

The inventory of Greenhouse Gas emissions in year 2022 of

## **TES-AMM Singapore Pte Ltd**

9 Benoi Sector, Singapore 629844

has been verified in accordance with ISO 14064-3:2019 as  
meeting the requirements of

## **Greenhouse Gas (GHG) Protocol**

Scope 1 GHG Emissions  
**1,295.40** tonnes of CO<sub>2</sub>e  
Scope 2 and 3 GHG Emissions  
**20,598.06** tonnes of CO<sub>2</sub>e  
Scope 1, 2 and 3 GHG Emissions  
**21,893.46** tonnes of CO<sub>2</sub>e

Authorized by

A handwritten signature in black ink, appearing to read 'Susan Law', is written over a faint background image of a hand holding a pen.

Susan Law

Knowledge Business Manager

Date: July 20, 2023

Version 1

SGS International Certification Services Singapore Pte Ltd  
30, Boon Lay Way  
#03-01, Singapore 609957

SGS has been contracted by TES-AMM Singapore Pte Ltd (hereinafter referred to as “TES-AMM”), 9 Benoi Sector Singapore 629844, for the verification of direct and indirect Greenhouse Gas in accordance with

### **ISO 14064-3:2019**

as provided by TES-AMM Singapore Pte Ltd (hereinafter referred to as “TES-AMM”), 9 Benoi Sector Singapore 629844, in the GHG Assertion in the form of report covering GHG emissions of the period 01 January 2022 to 31 December 2022.

### **Roles and responsibilities**

The management of TES-AMM 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.

It is SGS’s responsibility to express an independent GHG verification opinion on the GHG emissions as provided in the GHG Assertion for the period 01 January 2022 to 31 December 2022.

SGS conducted a third-party verification of the provided GHG assertion against the principles of GHG Protocol and ISO 14064-3: 2019 in the period 23 Jun 2023 to 17 Jul 2023. The verification was based on the verification scope, objectives and criteria as agreed between TES-AMM and SGS on 21 June 2023.

### **Level of Assurance**

The level of assurance agreed is that of reasonable assurance.

### **Scope**

TES-AMM has commissioned an independent verification by SGS Singapore of reported GHG emissions of TES-AMM arising from processes involving a combination of waste reuse, recycling and recovery activities, to establish conformance with GHG Protocol principles within the scope of the verification as outlined below.

This engagement covers verification of emission from anthropogenic sources of greenhouse gases included within the organization’s boundary and is based on ISO 14064-3:2019.

- The organizational boundary was established following operational control approach.
- Title or description activities: GHG verification for TES-AMM in year 2022
- Location/boundary of the activities:

Facilities in 38 operational locations in 22 countries

Site	Boundary
CN-Shanghai	No 358, Xingshu Road, Jiading District, Shanghai PR China
SG-Benoi	9 Benoi Sector Singapore 629844
CN-Suzhou	1468 Xiangjiang Rd, Suzhou, P.R. China
SG-TES B - Tuas West	20 Tuas West Road, Singapore 638379
DE-Recklinghausen	Blitzkuhlenstrasse 169 45659 Recklinghausen GERMANY
AU-NSW	1 Marple Avenue Villawood, New South Wales, 2163 Australia
JP-Tokyo	Daikan 3-12-6, Yamato-shi Kanagawa-ken, Japan 242-0025
MY-Johor Bahru	PLO 418 (LOT 51603), Jalan Emas 2, Kawasan Perindustrian Pasir Gudang, 81700 Pasir Gudang JOHOR
UK-Cannock	Blakeney Way, Kingswood Lakeside, Cannock, WS11 8JD
US-Seattle	1208 Andover Park East Tukwila, WA 98188
DE-Herten	Hohewardstrasse 327 45699 Herten GERMANY
US-Virginia	3475 Lee Hill Dr, Fredericksburg, VA 22408
TH-Bangkok	107, Moo 1, Tambon Banlen, Ampur Bang Pa-in, Phra Nakhon Si Ayutthaya, 13150 Thailand
CN-Beijing	No 22, Jing Sheng Zhong Jie Zhongguancun Science Park, Jinqiao Science Industrial Park Tongzhou District Beijing China
AU-Victoria	23 Fillo Drive Somerton, VIC 3062
CN-Guangzhou	Room 101 & 102, Building D, Guangzheng Logistics & Industrial Park, No 11 Nanyun Wu Rd, Science City, Luogang District, Guangzhou
KR-Seoul	(445-862) #107, Songjeong-Ri, Mado-Myeon, Hwaseosng-Si, Gyeonggi-Do, Korea
US-Atlanta	5238 Royal Woods Parkway Suite 110, Tucker GA 30084
UK-Irvine	10 Crompton Way, North Newmoor Industrial Estate, Irvine KA11 4HU
AU-Queensland	34 Union Circuit, Yatala QLD, 4207, Australia
MY-Penang	PT 4446 (Plot 25D), Jalan Jelawat, Kawasan Perindustrian Seberang Jaya, Mukim 1, 13700 Seberang Perai Tengah, Penang

ID-Jakarta	Jl Tanjung No 17 Multiguna Niaga II-Lippo Cikarang, Bekasi 17550 Indonesia
HK- Ong Lok Mun	2nd Floor, No 16 On Lok Mun Street, On Luk Tsuen, Fanling New Territories. Hong Kong.
TW-Taipei	No. 79, Jhongsing Rd. Lujhu Township, Taoyuan County 33857, Taiwan (R.O.C.)
HK-Lung Fung	Rm 401, Lung Fung Group Centre, No. 23 Yip Cheong St., Fanling, NT, Hong Kong
FR-Grenoble	17 rue de la Métallurgie, 38420 Domene FRANCE
ES-Madrid	Juan de la Cierva nº16 28936 Móstoles (Madrid)
FR-Senorches	20 rue albert Rémy , 28250 Senonches, France
NL-Rotterdam	Elbeweg 110, 3198 LC Rotterdam, The Netherlands
PH-Manila	Unit 104 Central Business Park No. 461 Amang Rodriguez Ave, Manggahan, Pasig City Philippines 1611
FR-Paris	44 Bavenue du 8 mai 1945, 92390 Vileneuve la Garenne , France
SE-Jonkoping	Kylvägen 6, SE 556 52 Jönköping, Sweden
IT-Milan	Via Glenn Curtiss, 3, 25018 Montichiari (BS), ITALY
VN-Hanoi	Trung Trac Commune, Van Lam District, Hung Yen Province, Vietnam
NZ-Auckland	89 Lansford Crescent, Avondale Auckland 1026, New Zealand
VN-HoChiMinh	Go cat disposal site, Tan Binh District, Ho Chi Minh city, Vietnam
KH-Cambodia	Unit G02, Ground Fl, HongKong Centre 108-223, St. Sothearos, Sangkat Chaktomuk, Phnom Penh, 12300 Cambodia
FR-Montpellier	226 Rue J. Baptiste Calvignac ZAE de la Biste 34670 Baillargues (Montpellier) FRANCE

- Physical infrastructure, activities, technologies and processes of the organization: Processes involve a combination of waste Reuse, Recycling and Recovery activities.
- GHG sources, sinks and/or reservoirs included: Sources as presented in the GHG inventory provided by TES-AMM
- Types of GHGs included: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, NF<sub>3</sub>, HFCs, PFCs, SF<sub>6</sub>
- The IPCC 2007 AR4 GWP values are applied in this inventory for Scope 1 and Scope 3.
- Electricity emission factor:
  - France: 0.057 kgCO<sub>2</sub>e/kWh (France Agency for Ecological Transition)
  - Spain: 0.190 kgCO<sub>2</sub>e/kWh (Red Eléctrica de España-2021)
  - Germany: 0.358 kgCO<sub>2</sub>e/kWh (IEA Database)
  - Italy: 0.270 kgCO<sub>2</sub>e/kWh (IEA Database)

Netherland: 0.314 kgCO<sub>2</sub>e/kWh (IEA Database)

Sweden: 0.00 kgCO<sub>2</sub>e/kWh (Supplier EF-Jonkoping)

UK: 0.193 kgCO<sub>2</sub>e/kWh (IEA Database)

US-Atlanta: 0.390 kgCO<sub>2</sub>e/kWh (IEA Database)

US-Seattle: 0.2722 kgCO<sub>2</sub>e/kWh (IEA Database)

US-Virginia: 0.2827 kgCO<sub>2</sub>e/kWh (IEA Database)

AU-NSW: 0.790 kgCO<sub>2</sub>e/kWh (Australian Government - Department of Industry, Science, Energy and Resources-2021)

AU-Queensland: 0.800 kgCO<sub>2</sub>e/kWh (Australian Government - Department of Industry, Science, Energy and Resources-2021)

AU-Victoria: 0.960 kgCO<sub>2</sub>e/kWh (Australian Government - Department of Industry, Science, Energy and Resources-2021)

Cambodia: 0.496 kgCO<sub>2</sub>e/kWh (IEA Database)

Malaysia: 0.654 kgCO<sub>2</sub>e/kWh (IEA Database)

New Zealand: 0.120 kgCO<sub>2</sub>e/kWh (New Zealand Government - Ministry for the Environment)

Singapore: 0.391 kgCO<sub>2</sub>e/kWh (IEA Database)

China: 0.623 kgCO<sub>2</sub>e/kWh (IEA Database)

Hongkong: 0.390 kgCO<sub>2</sub>e/kWh (IEA Database)

Indonesia: 0.774 kgCO<sub>2</sub>e/kWh (IEA Database)

Japan: 0.463 kgCO<sub>2</sub>e/kWh (IEA Database)

South Korea: 0.465 kgCO<sub>2</sub>e/kWh (IEA Database)

Philippines: 0.712 kgCO<sub>2</sub>e/kWh (IEA Database)

Taiwan: 0.509 kgCO<sub>2</sub>e/kWh (Taiwan Ministry of Economic Affairs, Bureau of Energy)

Thailand: 0.432 kgCO<sub>2</sub>e/kWh (Thailand Ministry of Energy: Energy Policy and Planning Office)

Vietnam: 0.632 kgCO<sub>2</sub>e/kWh (IEA Database)

- Directed actions: NA
- GHG information for the following period was verified: 01 January 2022 to 31 December 2022.
- The version of inventory sheet: Sustanion database\_dated 2023.07.17
- The version of GHG assertion: 2022 Sustainability Report\_dated 2023.06.24
- Intended user of the verification statement: Public

## Objective

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the GHG emissions are as declared by the organisation's GHG assertion
- The data reported are accurate, complete, consistent, transparent and free of material error or omission.

### Criteria

Criteria against which the verification assessment is undertaken are the principles of the GHG Protocol.

### Materiality

The materiality required of the verification was considered by SGS to 5%, based on the needs of the intended user of the GHG Assertion.

### Conclusion

TES-AMM provided the GHG assertion based on the requirements of the GHG Protocol. The GHG information for the period 01 January 2022 to 31 December 2022 disclosing Scope 1 Emissions 1,295.40 metric tonnes of CO<sub>2</sub> equivalent and Scope 2 and 3 Emissions 20,598.06 metric tonnes of CO<sub>2</sub> equivalent are verified by SGS to a reasonable level of assurance, consistent with the agreed verification scope, objectives, and criteria.

The emission of each scope is described as below:

Unit: tonnes of CO<sub>2</sub>e

Operational Boundaries		GHG Emissions
Scope	Description	Location-based
Scope 1	This direct GHG emissions are the sum of owned or controlled by the organization within the organization	1,295.40
Scope 2	Imported Electricity/ energy	4,818.65
Scope 3	Category 4: Upstream transportation and distribution	5,945.90
	Category 9: Downstream transportation and distribution	8,212.64
	Category 1: Purchased goods and services (Water)	29.52
	Category 5: Waste generated in operations	1,591.33
Scope 1, 2, and 3 Emissions		21,893.46

The emission of each site is described as below:

Unit: tonnes of CO<sub>2</sub>e

Site	Scope 1	Scope 2	Scope 3	Scope 1, 2 and 3 Emissions
CN-Shanghai	79.89	1,387.17	894.52	2,361.59
SG-Benoi	94.96	746.98	297.46	1,139.40
CN-Suzhou	33.46	618.74	439.92	1,092.12
SG-TES B - Tuas West	9.22	377.65	6.35	393.23
DE-Recklinghausen	225.18	80.68	656.29	962.15
AU-NSW	1.88	255.48	368.67	626.03
JP-Tokyo	57.30	167.79	32.68	257.77
MY-Johor Bahru	70.81	137.56	39.60	247.97
UK-Cannock	119.89	78.65	5,993.24	6,191.78
US-Seattle	162.56	30.33	255.17	448.06
DE-Herten	15.02	112.52	1,904.28	2,031.82
US-Virginia	124.61	55.59	282.24	462.44
TH-Bangkok	82.05	97.38	81.84	261.27
CN-Beijing	29.56	137.11	194.88	361.55
AU-Victoria	21.44	144.55	170.92	336.91
CN-Guangzhou	38.73	56.88	84.00	179.61
KR-Seoul	17.84	50.15	10.32	78.31
US-Atlanta	10.00	45.55	665.21	720.76
UK-Irvine	26.48	28.45	376.85	431.78
AU-Queensland	6.45	38.73	16.30	61.48
MY-Penang	3.59	28.05	0.26	31.90
ID-Jakarta	10.09	21.45	39.59	71.13
HK- Ong Lok Mun	11.62	14.33	17.76	43.71
TW-Taipei	15.79	8.11	21.75	45.65
HK-Lung Fung	9.97	10.67	0.57	21.21

FR-Grenoble	4.90	11.96	17.56	34.42
ES-Madrid	4.69	11.88	2,282.39	2,298.96
FR-Montpellier	-	1.40	0.01	1.41
FR-Senorches	-	13.93	223.90	237.83
NL-Rotterdam	-	13.64	3.60	17.24
PH-Manila	1.31	10.21	7.50	19.02
FR-Paris	-	10.53	-	10.53
SE-Jonkoping	6.06	-	233.12	239.18
IT-Milan	-	4.19	68.15	72.34
KH-Cambodia	0.05	1.40	1.77	3.22
VN-Hanoi	-	3.28	20.27	23.55
NZ-Auckland	-	2.89	59.67	62.56
VN-Ho Chi Minh	-	2.79	10.75	13.54

SGS's approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions information and the controls in place to mitigate these. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the organization's reported GHG emissions.

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 GHG emissions for the period 01 January 2022 to 31 December 2022 are fairly stated.

We conducted our verification with regard to the GHG assertion of TES-AMM which included assessment of GHG information system, monitoring and reporting plan/protocol. This assessment included the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, were consistently and appropriately applied

In SGS's opinion the presented GHG assertion:

- is materially correct and is a fair representation of the GHG data and information, and
- is prepared in accordance with The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard (revised edition) and The Greenhouse Gas Protocol – Corporate Value Chain (Scope 3) Standard on GHG quantification, monitoring and reporting.



### Confidentiality

The reports and attachments may contain relevantly confidential information of the clients. In addition to being submitted as governmental application or certification documents, the reports and attachments are not allowed to be edited, duplicated, or published without the clients' agreement in written form.

### Avoidance of Conflict of Interest

The reports and attachments are completely complied with the standards and procedures that related-authorities established. The reports and attachments of auditing process are conduct with fairness and honesty. If not, the auditing institution not only has to bear the relevant compensation duties, but also to receive legal charge and punishment.

This statement shall be interpreted with the GHG assertion of TES-AMM as a whole.

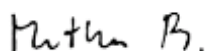
### Verifier Group

Above statements coincide with auditing process with fairness and impartiality, and aim at the emission of year 2022 of clients.

Lead Verifier:



Independent Reviewer:



**Note:** This Statement is issued, on behalf of Client, by SGS International Certification Services Pte Ltd. ("SGS") under its General Conditions for Green Gas Verification Services available at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). The findings recorded hereon are based upon an audit performed by SGS. A full copy of this statement, the findings and the supporting GHG Assertion may be consulted at TES-AMM Singapore Pte Ltd, 9 Benoi Sector Singapore 629844. This Statement does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client..