



# LRQA Independent Assurance Statement

Relating to Brother Group's GHG Emissions Inventory and Energy Consumption Data for the fiscal year 2021

This Assurance Statement has been prepared for Brother Industries, Ltd. in accordance with our contract.

## Terms of Engagement

LRQA was commissioned by Brother Industries, Ltd. ("BIL") to provide independent assurance on Brother Group's Greenhouse Gas ("GHG") emissions inventory and energy consumption data within its Corporate Website etc ("the report") for the fiscal year 2021, that is, from 1 April 2021 to 31 March 2022, against the assurance criteria below to a limited level of assurance and at the materiality of the professional judgement of the verifier using "ISAE 3000 (Revised) / ISO 14064-3:2019 for greenhouse gas (GHG) data".

Our assurance engagement covered the operations and activities relating BIL and its consolidated subsidiaries in Japan and overseas<sup>1</sup> and specifically the following requirements:

- Verifying conformance with BIL's reporting methodologies for the selected datasets:
- Evaluating the accuracy and reliability of data for only the selected indicators listed below:<sup>2</sup>
  - Scope 1 GHG emissions (tonnes CO<sub>2</sub>e)
  - Scope 2 GHG emissions [Market-based and Location-based] (tonnes CO<sub>2</sub>e)
  - Scope 3 GHG emissions (Category 1-15) (tonnes CO<sub>2</sub>e)
  - Energy consumption (MWh, kL, tonnes, km<sup>3</sup>, and GJ)

LRQA's responsibility is only to BIL. LRQA disclaims any liability or responsibility to others as explained in the end footnote. BIL's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of BIL.

## LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that BIL has not, in all material respects:

- Met the requirements of the criteria listed above
- Disclosed accurate and reliable GHG emissions inventory and energy consumption data as summarized in Table 1, 2 and 3 below

The opinion expressed is formed on the basis of a limited level of assurance<sup>3</sup> and at the materiality of the professional judgement of the verifier.

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<sup>1</sup> GHG emissions from BIL's some sales offices are not included in the report due to relatively small impacts to the total GHG emissions of Brother Group.

<sup>2</sup> GHG quantification is subject to inherent uncertainty.

<sup>3</sup> The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

**Table 1. Summary of Brother Group's GHG Emissions for the fiscal year 2021**

Scope of GHG emissions	Tonnes CO <sub>2</sub> e
Direct GHG emissions (Scope 1)	18,724
Energy indirect GHG emissions (Scope 2, Location-based)	105,317
Energy indirect GHG emissions (Scope 2, Market-based)	105,099
Other indirect GHG emissions (Scope 3)	2,942,352
1. Purchased goods & services	1,404,939
2. Capital goods	86,955
3. Fuel- and energy-related activities	11,838
4. Upstream transportation & distribution	138,978
5. Waste generated in operations	2,849
6. Business travel	1,887
7. Employee commuting	14,819
8. Upstream leased assets	4,101
9. Downstream transportation & distribution	15,366
10. Processing of sold products	0
11. Use of sold products	995,115
12. End of life treatment of sold products	263,618
13. Downstream leased assets	1,886
14. Franchises	0
15. Investments	0

**Table 2. Summary of Brother Group's Energy Consumption for the fiscal year 2021**

Scope	Energy Consumption	GJ equivalent
Electricity	207,083.4 MWh	745,499.7 GJ
Gasoline	2,927.6 kl	95,972.9 GJ
Kerosene	17.7 kl	621.4 GJ
Light oil	929.8 kl	33,584.7 GJ
Heavy oil	9.2 kl	317.4 GJ
Steam		1.4 GJ
LPG	163.9 t	7,752.9 GJ
Town gas	4,677 K m <sup>3</sup>	157,162.4 GJ
Heat		540.5 GJ

**Table 3. Summary of Brother Group's GHG Emissions by Category for the fiscal year 2021<sup>4</sup>**

Category	Location-based tCO <sub>2</sub> e	Market-based tCO <sub>2</sub> e
Scope 1 emissions	18,724	18,724
1. Direct GHG emissions and removals	18,724	18,724
1.1 Direct GHG emissions from mobile combustion	9,195	9,195

<sup>4</sup> Table 3 has been developed with reference to the categories and subcategories of ISO 14064-1:2018.

1.2 Direct GHG emissions from stationary combustion	9,404	9,404
1.3 Direct fugitive emissions from the release of GHGs in anthropogenic systems	125	125
Scope 2 emissions	105,317	105,099
2. Indirect emissions from imported energy	105,317	105,099
2.1 Indirect emissions from imported electricity	105,286	105,069
2.2 Indirect emissions from imported energy, excluding electricity	31	31
Scope 3 emissions	2,942,352	2,942,352
3. Indirect emissions from transportation	171,050	171,050
3.1 Emissions from upstream transport and distribution for goods	138,978	138,978
3.2 Emissions from downstream transport and distribution for goods	15,366	15,366
3.3 Emissions from employee commuting	14,819	14,819
3.4 Emissions from business travel	1,887	1,887
4. Indirect GHG emissions from products used by an organisation	1,510,683	1,510,683
4.1 Emissions from purchased goods	1,404,939	1,404,939
4.2 Emissions from capital goods	86,955	86,955
4.3 Emissions from Fuel- and energy-related activities (not included in scope 1 or scope 2)	11,838	11,838
4.4 Emissions from the disposal of solid and liquid waste	2,849	2,849
4.5 Emissions from upstream leased assets	4,101	4,101
5. Indirect GHG emissions associated with the use of products from the organisation	1,260,619	1,260,619
5.1 Emissions from processing of sold products	0	0
5.2 Emissions from use of sold products	995,115	995,115
5.3 Emissions from end-of-life treatment of sold products	263,618	263,618
5.4 Emissions from downstream leased assets	1,886	1,886
5.5 Emissions from Franchises	0	0
5.6 Emissions from investments	0	0
6. Indirect GHG emissions from other sources	N/A	N/A
Total	3,066,393	3,066,176

Consumption of renewable energy	4,761	MWh
Renewable energy generated and consumed on-site	532	MWh
Renewable energy generated off-site and purchased	4,229	MWh

### LRQA's Approach

LRQA's assurance engagements are carried out in accordance with ISAE 3000 (Revised) and ISO 14064-3:2019 for GHG emissions inventory. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing BIL's data management systems to confirm that there were no significant errors, omissions or misstatements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification;
- Interviewing with those key people responsible for compiling the data and drafting the report;
- Sampling datasets and traced activity data back to aggregated levels;



- Verifying the historical data and records for the fiscal year 2021;
- Visually observing areas around the physical boundary of Hoshizaki Factory; and
- Employing remote verification approach to Hoshizaki Factory and Xing Inc. whereby confirming the effectiveness of its data management systems via emails and Microsoft Teams in order to abide by BIL's "No Visitor" Policy due to the global infection spread of COVID-19.

### **LRQA's Recommendations**

It is recommended that BIL should proactively explore opportunities of further improvement and ensure effective and accurate aggregation and calculation of GHG inventory.

### **LRQA's Standards, Competence and Independence**

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021-1 *Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part1: Requirements* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only work undertaken by LRQA for BIL and as such does not compromise our independence or impartiality.

Signed

Dated: 6 June 2022

A handwritten signature in black ink that reads "Koji Tagami".

Koji Tagami

LRQA Lead Verifier

On behalf of LRQA Limited

10th Floor, Queen's Tower A, 2-3-1 Minatomirai, Nishi-ku, Yokohama, JAPAN

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