

Site Report (FY2023)

Japan:	Toyo Tire Corp.	Sendai Plant
		Kuwana Plant
		Hyogo Manufacturing Complex
		Tire Technical Center
		Automotive Parts Technical Center
		Corporate Technology Center
		Headquarters
		Tokyo Office
		Hiroshima Office
		Kanto Distribution Center
		Kansai Distribution Center
		Fukushima Rubber Co., Ltd.
		Ayabe Toyo Rubber Co., Ltd.
		Orient Machinery Co., Ltd.
		Toyo Tire Japan
US:	TOYO AUTOMOTIVE PARTS (USA), INC.	TOYO TIRE NORTH AMERICA MANUFACTURING INC.
		TOYO TIRE ZHANGJIAGANG CO., LTD.
China:	TOYO AUTOMOTIVE PARTS (GUANGZHOU) CO., LTD.	TOYO TIRE (ZHUCHENG) CO., LTD.
		TOYO TIRE (ZHUCHENG) CO., LTD.
		TOYO TIRE (ZHUCHENG) CO., LTD.
Malaysia:	TOYO TYRE MALAYSIA SDN BHD	
Thailand:	TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED	
Serbia:	TOYO TIRE SERBIA D.O.O.	

Period:

January - December, 2023 Energy consumption, CO2 emissions, SOx load, NOx load,
Water withdrawal, Water discharge, Water quality load, Water pollution,
Waste, Recycled waste, Reused waste

April 2023- March 2024 VOC emissions, PRTR substances (Handled, Emitted, Transferred)

*VOC emissions: the total for substances for which at least 1 ton is used annually at each business site.

*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 each production facility.

The data on water discharge from the Toyo Tire Corporation Hyogo Manufacturing Complex and on waste from
Ayabe Toyo Rubber Co., Ltd. includes the amounts from their respective neighboring facilities of other companies
(the amount of water discharge / waste for joint treatment, respectively).

Toyo Tire Corp.

1. Sendai Plant

Location	Iwanuma-city, Miyagi Japan				
Products	Automobile tires				
Energy consumption	2,048.3 (1000GJ)				
CO2 emissions	101.5 (1000t-CO2)				
VOC emissions	266.4 (t)				
SOx load	0.0 (t)				
NOx load	55.9 (t)				
Water withdrawal	1,197.4 (1000t)				
Water discharge	852.9 (1000t)				
Water quality load	• BOD		1.3	(t)	
	• COD		6.2	(t)	
Water pollution	• pH	Max.	8.0		*Regulation of the law 5.8～8.6
		Min.	7.1		
		Ave.	7.6		
	• BOD	Max.	1.9	(mg/L)	*Regulation of the law 120
		Min.	0.5	(mg/L)	
		Ave.	1.2	(mg/L)	
	• COD	Max.	7.0	(mg/L)	*Regulation of the law 120
		Min.	3.9	(mg/L)	
		Ave.	5.6	(mg/L)	
	• SS	Max.	11.0	(mg/L)	*Regulation of the law 150
		Min.	2.0	(mg/L)	
		Ave.	5.5	(mg/L)	
Waste	3,695.8 (t)				
Recycled waste	3,695.8 (t)				
Reused waste	0.0 (t)				
PRTR substances	• Handled		775.7	(t)	
	• Emitted		23.1	(t)	
	• Transferred		13.6	(t)	

2. Kuwana Plant

Location	Toin-cho, Inabe-gun, Mie Japan				
Products	Automobile tires, Automotive parts				
Energy consumption	1,969.2 (1000GJ)				
CO2 emissions	82.6 (1000t-CO2)				
VOC emissions	261.8 (t)				
SOx load	0.78 (t)				
NOx load	80.1 (t)				
Water withdrawal	867.4 (1000t)				
Water discharge	341.2 (1000t)				
Water quality load	• BOD	0.38 (t)			
	• COD	0.82 (t)			
Water pollution	• pH	Max.	7.7	*Regulation of the ordinance	6.0~8.0
		Min.	7.4		
		Ave.	7.5		
	• BOD	Max.	2.0 (mg/L)	*Regulation of the pollution prevention agreement with local governments	8
		Min.	<1 (mg/L)		
		Ave.	1.4 (mg/L)		
	• COD	Max.	5.0 (mg/L)	*Regulation of the pollution prevention agreement with local governments	8
		Min.	2.0 (mg/L)		
		Ave.	2.8 (mg/L)		
	• SS	Max.	2.0 (mg/L)	*Regulation of the pollution prevention agreement with local governments	10
		Min.	<2 (mg/L)		
		Ave.	2.0 (mg/L)		
Waste	6,125.9 (t)				
Recycled waste	6,125.9 (t)				
Reused waste	0.0 (t)				
PRTR substances	• Handled	1,258.6 (t)			
	• Emitted	201.4 (t)			
	• Transferred	58.2 (t)			

3. Hyogo Manufacturing Complex

Location Inami-cho, Kako-gun, Hyogo Japan

Energy consumption	1.02 (1000GJ)
CO2 emissions	0.07 (1000t-CO2)
Water withdrawal	0.14 (1000t)
Water discharge	0.14 (1000t)
Waste	1.4 (t)
Recycled waste	1.4 (t)
Reused waste	0.0 (t)

4. Tire Technical Center

Location Itami-city, Hyogo Japan

Energy consumption	22.2 (1000GJ)
CO2 emissions	0.1 (1000t-CO2)
Water withdrawal	8.3 (1000t)
Waste	501.7 (t)
Recycled waste	501.7 (t)
Reused waste	0.0 (t)

5. Automotive Parts Technical Center

Location	Miyoshi-city, Aichi Japan
Energy consumption	10.3 (1000GJ)
CO2 emissions	0.01 (1000t-CO2)
Water withdrawal	4.4 (1000t)
Waste	41.0 (t)
Recycled waste	41.0 (t)
Reused waste	0.0 (t)

6. Corporate Technology Center

Location	Kawanishi-city, Hyogo Japan
Energy consumption	16.6 (1000GJ)
CO2 emissions	1.3 (1000t-CO2)
Water withdrawal	7.6 (1000t)
Waste	55.3 (t)
Recycled waste	55.3 (t)
Reused waste	0.0 (t)

7. Headquarters

Location	Itami-city, Hyogo Japan	
Energy consumption	7.38	(1000GJ)
CO2 emissions	0.28	(1000t-CO2)
Water withdrawal	5.8	(1000t)
Waste	30.6	(t)
Recycled waste	30.6	(t)
Reused waste	0.0	(t)

8. Tokyo Office

Location	Shinagawa Ward, Tokyo Japan	
Energy consumption	0.17	(1000GJ)
CO2 emissions	0.01	(1000t-CO2)
Waste	2.1	(t)
Recycled waste	2.1	(t)
Reused waste	0.00	(t)

9. Hiroshima Office

Location	Hiroshima City, Japan	
Energy consumption	0.04	(1000GJ)
CO2 emissions	0.01	(1000t-CO2)
Waste	1.3	(t)
Recycled waste	1.3	(t)
Reused waste	0.00	(t)

10. Kanto Distribution Center

Location	Iruma City, Saitama Japan	
Energy consumption	0.73	(1000GJ)
CO2 emissions	0.1	(1000t-CO2)
Water withdrawal	0.5	(1000t)
Waste	17.0	(t)
Recycled waste	17.0	(t)
Reused waste	0.0	(t)

11. Kansai Distribution Center

Location	Kobe City, Hyogo Japan	
Energy consumption	0.50	(1000GJ)
CO2 emissions	0.05	(1000t-CO2)
Water withdrawal	0.39	(1000t)
Waste	3.6	(t)
Recycled waste	3.6	(t)
Reused waste	0.0	(t)

Fukushima Rubber Co., Ltd.

Location	Fukushima-city, Japan				
Products	Automobile tires, Automotive parts				
Energy consumption			58.1	(1000GJ)	
CO2 emissions			5.8	(1000t-CO2)	
VOC emissions			1.1	(t)	
SOx load			1.0	(t)	
NOx load			3.2	(t)	
Water withdrawal			236.4	(1000t)	
Water discharge			236.2	(1000t)	
Water quality load	• BOD		0.63	(t)	
	• COD		0.76	(t)	
Water pollution	• pH	Max.	7.7		*Regulation of the law 5.8~8.6
		Min.	7.1		
		Ave.	7.4		
	• BOD	Max.	3.9	(mg/L)	*Regulation of the law 25
		Min.	1.4	(mg/L)	
		Ave.	2.5	(mg/L)	
	• COD	Max.	5.6	(mg/L)	*Regulation of the law 40
		Min.	1.9	(mg/L)	
		Ave.	3.3	(mg/L)	
	• SS	Max.	18.0	(mg/L)	*Regulation of the law 70
		Min.	1.9	(mg/L)	
		Ave.	6.3	(mg/L)	
Waste			176.9	(t)	
Recycled waste			176.9	(t)	
Reused waste			0.0	(t)	
PRTR substances	• Handled		25.9	(t)	
	• Emitted		0.0	(t)	
	• Transferred		0.1	(t)	

Ayabe Toyo Rubber Co., Ltd.

Location	Ayabe-shi, Kyoto Japan				
Products	Automotive parts				
Energy consumption	11.5 (1000GJ)				
CO2 emissions	0.98 (1000t-CO2)				
VOC emissions	4.7 (t)				
SOx load	(t) *not yet measured				
NOx load	(t) *not yet measured				
Water withdrawal	18.4 (1000t)				
Water quality load	• BOD	0.06 (t)			
	• COD	0.15 (t)			
Water pollution	• pH	Max.	8.1	*Regulation of the law	5.8~8.6
		Min.	6.0		
		Ave.	6.9		
	• BOD	Max.	4.5 (mg/L)	*Regulation of the law	25
		Min.	2.0 (mg/L)	/ND : less than the lower quantitative limit	
		Ave.	3.2 (mg/L)		
	• COD	Max.	15.4 (mg/L)	*Regulation of the law	120
		Min.	0.6 (mg/L)	/ND : less than the lower quantitative limit	
		Ave.	8.1 (mg/L)		
	• SS	Max.	ND (mg/L)	*Regulation of the law	90
		Min.	ND (mg/L)	/ND : less than the lower quantitative limit	
		Ave.	ND (mg/L)		
Waste	116.3 (t)				
Recycled waste	116.3 (t)				
Reused waste	0.0 (t)				
PRTR substances	• Handled	7.4 (kg)			
	• Emitted	4.8 (kg)			
	• Transferred	2.7 (kg)			

Orient Machinery Co., Ltd.

Location	Itami-city, Hyogo Japan* *HQ Iwanuma-city, Miyagi Japan Kobe-city,Hyogo Japan
Products	Mechanical equipment, tire mold
Energy consumption	5.36 (1000GJ)
CO2 emissions	0.51 (1000t-CO2)
Water withdrawal	2.2 (1000t)
Waste	36.1 (t)
Recycled waste	36.1 (t)
Reused waste	0.0 (t)

Toyo Tire Japan

Location	Itami City, Hyogo Prefecture (head office) sales offices nationwide
Energy consumption	61.4 (1000GJ)
CO2 emissions	4.59 (1000t-CO2)
Water withdrawal	8.1 (1000t)
Waste	5,242.0 (t)
Recycled waste	5,242.0 (t)
Reused waste	0.0 (t)

TOYO AUTOMOTIVE PARTS (USA), INC.

Location	Kentucky, U.S.A
Products	Automotive parts

Energy consumption	79.6 (1000GJ)
CO2 emissions	5.6 (1000t-CO2)

Water withdrawal	12.0 (1000t)
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Waste	1,552.4 (t)
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※Including data of TMM (USA). INC. in the same site

TOYO TIRE NORTH AMERICA MANUFACTURING INC.

Location	Georgia, U.S.A.
Products	Automobile tires

Energy consumption	1,737.6 (1000GJ)
CO2 emissions	48.4 (1000t-CO2)

Water withdrawal	355.9 (1000t)
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Water discharge	93.9 (1000t)
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Waste	11,209.2 (t)
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東洋橡塑（広州）有限公司

(TOYO AUTOMOTIVE PARTS (GUANGZHOU) CO., LTD.)

Location	Guangzhou, China	
Products	Automotive parts	
Energy consumption	46.4	(1000GJ)
CO2 emissions	5.9	(1000t-CO2)
Water withdrawal	16.6	(1000t)
Water quality load	• BOD	0.15 (t)
	• COD	0.73 (t)
Waste	769.1	(t)

通伊欧輪胎張家港有限公司

(TOYO TIRE ZHANGJIAGANG CO.,LTD.)

Location	Jiangsu, China	
Products	Automobile tires	
Energy consumption	211.8	(1000GJ)
CO2 emissions	19.0	(1000t-CO2)
SOx load	0.0	(t)
NOx load	0.64	(t)
Water withdrawal	30.8	(1000t)
Water discharge	43.1	(1000t)
Water quality load	• BOD	0.54 (t)
	• COD	2.28 (t)
Waste	457.4	(t)

通伊欧輪胎（諸城）有限公司
(TOYO TIRE (ZHUCHENG) CO.,LTD.)

Location	Shandong, China
Products	Automobile tires
Energy consumption	276.0 (1000GJ)
CO2 emissions	27.1 (1000t-CO2)
Water withdrawal	79.5 (1000t)
Waste	618.2 (t)

TOYO TYRE MALAYSIA SDN BHD

Location	Perak, Malaysia
Products	Automobile tires
Energy consumption	803.3 (1000GJ)
CO2 emissions	67.5 (1000t-CO2)
Water withdrawal	266.7 (1000t)
Water quality load	141.7 (1000t)
Waste	2,359.0 (t)

TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED

Location	Ayutthaya, Thailand
Products	Automotive parts

Energy consumption	2.13 (1000GJ)
CO2 emissions	0.26 (1000t-CO2)

Water withdrawal	0.71 (1000t)
Water quality load	0.57 (1000t)

Waste	1.61 (t)
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TOYO TIRE SERBIA D.O.O.

Location	Industrijska, Serbia
Products	Automobile tires

Energy consumption	310.48 (1000GJ)
CO2 emissions	8.1 (1000t-CO2)

Water withdrawal	102.9 (千t)
Water quality load	22.6 (千t)

Waste	4,530.3 (t)
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