

Non-financial data (environmental)

Total CO<sub>2</sub> emissions (Scope 1/2/3, JR-West Group)

Item	Target and calculation method*3	FY2022				FY2023			FY2024*1		
		Non-consolidated	Group companies*2	Total		Non-consolidated	Group companies*2	Total	Non-consolidated	Group companies*2	Total
(Restated) Scope 1+2+3	The sum of Scope 1, 2, and 3	3,051,247	1,397,268	4,448,516		3,084,498	1,551,292	4,635,790	3,470,410★	1,829,742★	5,300,151★
(Restated) Scope 1+2	The sum of Scope 1 and 2	1,323,874	202,778	1,526,652		1,285,956	206,248	1,492,204	1,552,325★	229,975★	1,782,300★
Scope 1	Total CO <sub>2</sub> directly emitted by the JR-West Group from combustion of fuels, such as diesel oil for diesel train operation, and kerosene and heavy oil for operational purposes (includes the CO <sub>2</sub> equivalent mass for leaked fluorocarbons)	81,378	60,783	142,161		79,795	64,808	144,604	78,182★	62,623★	140,805★
Scope 2*4	Total CO <sub>2</sub> emitted indirectly by the JR-West Group from the use of power and heat purchased from power companies and others	1,242,496	141,995	1,384,491		1,206,160	141,440	1,347,600	1,474,144★	167,352★	1,641,495★
Scope 3	Total CO <sub>2</sub> emitted from other companies in relation to the JR-West Group's business activities (indirect emissions other than Scope 1 and Scope 2)	1,727,373	1,194,491	2,921,864		1,798,542	1,345,043	3,143,585	1,918,084★	1,599,767★	3,517,851★
Cat.1 Purchased goods and services	Calculated by multiplying the annual amount (monetary value) of products procured from outside the JR-West Group by the relevant emission factor	810,510	696,810	1,507,320		845,897	853,667	1,699,564	973,685★	1,001,493★	1,975,177★
Cat.2 Capital goods	Calculated by multiplying the annual amount of capital investment by the relevant emission factor	698,535	234,894	933,429		728,225	230,620	958,845	710,858★	327,567★	1,038,425★
Cat.3 Fuel- and energy-related activities not included in Scope 1 or Scope 2	Calculated by multiplying the annual amount of each type of energy consumed by the relevant emission factor	207,748	49,262	257,010		210,138	52,159	262,297	219,916★	51,901★	271,816★
Cat.5 Waste generated in operations	Calculated by multiplying the annual amount of waste (by type and by treatment method) by the relevant emission factor	4,197	24,896	29,093		6,207	23,586	29,793	5,726★	37,089★	42,814★
Cat.6 Business travel	Calculated by multiplying the number of employees by the relevant emission factor and then adding in the distance of business trips	925	987	1,912		2,833	3,022	5,855	2,779★	3,007★	5,786★
Cat.7 Employee commuting	Calculated by multiplying the number of employees/number of working days by the relevant emission factor	5,458	5,777	11,235		5,242	5,569	10,811	5,121★	5,547★	10,668★
Cat.11 Use of sold products	Calculated by multiplying the total floor area of sold property by the relevant emission factor	-	11,468	11,468		-	9,201	9,201	-	15,865★	15,865★
Cat.12 End-of-life treatment of sold products*5	Calculated by multiplying the total floor area of sold property by the relevant emission factor	-	300	300		-	2,089	2,089	-	853★	853★
Cat.13 Downstream leased assets	For rental properties, this is calculated by multiplying the total floor area of the rental property by the relevant emission factor. For hired cars and other leased assets that are not buildings, this is calculated by multiplying the number of leased assets by the relevant emission factor.	-	170,098	170,098		-	165,131	165,131	-	156,446★	156,446★

\*1 Items covered by third-party assurance are marked with a ★.

\*2 The scope of calculation for group companies encompasses all consolidated subsidiaries and Osaka Energy Service Co., Ltd., a group company with particularly large energy consumption.

\*3 Based on the Act on Promotion of Global Warming Countermeasures, scope- and category-specific calculation of CO<sub>2</sub> emissions is carried out in line with the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain ver. 2.6 published by the Ministry of Economy, Trade and Industry and the Ministry of the Environment. Emission factors were taken from the Ministry of the Environment's Database of Emission Unit Values ver. 3.4 and the IDEA LCI Database ver. 2.3 (Sustainable Management Promotion Organization).

\*4 Scope 2 CO<sub>2</sub> emissions are market standards.

\*5 For the emission factor in Cat.12, we referred to the "Emission factors by major structures and items associated with building demolition" given in the Architectural Institute of Japan's guidelines for building LCA.

Note: Cat.4, 8, 9, 10, 14, and 15 of Scope 3 are omitted for the following reasons.

Cat.4 (upstream transportation and distribution), Cat.9 (downstream transportation and distribution), Cat.10 (processing of sold products): Because of the nature of the JR-West Group's business, the impact from this has been determined to be negligible.

Cat.8 (upstream leased assets): Because this is accounted for in Scope 1 and/or Scope 2.

Cat.14 (franchises): Because franchise business is not part of the JR-West Group's business.

Cat.15 (investments): Because the JR-West Group does not hold any investment management shares.

Third-party assurance



Fiscal 2024 environmental impact of business activities (consolidated)

Figures in [ ] are the non-consolidated amount of the consolidated figures

INPUT (Energy usage)*1*2	
Total energy consumption (thousand GJ)*3	31,713★ [ 27,406★ ]
Electricity (billion kWh)	3.38 [ 3.04 ]
Kerosene (kl)	2,519 [ 2,437 ]
Gasoline (kl)	2,203 [ 805 ]
Propane gas (t)	364 [ 351 ]
Diesel oil (kl)	34,739 [ 23,698 ]
Class A heavy oil (kl)	1,374 [ 654 ]
Utility gas (thousand m³)	15,631 [ 1,841 ]

OUTPUT (Industrial waste)*1*2	
Used materials (facility construction) (thousand tons)	123.6
Recycled volume (thousand tons)	119.9
Recycled rate (%)	97.0
Used materials (rolling stock) (thousand tons)	26.5
Recycled volume (thousand tons)	26.2
Recycled rate (%)	98.7
Industrial waste*4 (thousand tons)	171.7★ [ 9.3★ ]
Of which is plastic industrial waste (thousand tons)*5	21.0 [ 4.6 ]
Hazardous waste (PCBs) (t)	1,110
Station and onboard garbage (thousand tons)	8.4
Of which is recyclable (thousand tons)	2.7
Recycled volume (thousand tons)	2.7
Recycled rate (%)	99.5
Amount of products provided that use specified plastics (t)*6	49.1 [ 0 ]

\*1 The scope of calculation for group companies encompasses all consolidated subsidiaries and Osaka Energy Service Co., Ltd., a group company with particularly large energy consumption. However, used materials (facility construction), used materials (rolling stock), hazardous waste (PCBs), and station and onboard garbage are tabulated individually.

\*2 Input (energy usage) is calculated with reference to the Greenhouse Gas Emissions Calculation and Reporting Manual provided by the Ministry of the Environment and the Ministry of Economy, Trade and Industry and the Act on Rationalizing Energy Use and Shifting to Non-Fossil Energy. Output (industrial waste) is calculated with reference to the Waste Management and Public Cleansing Act (Waste Management Act).

\*3 Total energy consumption is the sum of energy consumption for electricity, fuel, and heat consumption.

\*4 Industrial waste refers to waste as defined by the Waste Management Act (waste discharged by businesses). It is calculated by summing the figures listed in manifests stipulated by the Waste Management Act.

Manifest: A management form that is required to be issued when outsourcing the transportation and treatment of waste to an outside company under the Waste Management Act. It gives the weight of the waste, the treatment method, and other information.

Group company output includes waste generated from construction work ordered by JR-West.

\*5 The weight of mixed waste containing waste plastic and other waste that cannot be sorted into other types of waste is included in the total for plastic industrial waste. Group company output includes waste generated from construction work ordered by JR-West.

\*6 The amount of products provided that use specified plastics is calculated from the total amount of target products provided in target industries under the Plastic Resource Circulation Act.

Water resources

Item	Target and calculation method*2	FY2022				FY2023			FY2024*1		
		Non-consolidated	Group companies*2	Total		Non-consolidated	Group companies*2	Total	Non-consolidated	Group companies*2	Total
Total water withdrawal	Total for public water supply, groundwater, and industrial-use water	4,089	2,986	7,075		3,988	4,183	8,171	4,115★	4,608★	8,723★
Public water supply	Aggregate the usage amount on the bill from the waterworks bureau	3,172	2,637	5,809		3,082	3,344	6,425	3,265	3,756	7,022
Groundwater	Aggregate the measured values from meters managed in accordance with the Measurement Act	600	346	946		606	838	1,444	607	851	1,458
Industrial-use water	Aggregate the usage amount on the bill from the waterworks bureau	317	3	320		300	1	301	243	0	243
Recycled water		94	67	162		124	141	264	136	59	195
Total amount of wastewater	Total discharge into rivers and sewerage	3,835	3,217	7,052		4,028	4,019	8,047	4,070	4,483	8,554
Total discharge into rivers		455	21	477		410	28	438	442	34	476
Sewerage		3,380	3,196	6,576		3,618	3,991	7,609	3,629	4,449	8,078

\*1 Items covered by third-party assurance are marked with a ★.

\*2 The scope of calculation for group companies encompasses all consolidated subsidiaries and Osaka Energy Service Co., Ltd., a group company with particularly large energy consumption.

\*3 Calculations are made with reference to the Environmental Reporting Guidelines of the Ministry of the Environment.