

# Toyota Industries Corporation

## Performance Data FY2024 (Environment)

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## ■ Environmental Impact Flow

### INPUT

#### Energy [consolidated]

Energy consumption	21,105 TJ
Electricity	1,528,514 MWh
City gas	86,156 kNm <sup>3</sup>
LPG	4,260 t
Petroleum products	40,933 kL
Coal products	6,684 t
LNG	2,349 t

#### Water [consolidated]

Water withdrawal	4,772 km <sup>3</sup>
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#### Raw Materials [consolidated]

Raw Material consumption	933,949 t
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#### Chemical Substances [non-consolidated]

PRTR law* designated substances	6,392 t
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### OUTPUT

#### Into the Air

CO <sub>2</sub> emissions	863,453 t-CO <sub>2</sub>
GHG emissions other than CO <sub>2</sub>	1,198 t-CO <sub>2</sub>
CO <sub>2</sub> emissions from logistics	14,035 t-CO <sub>2</sub>
NO <sub>x</sub> (Nitrogen oxides)	207 t
SO <sub>x</sub> (Sulfur oxides)	1 kg
VOC(Volatile organic compounds)	1,319 t

#### Into Waterways [consolidated]

Water pollutants	22 t
Discharge of wastewater	3,325 km <sup>3</sup>

#### Waste [consolidated]

Waste Volume	10,964 t
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#### Chemical Substances [non-consolidated]

Emissions/transfers of PRTR law designated substances	1,071 t
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\*1: Short for Pollutant Release and Transfer Register, the PRTR law is a scheme whereby businesses measure the release and transfer of PRTR designated pollutants and report their performance to the government. The government then compiles this data and releases it to the public.

■ Establishing a Carbon Neutral Society

1. Energy consumption

GRI 302-1

1)Energy consumption\_fuel

		Unit	FY2022	FY2023	FY2024	Conversion factor		Sources
Fossil fuel	City gas	GJ	4,530,288	4,322,847	3,876,999	45.0	GJ/kNm3	Law Concerning the Promotion of the Measures to Cope with Global Warming (revised in March 2010)" in Japan ※Equivalent to the value of the Law Concerning the Rational Use of Energy in Japan
	LPG		258,462	228,360	216,414	50.8	GJ/ t	
	Coke		144,570	124,891	119,591	29.9	GJ/ t	
	Oil coke		64,551	62,118	41,755	29.9	GJ/ t	
	Anthracite		38,055	47,505	38,514	29.9	GJ/ t	
	gasoline		665,761	685,274	684,285	34.6	GJ/kl	
	Diesel		783,500	798,285	793,080	37.7	GJ/kl	
	LNG		109,849	121,915	128,253	54.6	GJ/ t	
	Heavy oil		2,287	1,554	1,954	39.1	GJ/kl	
	Kerosene		3,638	2,830	2,533	36.7	GJ/kl	
Non-fossil fuel	Biomass, Biogas		42,118	43,082	43,353	50.8	GJ/t	
Total			6,643,077	6,438,661	5,946,731			

2)Energy consumption\_electricity and steam

		Unit	FY2022	FY2023	FY2024	Conversion factor	
Electricity		GJ	14,642,489	14,683,264	15,128,538	9.97	GJ/MWh
	Of which non-fossil fuel-derived		1,976,196	2,640,859	3,566,499		
Steam		GJ	24,529	34,856	29,557	2.675	GJ/t
	Of which non-fossil fuel-derived		17,939	19,806	17,644		

GRI 302-3

3) Energy intensity

	Unit	FY2022	FY2023	FY2024	Note
Energy intensity	MWh/1Million	7.9	6.3	5.5	Calculated by dividing total energy consumption by net sales

GRI 302-4

4) Amount of energy saved

		Unit	FY2022	FY2023	FY2024
Amount of energy saved		MWh	32,321	29,666	27,089

5) Total renewable energy consumption.

	Unit	FY2022	FY2023	FY2024
Total renewable energy consumption	GJ	2,036,253	2,703,746	3,627,497

2. GHG emissions from the organization

1) Direct GHG emissions from organization (Scope1)

	Unit	FY2022	FY2023	FY2024	Emission factor*
Scope1	t-CO <sub>2</sub>	366,621	355,411	329,235	List of emission factors for "Greenhouse Gas Emissions Calculation, Reporting, and Publication System" in Japan

\*Using emission factors for some overseas regions.

2) Indirect GHG emissions from the use of electricity, heat and steam supplied by other companies\_market-based (Scope2)

		Unit	FY2022	FY2023	FY2024	Emission factor
Scope2	Purchased electricity	t-CO <sub>2</sub>	592,357	522,769	529,581	Actual values of contracted companies
Market-based	Steam		656	4,702	4,638	
Total			593,013	527,471	534,219	

3) Indirect GHG emissions from the use of electricity, heat and steam supplied by other companies\_location-based (Scope2)

		Unit	FY2022	FY2023	FY2024	Emission factor
Scope2	Purchased electricity	t-CO <sub>2</sub>	681,069	665,919	681,146	IEA Emission Factor
Location-based	Steam		660	6,512	6,251	Published values for each country
Total			681,729	672,431	687,397	

4) Emissions from biogenic carbon

	Unit	FY2022	FY2023	FY2024	Emission factor	Sources
Biogas	t-CO <sub>2</sub>	2,220	2,271	2,285	54,600 kg-CO <sub>2</sub> /GJ	IPCC Guidelines*

\*2006 IPCC Guidelines for National Greenhouse Gas Inventories

GRI 305-1

GRI 305-2

5) GHG emissions other than CO2

	Unit	FY2022	FY2023	Fy2024	Conversion factor
CH <sub>4</sub>	t-CO <sub>2</sub> e	2,342	2,205	1,571	List of Global Warming Potentials in the "Order for Enforcement of the Law Concerning the Promotion of the Measures to Cope with Global Warming" in Japan
N <sub>2</sub> O		466	411	851	
HFCs		33	773	1,198	
PFCs		0	0	0	
SF <sub>6</sub>		375	60	244	
NF <sub>3</sub>		0	0	0	

3. GHG emissions from supply chain

GRI 305-3

1) GHG emissions from supply chain

		Unit	FY2019	FY2022	FY2023	FY2024	Note
Scope3	Category 1	t-CO <sub>2</sub>	3,932,844	4,482,387	4,628,994	3,097,748	
	Category 2		429,984	459,649	384,285	393,581	
	Category 3		190,277	193,432	136,310	134,836	
	Category 4		197,202	263,394	245,861	181,685	
	Category 5		2,112	2,315	2,055	1,665	
	Category 6		10,073	11,044	11,602	12,121	
	Category 7		36,141	39,622	41,575	43,487	
	Category 8		—	—	—	—	Included in Scope 1 and 2
	Category 9		—	—	—	—	Included in Category 4 <sup>*1</sup>
	Category 10		1,318	1,269	1,310	1,305	
	Category 11		31,288,196	29,588,672	31,782,152	26,835,766	
	Category 12		35,076	41,540	41,670	29,490	
	Category 13		—	—	—	—	Included in Category 11 <sup>*2</sup>
	Category 14		NA	NA	NA	NA	No relation to business
	Category 15		1,314,316	1,072,548	1,042,592	934,502	
Total			37,437,541	36,155,872	38,318,407	31,666,185	

\*1 : It is difficult to clearly separate Category 4 and Category 9

\*2 : It is difficult to grasp emissions from indirect leasing

4. GHG emissions by business divisions.

GRI 305-1

1) Direct emissions by business divisions (Scope1)

	Unit	FY2022	FY2023	FY2024
Materials Handling Equipment	t-CO <sub>2</sub>	144,387	160,768	143,461
Textile Machinery		4,128	3,776	2,922
Automobile		189,336	157,293	153,883
Others		28,770	33,574	28,968
Total		366,621	355,411	329,235

GRI 305-2

2) Indirect emissions by business divisions from the use of electricity, heat and steam supplied by other companies\_market-based (Scope2)

	Unit	FY2022	FY2023	FY2024
Materials Handling Equipment	t-CO <sub>2</sub>	147,348	226,117	130,175
Textile Machinery		4,239	7,219	2,761
Automobile		434,014	268,126	394,153
Others		7,413	26,008	7,130
Total		593,013	527,471	534,219

3) Indirect emissions by business divisions from the use of electricity, heat and steam supplied by other companies\_location-based (Scope2)

	Unit	FY2022	FY2023	FY2024
Materials Handling Equipment	t-CO <sub>2</sub>	159,382	168,524	147,933
Textile Machinery		6,625	7,275	6,813
Automobile		508,143	485,424	524,682
Others		7,579	11,207	7,969
Total		681,729	672,431	687,397

■ Establishing a Recycling-Based Society

1. Number of sites located in water-stressed areas

1) Location status in water-stressed areas

	Unit	5	4	3	2	1	Assessment tool
Number of sites located in each areas	sites	0	7	5	0	52	WWF Water Risk Filter

	Unit	Number	Assessment method
High risk sites based on TICO water risk assessment	sites	0	Included in Performance Data Calculation Standard

2) Water resources volumes

\*rating 4 or 5

	Unit	The whole area			Water-stressed area*		
		FY2022	FY2023	FY2024	FY2022	FY2023	FY2024
Water withdrawal	km3	4,748	4,715	4,772	129	146	134
i. Surface water		26	24	24	9	11	9
ii. Groundwater		1,130	963	914	0	0	0
iii. Seawater		0	0	0	0	0	0
iv. Produced water		0	0	0	0	0	0
v. Third-party water		3,591	3,728	3,833	121	134	126
Water discharge		3,680	3,453	3,325	66	72	66
i. Surface water		616	1,336	1,364	0	0	0
ii. Groundwater		0	0	0	0	0	0
iii. Seawater		788	212	281	0	0	0
iv. Third-party water		2,276	1,905	1,680	66	72	66
Water consumption		1,068	1,262	1,446	64	73	68

3) Water pollutants

	Unit	FY2022	FY2023	FY2024
COD	t	10	10	12
T-N		9	8	10
T-P		0.1	0.2	0.2

GRI303-1

GRI303-3

GRI303-4

GRI303-5



GRI 301-1

## 2. Raw material consumption

		Unit	FY2022	FY2023	FY2024
Raw material consumption	Metals	t	1,362,430	1,309,386	851,682
	Non_metals		135,913	129,973	82,267

GRI 306-4

## 3. Waste volume

GRI 306-5

## 1) Waste volume by disposal operation

	Unit	FY2022	FY2023	FY2024
Recycled industrial waste	t	104,944	98,850	113,863
Incinerated industrial waste		2,086	2,385	2,512
Landfilled industrial waste		11,426	10,796	10,964
Total		118,455	112,031	127,339
Recycling rate	%	89%	88%	89%

## 2) Waste volume by its category

	Unit	FY2022	FY2023	FY2024
Non-hazardous waste	t	112,811	106,868	122,178
Hazardous waste		5,644	5,163	5,162

■ Other Performance Data

1. Air pollutants

	Unit	FY2022	FY2023	FY2024
NOx	t	234	225	207
SOx		1.4	1.4	1.3
VOC		1,283	1,275	1,319

2. Chemical substances

	Unit	FY2022	FY2023	FY2024
PRTR law designated substances	t	2,188	2,908	6,392
Emissions/transfers of PRTR law designated substances		763	800	1,071

3. Soil and groundwater

[→Topics \(Japanese only\)](#)

4. Vibration and noise

Nothing to report for FY2024

5. Environmental incidents

	Unit	FY2022	FY2023	FY2024
Number of environmental incidents	item	0	1	1

## ■Environmental Accounting

Scope of data collection: Toyota Industries Corporation

### 1. Environmental conservation cost

		Unit	FY2022		FY2023		FY2024	
			Investment	Expenses	Investment	Expenses	Investment	Expenses
Business area costs	Pollution prevention	Millions JPY	3,540	161	2,132	343	2,729	318
	Global environmental conservation		1,283	3,392	4,008	5,762	3,059	4,000
	Resource recycling		318	39	514	48	300	50
Upstream/downstream			0	353	0	357	0	299
Management			0	92	35	77	226	90
Research and development			5	4,724	5	5,594	6	6,431
Social contribution activity			0	91	0	71	0	69
Environmental remediation			0	0	27	0	30	0
Total			5,146	8,853	6,721	12,251	6,350	11,256
			13,999		18,971		17,605	

### 2. Economic benefits of environmental conservation initiatives

	Unit	FY2022	FY2023	FY2024
Revenue	Millions JPY	8,717	12,234	12,292
Cost reduction		0	0	3,789
Total		8,717	12,234	16,080

## ■ Calculation Standards of Environmental performance data

### < Scope of Organization >

Same as the scope of Toyota Industries Report, the integrated report. However, some exclusions apply

### < Scope of exclusion >

Establishing a Carbon Neutral Society : Some non-production companies (approximately 4% of our consolidated GHG emissions)

Other Topics : Non-production companies

### < Period covered >

April 1, 2023                      ~                      March 31, 2024

### < Reference guidelines >

#### ◆ The Greenhouse Gas Protocol

- Corporate Standard
- Scope 2 Guidance
- Corporate Value Chain (Scope 3) Standard
- Scope 3 Calculation Guidance

#### ◆ Ministry of the Environment and Ministry of Economy, Trade and Industry of Japan

- Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain
- Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain
- IDEA
- Manual for PRTR Release Estimation Methods
- Environmental Accounting Guidelines 2005

#### ◆ Internal standards

- TICO ENGINEERING STANDARD
- Environmental performance indicator totalizing procedure (the emission factors included)
- Guidelines for CO2 emission calculations and activity management to achieve Plant Zero CO2 Emissions
- Guidelines for Calculating CO2 Emissions from Logistics

< Calculation standard >

1. Amount of GHG emissions

Scope1 : Calculated by multiplying the amount of purchased fuel consumed by the company by an emission factor. Emission factors are based on list of emission factors for "Greenhouse Gas Emissions Calculation, Reporting, and Publication System" in Japan.

Scope2 : **[Location-based]**  
Calculated by multiplying the amount of electricity and steam purchased by the company by an emission factor.  
Emission factors are based on IEA Emission Factor Database\*1.

**[Market-based]**  
Calculated by multiplying the amount of electricity and steam purchased by the company by an emission factor.  
Emission factors are based on the actual results of those suppliers contracted by each site.\*1  
The emission factor used for calculating Scope 2 is from two years prior to each fiscal year.

\*1 : The emission factor used for calculating Scope 2 is from two years prior to each fiscal year.

Scope3

Category	Calculation method
1. Purchased goods and services	Weight of each material purchased x basic unit of manufacturing of each material*2
2. Capital goods	Fixed assets acquired x emission intensity*2
3. Fuel- and energy-related activities	Purchase volume by fuel x emission intensity*2
4. Upstream transportation and distribution	Weight x mileage x fuel consumption*3
5. Waste generated in operations	Amount of waste x emission intensity*2
6. Business travel	Number of employees x emission intensity*2
7. Employee commuting	Number of employees (by city) x number of working days x emission intensity*2
8. Upstream leased assets	Included in Scope 1 and 2
9. Downstream transportation and distribution	Included in Category 4
10. Processing of sold products	Number of production of automobile parts x emission intensity*4
11. Use of sold products	Amount of total energy consumption x emission intensity
12. End-of-life treatment of sold products	Lifetime fuel consumption of each product x emission factor
13. Downstream leased assets	Included in Category 11
15. Investments	Scope 1 and scope 2 emissions of equity investment x Share of equity

\*2 : Database on Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain

\*3 : Ministerial Ordinance on the Calculation of GHG Emissions from Business Activities of Specified Emitters issued by the Ministry of the Environment of Japan

\*4 : Proprietary emission factor measured internally

GRI303-1  
GRI303-3  
GRI303-4  
GRI303-5

## 2. Water resources

### 1) Water risk assessment methodology

We assess risks related to water resources at our production sites through the following process.

- (1) Assess geographic risk using the international water risk assessment tool (WWF Water RiskFilter)
- (2) Assess potential risks in each country and region based on information such as regulations and production processes at each site
- (3) Communicate with sites assessed as high risk to assess overall risk\*.

\*Overall risk assessment based on the status of water use, efficient water use , and water/facility management at each site.

### 2) Data of water resources

	Calculation standard
Water withdrawal	Total withdrawal volume from surface water, groundwater, seawater and third parties
Wastewater	Total discharge volume into surface water, groundwater, seawater and third parties
Water consumption	Difference between water withdrawal and wastewater discharge

### 3) Water withdrawal source and discharge destination

	Calculation standard	
	Sources of water withdrawal	Destination of water discharge
Surface water	Total volume of rainwater collected	Total volume of water discharged into rivers, lakes, etc.
Groundwater	Total volume of groundwater pumped	Total volume of water discharged into underground
Sea water	Total volume of seawater pumped	Total volume of water discharged into the sea
Produced water	Total volume of produced water	—
Third party water	Total volume of water purchased from third parties	Total volume of water discharged to third parties

### 4) Amount of water pollutants

	Calculation standard
COD	By multiplying the concentration of COD contained in wastewater by the volume of wastewater.
T-N	By multiplying the concentration of total nitrogen contained in wastewater by the volume of wastewater.
T-P	By multiplying the concentration of total phosphorus in wastewater by the volume of wastewater discharged.

### 3. Raw material consumption

		Calculation standard
Raw material consumption	Metals	Total weight of metallic raw materials used in the manufacturing process of the product
	Non_metals	Total weight of non-metallic raw materials used in the manufacturing process of the product

### 4. Waste volume

	Calculation standard
Recycled Industrial Waste	Total weight of waste that is recycled and reused outside the company
Incinerated Industrial Waste	Total weight of waste that is incinerated and the residual is landfilled
Landfilled Industrial Waste	Total weight of waste directly disposed of in landfills
Recycling rate	Percentage of waste that is recycled
Non-Hazardous waste	Total weight of waste deemed non-hazardous by national law
Hazardous waste	Total weight of waste deemed hazardous by national law

### 5. Other performance data

#### 1) Air pollutants

	Calculation standard
NOx	By multiplying the concentration of nitrogen oxides in exhaust gas by the amount of exhaust gas
SOx	By multiplying the concentration of sulfur oxides in exhaust gas by the amount of exhaust gas
VOC	By multiplying the amount of materials and sub-materials containing VOCs purchased by the basic unit.

#### 2) Chemical substances

	Calculation standard
PRTR law designated substance	Sum of the amount of materials containing the subject substance purchased multiplied by the content rate and the amount generated internally
Emissions/transfer of PRTR law designated substance	Calculated by multiplying the amount of target substances handled by the emission transfer factor.

#### 3) Environmental incidents

	Definition
Number of environmental incidents	Number of cases of serious violations of production and environmental laws and regulations that affected local residents and ecosystems.