 and gives continuous contribution year by year.	2025	Electricity	19461538
Adiabatic humidification	Usage of high pressurize water for air humidification inside HVAC instead or steam	2025	Gas	87437,7
Baseload assessment and reduction	Secondary compressed air reduction	2025	Electricity	23353,8
Steam system equipment upgrade – Venturi steam traps	Upgrade of steam system equipment and implementing new steam traps.	2025	Gas	204854,2
Optimization of mechanical dry system	Direct drive for cooling towers opening.	2025	Electricity	11920

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO2 eq]
Steam system equipment upgrade	Insulation of return condensate lines	2025	Gas	31810
Steam system equipment upgrade	Replacement of boilers with more efficiency	2025/2026	Gas	33309
Programmable schedule control	Programmable schedule control	2025/2026	Electricity	1402,5

Phillip Morris Investments B.V. Jordan

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Economizer Activation in Boilers	Heat recovery for water infeed which will reduce the usage of LPG	2025-2026	LPG	48299
LOTO project for Compressed air on main network and Linkups	Deployment LOTO for Compressed air reduce in shutdown to eliminate unnecessary air leakage	2025-2026	Electricity	23575
Heat Pump Package – New bin filling stations & stem bin filling stations	Replace the old Heating, Ventilation, and Air Conditioning package with heat pump to reduce the electricity usage	2025-2026	Electricity	214310
Water Evaporating Fans for stem bin filling station	Replace the old System with Water Evaporating Fans system in stem bin filling station	2025-2026	Electricity	32937

Philip Morris Romania SRL

Project name	Description	Year	Type of energy used	Estimated reduction [kg CO_2 eq]
Project One - Secondary production consumption KPI	Monitoring and improvement of production equipment consumption based on the of LV 3 meters installed on equipment, including compressed air consumption	2025 -2026	Electricity	1967000
Project One - Primary production consumption KPI	Monitoring and improvement of Primary production equipment consumption based on the of LV 3 meters installed on equipment	2025 -2026	Gas	2000000
Utilities efficiency improvement	Improve performance of chilled water and compressed air system by elimination losses during operation	2025 -2026	Electricity	1600000
Energy Saving initiatives ES 16.25	Install venturi traps with impact in condense recovery	2025 -2026	Gas	950000
Zero Carbon Tech Project	Decrease gas consumption by installing heat pumps, solar panel for e-Boiler	2025 -2026	Gas	4200000
Scirocco project	Improve performance of gas consumption by insulating the dryer surface	2025 -2026	Gas	500000

Actual emissions reductions will 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 the 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 **Verified Carbon Standard (VCS)**[1], **Climate Community and Biodiversity Alliance (CCBA)**[2], **Gold Standard**[3], **and other offsets as endorsed in PAS2060**.
To compensate residual **2024 GHG emissions**, PMI has selected a set of carbon projects as described in paragraph 4.2.
Credits were retired **on 2025 September 24th and 25th**

These projects are supported by publicly available project documentation on the GSF Registry (goldstandard.org)[4]) and on https://registry.verra.org/. The registry system is the central storehouse of data on all registered projects, and tracks the generation, retirement and cancellation of all credits. To register with the program, projects must show that they have met all standards and methodological requirements.

[1] https://verra.org/

[2] http://www.climate-standards.org/

[3] https://www.goldstandard.org/

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

4.2 Offsetting project(s)

Offsetting projects selected by PMI Cluster 1 for compensating the **2024** emissions are:

#	Project Name	Carbon credits allocation		Official project link
		tons	%	
1	GS2447 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation (5)	21896	35.2%	https://registry.goldstandard.org/projects/details/360
2	Impact Carbon and myclimate Safe Water and Improved Cookstoves Global PoA - Uganda VPA	224	0.4%	https://registry.goldstandard.org/projects/details/314
3	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	24000	38.6%	https://registry.verra.org/app/projectDetail/VCS/2372
4	JARI/AMAPÁ REDD+ PROJECT	7259	11.7%	https://registry.verra.org/app/projectDetail/VCS/1115
5	Pacajai REDD+ Project	8770	14.1%	https://registry.verra.org/app/projectDetail/VCS/981
		62149	**100%**	

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

Reporting Entity	Credits allocated for compensation (tons)	Project chosen for compensation	Vintage
AR (MASSALIN Merlo)	2012	Pacajai REDD+ Project	01/01/2017-31/12/2017
AR LF (MASSALIN Lrm)	4039	Pacajai REDD+ Project	01/01/2017-31/12/2017
BR (Santa Cruz)	2544	Pacajai REDD+ Project	01/01/2017-31/12/2017
CA (RBH Quebec)	226	UNITOR REDD+ PROJECT	26/04/2018-31/12/2018

CH (PMP SA Neuch)	1094	GS2447 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation (5)	2016
CZ (Kutna Hora)	2376	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
GR (PAPASTRATOS)	12022	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID (PTPMI Karawang)	732	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID (PTSIS Sukorejo)	8	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID (SAMP Karawang)	224	Impact Carbon and myclimate Safe Water and Improved Cookstoves Global PoA - Uganda VPA	2016
ID (SAMP Karawang)	4891	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID (SAMP Karawang)	501	JARI/AMAPÁ REDD+ PROJECT	15/02/2016-14/02/2017
ID (SAMP Sukorejo)	3886	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID SKT (Kraksaan SAMPOERNA)	23	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID SKT (Malang SAMPOERNA)	2	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID SKT (Rungkut 1 SAMPOERNA)	47	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
ID SKT (Rungkut 2 SAMPOERNA)	13	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	01/01/2021-15/04/2021
IT (PM MTB RRP GF)	23937	UNITOR REDD+ PROJECT	26/04/2018-31/12/2018
IT (PM MTB RRP ZP)	738	UNITOR REDD+ PROJECT	26/04/2018-31/12/2018
JO (Amman)	284	JARI/AMAPÁ REDD+ PROJECT	15/02/2016-14/02/2017

KZ (Almaty)	2656	UNITOR REDD+ PROJECT	26/04/2018-31/12/2018
LT (Klaipeda)	175	Pacajai REDD+ Project	01/01/2017-31/12/2017
PH (PMFTC Batangas)	2156	Pacajai REDD+ Project	01/01/2017-31/12/2017
PH (PMFTC Batangas)	1550	UNITOR REDD+ PROJECT	26/04/2018-31/12/2018
PK (PMPK Sahiwal)	893	UNITOR REDD+ PROJECT	26/04/2018-31/12/2018
PK LF (PMPK Mard)	1438	JARI/AMAPÁ REDD+ PROJECT	15/02/2016-14/02/2017
PT (TABAQUEIRA)	3543	JARI/AMAPÁ REDD+ PROJECT	15/02/2016-14/02/2017
RO (Bucharest)	16178	GS2447 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation (5)	2016
RO (Bucharest)	1493	JARI/AMAPÁ REDD+ PROJECT	15/02/2016-14/02/2017
RS (DIN)	4337	GS2447 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation (5)	2016
SN (Dakar)	287	GS2447 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation (5)	2016
TR (PMTM)	6401	Pacajai REDD+ Project	01/01/2017-31/12/2017
ZA (LEONARD DINGLER)	247	Pacajai REDD+ Project	01/01/2017-31/12/2017

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 **62149** tons of CO_2 equivalent, it is composed by two contributions:

- **60339 tons of CO_2 equivalent**, amount evaluated for this application period
- **1810 tons of CO_2 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 the GHG emissions of PMI Cluster 1 Factories.

PMI Cluster 1 Manufacturing entities portfolio offsetting credits is composed as per the table in paragraph 4.2

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

It also 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 1 of manufacturing entities, for offsetting unavoidable emissions, **in year 2024.**
https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=164255
https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=251870
https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=187127
https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=132238
https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=312382
https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=312383
https://registry.goldstandard.org/batch-retirements/details/221346
https://registry.goldstandard.org/batch-retirements/details/221345

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 1*** will be confirmed upon completion of the greenhouse gas inventory audit for that Application period. The portfolio composition and share among projects will be determined based on the volume of credits.

5 Annex A – Carbon Neutrality Assurance letter

Verification Statement Number:
CCP267919.PMI.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:

Phillip Morris International "Cluster 1" 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

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PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

SGS

Schedule Accompanying Greenhouse Gas Verification Statement
CCP267919.PMI.2024.V1 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 1" 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).

Roles and Responsibilities
The management of Philip Morris International (PMI) responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information, preparation of reports, QES, and purchase and retirement of carbon offsets.

It is SGS' responsibility to express an independent opinion on the Carbon Neutrality Declaration as provided by the client for the application period 01/01/2024 – 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 .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
- Third application period: Calendar Year 2024

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

Manufacturing affiliates:

Affiliate	Legal Entity
PT (TABAQUEIRA)	Tabaqueira Empresa Industrial de Tabacos S.A.
CH (PMP SA Neuch)	Philip Morris Products SA
LT (Klaipeda)	UAB Philip Morris Lietuva
CZ (Kutna Hora)	Philip Morris CR a.s.
AR LF (MASSALIN Lrm)	MASSALIN PARTICULARES SRL , Lerma
BR (Santa Cruz)	Philip Morris Brasil Industria e Comercio Ltda.
GR (PAPASTRATOS)	Papastratos Cigarette Manufacturing Company, S.A.
SN (Dakar)	Philip Morris Manufacturing Senegal S.A.R.L.
PK LF (PMPK Mard)	Philip Morris (Pakistan) Limited, Mardan Factory
ID (SAMP Sukorejo)	PT Hanjaya Mandala Sampoerna,Tbk. Sukorejo Plant
ID (PTSIS Sukorejo)	PT Sampoerna Indonesia Sembilan , Sukorejo Pasuruan
ID SKT (Malang SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Malang
ID SKT (Rungkut 1 SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. -SKT Plant Rungkut 1
ID SKT (Rungkut 2 SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk., SKT Plant Rungkut 2
ID SKT (Kraksaan SAMPOERNA)	PT Hanjaya Mandala Sampoerna, Tbk. SKT Plant Kraksaan
ID (PTPMI Karawang)	PT Philip Morris Indonesia Karawang International, Karawang
ID (SAMP Karawang)	PT Hanjaya Mandala Sampoerna, Tbk.,Karawang Plant
AR (MASSALIN Merlo)	MASSALIN PARTICULARES S.R.L. ,Merlo
RS (DIN)	Philip Morris Operations a.d. Nis
JO (Amman)	Philip Morris Investments B.V. Jordan
RO (Bucharest)	Philip Morris Romania SRL

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_2 equivalent emissions, carbon neutrality declaration and QES for the 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 CO_2 equivalent data and information and conforms to the requirements of PAS2060 2014.

6 Annex B – Qualifying Explanatory Statements (QES) checklist

EHS.D.410.F02%20QES%20Check%20List%2

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

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

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

Table 7.1 - Inclusions and exclusions

8 Annex D – Uncertainty calculation

8.1 Uncertainty calculation

Uncertainties around the quantification of the carbon footprint have been assessed throughout the assessment following the guidelines released by ISO and available in the “GHG Protocol’s Measurement and Estimation Uncertainty of GHG Emissions tool” (supporting worksheet file “2025 UC file Cluster 1I”)[5]; since the uncertainties are not known for all the parameters (activity data and emission factors), the IPCC Guideline for National Greenhouse Inventories Reporting Instructions (1996) was used:

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

All information can be accessed in the below file attached:

2025 UC file Cluster 1.xlsx

Outcome of the uncertainty calculation (from uncertainty Cluster 1 attached file)

	Step 1-2						Step 3					
	A	B	C	D	E	F	G	H	I	J	K	L
	Activity Data (e.g. Quantity of fuel used)	Unit used to measure Activity Data	Uncertainty of activity data (A) (Confidence interval expressed in ± percent)	GHG emission factor	Unit of GHG emission factor (for kg CO2)	Uncertainty of emission factor (Confidence interval expressed in ± percent)	CO2 emissions in kg	CO_2 emissions in metric tonnes	Uncertainty of calculated emissions	Certainty Ranking	Auxiliary Variable 1	Auxiliary Variable 2
							A * D	G/1000	[illegible]		(H*I)	x²
Example Source 1	1000.00	GJ	+/- 5.0%	56.10	kg CO2 / GJ	+/- 10.0%	56,100.00	56.10	+/- 11.2%	Good	6.27	39.34
Source description												
Natural gas	[illegible]	MJ	+/- 7.0%	0.06	kg CO2 / MJ	+/- 7.0%	51,950,431.[illegible]	51,950.43	+/- 9.9%	Good	5,143.02	########
LPG	[illegible]	MJ	+/- 7.0%	0.06	kg CO2 / MJ	+/- 7.0%	2,604,172.96	2,604.17	+/- 9.9%	Good	265.72	70,608.94
Diesel or Fuel oil light EL	[illegible]	MJ	+/- 7.0%	0.07	kg CO2 / MJ	+/- 7.0%	1,059,063.05	1,059.06	+/- 9.9%	Good	104.84	10,991.02
Biomass	[illegible]	MJ	+/- 7.0%	0.08	kg CO2 / MJ	+/- 7.0%	279,487.8[illegible]	279.49	+/- 9.9%	Good	27.67	765.51
Fuel oil	[illegible]	MJ	+/- 7.0%	0.08	kg CO2 / L	+/- 7.0%	326,798.52	326.80	+/- 9.9%	Good	32.35	1046.62
Fleet Biodiesel	1.00	L	+/- 7.0%	0.17	kg CO2 / L	+/- 7.0%	0.17	0.00	+/- 9.9%	Good	0.00	0.00
Fleet Bioethanol	[illegible]	L	+/- 7.0%	0.01	kg CO2 / L	+/- 7.0%	1.41	0.00	+/- 9.9%	Good	0.00	0.00
Fleet Natural gas	0.00	L	+/- 7.0%	1.7	kg CO2 / L	+/- 7.0%	0.00	0.00	+/- 9.9%	Good	0.00	0.00
Petrol	[illegible]	MJ	+/- 7.0%	0.07	kg CO2 / MJ	+/- 7.0%	694.96	0.69	+/- 9.9%	Good	0.07	0.00
Electricity - Market based	[illegible]	kWh	+/- 7.0%	0.00	kg CO2 / kWh	+/- 7.0%	0.00	0.00	+/- 9.9%	Good	0.00	0.00
Fleet Fuel Diesel	[illegible]	L	+/- 7.0%	2.51	kg CO2 / L	+/- 7.0%	93,266.71	93.27	+/- 9.9%	Good	9.05	54.80
Fleet Fuel Petrol	[illegible]	L	+/- 7.0%	2.06	kg CO2 / L	+/- 7.0%	832,697.03	832.70	+/- 9.9%	Good	82.43	6,795.17
CO2 in DIET Process (E Plant Biogenic)	[illegible]	Kg	+/- 2.0%	0.00	kg/kg	+/- 1.0%	0.00	0.00	+/- 2.2%	High	0.00	0.00
CO2 in Diet Process	[illegible]	Kg	+/- 2.0%	1.00	kg/kg	+/- 1.0%	1,124,634.00	1124.63	+/- 2.2%	High	25.17	631.73
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
							0.00	0.00	+/- 0.0%	High	0.00	0.00
Sum CO_2 emissions (M):							60,330,748.26	60,330.75				

Note: For individual uncertainties greater than 60%, the results of the tool are not valid

			Aggregated Certainty Ranking
Step 4: Cumulated Uncertainty:	$\pm_U = \pm \frac{\sqrt{\sum (H \cdot I)^2}}{M}$	+/- 8.9%	Good

Table 8.1 - Uncertainty calculations

[5] https://ghgprotocol.org/calculation-tools

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	3/4	1/4	1
CH_4	Waste	2/3	1/3	1
CH_4	Animals	25%	10%	20%
CH_4	Animal waste	20%	10%	20%
N_2O	Industrial Processes	35%	35%	50%
N_2O	Agricultural Soils			2 orders of magnitude
N_2O	Biomass Burning			100%
Note: Individual uncertainties that appear to be greater than ± 60% are not shown. Instead judgement as to the relative importance of emissions factor and activity data uncertainties are shown as fractions which sum to one				

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

Table 8.2 - IPCC uncertainty data

9 Annex E – Voluntary offset program

In this annex, shortlist of projects chosen for compensation of **2024** emissions.

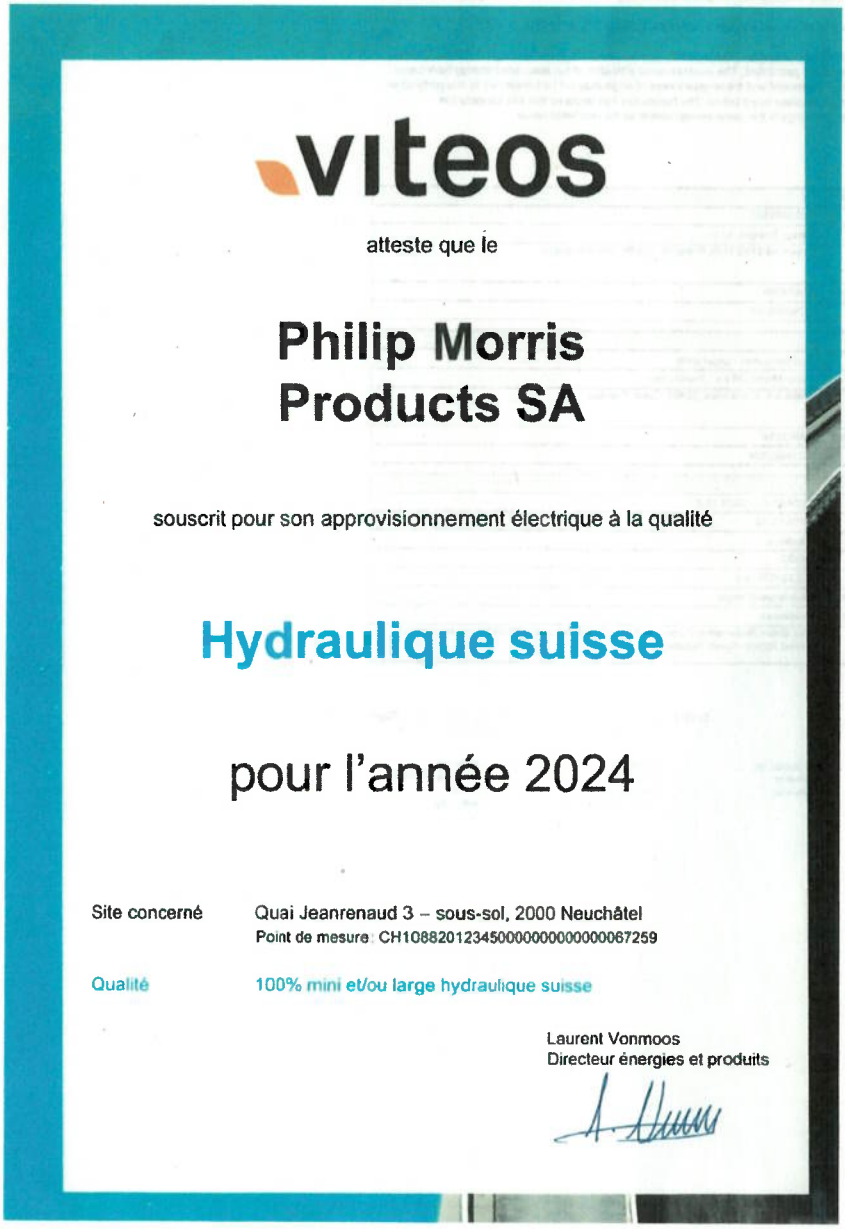
#	Project Name	Carbon credits allocation		Official project link
		tons	%	
1	GS2447 GS1265 African Biomass Energy Conservation PoA Malawi Biomass Conservation (5)	21896	35.2%	https://registry.goldstandard.org/projects/details/360
2	Impact Carbon and myclimate Safe Water and Improved Cookstoves Global PoA - Uganda VPA	224	0.4%	https://registry.goldstandard.org/projects/details/314
3	Installation of high efficiency wood burning cookstoves in Malawi - Project 2	24000	38.6%	https://registry.verra.org/app/projectDetail/VCS/2372
4	JARI/AMAPÁ REDD+ PROJECT	7259	11.7%	https://registry.verra.org/app/projectDetail/VCS/1115
5	Pacajai REDD+ Project	8770	14.1%	https://registry.verra.org/app/projectDetail/VCS/981
		62149	**100%**	

10 Annex F – Renewable Energy Certificates

In this annex, captured all the certificates for green electricity for the group of sites included in Cluster 1.

SGS Site Visits - Data Verification - Sustainability - Global - Documents

Philip Morris Products SA



viteos

atteste que le

Philip Morris Products SA

souscrit pour son approvisionnement électrique à la qualité

Hydraulique suisse

pour l'année 2024

Site concerné	Quai Jeanrenaud 3 – sous-sol, 2000 Neuchâtel Point de mesure: CH1088201234500000000000067259
Qualité	100% mini et/ou large hydraulique suisse

Laurent Vonmoos
Directeur énergies et produits

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

Kutna Hora- Philip Morris CR a.s.

OTE

EECS EUROPEAN ENERGY CERTIFICATE SYSTEM

Cancellation Statement for Guarantees of Origin

This Cancellation Statement acts as a receipt for the guarantees of origin listed below and for the purpose shown.

Unique identification number of this Cancellation Statement: 22X0001333_20250319_113517

With the issuance of this Cancellation Statement, the indicated guarantees of origin are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental attributes of the associated energy have been consumed and this Cancellation Statement and these guarantees of origin may not be transferred to any party other than the energy supplier or end-consumer listed below. The beneficiary has declared that this cancellation corresponds with consumption of energy in the same energy carrier as the one listed below.

Account holder information:	
Account number:	22X0001333
Name:	innogy Energie, s.r.o.
Address:	Limuzská 3135/3135, Praha 10, 100 00, Czech Republic
Company identification number:	49903209
VAT identification number:	CZ49903209

Beneficiary information:	
Type of beneficiary:	End-consumer - Legal entity
Name:	Philip Morris ČR a.s. , Kutná Hora
Address:	Vítězná 1, Kutná Hora, 28403, Czech Republic
Company identification number:	14803534
VAT identification number:	CZ14803534

Cancellation information:	
Consumption period:	2024-01-01 - 2024-12-31
Cancellation date:	2025-03-19
Energy carrier:	Electricity
Amount of energy (MWh):	24232
Registry cancelled from:	CZ 22 OTE, a.s.
Type of cancelled certificates:	Guarantee of origin
Cancellation category/purpose:	Disclosure
Note:	The stated Redemption Purpose is Scope 2 reporting and CDP disclosure for reporting period 2024 in Czech Republic

3/19/2025

OTE, a.s.
Sokolovská 192/79
186 00 Praha 8

T +420 224 095 100
otc@ote-cr.cz
www.ote-cr.cz

IČ: 26463318
DIČ: CZ26463318
Banka: KB, a.s.
č. ú.: 19-5882700547/0100

Registrace:
OR vedený MS v Praze,
odd. B,
vložka 7260

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

OTE

Overview of cancelled guarantees of origin

Guarantee of origin ID (from-to)	Country of issue	Amount	Issue date	Energy source	Technology type	Production period (from-to)	Operation launch	Production device ID / Production device name	Support schemes
[illegible]	ES	[illegible]	[illegible]	[illegible]	Photovoltaic - Unspecified	[illegible]	[illegible]	FV. VILLANUEVA	No support
[illegible]	ES	[illegible]	[illegible]	[illegible]	Photovoltaic - Unspecified	[illegible]	[illegible]	FV. ANTILIA SOLAR	No support
[illegible]	FI	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	No support
[illegible]	FI	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	FI	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	FI	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support
[illegible]	[illegible]	[illegible]	[illegible]	Mechanical source - Wind	Wind - Onshore	[illegible]	[illegible]	[illegible]	Production support

7/19/2025 © OTE, a.s. Page 2

Papastratos Cigarette Manufacturing Company, S.A.

ΔΑΠΕΕΠ

Cancellation Statement

This Cancellation Statement acts as a receipt for the Guarantees of Origin as listed below and for the purpose shown.

The environmental qualities of the associated energy have been consumed and will no longer be used for disclosure purposes in Greece. This Cancellation Statement and these Certificates may not be transferred to any party other than the energy supplier or end-consumer identified in this Cancellation Statement.

Performed by

ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΗΛΕΚΤΡΙΣΜΟΥ Α.Ε.
28XEQZ9X58
EL090000045
520803900000000302
Greece (interconnected)
ΧΑΛΚΟΚΟΝΔΥΛΗ 30
GR10432
ΑΘΗΝΑ
Greece

On behalf of

ΠΑΠΑΣΤΡΑΤΟΣ ΑΒΕΣ - Papastratos
2024-01-01
2024-03-31
Greece
Greece
Disclosure
End Consumer

Transaction Information

2024-07-15 11:30
2024071500004
Απόδειξη Προέλευσης της Ηλεκτρικής Ενέργειας που καταναλώθηκε
9 800

In the event of discrepancies between the information contained in this cancellation statement and in DAPEEP Registration Database, the latter shall prevail.

Piraeus, 2024-07-15

View cancellation statement here

ΔΑΠΕΕΠ

Cancellation Statement

This Cancellation Statement acts as a receipt for the Guarantees of Origin as listed below and for the purpose shown.

The environmental qualities of the associated energy have been consumed and will no longer be used for disclosure purposes in Greece. This Cancellation Statement and these Certificates may not be transferred to any party other than the energy supplier or end-consumer identified in this Cancellation Statement.

Performed by

ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΗΛΕΚΤΡΙΣΜΟΥ Α.Ε.
28XEQZ9X58
EL090000045
520803900000000302
Greece (interconnected)
ΧΑΛΚΟΚΟΝΔΥΛΗ 30
GR10432
ΑΘΗΝΑ
Greece

On behalf of

ΠΑΠΑΣΤΡΑΤΟΣ ΑΒΕΣ - Papastratos
2024-04-01
2024-06-30
Greece
Greece
Disclosure
End Consumer

Transaction Information

2024-09-25 12:38
2024092500011
Απόδειξη Προέλευσης της Ηλεκτρικής Ενέργειας που καταναλώθηκε
12 058

In the event of discrepancies between the information contained in this cancellation statement and in DAPEEP Registration Database, the latter shall prevail.

Piraeus, 2024-09-25

View cancellation statement here

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DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

ΔΑΠΕΕΠ

Cancellation Statement

This Cancellation Statement acts as a receipt for the Guarantees of Origin as listed below and for the purpose shown

The environmental qualities of the associated energy have been consumed and will no longer be used for disclosure purposes in Greece. This Cancellation Statement and these Certificates may not be transferred to any party other than the energy supplier or end-consumer identified in this Cancellation Statement.

Performed by

	ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΗΛΕΚΤΡΙΣΜΟΥ Α.Ε.
	28XEQZ9X56
	EL090000045
	520803900000000302
	Greece (interconnected)
	ΧΑΛΚΟΚΟΝΔΥΛΗ 30
	GR10432
	ΑΘΗΝΑ
	Greece

On behalf of

	ΠΑΠΑΣΤΡΑΤΟΣ ΑΒΕΣ - Papastratos
	2024-07-01
	2024-09-30
	Greece
	Greece
	Disclosure
	End Consumer

Transaction Information

	2024-11-20 12 34
	2024112000008
	Απόδειξη Προέλευσης της Ηλεκτρικής Ενέργειας που καταναλώθηκε
	12 498

In the event of discrepancies between the information contained in this cancelation statement and in DAPEEP Registration Database, the latter shall prevail.

Piraeus, 2024-11-20

View cancellation statement here

ΔΑΠΕΕΠ

Cancellation Statement

This Cancellation Statement acts as a receipt for the Guarantees of Origin as listed below and for the purpose shown

The environmental qualities of the associated energy have been consumed and will no longer be used for disclosure purposes in Greece. This Cancellation Statement and these Certificates may not be transferred to any party other than the energy supplier or end-consumer identified in this Cancellation Statement.

Performed by

	ΔΗΜΟΣΙΑ ΕΠΙΧΕΙΡΗΣΗ ΗΛΕΚΤΡΙΣΜΟΥ Α.Ε.
	28XEQZ9X56
	EL090000045
	520803900000000302
	Greece (interconnected)
	ΧΑΛΚΟΚΟΝΔΥΛΗ 30
	GR10432
	ΑΘΗΝΑ
	Greece

On behalf of

	ΠΑΠΑΣΤΡΑΤΟΣ ΑΒΕΣ - Papastratos
	2024-10-01
	2024-12-31
	Greece
	Greece
	Disclosure
	End Consumer

Transaction Information

	2025-02-20 11 00
	202502200000011
	Απόδειξη Προέλευσης της Ηλεκτρικής Ενέργειας που καταναλώθηκε
	11 528

In the event of discrepancies between the information contained in this cancelation statement and in DAPEEP Registration Database, the latter shall prevail.

Piraeus, 2025-02-20

View cancellation statement here

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DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

Philip Morris Lietuva

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end consumer specified below.

Litgrid

EECS

Transaction details

Transaction type: Cancellation

Status: Completed

Transaction number: 20250320000000059

Volume: 21430 MWh

Transaction start time: 20/03/2025, 10 54

Transaction completion time: 24/03/2025, 8 02

Transaction requested: 20/03/2025, 10 54

Public Statement: [illegible]

Standard: EECS electricity

From account

Organization name: SCENER UAB

Organization ID: 27XZ10FL6N

Domain: Lithuania

Domain code: LT

Account number: 643002406741099117

Street: Ukmerges g. 223

ZIP code: LT-07156

City: VILNIUS

Country: Lithuania

Beneficiary

Name of Beneficiary: Philip Morris Lietuva, UAB

Country of consumption: Lithuania

Location of beneficiary: Vilniaus pl. 16, LT-94104 Klaipeda

Consumption period: 01/01/2024 - 31/12/2024

Usage type: Disclosure

Cancellation purpose: The stated Redemption Purpose is Scope 2 reporting and CDP disclosure for reporting period 2024 in Lithuania

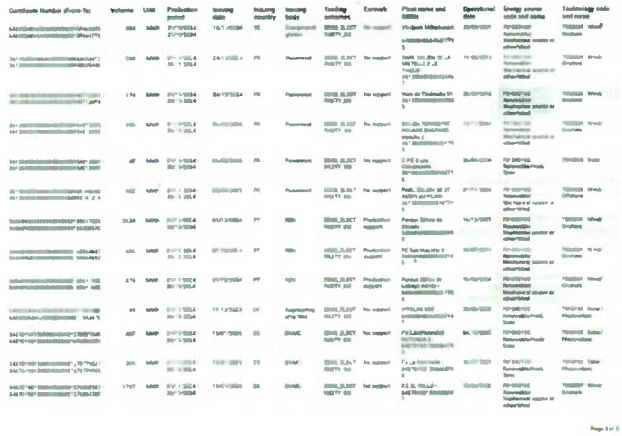
Type of beneficiary: End consumer

Certificate Number (From-To)	Volume	Unit	Production period	Issuing date	Issuing country	Issuing body	Trading schemes	Earmark	Plant name and GSRN	Operational date	Energy source code and name	Technology code and name
[illegible]	792	MWh	01/08/2024 - 31/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	PARC EOLIEN DE GRANCOURT - [illegible]	21/08/2019	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	868	MWh	01/08/2024 - 31/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	SEPE LA PATURE - [illegible]	01/09/2019	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	899	MWh	01/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production	MET LE MONT	01/09/2019	F01050100 -	T020001 - Wind/

Page 1 of 3

Certificate Number (From-To)	Volume	Unit	Production period	Issuing date	Issuing country	Issuing body	Trading schemes	Earmark	Plant name and GSRN	Operational date	Energy source code and name	Technology code and name
[illegible]			31/08/2024				EECS_ELECTRICITY_GO	support	[illegible]		Renewable/ Mechanical source or other/Wind	Onshore
[illegible]	530	MWh	01/08/2024 - 31/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	[illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	570	MWh	[illegible]	[illegible]	FR	Powernext	EECS_ELECTRICITY_GO	Production support	PARC EOLIEN DE [illegible]	[illegible]	[illegible]	T020001 - Wind/ Onshore
[illegible]	1706	MWh	[illegible]	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	PARC EOLIEN DU [illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	[illegible]	MWh	[illegible]	[illegible]	FR	Powernext	EECS_ELECTRICITY_GO	Production support	FERME EOLIENNE [illegible]	[illegible]	[illegible]	T020001 - Wind/ Onshore
[illegible]	[illegible]	MWh	01/08/2024 - 31/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	FERME EOLIENNE DU [illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	[illegible]	MWh	01/08/2024 - [illegible]	[illegible]	FR	Powernext	EECS_ELECTRICITY_GO	Production support	PARC EOLIEN DE [illegible]	[illegible]	[illegible]	T020001 - Wind/ Onshore
[illegible]	311	MWh	01/08/2024 - 31/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	EXTENSION SANTERRE - [illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	[illegible]	MWh	[illegible]	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	LE CROCQ [illegible]	[illegible]	[illegible]	T020001 - Wind/ Onshore
[illegible]	788	MWh	01/08/2024 - 31/08/2024	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	CHEMIN [illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	327	MWh	[illegible]	09/11/2024	FR	Powernext	EECS_ELECTRICITY_GO	Production support	PARC EOLIEN DE [illegible]	[illegible]	[illegible]	T020001 - Wind/ Onshore
[illegible]	[illegible]	MWh	01/08/2024 - 31/08/2024	[illegible]	FI	Fingrid	EECS_ELECTRICITY_GO	Production support	[illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore
[illegible]	[illegible]	MWh	[illegible]	[illegible]	SE	[illegible]	EECS_ELECTRICITY_GO	No support	[illegible]	[illegible]	F01050100 - Renewable/ Mechanical source or other/Wind	T020001 - Wind/ Onshore

Page 2 of 3



Philip Morris Lietuva RGGO Cancellation Statement

Transaction details

Transaction details

Transaction type
Cancellation

Status
Completed

Transaction number
20250711000000129

Volume
3798000 kWh

Transaction start time
11/07/2025, 12:10

Transaction completion time
11/07/2025, 12:10

Transaction requested
11/07/2025, 12:10

Message to Receiver

Standard
GGCS_BIOMETHANE

From account

Organization name
Kinect Energy Green Services AS

Organization ID
93X0020908

Business ID
S0090

Domain
Green Gas Certification Scheme

Domain code
GB-GGCS

Account number
643002406493020902

Street
1 Fantoftvegen 38

ZIP code
5072

City
Bergen

Country
Norway

Beneficiary

Name of Beneficiary
UAB Philip Morris Lietuva

Country of consumption
Lithuania

Location of beneficiary
Europe

Consumption period
01/01/2024 - 31/12/2024

Usage type
Disclosure

Cancellation purpose
For the benefit of UAB Philip Morris Lietuva for 2024 consumption.

Type of beneficiary
End consumer

Transaction certificates

PHILIP MORRIS BRASIL IND. COM. LTDA.

Redeemed Certificates

Production Device Details

Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO_2 / MWh)
UFV Apodi III	Brazil	Solar	PV Ground mounted	No	2018-11-28	0.000000

Redeemed Certificates

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0222-2043-6231.000000	0000-0222-2044-1373.999999	5 143.000000	Incl	2024-05-01 00:00:00 - 2024-05-31 23:51:55 (UTC)	Instituto Totum
From Certificate ID	**To Certificate ID**	**Number of Certificates**	**Offset Attributes**	**Period of Production**	**Issuer**
0000-0222-2043-1951.000000	0000-0222-2043-4626.999999	2 676.000000	Incl	2024-04-01 00:00:00 - 2024-04-30 23:55:58 (UTC)	Instituto Totum
From Certificate ID	**To Certificate ID**	**Number of Certificates**	**Offset Attributes**	**Period of Production**	**Issuer**
0000-0221-0121-1931.000000	0000-0221-0121-4493.999999	2 563.000000	Incl	2024-01-01 00:00:00 - 2024-01-31 23:56:14 (UTC)	Instituto Totum

Production Device Details

Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO_2 / MWh)
Apodi	Brazil	Solar	PV Ground mounted	No	2018-11-28	0.000000

Redeemed Certificates

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0221-0119-4736.000000	0000-0221-0120-0008.999999	5 273.000000	Incl	2024-01-01 00:00:00 - 2024-01-31 23:57:31 (UTC)	Instituto Totum
From Certificate ID	**To Certificate ID**	**Number of Certificates**	**Offset Attributes**	**Period of Production**	**Issuer**
0000-0221-2018-7410.000000	0000-0221-2018-7570.999999	161.000000	Incl	2024-04-01 00:00:00 - 2024-04-30 23:57:43 (UTC)	Instituto Totum

Production Device Details

Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO_2 / MWh)
Usina de Energia Eolica Vila Ceara II SPE SA	Brazil	Wind	Onshore	No	2020-02-08	0.000000
All Certificates issued for this production device qualify for REC Brazil						

Redeemed Certificates

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0220-2971-3487.000000	0000-0220-2971-3550.999999	64.000000	Incl	2024-01-01 00:00:00 - 2024-01-31 03:48:07 (UTC)	Instituto Totum

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0220-2971-3451.000000	0000-0220-2971-3486.999999	36.000000	Incl	2024-01-01 00:00:00 - 2024-01-31 03:48:07 (UTC)	Instituto Totum

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0220-2971-3551.000000	0000-0220-2971-3600.999999	50.000000	Incl	2024-01-01 00:00:00 - 2024-01-31 03:48:07 (UTC)	Instituto Totum

Indonesia

PT Hanjaya Mandala Sampoerna, Tbk. Sukorejo Plant and Karawang plant.

PT Philip Morris Indonesia Karawang International, Karawang plant

PT Hanjaya Mandala Sampoerna, Tbk. SKT Malang plant

PT Sampoerna Indonesia Sembilan, Sukorejo Pasuruan plant

PT Hanjaya Mandala Sampoerna, Tbk. SKT Rungkut 1 plant

PT Hanjaya Mandala Sampoerna, Tbk. SKT Rungkut 2 plant

PT Hanjaya Mandala Sampoerna, Tbk. SKT Kraksaan plant


The International Tracking Standard Foundation

This Redemption Statement has been produced for

PMI COMPANY PT INDONESIA

by

ENEL X ADVISORY SERVICES S R L

confirming the Redemption of

101 538 000000

I-REC Certificates, representing 101 538 000000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

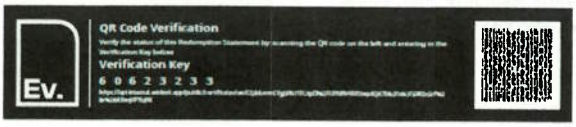
Factories SAMP Karawang, SAMP Sukorejo, Kraksaan Sampoerna, Malang Sampoerna, Rungkut 1 Sampoerna, Rungkut 2 Sampoerna, PTSIS Sukorejo and PTPMI Karawang Indonesia

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 PT Indonesia, Factories SAMP Karawang, SAMP Sukorejo, Kraksaan Sampoerna, Malang Sampoerna, Rungkut 1 Sampoerna, Rungkut 2 Sampoerna, PTSIS Sukorejo and PTPMI Karawang



PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
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SGS

PT Hanjaya Mandala Sampoerna, Tbk. Sukorejo Plant - Biogenic CO2 certificate

mig | PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 323.840 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of January 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 12th of February 2024.

Signed by,

Yohanes Kurniawan
General Manager

mig | PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 83.482 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of February 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 5th of March 2024.

Signed by,

Yohanes Kurniawan
General Manager

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 205.123 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of March 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 2nd of April 2024.

Signed by,

Yohanes Kurniawan
General Manager

PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 119.937 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of April 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 6th of May 2024.

Signed by,

Yohanes Kurniawan
General Manager

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange
SGS

mig | PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 75.418 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of May 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 4th of June 2024.

Signed by,

Yohanes Kurniawan
General Manager

mig | PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 242.669 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of June 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 8th of July 2024.

Signed by,

Yohanes Kurniawan
General Manager

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

mig | PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 222.833 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of July 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 7th of August 2024.

Signed by,

Yohanes Kurniawan
General Manager

mig | PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 200.000 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of August 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 15th of November 2024.

Signed by,

Yohanes Kurniawan
General Manager

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 182.762 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of September 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 10th of October 2024.

Signed by,

Yohanes Kurniawan
General Manager

PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 183.932 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of October 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 15th of November 2024.

Signed by,

Yohanes Kurniawan
General Manager

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 113.614 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of November 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 9th of December 2024.

Signed by,

Yohanes Kurniawan
General Manager

PT MOLINDO INTI GAS

CERTIFICATE OF ORIGIN

This document confirms and/or certifies that **PT Molindo Inti Gas** has supplied 162.237 kgs of Biogenic CO2 to **PT HM Sampoerna** in the month of December 2024. The liquid CO_2 produced at our distillery is sourced from the fermentation of black strap molasses into bio-ethanol. No other materials or source have been used other than the above stated.

Issued this 20th of January 2025.

Signed by,

Yohanes Kurniawan
General Manager

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

Leaf Threshing Plant, Philip Morris (Pakistan) Limited, Mardan Pakistan

The International Tracking Standard Foundation
Founders of I-REC

This Redemption Statement has been produced for

PHILIP MORRIS (PAKISTAN) LIMITED

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

6 562 000000

I-REC Certificates, representing 6 562.000000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

Mardan -Sahiwal
Pakistan

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 (Pakistan) Limited, Mardan and Sahiwal factories

Ev.

QR Code Verification
Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below
Verification Key
1 8 3 2 8 2 9 7

Massalin Particulares S.R.L., Lerma,Salta, Argentina and Massalin Particulares S.R.L., Merlo, Argentina

The International Tracking Standard Foundation
Founders of I-REC

This Redemption Statement has been produced for

PMI COMPANY MASSALIN PARTICULARES SRL.

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

22 173.000000

I-REC Certificates, representing 22 173.000000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

Factories Massalin Merlo and Massalin Lerma. Argentina

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 Massalin Particulares SRL., Factories Massalin Merlo and Massalin Lerma.

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 0 7 5 4 7 3 4

Redeemed Certificates

Production Device Details

Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO_2 / MWh)
Parque Eolico Madryn	Argentina	Wind	Onshore	Yes	2018-11-01	0.000000

Redeemed Certificates

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0220-7945-1699 884000	0000-0220-7945-2851 883999	1 152 000000	Inc	2024-01-01 - 2024-01-06	Instituto Argentino de Normalizacion y Certificacion

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0220-7945-1620 884000	0000-0220-7945-1699 883999	79 000000	Inc	2024-01-01 - 2024-01-06	Instituto Argentino de Normalizacion y Certificacion

Production Device Details

Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO_2 / MWh)
Parque Eolico Los Teros I	Argentina	Wind	Onshore	No	2020-09-15	0.000000

Redeemed Certificates

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0221-5621-6164 290000	0000-0221-5622-5254 289999	9 090 000000	Incl	2024-08-01 - 2024-09-30	Instituto Argentino de Normalizacion y Certificacion

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0221-5621-3627 290000	0000-0221-5621-5736 289999	2 109 000000	Incl	2024-08-01 - 2024-09-30	Instituto Argentino de Normalizacion y Certificacion

From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0221-3258-4321 000000	0000-0221-3259-4063 999999	9 743 000000	Inc	2024-01-12 - 2024-01-17	Instituto Argentino de Normalizacion y Certificacion

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

Philip Morris Operations a.d. Nís

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end consumer specified below.

Transaction details

Transaction type Cancellation	Status Completed
Transaction number 20250203000000092	Volume 1519 MWh
Transaction start time 03/02/2025, 9 50	Transaction completion time 04/02/2025, 10.14
Transaction requested 03/02/2025, 9 50	
Public Statement https://grex.gexcel.com/en/public/cancellationstatement/	Standard EECS electricity

From account

Organization name EPS AD Beograd	Organization ID 47XQ80ZW5L
Domain Serbia	Domain code RS
Account number 643002406741098837	
Street Balkanska	
PO box 13	ZIP code 11000
City Beograd	Country Serbia

Beneficiary

Name of Beneficiary PHILIP MORRIS OPERATIONS A.D. - NIŠ	Country of consumption Serbia
Location of beneficiary Serbia	Consumption period 01/12/2024 - 31/12/2024
Usage type Disclosure	Cancellation purpose Supply to the consumer in 12/2024
Type of beneficiary End consumer	

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type Cancellation	Status Completed
Transaction number 20240311000000097	Volume 1423 MWh
Transaction started 11/03/2024, 11 42	Transaction completed 11/03/2024, 14 56
Public Statement https://grex.gexcel.com/en/public/cancellationstatement/	Standard EECS

From account

Organization name EPS AD Beograd	Organization ID 47XQ80ZW5L
Domain Serbia	Domain code RS
Account number 643002406741098837	Street Balkanska
PO box 13	ZIP code 11000
City Beograd	Country Serbia

Beneficiary

Name of Beneficiary PHILIP MORRIS OPERATIONS A.D. - NIŠ	Country of consumption Serbia
Organization ID 47XQ80ZW5L	Location of beneficiary Serbia
Consumption period 01/01/2024 - 31/01/2024	Usage type Disclosure
Cancellation purpose Supply to the consumer in 01/2024	Type of beneficiary End consumer

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type Cancellation	Status Completed
Transaction number 20240411000000097	Volume 1404 MWh
Transaction started 11/04/2024, 14.56	Transaction completed 12/04/2024, 11.19
Public Statement https://grex.gexcel.com/en/public/cancellationstatement/	Standard EECS

From account

Organization name EPS AD Beograd	Organization ID 47XQ80ZW5L
Domain Serbia	Domain code RS
Account number 643002406741098837	Street Balkanska
PO box 13	ZIP code 11000
City Beograd	Country Serbia

Beneficiary

Name of Beneficiary PHILIP MORRIS OPERATIONS A.D. - NIŠ	Country of consumption Serbia
Organization ID 47XQ80ZW5L	Location of beneficiary Serbia
Consumption period 01/02/2024 - 29/02/2024	Usage type Disclosure
Cancellation purpose Supply to the consumer in 02/2024	Type of beneficiary End consumer

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
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Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20240510000000061**	Volume **1864 MWh**
Transaction started **10/05/2024, 13.29**	Transaction completed **11/05/2024, 12.16**
Public Statement https://grex.grexel.com/en/public/cancellationstatement/2fc2712b-d85f-47b6-9f7d-b1ab35ab2f4e	Standard **EECS**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	Street **Balkanska**
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/03/2024 - 31/03/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 03/2024**	Type of beneficiary **End consumer**

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20240626000000136**	Volume **1750 MWh**
Transaction started **26/06/2024, 13.52**	Transaction completed **27/06/2024, 10.27**
Public Statement https://grex.grexel.com/en/public/cancellationstatement/2d3b09c4-de2d-4490-bee6-5f8d884110b6	Standard **EECS**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	Street **Balkanska**
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/04/2024 - 30/04/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 04/2024**	Type of beneficiary **End consumer**

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20240711000000275**	Volume **1635 MWh**
Transaction started **11/07/2024, 15.07**	Transaction completed **12/07/2024, 12.58**
Public Statement https://grex.grexel.com/en/public/cancellationstatement/de948577-c398-4ffd-86da-17bcc703273c	Standard **EECS**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	Street **Balkanska**
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/05/2024 - 31/05/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 05/2024**	Type of beneficiary **End consumer**

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Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20240808000000146**	Volume **2215 MWh**
Transaction started **08/08/2024, 9.50**	Transaction completed **08/08/2024, 12.47**
Public Statement https://grex.grexel.com/en/public/cancellationstatement/741337e4-8687-49c8-85fa-8affb1085fed	Standard **EECS**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	Street **Balkanska**
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/06/2024 - 30/06/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 06/2024**	Type of beneficiary **End consumer**

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20240912000000048**	Volume **1820 MWh**
Transaction started **12/09/2024, 7.43**	Transaction completed **12/09/2024, 13.27**
Transaction requested **12/09/2024, 7.43**	
Public Statement https://grex.grexel.com/en/public/cancellationstatement/d2428167-7a4d-47b9-8794-d63e7f837191	Standard **EECS electricity**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	
Street **Balkanska**	
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/07/2024 - 31/07/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 07/2024**	Type of beneficiary **End consumer**

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Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20241007000000157**	Volume **1994 MWh**
Transaction started **07/10/2024, 12.23**	Transaction completed **07/10/2024, 13.43**
Transaction requested **07/10/2024, 12.23**	
Public Statement https://orex.grexel.com/en/public/cancellationstatement/ba636a9b-fbcf-408b-8fc6-bf49f1f256e1	Standard **EECS electricity**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	
Street **Balkanska**	
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/08/2024 - 31/08/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 08/2024**	Type of beneficiary **End consumer**

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below.

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20241106000000244**	Volume **1856 MWh**
Transaction started **06/11/2024, 13.55**	Transaction completed **07/11/2024, 7.35**
Transaction requested **06/11/2024, 13.55**	
Public Statement https://orex.grexel.com/en/public/cancellationstatement/54cb2170-7317-420a-8821-c8ad82f0f5d0	Standard **EECS electricity**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	
Street **Balkanska**	
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/09/2024 - 30/09/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 09/2024**	Type of beneficiary **End consumer**

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
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Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20241218000000141**	Volume **1846 MWh**
Transaction start time **18/12/2024, 11.16**	Transaction completion time **19/12/2024, 7.56**
Transaction requested **18/12/2024, 11.16**	
Public Statement https://prex.prexel.com/en/public/cancellationstatement/cfd1a49e-e916-45a6-9dfd-edcc553f7b57	Standard **EECS electricity**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	
Street **Balkanska**	
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/10/2024 - 31/10/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 10/2024**	Type of beneficiary **End consumer**

Cancellation Statement

This cancellation statement acts as a receipt for the certificates listed below and for the purpose shown. With this Cancellation Statement, released on the Transaction Date, the indicated certificates are no longer tradable. Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified below

Transaction details

Transaction type **Cancellation**	Status **Completed**
Transaction number **20241230000000164**	Volume **1642 MWh**
Transaction start time **30/12/2024, 14.09**	Transaction completion time **31/12/2024, 8.06**
Transaction requested **30/12/2024, 14.09**	
Public Statement https://prex.prexel.com/en/public/cancellationstatement/ec10ec5f-328f-4510-bd55-b6cc6514540a	Standard **EECS electricity**

From account

Organization name **EPS AD Beograd**	Organization ID **47XQ80ZW5L**
Domain **Serbia**	Domain code **RS**
Account number **643002406741098837**	
Street **Balkanska**	
PO box **13**	ZIP code **11000**
City **Beograd**	Country **Serbia**

Beneficiary

Name of Beneficiary **PHILIP MORRIS OPERATIONS A.D. - NIŠ**	Country of consumption **Serbia**
Organization ID **47XQ80ZW5L**	Location of beneficiary **Serbia**
Consumption period **01/11/2024 - 30/11/2024**	Usage type **Disclosure**
Cancellation purpose **Supply to the consumer in 11/2024**	Type of beneficiary **End consumer**

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
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Philip Morris Investments B.V. Jordan

The International Tracking Standard Foundation
Founders of HRFC

This Redemption Statement has been produced for

PMI COMPANY PHILIP MORRIS INVESTMENTS B V JORDAN

by

ENEL X ADVISORY SERVICES S.R.L.

confirming the Redemption of

3 316.000000

I-REC Certificates, representing 3 316.000000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

Factory Amman
Jordan

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 Philip Morris Investments B V Jordan, factory Amman

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 7 0 1 6 1 4 2

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
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Philip Morris Romania SRL

Statnett

Cancellation Statement

This cancellation statement provides the proof of origin for 51 870 MWh consumed energy.

This cancellation statement proves that 51 870 Guarantees of Origin has been cancelled in the Norwegian Energy Certificate System (NECS).

Performed by

Account Holder Name	AFS Energy b.v.
Account Holder Code	08XR25CS6E
VAT Number	NL808506432B01
Account	707052300001192317
Domain	Norway
Postal Code	1012 JW
City	Amsterdam
Country	Netherlands

On behalf of

Name of Beneficiary	Philip Morris Romania SRL, factory Bucharest
Consumption Start	2024-01-01
Consumption End	2024-12-31
Country of Consumption	Romania
Location of Beneficiary	Philip Morris Romania SRL, factory Bucharest
Usage Category	Disclosure
Type of Beneficiary	End Consumer

Transaction Information

Transaction Date	2025-03-18 11:13
Transaction Number	2025031800232
Cancellation Purpose	The stated Redemption Purpose is Scope 2 reporting and CDP disclosure for reporting period 2024 in Romania.
Volume Cancelled (sum)	51 870

This cancellation statement acts as a receipt of the cancellation of the certificates listed and for the purpose shown. With this Cancellation Statement, released on the 2025-03-18, the indicated certificates are no longer tradable.
Onward sale of this Cancellation Statement is prohibited. The environmental qualities of the associated energy have been consumed and this Cancellation Statement and these certificates may not be transferred to any party other than the energy supplier or end-consumer specified above.

View cancellation statement here.

Oslo, 2025-03-18

Ole Jacob Høyland
Director, market operations
Statnett SF

PHILIP MORRIS INTERNATIONAL

DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

Philip Morris Manufacturing Senegal S.A.R.L.

The International Tracking Standard Foundation
Founders of I-REC

This Redemption Statement has been produced for

PMI COMPANY PHILIP MORRIS MANUFACTURING SENEGAL S.A.R.L.

by

ENEL X ADVISORY SERVICES S R.L.

confirming the Redemption of

4 601.000000

I-REC Certificates, representing 4 601.000000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

Factory Dakar
Senegal

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 Philip Morris Manufacturing Senegal S.A.R.L., Factory Dakar

Ev.

QR Code Verification
Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below
Verification Key
1 2 3 8 9 2 3 4

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DEMONSTRATION OF CARBON NEUTRALITY
www.sgs.com/climatechange

Tabaqueira- Empresa Industrial Tabacos S.A

EEGO

EECS EUROPEAN ENERGY CERTIFICATE SYSTEM

Cancellation Statement - Guarantees of Origin

This Cancellation Statement certifies that the Guarantees of Origin listed hereunder have been cancelled. The environmental properties of the energy associated with the Guarantees of Origin are deemed to have been consumed. This Cancellation Statement and the related Guarantees of Origin may not be transferred to third parties other than the identified energy user or end consumer. Onward sale of this Cancellation Statement is prohibited.

This Statement can be validated on the EEGO portal [illegible] using the Consultation Code provided here.

Requesting Entity (Cancelled by)			
Account	[illegible]	Name	Iberdrola Clientes Portugal Unipessoal, Lda.
VAT	PT[illegible]	Address	Avenida D. João II, Edifício Meridiano nº 30, Piso 3 | 1990-[illegible] Lisboa Portugal

Beneficiary (Cancelled on behalf of)			
Type	Consumidor final	Account	Não Registado
Name	TABAQUEIRA - EMPRESA INDUSTRIAL TABACOS,	VAT	PT[illegible]
Address	Av. Alfredo da Silva, Nº 35	Consumption Country	Portugal
	2639-002 Rio de Mouro Portugal	Consumption Domain	PT - Portugal Continental
Delivery Point Codes	[illegible]		

Cancellation Information			
Cancellation ID	362775	Validation Code	[illegible]
Document Issuance Date	2025-04-03 v1	Canceled By	PT19 REN
Cancellation Date	25-03-2025	Nr of Cancelled Guarantees	21416
GO purpose	Disclosure	Energy Carrier	Electricity
Consumption Period	2024-01-01 - 2024-12-31		
Comments(*)			

Digitally signed by REN - REDE ELECTRICA NACIONAL, S.A.
Date: 2025.04.0[illegible]
Reason: Guarantees of Origin Cancellation
Location: Portugal

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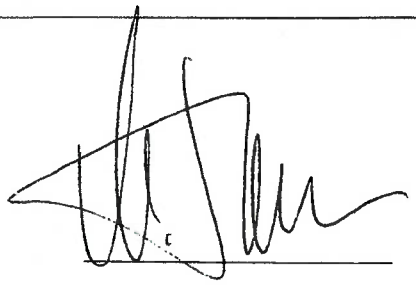
END OF THE DOCUMENT

CARBON NEUTRAL DECLARATION CLUSTER 1

November 2025

Irene Pinto
Director Manufacturing Sustainability
PMI Operations



November 2025

Michael Scharer
VP Global Manufacturing
PMI Operations