Sustainability Report

2019

Web version

(As of November 2019)

Sustainability Report

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THIRD-PARTY VERIFICATION

To ensure reliability of the content of this report, Daikin had a third-party verification conducted for data on greenhouse gas emissions, water use, waste water, waste emissions, and chemical substances emissions.

Data Covered by Verification

Environmental Impact Data on Business Operations in FY2018

- Scope 1 and Scope 2 greenhouse gas (GHG) emissions, water use, waste water, waste emissions, and chemical substances emissions from business operations of four production bases in Japan of Daikin Industries, Ltd., eight production subsidiaries in Japan, and 47 production subsidiaries overseas.
- Category 1 (purchased goods and services), 11 (use of sold products), and 12 (final product disposal) emissions of Scope 3 GHG emissions calculated in line with the GHG Protocol's 'Corporate Value Chain (Scope3) Accounting and Reporting Standard.'

Scope of Review

Contribution to CO₂ Emission Reduction through the Use of Products

- Contribution to CO₂ emission reduction through the use of inverter air conditioners sold in emerging countries in fiscal 2018.
- Contribution to CO₂ emission reductions through the use of air conditioners sold in industrialized countries and China in fiscal 2018.
- Contribution to greenhouse gas emission reductions through fiscal 2018 worldwide sales of air conditioners that use R-32 low global warming potential refrigerant.

Calculation Method  (Page 482)
INDEPENDENT ASSURANCE STATEMENT

To: Daikin Industries, Ltd.

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has been engaged by Daikin Industries, Ltd. (Daikin) to provide limited assurance and to conduct an external review over sustainability information selected by Daikin. This Assurance Statement applies to the related information included within the scope of work described below.

Selected information
The scope of our assurance work was limited to assurance over the following information included within Daikin Group Sustainability Report 2019 (the “Report”) or reported internally to Daikin Group only for the purpose of internal management for the period of April 1, 2018 through March 31, 2019 (the “Selected Information”):
1) The following data through business operations of four production bases of Daikin, eight production subsidiaries within Japan and 47 production subsidiaries overseas
   - CO₂ emissions from energy use
   - HFCs and PFCs emissions
   - Water intake and Wastewater
   - Recycled materials and Waste
   - VOC emissions
2) Release amount of PRTR (“1) chemical substances through business operations of four production bases of Daikin and eight production subsidiaries within Japan
   (“1) Pollutant Release and Transfer Register system
3) The following data through business operations of four production bases of Daikin
   - CO₂ emissions from non-energy use
   - CH₄, N₂O, SF₆, and NF₃ emissions
4) Categories 1, 11 and 12 of Scope 3 GHG emissions accounted in line with the GHG Protocol’s ‘Corporate Value Chain (Scope 3) Accounting and Reporting Standard

The scope of our review work was limited to review about the following information included within Daikin Group Sustainability Report 2019 (the “Report”) or reported internally to Daikin Group only for the purpose of internal management for the period of April 1, 2018 through March 31, 2019 (the “Selected Information”):
1) The amount of contribution to CO₂ emission reduction through the use of inverter air conditioners sold for emerging countries in FY2018
2) The amount of contribution to CO₂ emission reduction through the use of air conditioners sold for advanced countries and China in FY2018
3) The amount of contribution to GHG emission reduction through the change to low global warming potential refrigerant (R32) charged into air conditioners sold in FY2018

Reporting criteria
The Selected Information included within the Report needs to be read and understood together with the reporting criteria stated in the Report.
The Selected Information reported internally to Daikin Group only for the purpose of internal management needs to be read and understood together with the internal reporting criteria defined by Daikin.

Limitations and Exclusions
Excluded from the scope of our work is any verification of information relating to:
- Activities outside the defined verification period;
- Any other information within the Report, which is not listed as the ‘Selected Information’.
This limited assurance engagement relies on a risk based selected sample of sustainability data and the associated limitations that entails. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Responsibilities
This preparation and presentation of the Selected Information in the Report are the sole responsibility of the management of Daikin.
Bureau Veritas was not involved in the drafting of the Report or of the Reporting Criteria. Our responsibilities were to:
- Obtain limited assurance about whether the Selected Information has been prepared in accordance with the Reporting Criteria by conducting our assurance work;
- Assess the reliability and accuracy of the Selected Information by conducting our review work;
- Form an independent conclusion based on the procedures performed and evidence obtained; and
- Report our conclusions to the Directors of Daikin.

Assessment Standard
We performed our review work by using Bureau Veritas’ standard procedures for external review of sustainability information.
Summary of work performed

As part of our independent verification, our work included:

1. Conducting interviews with relevant personnel of Daikin;
2. Reviewing the data collection and consolidation processes used to compile Selected Information, including assessing assumptions made, and the data scope and reporting boundaries;
3. Reviewing documentary evidence provided by Daikin;
4. Reviewing Daikin systems for quantitative data aggregation and analysis;
5. Verification of sample of data back to source by carrying out nine physical site visits, selected on a risk-based bases at the following locations:
   - Daikin Head Office
   - Daikin Industries Co., Ltd., Kushunta Plant
   - Daikin Refrigeration (Suzhou) Co., Ltd.
   - Daikin Motor (Suzhou) Co., Ltd.
   - Daikin Industries Czech Republic s.r.o.
   - Daikin Device Czech Republic s.r.o.
   - Daikin Industries (Thailand) Ltd.
   - Daikin Airconditioning (Thailand) Ltd.
   - Daikin Compressor Industries Ltd
6. Reperforming a selection of aggregation calculations of the Selected Information;
7. Comparing the Selected Information to the prior year amounts taking into consideration changes in business activities, acquisitions and disposals.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement.

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.

Verified greenhouse gas emissions

We performed our verification work on greenhouse gas emissions data in accordance with the requirements of ISO14064-3:2006.

Verified data in greenhouse gas assessment made by Daikin are as follows.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Greenhouse gas emissions [t-CO2e]</th>
<th>Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>593,625</td>
<td>- CO2 from energy use, HFCs and PFCs: GHG emissions through business operations of four production bases of Daikin, eight production subsidiaries within Japan and 47 overseas production subsidiaries</td>
</tr>
<tr>
<td>Scope 2 (location-based)</td>
<td>728,753</td>
<td>- CO2 from non-energy use: CH4, N2O, SF6 and NF3: GHG emissions through business operations of four production bases of Daikin</td>
</tr>
<tr>
<td>Scope 2 (market-based)</td>
<td>515,988</td>
<td>- GHG emissions through business operations of four production bases of Daikin</td>
</tr>
<tr>
<td>Scope 3 (Category 1, 11 and 12)</td>
<td>330,393,125</td>
<td>Categories 1, 11 and 12 of Scope 3 GHG emissions accounted and reported in line with the GHG Protocol's 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard Within the boundaries defined by Daikin for each category</td>
</tr>
</tbody>
</table>

The breakdown of Scope 3 emissions are as follows:
- Category 1: 2,962,614 t-CO2e
- Category 11: 2,961,958 t-CO2e
- Category 12: 30,629,233 t-CO2e

Conclusion

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the Selected Information has not been properly prepared, in all material respects, in accordance with the Reporting Criteria;
- It is our opinion that Daikin has established appropriate systems for the collection, aggregation and analysis of quantitative data within the scope of our work.

Statement of Independence, Integrity and Competence

Bureau Veritas is an independent professional services company that specialises in quality, environmental, health, safety and social accountability with over 190 years history. Its assurance team has extensive experience in conducting verification over environmental, social, ethical and health and safety information, systems and processes.

Bureau Veritas operates a certified Quality Management System which complies with the requirements of ISO 9001:2015, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Bureau Veritas has implemented and applies a Code of Ethics, which meets the requirements of the International Federation of Inspections Agencies (IFIA), across the business to ensure that its employees maintain integrity, objectivity, professional competence and due care, confidentiality, professional behavior and high ethical standards in their day-to-day business activities.

Bureau Veritas Japan Co., Ltd.
Yokohama, Japan
June 25, 2019
Greenhouse gas emissions data are calculated as follows.

(1) Use of fuel at sites (Energy-induced CO\textsubscript{2})  
- The scope of calculation covers four manufacturing bases of Daikin Industries, eight manufacturing subsidiaries in Japan, and 47 manufacturing subsidiaries overseas.
- However, the following may not be included in calculation: newly consolidated bases, sites that are newly established and that don’t yet have a data collection system in place, and sites whose emissions are negligible. As well, for sites where data procurement is difficult, calculation is based on estimates of past data, for example.
- Heat generation per unit, CO\textsubscript{2} emissions coefficient: Based on Environmental Activity Evaluation Program (Eco-Action 21) (1998, Ministry of the Environment); for natural gas in Japan, the coefficient used is based on the Act on the Promotion of Global Warming Countermeasures.

(2) Emissions of HFC and PFC in production processes at sites  
- The scope of calculation covers four manufacturing bases of Daikin Industries, eight manufacturing subsidiaries in Japan, and 47 manufacturing subsidiaries overseas.
- For estimates of HFC and PFC emissions, material balances and emissions coefficients are set and calculated based on methods stipulated in the Act on the Promotion of Global Warming Countermeasures.
- Global warming potentials of HFC and PFC are from the IPCC Fourth Assessment Report.

(3) Non-energy-induced CO\textsubscript{2}, CH\textsubscript{4}, N\textsubscript{2}O, SF\textsubscript{6}, NF\textsubscript{3} emissions in production processes at sites
- The scope of calculation is the four manufacturing bases of Daikin Industries.
- Calculations are based on emissions coefficients stipulated in the Act on the Promotion of Global Warming Countermeasures.
- Global warming potentials are from the IPCC Fourth Assessment Report.
(4) Use of electricity and heat at sites (Energy-induced CO₂) 

- The scope of calculation covers four manufacturing bases of Daikin Industries, eight manufacturing subsidiaries in Japan, and 47 manufacturing subsidiaries overseas.
- CO₂ emissions coefficients are as follows.
  - Purchased electricity: In Japan: 0.384 kg-CO₂/kWh
    - Based on Environmental Activity Evaluation Program (Eco-Action 21) (1998, Ministry of the Environment)
  - Overseas: Coefficients provided by electricity distribution companies
    - Based on Report on Survey of Estimates of CO₂ Unit Emissions in Power Generation Fields in Countries of the World (Japan Electrical Manufacturers’ Association), and on CO₂ Emissions from fuel combustion 2015 edition (IEA)
  - Purchased heat: 0.068 kg-CO₂/MJ
    - Based on Environmental Activity Evaluation Program (Eco-Action 21) (1998, Ministry of the Environment)
    - For Kashima Plant, 0.05 kg-CO₂/MJ (surveyed value by site)

(5) Purchased products and services (Energy-induced CO₂) 

- Scope of calculation covers components and materials purchased for air conditioners, water heaters, oil hydraulic products, and fluorochemical products produced in Japan, China, Thailand, Malaysia, Belgium, the Czech Republic, the Netherlands, France, Italy, Germany, Turkey, and the U.S.
- For each, purchased amount is multiplied by CO₂ emission coefficient.
- CO₂ emission coefficient is based on CFP Program Basic Database Ver. 1.01 (data in Japan), by the Japan Environmental Management Association for Industry, and the Inventory Database for Environment Analysis, by the National Institute of Advanced Industrial Science and Technology, and the Japan Environmental Management Association for Industry
- For chemicals, approximately 80% of the highest volume ones were selected, and a 100% value estimate calculation was done.
(6) CO₂ emissions in use of products sold in Japan (Energy-induced CO₂) Scope 3

- Scope of calculation covers CO₂ emissions from the use of residential air purifiers, central air conditioners, residential water heaters, residential air conditioners, factory air conditioners, and air conditioners for buildings, stores, and offices sold in Japan, ASEAN, China, Hong Kong, Taiwan, Australia, the EU, the U.S, and India.
- Calculation method: Annual electricity consumption × product lifecycle × electricity CO₂ emission coefficient × products sold.
- Annual electricity consumption and others are as follows.
  - Annual electricity consumption: Catalog values for room air conditioners, assumed conditions of actual use for other products.
  - Product lifecycle: 10 years for room air conditioners, water heaters, and air purifiers, 13 years for other products.
  - Electricity CO₂ emission coefficient:
    - In Japan: 0.348 kg-CO₂/kWh; based on Environmental Activity Evaluation Program (Eco-Action 21) (1998, Ministry of the Environment).
    - Overseas: Based on Report on Survey of Estimates of CO₂ Unit Emissions in Power Generation Fields in Countries of the World (The Japan Electrical Manufacturers’ Association), or on “Methodology for Ecodesign of Energy-related Products (COWI, VHK).”
- Up to 80% of the total sales volume, in order of highest selling products, was calculated, and a 100% value estimate calculation was done.

(7) Refrigerant leakage in use of products sold in Japan Scope 3

- Scope of calculation covers refrigerant leakage during use of refrigeration and air conditioning equipment sold in Japan, ASEAN, China, Hong Kong, Taiwan, Australia, the EU, the U.S, and India.
- Calculation method: Annual leakage rate × product lifecycle × global warming potential of refrigerant × products sold in fiscal 2014.
- Annual leakage rate and others are as follows.
  - Product lifecycle: 10 years for residential products, 13 years for commercial refrigeration and air conditioning equipment.
  - Global warming potentials of refrigerants are from the IPCC Fourth Assessment Report.
- Up to 80% of the total sales volume, in order of highest selling products, was calculated, and a 100% value estimate calculation was done.
(8) Disposal of products sold

- Scope of calculation is same as part (7).
- For calculation method, refrigerant leakage is calculated by refrigerant charge amount \( \times \) refrigerant global warming potential \( \times \) leakage rate at time of disposal. The emissions accompanying things like the transport and disassembly of waste products is calculated by multiplying the emissions per item by the number of items sold.
- Leakage rate at time of disposal is set at 80% for industrialized countries and 100% for emerging countries.

Global warming potentials of refrigerants are from the IPCC Fourth Assessment Report.
Awards for 2018

Overall CSR (Including SRI)

Daikin Industries, Ltd.

- Chosen for inclusion in the MSCI ESG Leaders Indexes

MSCI 2019 Constituent MSCI ESG Leaders Indexes

- Chosen for inclusion in the MSCI Japan Empowering Women Index (WIN)

MSCI MSCI Japan Empowering Women Index (WIN)

The inclusion of Daikin Industries, LTD. in any MSCI index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement or promotion of Daikin Industries, LTD. by MSCI or any of its affiliates. The MSCI indexes are the exclusive property of MSCI. MSCI and the MCSI index names and logos are trademarks or service marks of MSCI or its affiliates.

MSCI ESG Research website (https://www.msci.com/esg-investing)

- Chosen for inclusion in the MSCI Japan ESG Select Leaders Index

MSCI MSCI Japan ESG Select Leaders Index

- Chosen for inclusion in the FTSE Blossom Japan Index

FTSE Blossom Japan

FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that Daikin Industries has been independently assessed according to the FTSE Blossom Japan Index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Index Series. Created by the global index provider FTSE Russell, the FTSE Blossom Japan Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE Blossom Japan Index indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.
■ Chosen for inclusion in the Morningstar Socially Responsible Investment Index.

■ Chosen for inclusion in the SNAM (Sompo Japan Nipponkoa Asset Management Co., Ltd.) Sustainability Index.

■ Won the Grand Prize (from among approx. 3,600 TSE-listed companies) in the Corporate Value Improvement Award for fiscal 2018 sponsored by the Tokyo Stock Exchange.


Daikin Industries (Thailand) Ltd.

■ Won the Prime Minister's Outstanding Industry Award from Thailand's Ministry of Industry for continuous contribution to the country's economic growth.
Environmental Honors

Daikin Industries, Ltd.

- Won FY 2018 Energy Conservation Grand Prize
  - Won the Director-General Prize of Agency for Natural Resources and Energy for realization of a system for upgrading medium-sized office buildings to zero-energy buildings (ZEB)
  - Won the Chairman Prize of Energy Conservation Center for the "multi-cube" air-conditioners unit
  - Won the Special Judges Selection Award for the Smart-Multi hybrid individual air conditioning system

- Shiga Plant received the highest rating, 3 stars, in the biodiversity award system sponsored by Shiga Prefecture

Daikin Compressor Industries, Ltd.

- Won the Prime Minister’s Industry Award (energy efficiency category from Thailand’s Ministry of Industry)
Honors for Creating New Value

Daikin Industries, Ltd.

- Won Minister of MEXT Award in the 1st Japan Open Innovation Awards, sponsored by Japan’s Cabinet Office, for an industry-university co-creation starting from the basic research stage

- For the fifth consecutive year was selected a Derwent Top 100 Global Innovator, by Clarivate Analytics, for intellectual property activities
Honors for Customer Satisfaction

**Daikin Industries, Ltd.**

- The Urusara 7 residential air conditioner for the Japanese market won a Red Dot award and a Good Design Award

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**red dot award 2019 winner**

**Daikin Air-Conditioning Technology (China) Ltd.**

- Won an award as a model company for protecting consumers' rights, an honor for offering outstanding service, from the China Appliance Maintenance Association
Daikin Industries, Ltd.

- Granted Nadeshiko Brand designation for the sixth time, and the fifth consecutive year, by the Ministry of Economy, Trade and Industry.

- Awarded the highest level of certification (L-boshi certification) based on Japan’s Act to Advance Women’s Success in their Working Life.

- Awarded the highest rating, 5 stars, in the 2nd NIKKEI Smart Work survey conducted by Nikkei Inc., which assesses companies based on the adoption of diverse, flexible work practices.

NIKKEI

Smart Work

2019 ★★★★★ Best 14

Daikin (China) Investment Co., Ltd.

- Won the China Model Human Resources Hiring Company Prize in awards sponsored by 51job, China's leading human resource solutions provider.
Daikin Malaysia Sdn. Bhd.

- Won a Gold Class 1 Award from the Malaysian Society for Occupational Safety & Health