

\*The organization name in boundary is the name at the time of recording.

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

#### Energy consumption within the organization

|                                |  |
|--------------------------------|--|
| Boundary                       | <p>*Including the affiliates transferred at the end of 2018</p> <p>In Japan: 12 sites;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (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., F.C.C Co., Ltd., Orient Machinery Co., Ltd.</p> <p>Outside Japan: 8 sites;<br/>           TOYO AUTOMOTIVE PARTS (USA), INC. \ TOYO TIRE NORTH AMERICA MANUFACTURING INC., 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). 1TJ=277.778 MWh.</p>  |

#### Energy consumption outside of the organization (in Logistics)

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| 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 (3rd Ed.) (Agency for Natural Resources and Energy of the Ministry of Economy, Trade and Industry/Energy Conservation Center, Japan). |

#### Energy intensity

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| Boundary | <p>Energy per unit of production (calorific value/sales): Same as "Energy consumption within the organization"</p> <p>The main production facilities in Japan; *4 sites account for 95% of total energy consumption in Japan</p> <p>TOYO TIRE &amp; RUBBER CO., LTD. (Headquarters, Sendai Plant, Kuwana Plant,</p> |
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|                                | Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd.  |
| 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

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| 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

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| Boundary | <p>Direct and indirect GHG emissions: Same as "Energy consumption within the organization"</p> <p><u>Scope 1, 2, and 3</u></p> <p>11 sites related to tire production in and outside Japan;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (Headquarters, Sendai Plant, Kuwana Plant, Tire Technical Center, Corporate Technology Center), Fukushima Rubber Co., Ltd., TOYO TIRE NORTH AMERICA MANUFACTURING INC., TOYO TIRE ZHANGJIAGANG CO., LTD., TOYO TIRE (ZHUCHENG) CO., LTD., SILVERSTONE BERHAD, TOYO TYRE MALAYSIA SDN BHD</p> <p><u>CO2 per unit of production</u></p> <p>4 main production facilities in Japan;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd.</p> |
| Period   | From January to December of that year   |

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| 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 &amp; Distribution Ver 2.1 (Ministry of the Environment, Ministry of Economy, Trade and Industry, 2014).</p> <p>*Regarding the changes to standard calorific value for energy sources and use of CO2 converted emissions coefficient:</p> <ul style="list-style-type: none"> <li>•Regarding the calculation of Direct and Indirect (Scope 1) GHG emissions and Energy indirect (Scope 2) GHG emissions, until last year's report, the standard calorific value for energy sources and CO2 converted emissions coefficient used in "Tyre LCCO2 Calculation Guidelines Ver. 2.0" (Japan Automobile Tyre Manufacturers Association, 2012) had been used. However, to reflect the effects of low-carbon due to changes in the composition and properties of fuel and changes to the supply configurations of purchased power, from this year's report, we use the standard calorific value and emissions coefficient used at each aggregation year.</li> <li>•Regarding the calculation of the compared to fiscal 2005 of GHG emissions intensity, until last year's report, we had used the standard calorific value and emissions coefficient used at the reference year. However, to reflect the effects of low-carbon due to changes in the composition and properties of fuel and changes to the supply configurations of purchased power, from this year's report, we use the standard calorific value and emissions coefficient used at each aggregation year.</li> </ul> |
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Reduction in GHG emissions due to direct impact of efforts to reduce emissions in fiscal 2018

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| 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)

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| Boundary | 7 sites of TOYO TIRE & RUBBER CO., LTD. (Japan);<br>Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, |
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|                                |   |
|--------------------------------|---|
|                                | Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center   |
| 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

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| Boundary                       | <p>*Including the affiliates transferred at the end of 2018</p> <p><u>NOx, Sox</u></p> <p>5 manufacturing sites in Japan;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd.</p> <p><u>VOC</u></p> <p>7 manufacturing sites in Japan;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., F.C.C 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 | Measured values. VOC is the total for substances for which at least 1 ton is used annually at each business site.   |

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Water withdrawal

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|--------------------------------|--|
| Boundary                       | <p>*Including the affiliates transferred at the end of 2017</p> <p>In Japan: 12 sites;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (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., F.C.C Co., Ltd., Orient Machinery Co., Ltd.</p> <p>Outside Japan: 8 sites;<br/>           TOYO AUTOMOTIVE PARTS (USA), INC. \ TOYO TIRE NORTH AMERICA MANUFACTURING INC., 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 2019.   |

Management of water discharge-related impacts at manufacturing bases (Toyo Tire Corporation)

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| Boundary                       | TOYO TIRE & RUBBER CO., LTD. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex) *in Japan                             |
| 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 2019. |

Water consumption at manufacturing bases (Toyo Tire Corporation)

|                                |  |
|--------------------------------|--|
| Boundary                       | TOYO TIRE & RUBBER CO., LTD. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex) *in Japan |
| Period                         | From January to December of that year  |
| Assumptions Underlying of Data | In accordance with GRI standard.   |

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Main materials used

|                                      |  |
|--------------------------------------|--|
| Boundary                             | TOYO TIRE & RUBBER CO., LTD. (Japan)   |
| Period                               | From January to December of that year  |
| Assumptions<br>Underlying of<br>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>*Including the affiliates transferred at the end of 2018</p> <p><u>Waste</u></p> <p>In Japan: 12 sites;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (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., F.C.C Co., Ltd., Orient Machinery Co., Ltd.</p> <p>Outside Japan: 8 sites;<br/>           TOYO AUTOMOTIVE PARTS (USA), INC. \ TOYO TIRE NORTH AMERICA MANUFACTURING INC., 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>PRTR substances</u></p> <p>In Japan: 7 sites;<br/>           TOYO TIRE &amp; RUBBER CO., LTD. (Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., F.C.C Co., Ltd.</p> |
| Period                               | From January to December of that year   |
| Assumptions<br>Underlying of<br>Data | Total weight and recycled volume in Japan is based on the total disposal volume information provided by waste disposal service providers. The volume 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). For PRTR substances, "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   |

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|  |                           |
|--|---------------------------|
|  | each production facility. |
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Total Production Shipments of Recycled (Retreaded) Tires \*TOYO TIRES Brand

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|--------------------------------------|---|
| 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<br>Underlying of<br>Data | production output   |