

# LR Independent Assurance Statement

## Relating to Bridgestone Group's Environmental and Social Data for the calendar year 2019

This Assurance Statement has been prepared for Bridgestone Corporation in accordance with our contract but is intended for the readers of this Report.

### Terms of engagement

Lloyd's Register Quality Assurance Limited (LR) was commissioned by Bridgestone Corporation (the Organisation) to provide independent assurance on its environmental and social data ("the report") for the calendar year 2019, that is, from 1 January 2019 to 31 December 2019<sup>1</sup>, against the assurance criteria below to a level of assurance and materiality using LR's verification procedure and ISO 14064 - Part 3 for greenhouse gas emissions data. LR's verification procedure is based on current best practice, is in accordance with ISAE 3000 and uses the following principles - inclusivity, materiality, responsiveness and reliability of performance data.

Our assurance engagement covered operations and activities of Bridgestone Group<sup>2</sup> and specifically the following requirements:

- Verifying conformance with Bridgestone Group's reporting methodologies for selected datasets
- Evaluating the accuracy and reliability of data for only the selected indicators listed below:

#### Environmental:

- Total energy consumption, Energy consumption (fuel) including fuel from renewable sources, Energy consumption (purchased electricity) including electricity from renewable sources, Energy consumption (purchased steam), Energy consumption (self-generated renewable electricity from non-fuel sources; solar, etc.), Electricity sold, Total energy consumption (renewable), Total energy consumption (non-renewable),
- Total water withdrawal, Water withdrawal (surface water), Water withdrawal (groundwater), Water withdrawal (water supply, industrial water), Water withdrawal (seawater),
- Greenhouse gas emissions<sup>3 4</sup> (Scope 1), Greenhouse gas emissions (Scope 2) Market-based and Location-based, Greenhouse gas emissions (Scope 3) Categories<sup>5</sup> 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12 and 14,
- NOx emissions, SOx emissions,
- Volume of waste generated, Volume of recycled waste, Recycling waste rate, Volume of waste landfill, Volume of regulated hazardous waste generated, and
- Sites with ISO14001 certification

#### Social:

Lost-time injuries frequency rate of employees, Lost-time injuries frequency rate of the contractors, and, Occupational illness frequency rate (OIFR)

Our assurance engagement excluded the other data and information of the Organisation's suppliers, contractors and any third-parties mentioned in the report.

<sup>1</sup> The Volume of regulated hazardous waste generated of the sites in Japan uses data from 1 April 2019 to 31 March 2020 and the Lost-time injuries frequency rate of the contractors uses data from 1 July 2019 to 31 December 2019.

<sup>2</sup> Except non-production sites for environmental data. 161 production sites for energy consumption, greenhouse gas emissions Scope 1 and Scope 2, NOx emissions and SOx emissions, 157 production sites for water withdrawal and waste data in the world are covered. Out of social data, Occupational illness frequency rate covers operations and activities of Bridgestone Corporation in Japan.

<sup>3</sup> Scope 1 and 2 emissions are as defined in The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard.

<sup>4</sup> GHG quantification is subject to inherent uncertainty.

<sup>5</sup> The categories of Scope 3 emissions are as defined in the Greenhouse Gas Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Table 5.3.

LR's responsibility is only to the Organisation. LR disclaims any liability or responsibility to others as explained in the end footnote. The Organisation'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 the Organisation.

### **LR's Opinion**

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

- Met the requirements above
- Disclosed accurate and reliable performance data and information as no errors or omissions were detected

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

**Note:** 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 substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

### **LR's approach**

LR's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing the Organisation's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.
- Visiting Bridgestone Group's factory in Warren Country, the U.S.A. to sample source data for selected datasets to confirm its accuracy and reliability.
- Conducting remote verification to Bridgestone Group's factory in Kakegawa, Japan via Cisco Webex substituting a visit for the similar purposes as above, in consideration of preventing from expansion of the new coronavirus infection.
- Conducting review of the following datasets through the verification processes:
  - Environmental: Amount of raw materials used, Reclaimed products rate, Energy consumption outside of the organisation, Energy intensity (energy consumption per unit of sales), Reduction volume of energy consumption, CO<sub>2</sub> emissions per unit in lifecycle stages, and CO<sub>2</sub> emission reduction rate per unit in the operations and products' after-use (compared with 2005)
  - Social: Number of fatalities of employees, and, Number of fatalities of the contractors

### **LR's recommendations**

The Organisation should make further efforts to share in-depth understating among the group staff and continually improve through implementing the procedures of collection and internal checks of data, in particular, those newly added to the scope of verification by the third party.

The Organisation should also study the estimation methods and measures to reduce impacts of applying estimation to the disclosed data when a part of data could not be collected in a timely manner.

### **LR's standards, competence and independence**

LR 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 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LR 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.

The verification is the only work undertaken by LR for the Organisation and as such does not compromise our independence or impartiality.

Signed

Dated: 12 June 2020



Michiaki Chiba  
LR Lead Verifier

On behalf of Lloyd's Register Quality Assurance Limited  
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LR reference: YKA00000672\_2

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**Assurance Statement related to  
GHG Emissions Inventory 2019  
Prepared for Bridgestone Corporation**

### **Terms of Engagement**

This Assurance Statement has been prepared for Bridgestone Corporation.

Lloyd's Register Quality Assurance Limited (LR) was commissioned by Bridgestone Corporation (the Organisation) to assure its Greenhouse Gas (GHG) Emissions Inventory for the calendar year 2019, that is from 1 January 2019 to 31 December 2019 (hereafter referred to as "the Report").

The Report relates to direct GHG emissions (Scope 1<sup>1</sup>), energy indirect GHG emissions (Scope 2<sup>1</sup>) and other indirect GHG emissions (Scope 3<sup>2</sup>). The Report covers Bridgestone Group's 161 production sites in the world for GHG emissions Scope 1 and Scope 2.

The Organisation's GHG Emissions Inventory excludes GHG emissions from operations and activities of Bridgestone Group's non-production sites, emissions of GHGs other than CO<sub>2</sub> from use of energy, GHG emissions from mobile sources used outside of the production sites. Categories 10 and 11 of Scope 3 GHG emissions are calculated for tires of passenger cars, trucks and buses as the main products only. These GHG emissions excluded from the calculation are relatively small to the total GHG emissions of the Organisation.

### **Management Responsibility**

The Organisation's management was responsible for preparing the Report and for maintaining effective internal controls over the data and information disclosed. LR's responsibility was to carry out an assurance engagement on the Report in accordance with our contract with the Organisation.

Ultimately, the Report has been approved by, and remains the responsibility of the Organisation.

### **LR's Approach**

Our verification has been conducted in accordance with ISO 14064-3:2006, 'Specification with guidance for validation and verification of greenhouse gas assertions' to provide limited assurance that GHG emissions data as presented in the Report have been prepared in conformance with the Organisation's in-house procedures.

To form our conclusions the assurance engagement was undertaken as a sampling exercise and covered the following activities:

- conducted site tour of Bridgestone Group's factory in Warren Country, the U.S.A. and reviewed processes related to the control of GHG emissions data and records;
- conducted remote site tour and review of Bridgestone Group's factory in Kakegawa, Japan via Cisco Webex substituted a visit for the similar purposes as above, in consideration of preventing from expansion of the new coronavirus infection;

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<sup>1</sup> Scope 1 and 2 emissions are as defined in The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard.

<sup>2</sup> The categories of Scope 3 emissions are as defined in the Greenhouse Gas Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Table 5.3.

- reviewed the management system documents for GHG emissions data, information and records, covering all the processes up to the preparation of the GHG Inventory at the head office in Tokyo;
- interviewed relevant staff of the Organisation responsible for managing GHG emissions data and records;
- assessed effectiveness of implementation of the GHG management system and the internal data verification; and
- verified historical GHG emissions data and records at an aggregated level for the calendar year 2019.

#### **Level of Assurance & Materiality**

The opinion expressed in this Assurance Statement has been formed based on a limited level of assurance and at a materiality of the professional judgment of the Verifier.

#### **LR's Opinion**

Based on LR's approach nothing has come to our attention that would cause us to believe that the total direct GHG emissions and energy indirect GHG emissions and other indirect GHG emissions disclosed in the Report as summarized in Table 1 below are not materially correct and that the Report has not been prepared in conformance with the Organisation's in-house procedures.

#### **LR's Recommendations**

The Organisation should periodically review the emission sources of each site, the calculation methods and factors used for calculation of GHG emissions.

Dated: 5 June 2020



Michiaki Chiba  
LR Lead Verifier

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LR reference number: YKA00000672\_2

**Table 1. Summary of Bridgestone Group's GHG Emissions Inventory 2019**

Scope of GHG emissions	Tonnes CO <sub>2</sub>
Direct GHG emissions (Scope 1)	1,807,183
Energy indirect GHG emissions (Scope 2, Market-based)	2,138,119
Energy indirect GHG emissions (Scope 2, Location-based)	2,284,265
Other indirect GHG emissions (Scope 3) Categories 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, and 14	121,566,419
Note: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015	

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Due to inherent limitations in any internal control, it is possible that fraud, error, or non-compliance with laws and regulations may occur and not be detected. Further, the verification was not designed to detect all weakness or errors in internal controls so far as they relate to the requirements set out above as the verification has not been performed continuously throughout the period and the verification carried out on the relevant internal controls were on a test basis. Any projection of the evaluation of control to future periods is subject to the risk that the processes may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

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