



# Greenhouse gas emissions Verification Statement

24 December 2024

## HAGIWARA ELECTRIC HOLDINGS CO., LTD.

Japan Management Association  
GHG Certification Center  
Chiga Maruo, Senior Executive



### 1. Objective and Scope of Verification

Japan Management Association GHG Certification Center (JMACC) was commissioned by HAGIWARA ELECTRIC HOLDINGS CO., LTD. (hereinafter, referred to as “the Organization”) to conduct independent verification on a limited level of assurance. The scope of verification is the following greenhouse gas (GHG) emissions within the organizational boundary<sup>\*1</sup> in its fiscal year 2023 Monitoring Report (hereinafter, referred to as “the Report”) from 1 April 2023 to 31 March 2024.

- 1) SCOPE 1 GHG emissions;  
Direct CO<sub>2</sub> emissions within the Organizational boundary by using city gas, LPG and gasoline
- 2) SCOPE 2 GHG emissions;  
Indirect CO<sub>2</sub> emissions within the Organizational boundary by using electricity, heating and cooling
- 3) SCOPE 3 GHG emissions;  
CO<sub>2</sub> emissions within the category 1, 2, 3, 4, 5, 6 and 7 of SCOPE 3<sup>\*2</sup>

The objective of this verification is to confirm that the monitoring data in the Organization’s applicable scope have been correctly calculated and reported in line with the criteria of the monitoring procedure<sup>\*3</sup>, and to express our views as a third party. The Organization’s responsibility is to prepare the Report and report the monitoring data, and JMACC’s responsibility is to express our views on the monitoring data of the Report as a third party.

### 2. Procedure of Verification

The Report was verified by JMACC in accordance with the requirement of ISO14064-3:2019 (Greenhouse gases Part 3: Specification with guidance for the verification and validation of greenhouse gas statements), and following processes were implemented:

- Assessment regarding to the information to specify the GHG emissions in the Report, monitoring procedure, monitoring system and related documents
- Interviews with persons in charge of preparing the Report
- Verifying the evidence for confirmation of the accuracy of GHG emissions by sampling

### 3. Conclusion of Verification

Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's GHG emissions in the Report were not calculated and reported in conformance with the criteria.

SCOPE	Verified GHG emissions (t-CO <sub>2</sub> e)		Organizational boundary <sup>※1</sup>
SCOPE 1	299		HAGIWARA ELECTRIC HOLDINGS CO., LTD. HAGIWARA ELECTRONICS CO., LTD. HAGIWARA TECHNO SOLUTIONS CO., LTD. HAGIWARA ENGINEERING CO., LTD. HAGIWARA HOKUTO TECHNO CO., LTD. Hagiwara America, Inc. Hagiwara Electric Europe GmbH Hagiwara (Shanghai) Co., Ltd. Hagiwara Techno Solutions (Shanghai) Co., Ltd. Hagiwara Electric Korea Co., Ltd. Singapore Hagiwara Pte. Ltd. Hagiwara Electric (Thailand) Co., Ltd. Hagiwara Electronics India Private Limited
SCOPE 2 <sup>※4</sup>	Location-based 1,077	Market-based 718	
SCOPE 3	739,719		See below
Breakdown of SCOPE 3			
Category 1	729,602		HAGIWARA ELECTRIC HOLDINGS CO., LTD. HAGIWARA ELECTRONICS CO., LTD.
Category 2	1,337		HAGIWARA TECHNO SOLUTIONS CO., LTD.
Category 3	141		HAGIWARA ELECTRIC HOLDINGS CO., LTD. HAGIWARA ELECTRONICS CO., LTD. HAGIWARA TECHNO SOLUTIONS CO., LTD. HAGIWARA HOKUTO TECHNO CO., LTD.
Category 4	8,225		HAGIWARA ELECTRONICS CO., LTD. HAGIWARA TECHNO SOLUTIONS CO., LTD.
Category 5	82		HAGIWARA ELECTRIC HOLDINGS CO., LTD.
Category 6	103		HAGIWARA ELECTRONICS CO., LTD.
Category 7	229		HAGIWARA TECHNO SOLUTIONS CO., LTD.
SCOPE1,2,3 (Total of above)	SCOPE 2: Location-based	SCOPE 2: Market-based	Organizational boundary <sup>※1</sup>  See above
	741,095	740,736	



NOTE:

※1 : Organizational boundary : HAGIWARA ELECTRIC Group (Total 13 corporations, 23 sites)

- HAGIWARA ELECTRIC HOLDINGS CO., LTD. : Headquarters
- HAGIWARA ELECTRONICS CO., LTD. : Headquarters, Kansai Office, Miyoshi Distribution Center
- HAGIWARA TECHNO SOLUTIONS CO., LTD. : Headquarters, Tokyo Branch, Kansai Branch, Kyushu Residence,  
Nisshin Office, Toyota Distribution Center, Nagoya Distribution Center
- HAGIWARA ENGINEERING CO., LTD. : Headquarters, 2nd factory, 3rd factory
- HAGIWARA HOKUTO TECHNO CO., LTD. : Nagoya Office (Headquarters)
- Hagiwara America, Inc. : Headquarters
- Hagiwara Electric Europe GmbH : Headquarters
- Hagiwara (Shanghai) Co., Ltd. : Headquarters
- Hagiwara Techno Solutions (Shanghai) Co., Ltd. : Headquarters
- Hagiwara Electric Korea Co., Ltd. : Headquarters
- Singapore Hagiwara Pte. Ltd. : Headquarters
- Hagiwara Electric (Thailand) Co., Ltd. : Headquarters
- Hagiwara Electronics India Private Limited : Headquarters

Organizational boundary of major indirect expenses of category 1 is all sites above. For that of other scopes, refer to the column of organizational boundary in the table.

※2 : Overview of categories of SCOPE 3 :

- Category 1 (Purchased goods and services) : Purchased raw materials, parts, goods, sub-materials, services and major indirect expenses.
- Category 2 (Capital goods) : Increased tangible fixed assets (facilities, equipment, buildings, vehicles, software etc.)
- Category 3 (Fuel- and energy-related activities not included in Scope 1 or Scope 2) : Fuel, electricity, heating and cooling consumption  
Electricity derived from renewable energy is calculated assuming zero emissions.
- Category 4 (Transport and distribution (upstream)) : Domestic / overseas shipping transportation
- Category 5 (Waste generated in operations) : Industrial waste and non-industrial waste generated in operations within the organizational boundary
- Category 6 (Business travel) : Business travel via public transportation by employees
- Category 7 (Employee commuting) : Employee commuting to the worksites

※3 : Monitoring procedure of SCOPE 1, 2 and 3 : “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver.2.6)”, “Database of emissions unit values for Greenhouse Gas Emissions throughout the Supply Chain (ver.3.4)”, and the “2023 Monitoring procedures” prepared by the Organization

※4 : Emission factor for electricity consumption :

Japan : Adjusted emission factor under GHG emissions reporting system of Japan

Overseas : “Database of emissions unit values for Greenhouse Gas Emissions throughout the Supply Chain (ver.3.4)”,  
“IGES List of Grid Emission Factors (ver.11.5)”