

*The organization name is the name at the time of recording.

Site Report (FY2017)

Domestic:	TOYO TIRE & RUBBER CO., LTD.	Sendai Plant Kuwana Plant Hyogo Manufacturing Complex Tire Technical Center Automotive Parts Technical Center Corporate Technology Center Headquarters
	Fukushima Rubber Co., Ltd. Toyo Soflan Co., Ltd. Ayabe Toyo Rubber Co., Ltd. F.C.C Co., Ltd. Orient Machinery Co., Ltd.	
Oversea:	TOYO AUTOMOTIVE PARTS (USA), INC. TOYO TIRE NORTH AMERICA MANUFACTURING INC. TOYO TYRE AND RUBBER AUSTRALIA LTD. 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	

Period:

January - December, 2017 Energy consumption, CO2 emissions, SOx load, NOx load,
Water withdrawal, Water discharge, Water quality load, Water pollution,
Waste, Recycled waste, Reused waste

April - March, 2017 VOC emissions, PRTR substances (Handled, Emitted, Transferred)

*Number of employees: as of the end of December, 2017

*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.

TOYO TIRE & RUBBER CO., LTD.

Number of Employees 3,186
(Temporary Employees) (615)

1. Sendai Plant

Location Iwanuma-shi, Miyagi Japan

Products Automobile tires

Energy consumption 2,063.32 (1000GJ)

CO2 emissions 189.05 (1000t-CO2)

VOC emissions 264 (t/year)

SOx load 15.02 (t/month)

NOx load 268.87 (t/month)

Water withdrawal 1,424.64 (t)

Water discharge 904.99 (t)

Water quality load • BOD 1.99 (t/month)

• COD 6.20 (t/month)

Water pollution • pH Max. 8.2 *Regulation of the law 5.8~8.6

Min. 7.3

Ave. 7.8

• BOD Max. 3.4 (mg/L) *Regulation of the law 120

Min. 0.6 (mg/L)

Ave. 1.5 (mg/L)

• COD Max. 5.4 (mg/L) *Regulation of the law 120

Min. 3.1 (mg/L)

Ave. 4.5 (mg/L)

• SS Max. 8.0 (mg/L) *Regulation of the law 150

Min. 1.0 (mg/L)

Ave. 3.8 (mg/L)

Waste 11,439.08 (t)

Recycled waste 11,439.08 (t)

Reused waste 904.17 (t)

PRTR substances • Handled 1,223,889 (kg)

• Emitted 9,034 (kg)

• Transferred 18,496 (kg)

2. Kuwana Plant

Location	Toin-cho, Inabe-gun, Mie Japan		
Products	Automobile tires, automotive parts		
Energy consumption			1,948.07 (1000GJ)
CO2 emissions			132.25 (1000t-CO2)
VOC emissions			381 (t/year)
SOx load			1.28 (t/month)
NOx load			74.10 (t/month)
Water withdrawal			955.25 (t)
Water discharge			309.91 (t)
Water quality load	• BOD		0.86 (t/month)
	• COD		2.24 (t/month)
Water pollution	• pH	Max.	7.8
		Min.	7.3
		Ave.	7.6
	• BOD	Max.	4.0 (mg/L)
		Min.	1.0 (mg/L)
		Ave.	2.8 (mg/L)
	• COD	Max.	6.0 (mg/L)
		Min.	1.0 (mg/L)
		Ave.	4.0 (mg/L)
	• SS	Max.	6.0 (mg/L)
		Min.	<2 (mg/L)
		Ave.	4.0 (mg/L)
Waste			5,249.37 (t)
Recycled waste			5,249.37 (t)
Reused waste			0.0 (t)
PRTR substances	• Handled		1,662,678 (kg)
	• Emitted		141,547 (kg)
	• Transferred		58,029 (kg)

*Regulation of the ordinance 6.0~8.0

*Regulation of the pollution prevention agreement with local governments 8

*Regulation of the pollution prevention agreement with local governments 8

*Regulation of the pollution prevention agreement with local governments 10

3. Hyogo Manufacturing Complex

Location	Inami-cho, Kako-gun, Hyogo Japan			
Products	Automotive parts			
Energy consumption			122.16 (1000GJ)	
CO2 emissions			9.76 (1000t-CO2)	
VOC emissions			32.24 (t/year)	
NOx load			0.52 (t/month)	
Water withdrawal			241.67 (t)	
Water discharge			111.92 (t)	
Water quality load	• BOD		0.22 (t/month)	
	• COD		0.28 (t/month)	
Water pollution	• pH	Max.	8.4	*Regulation of the law 5.8~8.6
		Min.	7.5	
		Ave.	7.9	
	• BOD	Max.	3.0 (mg/L)	*Regulation of the law 100
		Min.	1.5 (mg/L)	
		Ave.	2.1 (mg/L)	
	• COD	Max.	5.0 (mg/L)	*Regulation of the law 100
		Min.	2.7 (mg/L)	
		Ave.	3.7 (mg/L)	
	• SS	Max.	2.5 (mg/L)	*Regulation of the law 90
		Min.	0.9 (mg/L)	
		Ave.	1.6 (mg/L)	
Waste			935.02 (t)	
Recycled waste			934.53 (t)	
Reused waste			0.0 (t)	
PRTR substances	• Handled		42,484 (kg)	
	• Emitted		29,360 (kg)	
	• Transferred		4,000 (kg)	

4. Tire Technical Center

Location	Itami-shi, Hyogo Japan
Energy consumption	17.21 (1000GJ)
CO2 emissions	2.15 (1000t-CO2)
Water withdrawal	7.96 (t)
Waste	485.66 (t)
Recycled waste	485.66 (t)

5. Automotive Parts Technical Center

Location	Miyoshi-shi, Aichi Japan
Energy consumption	13.66 (1000GJ)
CO2 emissions	1.94 (1000t-CO2)
Water withdrawal	5.01 (t)
Waste	60.91 (t)
Recycled waste	60.91 (t)

6. Corporate Technology Center

Location Kawanishi-shi, Hyogo Japan

Energy consumption	17.44 (1000GJ)
CO2 emissions	1.74 (1000t-CO2)
Water withdrawal	10.39 (t)
Waste	81.22 (t)
Recycled waste	81.22 (t)

7. Headquarters

Location Itami-shi, Hyogo Japan

Energy consumption	5.61 (1000GJ)
CO2 emissions	0.47 (1000t-CO2)
Water withdrawal	4.84 (t)
Waste	19.31 (t)
Recycled waste	19.31 (t)

Fukushima Rubber Co., Ltd.

Location	Fukushima-shi, Fukushima Japan			
Products	Automobile tires, automotive parts			
Number of Employees (Temporary Employees)	142	(	26)
Energy consumption	119.59	(1000GJ)		
CO2 emissions	11.31	(1000t-CO2)		
VOC emissions	52	(t/year)		
SOx load	2.89	(t/month)		
NOx load	5.53	(t/month)		
Water withdrawal	389.27	(t)		
Water pollution	• pH	Max.	7.4	*Regulation of the law 5.8~8.6
		Min.	7.1	
		Ave.	7.3	
	• BOD	Max.	5.2 (mg/L)	*Regulation of the law 25
		Min.	1.3 (mg/L)	
		Ave.	3.2 (mg/L)	
	• COD	Max.	4.7 (mg/L)	*Regulation of the law 40
		Min.	2.0 (mg/L)	
		Ave.	3.0 (mg/L)	
	• SS	Max.	6.9 (mg/L)	*Regulation of the law 70
		Min.	1.0 (mg/L)	
		Ave.	2.8 (mg/L)	
Waste	357.52	(t)		
Recycled waste	357.52	(t)		
Reused waste	0.0	(t)		
PRTR substances	• Handled	115,457	(kg)	
	• Emitted	37,242	(kg)	
	• Transferred	2,136	(kg)	

Toyo Soflan Co., Ltd.

Location	Miyoshi-shi, Aichi Japan			
Products	Automotive parts			
Number of Employees (Temporary Employees)	134	(	19)
Energy consumption	54.09	(1000GJ)		
CO2 emissions	5.34	(1000t-CO2)		
VOC emissions	63	(t/year)		
Water withdrawal	30.89	(t)		
Water pollution	• pH	Max.	8.6	*Regulation of the law 5.8~8.6
		Min.	7.0	
		Ave.	7.6	
	• BOD	Max.	24.0 (mg/L)	*Regulation of the law 25
		Min.	0.7 (mg/L)	
		Ave.	6.1 (mg/L)	
	• COD	Max.	24.0 (mg/L)	*Regulation of the law 25
		Min.	2.6 (mg/L)	
		Ave.	8.9 (mg/L)	
	• SS	Max.	20.0 (mg/L)	*Regulation of the law 30
		Min.	1.0 (mg/L)	
		Ave.	4.0 (mg/L)	
Waste	161.64	(t)		
Recycled waste	161.64	(t)		
Reused waste	0.0	(t)		
PRTR substances	• Handled	1,302,801	(kg)	
	• Emitted	8,562	(kg)	
	• Transferred	0	(kg)	

Ayabe Toyo Rubber Co., Ltd.

Location	Ayabe-shi, Kyoto Japan			
Products	Automotive parts			
Number of Employees (Temporary Employees)	27	(	20)
Energy consumption	18.39	(1000GJ)		
CO2 emissions	2.10	(1000t-CO2)		
VOC emissions	2	(t/year)		
SOx load	0.06	(t/month)		
NOx load	0.16	(t/month)		
Water withdrawal	22.72	(t)		
Water pollution	• pH	Max.	7.7	*Regulation of the law 5.8~8.6
		Min.	6.7	
		Ave.	7.1	
	• BOD	Max.	4.0 (mg/L)	*Regulation of the law 25
		Min. ND	(mg/L)	/ND : less than the lower quantitative limit
		Ave.	0.6 (mg/L)	
	• COD	Max.	4.0 (mg/L)	*Regulation of the law 120
		Min. ND	(mg/L)	/ND : less than the lower quantitative limit
		Ave.	1.2 (mg/L)	
	• SS	Max.	2.0 (mg/L)	*Regulation of the law 90
		Min. ND	(mg/L)	/ND : less than the lower quantitative limit
		Ave.	0.2 (mg/L)	
Waste	212.94	(t)		
Recycled waste	212.94	(t)		
Reused waste	0.0	(t)		
PRTR substances	• Handled	6,071	(kg)	
	• Emitted	3,092	(kg)	
	• Transferred	2,979	(kg)	

F.C.C Co., Ltd.

Location	Fukushima-shi, Fukushima Japan	
Products	Automotive parts	
Number of Employees (Temporary Employees)	50	(3)
Energy consumption	10.64	(1000GJ)
CO2 emissions	1.35	(1000t-CO2)
VOC emissions	19	(t/year)
Water withdrawal	1.56	(t)
Waste	73.10	(t)
Recycled waste	73.10	(t)
Reused waste	0.0	(t)
PRTR substances	• Handled	511,010 (kg)
	• Emitted	1 (kg)
	• Transferred	0 (kg)

Orient Machinery Co., Ltd.

Location	Itami-shi, Hyogo Japan*	Iwanuma-shi, Miyagi Japan	*HQ
Products	Mechanical equipment, tire mold		
Number of Employees (Temporary Employees)	173	(	30)
Energy consumption	6.75	(1000GJ)	
CO2 emissions	0.96	(1000t-CO2)	
Water withdrawal	2.96	(t)	
Waste	87.23	(t)	
Recycled waste	81.88	(t)	
Reused waste	0.0	(t)	

TOYO AUTOMOTIVE PARTS (USA), INC.

Location	Kentucky, U.S.A		
Products	Automotive parts		
Number of Employees (Temporary Employees)	290	(	44)
Energy consumption	114.75	(1000GJ)	
CO2 emissions	9.61	(1000t-CO2)	
Water withdrawal	16,466.49	(t)	
Waste	1,880.92	(t)	

※同敷地内のTMM (USA) .INC.のデータを含む

TOYO TIRE NORTH AMERICA MANUFACTURING INC.

Location	Georgia, U.S.A.		
Products	Automobile tires		
Number of Employees (Temporary Employees)	1,301	(	0)
Energy consumption	1,682.01	(1000GJ)	
CO2 emissions	137.26	(1000t-CO2)	
Water withdrawal	345,372.33	(t)	
Waste	7,838.56	(t)	

TOYO TYRE AND RUBBER AUSTRALIA LTD.

Location	New South Wales, Australia		
Products	Automotive parts		
Number of Employees (Temporary Employees)	121	(	0)
Energy consumption	27.02	(1000GJ)	
CO2 emissions	4.90	(1000t-CO2)	
Water withdrawal	7,736.36	(t)	
Waste	472.0	(t)	

東洋橡塑（広州）有限公司

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

Location	Guangzhou, China		
Products	Automotive parts		
Number of Employees (Temporary Employees)	371	(	0)
Energy consumption	70.73	(1000GJ)	
CO2 emissions	8.02	(1000t-CO2)	
Water withdrawal	19,632.0	(t)	
Waste	687.43	(t)	

通伊欧輪胎張家港有限公司

(TOYO TIRE ZHANGJIAGANG CO.,LTD.)

Location	Jiangsu,China		
Products	タイヤ		
Number of Employees (Temporary Employees)	360	(	0)
Energy consumption	232.21	(1000GJ)	
CO2 emissions	24.12	(1000t-CO2)	
Water withdrawal	36,819.0	(t)	
Water pollution	610.77	(t)	

通伊欧輪胎（諸城）有限公司

(TOYO TIRE (ZHUCHENG) CO.,LTD.)

Location	Shandong, China		
Products	Automobile tires		
Number of Employees (Temporary Employees)	549	(	3)
Energy consumption	231.15	(1000GJ)	
CO2 emissions	24.03	(1000t-CO2)	
Water withdrawal	101,926.0	(t)	
Waste	848.57	(t)	

SILVERSTONE BERHAD

Location	Perak, Malaysia
Products	Automobile tires
Number of Employees (Temporary Employees)	1,604 (0)
Energy consumption	525.09 (1000GJ)
CO2 emissions	49.92 (1000t-CO2)
Water withdrawal	220,178.0 (t)
Waste	2,312.14 (t)

TOYO TYRE MALAYSIA SDN BHD

Location	Perak, Malaysia
Products	Automobile tires
Number of Employees (Temporary Employees)	1,118 (0)
Energy consumption	533.55 (1000GJ)
CO2 emissions	61.37 (1000t-CO2)
Water withdrawal	125,639.0 (t)
Waste	2,023.64 (t)

TOYO RUBBER CHEMICAL PRODUCTS (THAILAND) LIMITED

Location	Ayutthaya, Thailand
Products	Automobile tires
Number of Employees (Temporary Employees)	33 (0)
Energy consumption	5.55 (1000GJ)
CO2 emissions	0.79 (1000t-CO2)
Water withdrawal	1,822.0 (t)
Waste	26.84 (t)