

# 1 DAIWA HOUSE INDUSTRY CO., LTD.

	<b>Companies' approach</b>
<b>① Background and purpose of accounting</b>	<ul style="list-style-type: none"> <li>• In order to know the status of our own supply chain emissions and to focus on priority targets for emissions reduction activities.</li> <li>• In order to consider and find out effective indicators as a basis for measuring the progress of CO<sub>2</sub> emissions reduction activities, so that we can go forward with such activities together with our suppliers.</li> <li>• In order to meet the demand for information disclosure from our investors, NPOs and other stakeholders, so that there will be a better understanding of our efforts.</li> </ul>
<b>② Utilization of accounting results</b>	<ul style="list-style-type: none"> <li>• Internally, we use our accounting results as a strategic planning tool to identify priority target areas for emissions reduction and promote cooperative reduction activities with our suppliers.</li> <li>• And externally, we also use them as a communication tool with our stakeholders by disclosing information through environmental reports and various questionnaires or surveys.</li> </ul>
<b>③ Benefits of accounting</b>	<ul style="list-style-type: none"> <li>• Carrying out this accounting has led us to reconfirm that our emissions from the "Use of sold products" are the largest contributor, with which we will need to continuously deal as a priority target for our reduction activities.</li> <li>• As typically seen in the construction industry, we have found that Categories "Purchased goods and services" and "End-of-life treatment of sold products" also account for a relatively large share of our total supply chain emissions, and that these areas should accordingly be priority targets for our future activities.</li> </ul>
<b>④ Internal system for accounting</b>	<ul style="list-style-type: none"> <li>• In principle we use the "Activities quantity x Emission factor" calculation formula to account for our emissions, and do not use actual emissions data from suppliers.</li> <li>• The activities quantity is based on our primary data drawn from our results. We collect existing internal data from the related departments, and then have the Environmental Department make the calculations.</li> </ul>

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## DAIWA HOUSE INDUSTRY CO., LTD.

	<b>Companies' approach</b>
<p>⑤ <b>Efforts to reduce supply chain emissions</b></p>	<ul style="list-style-type: none"> <li>• We will place an even greater emphasis on reduction activities in the “Use of sold products“ where we have already been making efforts as a priority target. (We will also use “avoided CO<sub>2</sub> emissions” separately as an indicator for management of emissions.)</li> <li>• With respect to reducing emissions from “Purchased goods and services” and “End-of-life treatment of sold products,” we will further pursue "resource saving" and "ease of tearing down buildings" which are important feature elements of engineered architecture.</li> <li>• As for CO<sub>2</sub> reduction activities at suppliers, we will promote support and cooperative activities through various projects, including planning and proposing energy-saving architecture, and implementing energy-saving renovation. We also set CO<sub>2</sub> reduction targets for more than 90% of major suppliers and encourage energy-saving activities.</li> </ul>
<p>⑥ <b>Issues in supply chain emissions accounting</b></p>	<ul style="list-style-type: none"> <li>• Now that the proportion of Scope 3 to our total emissions is expected to be far greater than Scope 1 and 2, there is a risk that we will become less interested in Scope 1 and 2 emissions reduction activities as Scope 3 gets recognized more widely (both within our company and beyond).</li> <li>• In order to comprehend the scale of emissions, estimates based on emission factor are preferred over cumulative figures that might be missing some data. In that case, however, it would be difficult to incorporate the results of reduction activities along the supply chain in Scope 3 emissions.</li> <li>• In principle the organizational boundaries should encompass consolidated businesses, but this can be a major burden for combined businesses.</li> </ul>
<p>⑦ <b>Other</b></p>	<ul style="list-style-type: none"> <li>• For the future, with the Natural Capital approach in mind, we will be exploring ways to capture and understand the extent of environmental impact that we may have in terms of not only carbon dioxide emissions but also of water usage, waste, and air pollution across the entire supply chain.</li> </ul>

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## DAIWA HOUSE INDUSTRY CO., LTD.

Category	Accounting methods ※Accounting period : 1 April 2018 – 31 March 2019	
	Activity data	Emission factor
Category 1: Purchased goods and services	<ul style="list-style-type: none"> <li>Area of buildings supplied, by use</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor per unit area of buildings supplied ※3 (※1 for only procurement of paper and water)</li> </ul>
Category 2: Capital goods	<ul style="list-style-type: none"> <li>Amount of capital investment</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor per capital investment amount※1</li> </ul>
Category 3: Fuel and energy related activities not included in Scope 1 or 2	<ul style="list-style-type: none"> <li>Consumption of fuel and energy that was procured</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor for extraction, production and transportation, by fuel and energy type※1,2</li> </ul>
Category 4: Transportation and delivery (upstream)	<ul style="list-style-type: none"> <li>Calorific value of fuel used by us as the sender for transportation</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor per calorific value (by the Act on the Rational Use of Energy)</li> </ul>
Category 5: Waste generated in operations	<ul style="list-style-type: none"> <li>Amount of waste discharged, by item</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor for disposal, by waste item※1</li> </ul>
Category 6: Business travel	<ul style="list-style-type: none"> <li>Amount of business travel expenses, by mode of transportation</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor per transportation expenses paid, by mode of transportation※1</li> </ul>
Category 7: Employee commuting	<ul style="list-style-type: none"> <li>Commuting expenses paid, by mode of transportation</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor per transportation expenses paid, by mode of transportation※1</li> </ul>
Category 8: Leased assets (upstream)	<ul style="list-style-type: none"> <li>Occupied area (warehouses, data centers)</li> </ul>	<ul style="list-style-type: none"> <li>Basic unit per area※3</li> </ul>
Category 9: Transportation and delivery (downstream)	<ul style="list-style-type: none"> <li>Not relevant</li> </ul>	
Category 10: Processing of sold products	<ul style="list-style-type: none"> <li>Not relevant</li> </ul>	
Category 11: Use of sold products	<ul style="list-style-type: none"> <li>Area of buildings supplied, by use</li> </ul>	<ul style="list-style-type: none"> <li>Annual CO<sub>2</sub> emissions per unit area of buildings marketed, by use (internal calculation) x Assumed number of years of use</li> </ul>
Category 12: End-of-life treatment of sold products	<ul style="list-style-type: none"> <li>Area of buildings supplied, by use</li> </ul>	<ul style="list-style-type: none"> <li>Emission factor per unit area of buildings supplied (CASBEE for Building &lt;New Construction&gt;) ※3</li> </ul>
Category 13: Leased assets (downstream)	<ul style="list-style-type: none"> <li>Lease area (offices)</li> </ul>	<ul style="list-style-type: none"> <li>Basic unit per area※3</li> </ul>
Category 14: Franchises	<ul style="list-style-type: none"> <li>Not relevant</li> </ul>	
Category 15: Investments	<ul style="list-style-type: none"> <li>With regard to Scope 1 and 2 emissions by companies invested in, the estimates based on partial actual data show that they are less than 2 percent of the entire Scope 3 emissions. As a result, they were not included because the quantity of emissions was so small compared with how difficult it would be to collect the data</li> </ul>	
Other	<ul style="list-style-type: none"> <li>Not calculated because it is an option category</li> </ul>	

※1 Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.6) (Ministry of Economy, Trade and Industry, Ministry of the Environment)

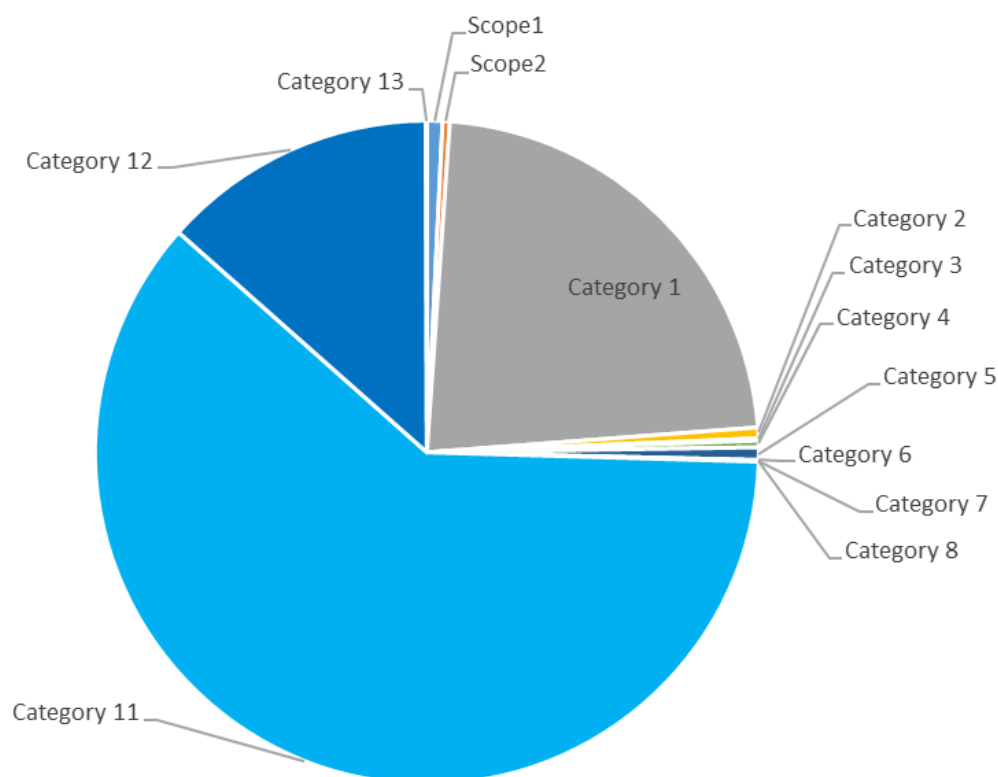
※2 Carbon Footprint Communication Program Basic Database ver.1.01 (domestic data) (Japan Environmental Management Association For Industry)

※3 Comprehensive Assessment System for Building Environmental Efficiency (CASBEE) LCCO2 calculation tool FY2016 (Japan Sustainable Building Consortium)

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## DAIWA HOUSE INDUSTRY CO., LTD.

## Supply chain emissions : Accounting results



Scope1	0.8%
Scope2	0.4%
Scope3	98.9%
Category 1: Purchased goods and services	21.6%
Category 2: Capital goods	0.5%
Category 3: Fuel and energy related activities not included in Scope 1 or 2	0.1%
Category 4: Transportation and delivery (upstream)	0.3%
Category 5: Waste generated in operations	0.6%
Category 6: Business travel	0.05%
Category 7: Employee commuting	0.05%
Category 8: Leased assets (upstream)	0.001%
Category 9: Transportation and delivery (downstream)	—
Category 10: Processing of sold products	—
Category 11: Use of sold products	62.4%
Category 12: End-of-life treatment of sold products	13.2%
Category 13: Leased assets (downstream)	0.02%
Category 14: Franchises	—
Category 15: Investments	—

※The accounting results are detailed in Daiwa House group's Sustainability Report 2019 (p.217 and p218).

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