

Ascertaining CO₂ Emissions in the Supply Chain

Tamron has been calculating the amount of indirect greenhouse gas emissions (Scope 3) in the supply chain since FY2016. We received support from the Ministry of the Environment in calculating supply chain emissions.

<Scope Emissions and the ratio>

Site Covered: Tamron Group (FY2022)

Scope 1

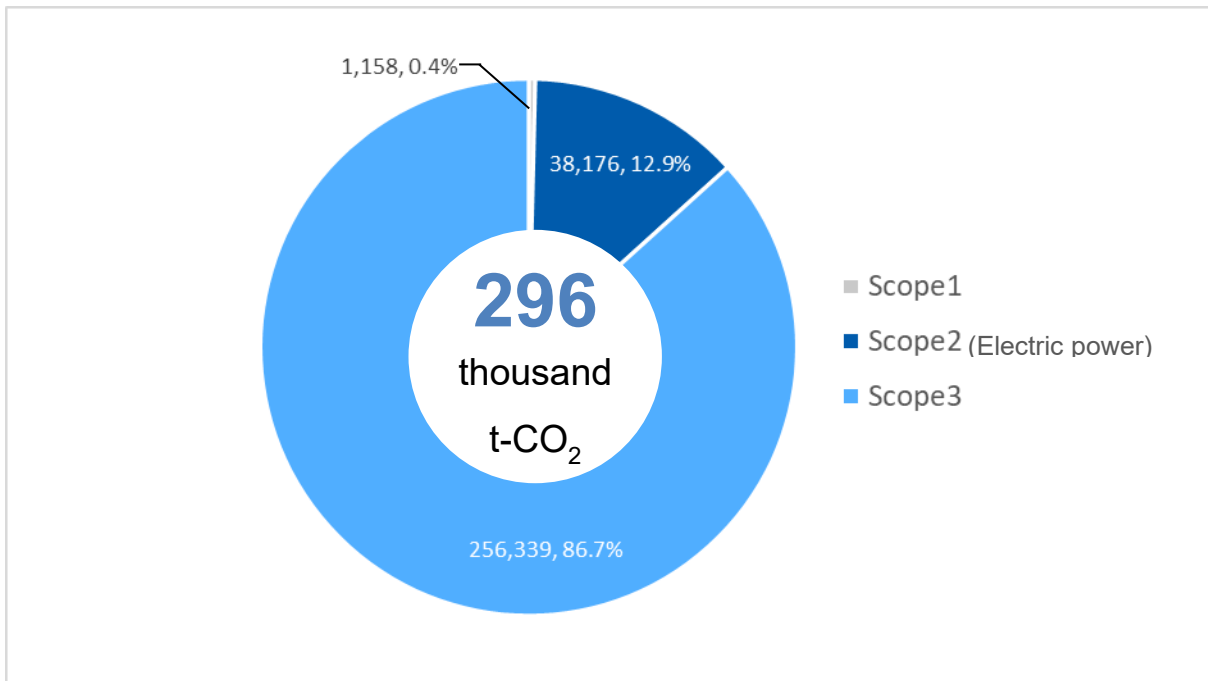
(Direct greenhouse gas emissions from the use of fuel, etc.): **1,158 t-CO₂**

Scope 2

(Indirect greenhouse gas emissions generated due to the use of purchased electricity or heat): **38,176t-CO₂**

Scope 3

(Indirect greenhouse gas emissions related to business activities in the supply chain): **256,339t-CO₂**



<CO₂ Emissions by Scope and Category /Ratio /Calculation method>

Site Covered: Tamron Group (FY2022)

Scope and Category	CO ₂ emissions (t-CO ₂)	Ratio(%)	Calculation method
Scope 1 (Direct emissions)	1,158	0.4%	—
Scope 2 (Indirect emissions)	38,176	12.9%	—
Scope 3 (Supply chain)	256,339	86.7%	—
Category 1 Purchased goods and services	182,509	71.2%	Amount of activity: Amount of purchased raw materials, packaging materials, advertising expenses, and consumables Unit: Calculated by the emissions unit of each item (Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)
Category 2 Capital goods	40,615	15.8%	Amount of activity: Amount of capital investment by all consolidated subsidiaries Unit: Calculated by the emissions unit (Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)
Category 3 Fuel-and-energy-related activities excluding Scope 1, 2	5,461	2.1%	Amount of activity: Amount of purchased electricity and fuels (monetary amount) Unit: Calculated by the emissions unit of each type (Inventory Database for Environmental Analysis) ver.2.3)

Scope and Category	CO ₂ emissions (t-CO ₂)	Ratio (%)	Calculation method
<p>Category 4 Upstream transportation and distribution</p>	<p>20,071</p>	<p>7.8%</p>	<p>Amount of activity: Amount of domestic and overseas shipment of purchased materials and services from supplier</p> <p>Unit: Calculated by the emissions unit of each transportation type</p> <p>(Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)</p> <p>Trucks: Specific fuel consumption using the improved ton/kilo method</p> <p>Airplanes: Simplified calculation tool issued by Policy Research Institute for Land, Infrastructure, Transport and Tourism</p>
<p>Category 5 Waste generated in operations</p>	<p>555</p>	<p>0.2%</p>	<p>Amount of activity: Emissions of each type of waste (metal, paper, waste oil, plastic, glass and ceramics)</p> <p>Unit: Calculated by the emissions unit of each type</p> <p>(Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)</p>
<p>Category 6 Business travel</p>	<p>229</p>	<p>0.1%</p>	<p>Amount of activity: Transportation expenses paid by the employee's means of transportation when traveling on business</p> <p>Unit: Calculated by the emissions unit per transportation means</p> <p>(Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)</p>

Scope and Category	CO ₂ emissions (t-CO ₂)	Ratio (%)	Calculation method
Category 7 Employee commuting	6,591	2.6%	Amount of activity: Transportation expenses paid to employees Unit: Calculated by the emissions unit per transportation means (Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)
Category 8 Upstream leased assets	9	0.0%	Amount of activity: Leased buildings such as sales offices Unit: Calculated by the emissions unit of the sales area (Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)
Category 9 Downstream transportation and distribution	-	-	Not covered (We have not burdened transportation expenses after delivery to the agents.)
Category 10 Processing of sold products	-	-	Not covered (There is no processing after product delivery.)
Category 11 Use of sold products	180	0.1%	Amount of activity: Lifetime power consumption of products (total of annual sales numbers) Unit: Calculated by the emissions unit of the power consumption described in the product specifications (Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)

Scope and Category	CO ₂ emissions (t-CO ₂)	Ratio (%)	Calculation method
Category 12 End of life treatment of sold products	119	0.1%	Amount of activity: Emissions from the product itself and container packaging materials Unit: Calculated by the emissions unit of each type (Emission factor database for calculating organizational GHG emissions throughout the supply chain ver. 3.3)
Category 13 Downstream leased assets	-	-	Not covered (There are no leased assets.)
Category 14 Franchises	-	-	Not covered (Business type is not franchise type.)
Category 15 Investments	-	-	Not covered (We are not engaged in investment and financial services activities.)