

Third-Party Assurance

Canon has received third-party assurance from Lloyd's Register Quality Assurance Limited (LRQA), when calculating direct GHG emissions (Scope 1), indirect GHG emissions that originate from energy (Scope 2) and other indirect GHG emissions (Scope 3).



Lloyd's Register
LRQA

Assurance Statement related to GHG Emissions Inventory 2017 prepared for CANON Group

Terms of Engagement

This Assurance Statement has been prepared for CANON INC.

Lloyd's Register Quality Assurance Ltd. (LRQA) was commissioned by CANON INC. (30-2 Shimomaruko 3-Chome, Ota-ku, Tokyo 146-8501, Japan) to assure CANON Group's GHG Emissions Inventory for the calendar year 2017, that is, 01 January to 31 December 2017 (hereafter referred to as "the Report").

The Report relates to direct GHG emissions (Scope 1¹), energy indirect GHG emissions (Scope 2¹) and other indirect GHG emissions (Scope 3 – Categories² 1 to 15).

Management Responsibility

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

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

LRQA'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 data as presented in the Report have been prepared in conformance with ISO14064–1:2006 '*Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals*' and taking into account the Greenhouse Gas Protocol, '*Corporate Value Chain (Scope 3) Accounting and Reporting Standard*.'

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

- conducted site visits to CANON INC.'s head office in Tokyo and Oita Canon Materials Inc. in Oita Prefecture, Japan;
- interviewed key personnel responsible for the management of GHG emissions data and information and for the preparation of the Report at the above sites;
- reviewed processes for the management of GHG emissions data and information included in the Report; and
- verified GHG emissions data and information at an aggregated level made available at the head office and back to the original sources at the above sites visited.

Level of Assurance & Materiality

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

LRQA's Opinion

Based on LRQA'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

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

² 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.



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 ISO 14064-1:2006 and taking into account the GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

LRQA's Recommendations

- CANON INC. should continue efforts for implementing quality assurance and quality control (QA/QC) systems for the GHG data and information management. This is particular to ensuring effective internal verification processes at both the corporate and member company levels.
- CANON INC. should validate the applied GHG removal factor against the actual performance data to further demonstrate reliability. This is particular to the estimations made when the GHG removal equipment has been installed in CANON INC.'s semiconductor manufacturing company.

Dated: 1 May 2018

Takahiro Iio
Lead Verifier

On behalf of Lloyd's Register Quality Assurance Limited
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LRQA Reference No: YKA4005113

Table 1. Summary of CANON Group's GHG Emissions Inventory 2017

Scope of GHG emissions	Tonnes CO ₂ e
Direct GHG emissions (Scope 1)	174,342
Energy indirect GHG emissions (Scope 2, Market-based)	987,485
Energy indirect GHG emissions (Scope 2, Location-based)	1061,341
Other indirect GHG emissions (Scope 3)	7,568,749
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the GHG Protocol Scope 2 Guidance, 2015	
Note 2: Scope 3 includes Category 1 to 15.	

This Assurance Statement is subject to the provisions of this legal section:

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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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