

Calculation method for FY 2020 actual scope 3 emissions

| Categories | Summary  | Calculation Method   | Emissions intensity * 1   |
|------------|--|--|---|
| 1          | Purchased goods and services   | (1)Purchase amount (1 million yen) x emission intensity of each product<br>(2)Data for domestic manufacturing sites is based on Scope 1 and 2 of some suppliers.   | Ministry of the Environment's * 1 [5] Emissions intensity based on the input-output table<br>Emissions intensity on a monetary basis for each product (buyer price basis)   |
| 2          | Capital goods  | Acquisition cost of capital goods (Facilities, etc.) (1 million yen) x emissions intensity of each capital goods   | Ministry of the Environment's DB * 1 [6] Emissions intensity per price of capital goods<br>Emissions intensity on a monetary basis for each product   |
| 3          | Fuel and energy-related activities<br>(not included in scope 1 or scope 2) | Energy consumption in Scopes 1 and 2 × emissions intensity for each energy   | Scope 1: Carbon Footprint Communication Program Basic Database ver. 1.01 (domestic data)<br>Scope 2: Ministry of the Environment's DB * 1 [7] Emission intensity per electricity and heat usage. Emission intensity at the time of fuel procurement   |
| 4          | Upstream transportation and distribution                                   | < Domestic operations ><br>(1) Calculation method of CO2 emissions from save energy sources related to freight transportation by shippers, as stipulated by the Energy Conservation Law<br>(2) Annual transportation cost (1 million yen) × emission intensity<br><Overseas operations ><br>Transportation cost (1 million yen) × emission intensity | Domestic operation:<br>(1) " Greenhouse gas emission calculation / reporting manual"<br>(2)Ministry of the Environment's DB * 1 [5] Emissions intensity based on the input-output table<br>Road freight transportation: 3.93 t-CO 2 eq/1-million-yen<br>Overseas operation:<br>Ministry of the Environment's DB * 1 [5] Emissions intensity based on the input-output table |

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|   |                               | for each transportation method  | <p>Emissions intensity on a monetary basis for each product (buyer price basis)</p> <p>Road freight transportation: 3.93 t-CO<sub>2</sub> eq/1 million yen</p> <p>Railway freight transportation: 4.90 t-CO<sub>2</sub> eq/1 million yen</p> <p>Air transportation: 12.14 t-CO<sub>2</sub> eq/1 million yen</p> <p>Ocean transport: 27.33 t-CO<sub>2</sub> eq/1 million yen</p> <p>Unclassified: 3.19 t-CO<sub>2</sub> eq/1 million yen</p>  |
| 5 | Waste generated in operations | <p>&lt;Emissions from industrial waste transportation&gt;</p> <p>Domestic operations:<br/>Calculation method of CO<sub>2</sub> emissions from save energy sources related to freight transportation by shippers, as stipulated by the Energy Conservation Law</p> <p>Overseas operations:<br/>Transportation cost (1 million yen) × emission intensity</p> <p>Domestic operations : Industrial waste emissions × emission intensity<br/>Overseas operations: Industrial waste disposal cost (1 million yen) × emission intensity</p> <p>&lt;Emissions from Industrial Waste Disposal&gt;</p> <p>Domestic operations :<br/>Industrial waste emissions × emission intensity</p> <p>Overseas operations:<br/>Industrial waste disposal cost (1 million yen) × emission</p> | <p>&lt;Emissions from industrial waste transportation&gt;</p> <p>Domestic operations: " Greenhouse gas emission calculation / reporting manual"</p> <p>Overseas: Ministry of the Environment's DB * 1 [5] Emissions intensity based on the input-output table</p> <p>Road freight transportation: 3.93 t-CO<sub>2</sub> eq/1 million yen</p> <p>&lt;Emissions from Industrial Waste Disposal&gt;</p> <p>Domestic operations: Ministry of the Environment's database * 1 (8)<br/>Emission intensity by type of waste (Exclude the waste transport stage)</p> <p>Overseas: Ministry of the Environment's DB * 1 [5] Emissions intensity based on the input-output table</p> <p>Emissions intensity on a monetary basis for each product (buyer price basis)</p> <p>Waste disposal (industry): 7.81 t-CO<sub>2</sub> eq/1 million yen</p> |

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|   |                    | intensity  |  |
| 6 | Business travel    | <p>&lt;Domestic operations&gt;</p> <p>Number of employees × emission factor</p> <p>&lt;Overseas operations&gt;</p> <p>(1) Number of days by type of business trip (Domestic day trips, domestic overnight stays and overseas business trips) × emission intensity</p> <p>(2) Number of employees × emission factor</p>   | <p>Domestic operations:</p> <p>Ministry of the Environment's database * 1 [13] Unit emissions per employee</p> <p>Overseas operations:</p> <p>(1) Ministry of the Environment's database * 1 [13] Emissions intensity per total number of business trip days for employees</p> <p>(2) Ministry of the Environment's database * 1 [13] Emissions intensity per employee</p>   |
| 7 | Employee commuting | <p>&lt;Domestic operations&gt;</p> <p>Cars and motorcycles:</p> <p>Round trip commuting distance × average number of working days per month × 12 ÷ fuel consumption × emission factor</p> <p>Public Transportation:</p> <p>Number of public transportation users × basic unit of emissions by work type (offices and factories) and city category (Large cities, medium cities, etc.)</p> <p>&lt;Overseas operations&gt;</p> <p>Calculation method similar to that of domestic public transportation</p> | <p>Fuel consumption of cars and motorcycle:</p> <p>Fuel consumption as specified in company regulations "Standards for Payment of Commuting Allowance by Private Car"</p> <p>Motorcycle: 25 km/l</p> <p>Cars: 10.7 km/l</p> <p>Fuel emission factor:</p> <p>Ministry of the Environment's * 1 [2] Gasoline emission intensity based on the transport ton-kilometer method: 2.32 t-CO<sub>2</sub> /kl</p> <p>Public Transportation:</p> <p>Ministry of the Environment's DB * 1 [14] emission intensity per employee (number of working days)</p> |

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| 11 | Use of sold products                   | Annual power consumption per unit of each product × CO2 emissions intensity per unit of power used x useful life of each product x number of units shipped in the fiscal year<br>*For some products, substitute values for similar products. | < CO2 emissions per unit of power consumption><br>IEA 'CO 2 Emissions from Fuel Combustion 2013'<br>Global 2010 0.53 kg-CO 2/kWh  |
| 12 | End-of-life treatment of sold products | CO2 emissions at the time of disposal of each product × the number of units shipped of each product in the fiscal year concerned<br>*For some products, substitute values for similar products.  | CO2 emissions at the time of product disposal: Calculated based on the company's LCA results from the weight of waste assumed for each product, disposal method, transportation distance, and means of transportation.<br>Basic unit of waste transportation: IDEA (Inventory Database for Lifecycle Analysis) 10 t Truck 0.126 t-CO 2/t-km<br>Basic unit for disposal and shredding: IDEA (Inventory Database for Lifecycle Analysis) 0.00382 t-CO 2/t |

Note: Categories not listed above are excluded from the scope of Scope3.

\*(1) A database of emission intensity used for calculating supply chain emissions (Ver. 3.1) is used