

Verification Opinion

CFV 821078

Verification Opinion

Verified as Satisfactory:

Based on evidence that the GHG statement contained in the GHG Report 2023 produced by United Palm Oil Industry Public Company Limited.

- Is not materially correct and is not a fair representation of GHG data and information.
- Has not been prepared in accordance with ISO14064-1:2018 and its principles
- SET CARBON Application

Lead Verifier: Naris Lapsunthornphithak

Signed on behalf of BSI: Pornphen Vonganonchinda, General Manager – Finance, Thailand

Independent Reviewer: Puinoon Lertjettanarom

Issue Date: 15 December 2024

NOTE: BSI (Thailand) is independent to and has no financial interest in United Palm Oil Industry Public Company Limited. This 3rd party Verification Opinion has been prepared for United Palm Oil Industry Public Company Limited only for the purposes of verifying its statement relating to its GHG emissions more particularly described in the scope above. It was not prepared for any other purpose. In making this Statement, BSI (Thailand) has assumed that all information provided to it by United Palm Oil Industry Public Company Limited is true, accurate and complete. BSI (Thailand) accepts no liability to any third party who places reliance on this statement.

BSI Group (Thailand) Co.,Ltd. 127/29 Panjathani Tower, 24th Floor Nonsee Road, Chongnonsee, Yannawa Bangkok. Thailand.

Verification Engagement

Organization:

United Palm Oil Industry Public Company Limited

Responsible party:

United Palm Oil Industry Public Company Limited

Verification Objectives:

To express an opinion on whether the organizational GHG Statement which is historical in nature:

- Is accurate, materially correct and is a fair representation of GHG data and information.
- Has been prepared in accordance with ISO14064-1:2018 the criteria used by BSI to verify the GHG Organizational Statement.

Materiality Level:

5%

Level of Assurance:

Limited

Verification evidence gathering procedures:

- Evaluation of the monitoring and controls systems through interviewing employees observation & inquiry
- Verification of the data through sampling recalculation, retracing, cross checking and reconciliation
- SET Carbon Application

The verification activities applied in a limited level of assurance verification are less extensive in nature, timing and extent than in a reasonable level of assurance verification

Verification Standards:

The verification was carried out in accordance with ISO 14064-3: 2019, ISO 14065: 2020 and ISO 17029:2019

Note: United Palm Oil Industry Public Company Limited is responsible for the preparation and fair presentation of the GHG statement and report in accordance with the agreed criteria. BSI is responsible for expressing an opinion on the GHG statement based on the verification.

Organizational GHG Statement

Organization:

United Palm Oil Industry Public Company Limited

Organizations GHG Report containing GHG Statement:

GHG Inventory report update 10.12

Organizational Boundary:

Operational Control

Locations included in the Organizational Boundary:

98 Moo 6, Nuaklong-Khao Phanom Road, Huayyoong Sub-District, Nuaklong District, Krabi 81130, Thailand.

Include other boundaries See Appendix A

Scope of activities:

- Manufacture of Crude Palm Oil, Palm Kernel, Crude Palm Kernel Oil, Palm Kernel Cake
- Oil Palm Nursery and Oil Palm Plantation
- Power plant electricity generating from biogas and biomass.
- Office Krabi

Reporting Boundary:

Direct GHG Emissions (Scope 1)

- Stationary combustion: diesel generator, diesel fire pump, diesel for pilot boiler, LPG for maintenance, Gasoline for glass cutter, Biogas for gas engine of power plant, Biomass for boiler and steam turbine of power plant
- Mobile combustion (on-road): Car company, Plant truck transport, staff car, manager car, Manager car, plant garden car.
- Mobile combustion (off-road): Tractor, Backhoe (B7-PLA), Biomass excavator, soil excavator, forklift
- Fugitives: Refrigerant leakage Chiller R-410a, R-32, CO2 fire extinguisher, Fertilizer uses, wastewater treatment

Direct GHG Removals (Scope 1)

N/A

Indirect GHG Emissions from imported energy (Scope 2) Imported electricity from PEA

- MILL/BIOMASS
- BIOGAS
- MILL/HOUSING

Plantation and nursery sites detail as

- Krabi Noi nursery
- Nam-Jarn nursery
- Khao Khen Estate
- Koh Noi Estate
- Ban Mark Estate
- Khiansa Estate
- Chaiburi Estate
- Tubprik Estate
- Ranong Nursery
- Nakhon Nursery

Indirect GHG emissions (Scope 3)

No reporting

Separately report

Biogenic carbon from biogas and biomass
Refrigerant leakage R-22

Exclusions from Reporting Boundary:

Scope 3 Other indirect GHG emissions as minimum requires of SET (Stock exchange Thailand)

Criteria for developing the organizational GHG Inventory:

ISO14064-1:2018

Reporting Period:

01/01/2023 – 31/12/2023

2023	tCO2(e)
Direct Emissions (scope 1)	345,573.99
• Stationary combustion	871.64
• Mobile combustion	1295.26
• Fugitives	343,407.08
Indirect Emissions from Imported Energy (scope 2) - Location Based	910.09
Indirect GHG emissions from transportation (Scope 3)	N/A
Total (location based)	346,484.08
Separately report	
• Biogenic carbon from biogas and biomass	46,399.65
• Refrigerant leakage R-22	67.55

Appendix A

Code	Name	Address location
โรงสกัดน้ำมันปาล์ม/โรงไฟฟ้า/หน่วยงานสนับสนุน / กิจกรรมของฝ่ายโรงงาน		
MILL	Mill house and Power Plant biogas/biomass	98 Moo 6, Nuaklong-Khao Phanom Road, Huayyoong Sub-District, Nuaklong District, Krabi 81130, Thailand.
หน่วยงานฝ่ายสวน / กิจกรรมรวบรวมข้อมูลโดยตุรการฝ่ายสวน/บัญชี		
N10	Nursery Ranong แปลงเพาะระนอง	30/1, Moo 6, Nam Chuet Noi Subdistrict, Kra Buri District, Ranong Province, 85110, Thailand
N12	Nursery Nakhon แปลงเพาะนคร	473/1, Moo 5, Suan Luang Subdistrict, Chalerm Pra Kiat District, Nakhon Si Thammarat Province, 80150, Thailand.
PLA1	Oil Palm Nursery and Oil Palm Plantation, Krabi Noi Estate สวนกระปี่น้อย	78, Moo 4, Krabi Noi Sub-district, Mueang Krabi District, Krabi Province, 81000, Thailand
PLA1	Nursery Num-Jarn แปลงน้ำจัน	78/1, Moo 4, Nuea Khlong-Khao Phanom Road, Krabi Noi Sub-district, Mueang Krabi District, Krabi Province, 81000, Thailand
PLA4	Oil Palm Nursery and Oil Palm Plantation, Koh Noi Estate สวนเกาะน้อย	75/5, Moo 2, Bang Sawan Sub-district, Phra Saeng District, Surat Thani Province, 84210, Thailand
PLA5	Oil palm Plantation, Ban Mark Estate สวนบ้านหมาก	157, Moo 6, Bang Sawan Sub-district, Phra Saeng District, Krabi Province, 84210, Thailand
PLA8	Oil Palm Plantation, Tubprik Estate สวนทับปริก	341, Moo 5, Thap Prik Sub-district, Mueang Krabi District, Krabi Province, 81000, Thailand
PLA7	Oil Palm Plantation, Chaiburi Estate สวนชัยบุรี	68/5 Moo 5, Chaiburi Sub-District, Chaiburi District, Surat Thani 84260, Thailand
PLA6	Oil Palm Plantation, Khiansa Estate สวนเคียนซา	153, Moo 13, Ban Sedaet Sub-district, Kien Sian District, Krabi Province, 81110, Thailand
PLA3	Oil Palm Plantation, Khao Khen Estate สวนเขาเขน	86, Moo 4, Kiriwong Sub-district, Plai Phraya District, Krabi Province, 81160, Thailand