

Boundary, Period, and Assumptions Underlying of Data (Environment)

Energy consumption within the organization

Boundary	<p>Japan: 12 sites Toyo Tire Corp. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center, Tire Proving Ground), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., Orient Machinery Co., Ltd.</p> <p>Americas: 2 sites TOYO AUTOMOTIVE PARTS (USA), INC. \ TOYO TIRE NORTH AMERICA MANUFACTURING INC.</p> <p>Asia (Excluding Japan): 6 sites TOYO AUTOMOTIVE PARTS (GUANGZHOU) CO., LTD., TOYO TIRE ZHANGJIAGANG CO., LTD., TOYO TIRE (ZHUCHENG) CO., LTD., SILVERSTONE BERHAD, TOYO TYRE MALAYSIA SDN BHD, TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED</p>
Period	From January to December of that year
Assumptions Underlying of Data	<p>Calculated from actual fuel use values. *Energy consumption within the organization from renewable sources outside Japan is used the theoretical exact.</p> <p>Converted using the standard calorific value for fiscal 2013 (Agency for Natural Resources and Energy of the Ministry of Economy, Trade and Industry, last revised on 2018).</p> <p>The ratio of renewable energy to purchased electricity (reference) is estimated from data disclosed by electric power companies (for our bases/sites in Japan) and from data on power generated by using renewable energy in respective countries as announced by Enerdata s.a. (for our bases/sites outside of Japan).</p>

Energy consumption outside of the organization (in Logistics)

Boundary	Logistics in Japan (trucks, ship, rail)
Period	From April in this year to March of that year
Assumptions Underlying of Data	Conforms to the Shippers' Energy Conservation Handbook (Sixth Ed.) (Agency for Natural Resources and Energy of the Ministry of Economy, Japan).

Energy intensity

Boundary	Energy per unit of production (calorific value/sales): Same as “Energy consumption within the organization”
Period	From January to December of that year
Assumptions Underlying of Data	Calculated from actual fuel use values. Energy consumption conversion is the same as “Energy consumption within the organization.” Sales are consolidated financial results Converted assuming calorific value of 10 million KJ as 0.258 kl of crude oil (Article 4 of Enforcement Regulations for the Act on the Rational Use of Energy (Conversion Methods)).

The case of reducing energy consumption

Period	From January to December of that year
Assumptions Underlying of Data	Calculated from actual fuel use values. Energy consumption conversion is the same as “Energy consumption within the organization.”

Reductions in energy requirements of products (Fuel Efficient Tires)

Period	From January to December of that year
Assumptions Underlying of Data	Conforms to the Tyre LCCO2 Calculation Guidelines Ver. 2.0 (Japan Automobile Tyre Manufacturers Association). Calculated the middle size tire of light track as Tires for Passenger Vehicles, and the large size tire of light track as Tires for Trucks and Buses.

GHG emissions

Boundary	<u>Scope 1, 2</u> Same as “Energy consumption within the organization” <u>Scope 3</u> Tire production sites Japan: 6 sites Toyo Tire Corp. (Headquarters, Sendai Plant, Kuwana Plant, Tire Technical Center, Corporate Technology Center), Fukushima Rubber Co., Ltd., Americas: 1 site TOYO TIRE NORTH AMERICA MANUFACTURING INC. Asia (Excluding Japan): 4 sites TOYO TIRE ZHANGJIAGANG CO., LTD., TOYO TIRE (ZHUCHENG) CO., LTD., SILVERSTONE BERHAD, TOYO TYRE MALAYSIA SDN BHD
Period	From January to December of that year

Assumptions Underlying of Data	<p>Calculated from actual fuel use values. Fiscal 2013 Carbon Emission Factor (Agency for Natural Resources and Energy) and CO2 Emissions Factors (2018 Edition, IEA) is used for total volume. Scope 1, 2, and 3 are in accordance with the Tyre LCCO2 Calculation Guidelines Ver. 2.0 (Japan Automobile Tyre Manufacturers Association, 2012) and Guidelines on Disclosure of CO2 Emissions from Transportation & Distribution Ver 2.1 (Ministry of the Environment, Ministry of Economy, Trade and Industry, 2014).</p> <p>*Scope 2 uses location criteria</p>
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Reduction in GHG emissions due to direct impact of efforts to reduce emissions in fiscal 2019

Boundary	Same as "Energy consumption within the organization"
Period	From January to December of that year
Assumptions Underlying of Data	Calculated based on actual reductions compared to projected amount used for each type of fuel.

Emissions of ozone-depleting substances (ODS)

Boundary	<p>Japan: 11 sites</p> <p>Toyo Tire Corp. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., Orient Machinery Co., Ltd.</p>
Period	From April in this year to March of that year
Assumptions Underlying of Data	In accordance with the Freon Calculated Leak Volume Reporting Manual (Ministry of the Environment, Ministry of Economy, Trade and Industry; 2015)

Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions

Boundary	<p>*Including the affiliates transferred at the end of 2018</p> <p><u>NOx, Sox</u></p> <p>Japan; 6 sites</p> <p>Toyo Tire Corp. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd.</p> <p>Asia (Excluding Japan):1 site</p> <p>TOYO TIRE ZHANGJIAGANG CO., LTD.</p>
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	<p><u>VOC</u></p> <p>Japan; 6 sites</p> <p>Toyo Tire Corp. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd.</p>
Period	<p>NOx, SOx: From January to December of that year</p> <p>VOC: From April of that year to March of the following year</p>
Assumptions Underlying of Data	<p>Measured values. VOC is the total for substances for which at least 1 ton is used annually at each business site.</p>

Water withdrawal

Boundary	<p>Japan: 11 sites</p> <p>Toyo Tire Corp. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center, Tire Proving Ground), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., Orient Machinery Co., Ltd.</p> <p>Americas: 2 sites</p> <p>TOYO AUTOMOTIVE PARTS (USA), INC. \ TOYO TIRE NORTH AMERICA MANUFACTURING INC.</p> <p>Asia (Excluding Japan): 6 sites</p> <p>TOYO AUTOMOTIVE PARTS (GUANGZHOU) CO., LTD., TOYO TIRE ZHANGJIAGANG CO., LTD., TOYO TIRE (ZHUCHENG) CO., LTD., SILVERSTONE BERHAD, TOYO TYRE MALAYSIA SDN BHD, TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED</p>
Period	From January to December of that year
Assumptions Underlying of Data	Measured values. Accessed the water-related impacts by Aqueduct Water Risk Data (Aqueduct, WRI) at the end of February 2020.

Water discharge

Boundary	<p>Same as "Water withdrawal"</p> <p>* Numbers for Toyo Tire Corporation's Hyogo Manufacturing Complex include water discharge from neighboring facilities of other companies (the amount of water discharge for joint treatment).</p>
Period	From January to December of that year
Assumptions Underlying of Data	<p>Measured value or Estimated value from water intake</p> <p>Measured value:</p> <p>Toyo Tire Corp. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., TOYO TIRE NORTH AMERICA MANUFACTURING INC., TOYO TIRE ZHANGJIAGANG CO., LTD., TOYO TIRE (ZHUCHENG) CO., LTD., TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED</p> <p>Estimated value: Other than the above</p> <p>Accessed the water-related impacts by Aqueduct Water Risk Data (Aqueduct, WRI) at the end of February 2020.</p>

Water consumption

Boundary	Same as "Water withdrawal"
Period	From January to December of that year
Assumptions Underlying of Data	In accordance with GRI standard. Accessed the water-related impacts by Aqueduct Water Risk Data (Aqueduct, WRI) at the end of February 2020.

Main materials used

Boundary	Toyo Tire Corp. (Japan)
Period	From January to December of that year
Assumptions Underlying of Data	Actual purchased volume. Raw material utilization efficiency is the tire production volume divided by the total volume of main raw materials related to tire production.

Waste

Boundary	<p><u>Non-hazardous waste</u></p> <p>Japan: 11 sites Toyo Tire Corp. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., Orient Machinery Co., Ltd.</p> <p>Americas: 2 sites TOYO AUTOMOTIVE PARTS (USA), INC. \ TOYO TIRE NORTH AMERICA MANUFACTURING INC.</p> <p>Asia (Excluding Japan): 6 sites TOYO AUTOMOTIVE PARTS (GUANGZHOU) CO., LTD., TOYO TIRE ZHANGJIAGANG CO., LTD., TOYO TIRE (ZHUCHENG) CO., LTD., SILVERSTONE BERHAD, TOYO TYRE MALAYSIA SDN BHD, TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED</p> <p><u>Recycled amount and Reused amount of non-hazardous waste, and</u></p> <p><u>Hazardous waste</u></p> <p>Japan: 11 sites TOYO TIRE Corp. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., Orient Machinery Co., Ltd.</p> <p>*The total weight of non-waste, the amount of non-hazardous waste recycled, and the total weight of hazardous waste (waste subject to special control) of Ayabe Toyo Rubber Co., Ltd. include the amount of waste from neighboring facilities of other companies (the amount of waste for joint treatment).</p>
Period	From January to December of that year
Assumptions Underlying of	Total weight and recycled volume in Japan are based on the total disposal volume information provided by waste disposal service providers. The volume

Data	recycled in Japan is the total volume of waste generated less the volume sent to landfills. The recycling rate for Japan is the percentage of waste that is not final output (volume sent to landfills and volume of waste incinerated).
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Transport of hazardous waste (PRTR-designated chemical substances)

Boundary	Japan: 6 sites; Toyo Tire Corp. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd.
Period	From January to December of that year
Assumptions Underlying of Data	“Class 1 chemical substances” are those of which at least 1 ton is used annually at each production facility, and “designated class 1 chemical substances” are those of which at least 0.5 ton is used annually at each production facility.

Total Production Shipments of Recycled (Retreaded) Tires *TOYO TIRES Brand

Boundary	The retreaded Tires factories of the affiliated company accounted for by the equity-method in japan
Period	From January to December of that year
Assumptions Underlying of Data	production output