

# OPINION

## Greenhouse Gases Verification Opinion ISO 14064-1 : 2018

Gives to

**ASE ELECTRONICS (M) SDN.BHD.**

Office Address

**Plot 8 & 20, Phase 4, Bayan Lepas Free Industrial Zone,  
11900 Bayan Lepas, Penang, Malaysia**

The quantity of Greenhouse Gas of the above organization and found to be in accordance with ISO 14064-3:2019. (detailed information please refer to next page)

<b>Report Year</b>	<b>: 2022</b>	
<b>Greenhouse Gases</b>		
<b>Direct Emissions</b>	<b>: 1,392.18</b>	<b>CO2-e Tonnes/ year</b>
<b>Energy Indirect Emissions(Category2)</b>	<b>: 83,756.57</b>	<b>CO2-e Tonnes/ year</b>
<b>Other Indirect Emissions (Category3-6)</b>	<b>: 14,121.58</b>	<b>CO2-e Tonnes/ year</b>
<b>Sum</b>	<b>: 99,270.33</b>	<b>CO2-e Tonnes/ year</b>
<b>Materiality</b>	<b>: 5%</b>	
<b>Reasonable Assurance</b>	<b>: Direct and Energy Indirect Emissions</b>	
<b>Limited Assurance</b>	<b>: Category3-6</b>	

Opinion No.: GHG-232791011

Version:

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Verification Body  
at TUV NORD Taiwan Co., Ltd.

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Further clarifications regarding the scope of this opinion and the applicability of the standard may be obtained by consulting the organization

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# OPINION

## Appendix to Opinion No. GHG-232791011

### ISO 14064-1 : 2018

TUV NORD Taiwan Co., Ltd (hereinafter referred to as "TUV NORD") has been contracted with [ASE Electronics (M) Sdn.Bhd.] (hereinafter referred to as "ASE Electronics"), [Plot 8 & 20, Phase 4, Bayan Lepas Free Industrial Zone, 11900 Bayan Lepas, Penang, Malaysia] for the verification of direct and indirect greenhouse gas emissions in accordance with ISO 14064-3:2019. In the GHG Opinion in the form of GHG report covering GHG emissions of the period 01, 01, 2022 to 31, 12, 2022.

#### Roles and responsibilities

The management of ASE Electronics is 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 and the reported GHG emissions.

TUV NORD conducted a third party verification to express an independent GHG verification opinion on the GHG emissions as provided in the GHG Opinion for the period year 2022.

#### Level of Assurance

The level of assurance agreed are that of reasonable assurance for category 1 and 2; Limited level assurance from category 3 to 6.

#### Scope

Verification of GHG emissions within the organization's boundary and is based on ISO 14064-3:2019.

- Types of GHGs included: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>
- The IPCC 2014 AR5 GWP values are applied in the inventory.
- GHG information for the following period was verified on 17, 02, 2023 to 28, 03, 2023

The GHG emissions are described as below:

GHG emissions categorization		Description	GHG emission (tonnes of CO <sub>2</sub> e per year)
<b>Direct Emissions/ Category 1</b>		Occur from GHG sources inside organizational boundaries and that are owned or controlled by the organization.	1,392.18
<b>Energy Indirect Emissions</b>	<b>Category 2</b>	Indirect GHG emissions from imported energy	83,756.57
		Renewable Electricity purchased in MWh with contractual instruments compliant with ISO 14064-1 Annex E	143,174
		Indirect emissions from imported electricity-location-based approach	83,756.57
		Indirect emissions from imported electricity-market-based approach	0
<b>Indirect Emissions</b>	<b>Category 3</b>	Indirect GHG emissions from transportation	1,771.64
	<b>Category 4</b>	Indirect GHG emissions from products used by an organization	12,349.94
	<b>Category 5</b>	Indirect GHG emissions associated with the use of products from the organization	-
	<b>Category 6</b>	Other sources	-
Direct Emissions and Indirect Emissions			99,270.33

The GHG emissions categorization are based on Annex B of ISO14064-1:2018.

Intended User of Verification Opinion: Organizations use for their own reference.

#### Confidentiality

The reports and appendix are not allowed to be edited, duplicated, or published without the clients' agreement.

#### Avoidance of Conflict of Interest

The reports was verified with fairness and honesty.

#### Verifiers Group

According as the above opinion were judgement by TUV NORD.



Verification Body  
at TUV NORD Taiwan Co., Ltd.

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