validation/verification

### **ISO 14064-1** Greenhouse Gas (GHG)



The GHG Report at organization level for the calendar year 2024

TPI Polene Power Public Company Limited: Waste-derived fuel (RDF) production plant, waste heat power plant, RDF-fired power plant, and coal-fired power plant in Saraburi

WHITE THE PROPERTY OF THE PROP				
1.TG1, TG2, and TG3 Power Plants	299/299 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
2.TG4 Power Plant	299/399 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
3.TG5 Power Plant	299/499 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
4.TG6 Power Plant	302 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
5.TG7 Power Plant	303 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
6.TG8 Power Plant	304 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
7.B6 Steam Production Plant	303 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
8.B11 and B12 Steam Production Plants	299/299 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
9.RDF Production Plant	299/199 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260			
It has been verified at a reasonable level of assurance according to ISO 14064 1:2019 and ISO 14064 2:2010				

It has been venified at a reasonable level of assurance according to ISO 14064—1:2018 and ISO 14064—3:2019. The total greenhouse gas emission in the period 1 January 2024 to 31 December 2024 as following

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Category 1: Direct GHG emissions	1,780,876	tCO <sub>2</sub> e	
Category 2: Indirect GHG emissions from imported energy	14,983	tCO <sub>2</sub> e	
Category 3: Indirect emissions from transportation	34,269	tCO <sub>2</sub> e	
Category 4: Indirect GHG emissions from products used by organization	83,987	tCO <sub>2</sub> e	
The total greenhouse gas emission for	1,795,859	tCO <sub>2</sub> e	
Category 1 and Category 2		/6 (15	
The total greenhouse gas emission for	1,914,115	tCO <sub>2</sub> e	
Category 1, Category 2, Category 3 and Category 4			
Biogenic CO <sub>2</sub> emissions	1,333,914	tCO <sub>2</sub> e	
HCFC-22, HCFC-141B, CFC-11	2,077	tCO <sub>2</sub> e	

Note: The amount of greenhouse gas emission of each category has been rounded up to an integer, which may affect the total emission by using mathematical equations, different is less than 1 tonne of carbon dioxide equivalent.

For the following activities

Direct GHG emissions --- Stationary combustion (RDF, Coal, Fuel oil, Diesel, LPG), Mobile combustion (Diesel, Gasoline, LPG, CNG), Fugitive emissions (CH<sub>4</sub> from coal storage, CH<sub>4</sub> from wastewater, Refrigerants,  $CO_2$  from fire extinguishers,  $SF_6$ ) including Biogenic  $CO_2$ , HCFC-22, HCFC-141B, CFC-11 Indirect GHG emissions from imported energy --- Electricity

Indirect emissions from transportation --- Upstream transportation and Downstream transportation

Indirect GHG emissions from products used by organization --- Purchased goods and services (Paper, Sodium hypochlorite) and Fuel- and energy-related activities

Date of Verification Statement: 22 July 2025

This verification statement is not valid without the full verification scope, objective, criteria and conclusion available on page 2 to 3 of this statement.

Signed by

Mr. Teerakul Boonyong Vice president,

Sustainability Validation and Verification Department

Signed by

Mr. Teerakul Boonyong

Technical Reviewer

Ms. Atchada Ngeimvijawat

thada !

Lead Verifier

Signed by





validation/verification

# ISO 14064-1 Greenhouse Gas (GHG)



Verification Statement related to GHG Report at organization level for Calendar Year 2024 prepared for

TPI Polene Power Public Company Limited: Waste-derived fuel (RDF) production plant, waste heat power plant, RDF-fired power plant, and coal-fired power plant in Saraburi

Terms of Engagement

TPI Polene Power Public Company Limited: Waste-derived fuel (RDF) production plant, waste heat power plant, RDF-fired power plant, and coal-fired power plant in Saraburi (hereafter referred to as "TPIPP") has commissioned to Management System Certification Institute (Thailand), Foundation for Industrial Development (hereafter referred to as "MASCI") to carry out a reasonable level of assurance of the GHG Report at organization level for the calendar year 2024 (hereafter referred to as "GHG Report").

Management Responsibility

TPIPP is responsible for the preparation and fair presentation of the GHG Report in accordance with ISO 14064-1:2018. This responsibility includes designing, implementing and maintaining a data and information management system relevant to the preparation and fair presentation of the GHG Report that is free from material misstatement.

MASCI's responsibility is to express a third party opinion on the GHG Report based on our verification. We conduct our verification in accordance with the ISO 14064-3:2019. This International Standard requires that we comply with ethical requirements and plan and perform the verification to obtain a reasonable level of assurance in accordance with our contract with TPIPP. Ultimately, the GHG Report has been approved by, and remained the responsibility of TPIPP.

Verification Objective

The purpose of the verification is to provide interested parties with professional and independent judgment, which is a third party opinion regarding the data and information contained in the GHG Report.

Verification Scope

Type of GHG included -  $CO_2$ ,  $CH_4$ ,  $N_2O$ ,  $SF_6$ , PFCs, HFCs and  $NF_3$  including Biogenic  $CO_2$ , HCFC-22, HCFC-141B, CFC-11 The organizational boundaries were established by using operational control approach.

The facilities are consist of TPI Polene Power Public Company Limited: Waste-derived fuel (RDF) production plant, waste heat power plant, RDF-fired power plant, and coal-fired power plant in Saraburi

1.TG1, TG2, and TG3 Power Plants 299/299 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 2.TG4 Power Plant 299/399 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 299/499 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 3.TG5 Power Plant 302 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 303 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 304 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 4.TG6 Power Plant 5.TG7 Power Plant 6.TG8 Power Plant 7.B6 Steam Production Plant 303 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 8.B11 and B12 Steam Production Plants 299/299 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260 9. RDF Production Plant 299/199 Moo 5, Mittraparp Road, Tubkwang, Kangkhoy District, Saraburi 18260

The GHG emissions, removals and storage in GHG Report for the period 1 January 2024 to 31 December 2024, which comprise the following: Direct GHG emissions --- Stationary combustion (RDF, Coal, Fuel oil, Diesel, LPG), Mobile combustion (Diesel, Gasoline, LPG, CNG), Fugitive emissions ( $CH_4$  from coal storage,  $CH_4$  from wastewater, Refrigerants,  $CO_2$  from fire extinguishers,  $SF_6$ ) including Biogenic  $CO_2$ , HCFC-22, HCFC-141B, CFC-11

Indirect GHG emissions from imported energy --- Electricity

Indirect emissions from transportation --- Upstream transportation and Downstream transportation

Indirect GHG emissions from products used by organization --- Purchased goods and services (Paper, Sodium hypochlorite) and Fueland energy-related activities

· Data and information related to GHG emission reduction and removal enhancement initiatives, projects and targets has not been included.

### Verification Criteria

ISO 14064-1:2018 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

ISO 14064-3:2019 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements

R-801 MASCI's regulation for GHG validation and verification services

IPCC Fifth Assessment Report (AR5), Global warming potential (GWP) values are applied in this GHG Report Noted: GWP IPCC ARS has been applied to be in line with GHG Emission Factor, which was announced by Thailand Greenhouse Gas Management Organization (Public Organization) in April 2022





validation/verification

# ISO 14064-1 Greenhouse Gas (GHG)



Level of Assurance & Materiality

The conclusion expressed in this verification statement has been formed on the basis of a reasonable level of assurance and at a materiality threshold of 5%.

#### MASCI's Approach

Our verification has been conducted in accordance with ISO 14064-3:2019, Specification with guidance for the verification and validation of greenhouse gas statements, to provide a reasonable level of assurance for the disclosure of data and information in the GHG Report have been prepared in accordance with ISO 14064-1:2018, Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Focusing on the basic principles of ISO 14064—3:2019, Impartiality, Evidence based approach, Fair presentation, Documentation, Conservativeness, and focusing on the basic principles of 14064—1:2018, Relevance, Completeness, Consistency, Accuracy, Transparency Verification team performed verification activity as per procedure and criteria, including audit trail and source of evidence in line with strategic review and risk assessment, sampling plan, justification for quantifying and selecting the data sets. Evidence-gathering procedures included but were not limited to:

- 1) Review of historical data in 2023, which has been set as the base year, data and information between 1 January 2024 to 31 December 2024, data and information management procedure, calculation and analyze the amount of greenhouse gas emissions and reduction including relevant data and information.
- 2) Assessment and cross check the activity data and emission factor values i.e. sampling of fuel and energy records to confirm accuracy of source data into calculations, and recalculation of emissions
- 3) Verification of operational activities of facilities to inspect the completeness of the GHG Report and re-perform access controls to onsite records
- 4) Interviews the executives, operators and responsible persons for greenhouse gas data and information to confirm operational behaviour and standard operating procedures

#### **MASCI's Conclusion**

Our verification opinion based on the process and procedures conducted and the basis of a reasonable level of assurance. Based on the verification, it is concluded that the GHG Report is materially correct, fairly represents the GHG data and information, and complies with ISO 14064-1:2018.

The total greenhouse gas emission in the period 1 January 2024 to 31 December 2024 as following

		A SECURE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON OF THE PERS
Category 1: Direct GHG emissions	1,780,876	tCO <sub>2</sub> e
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		ARREST AND A STATE OF THE PARTY

Note: The amount of greenhouse gas emissions of each category has been rounded up to an integer, which may affect the total emissions by using mathematical equations, different is less than 1 tonne of carbon dioxide equivalent.

This verification statement is subject to the provisions of this legal section:

- Management System Certification Institute (Thailand) and their respective officers assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the data and information or advice in this document or howsoever provided, unless that person has signed a contract for the provision of this data and information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.
- This verification statement is only valid when published with the report to which it refers. It may only be reproduced in its entirety.

  In the case of any conflict between the English and That language versions of this legal section, the That version shall prevail.

  Due to inherent limitations in any internal control, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the verification carried out on the relevant internal controls were on a test basis. Any projection of the evaluation of control to future periods is subject to the risk that the processes may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.



