

Environmental data

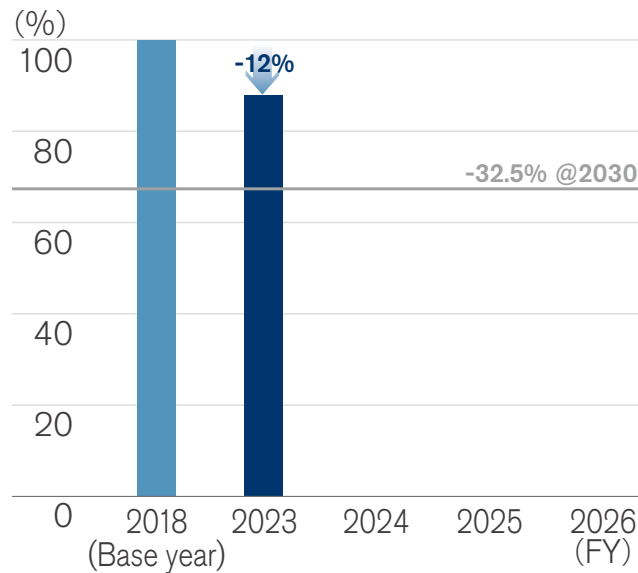
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Climate change (Products)

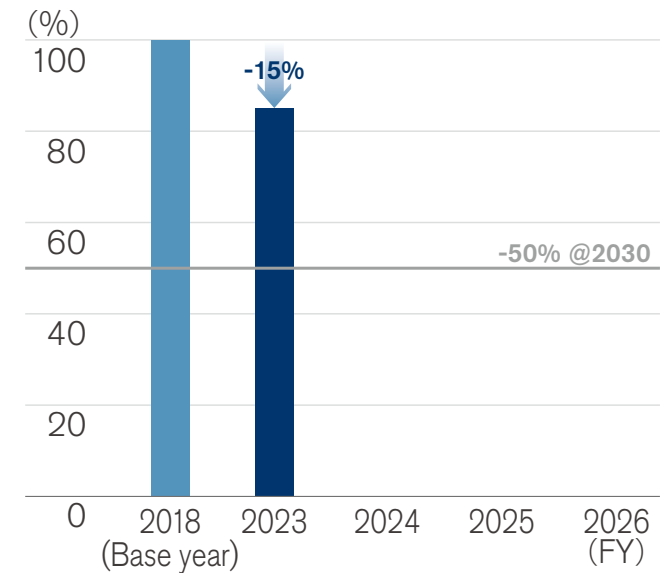
CO₂ emissions from new vehicles

Global: -12%; Four regions (Japan, the U.S.A., Europe, China): -15%
 CO₂ emissions were reduced by promoting electrification, especially in the four regions.*1

Global

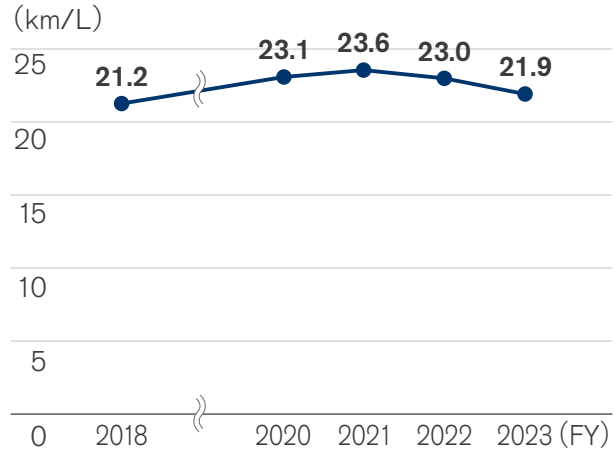


Four regions (Japan, the U.S.A., Europe, China)



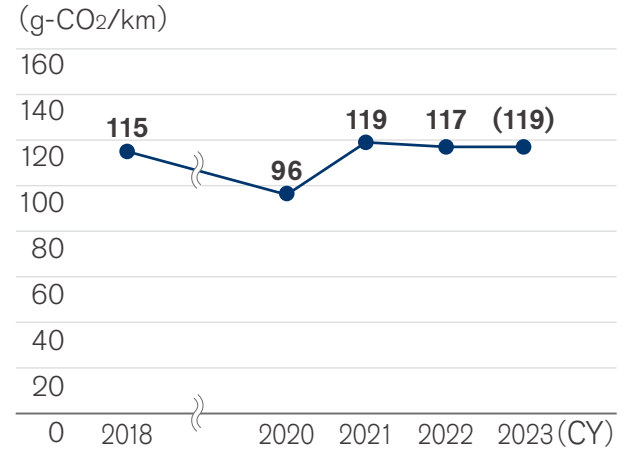
*1 CO₂ emissions are calculated on a Well to Wheel basis, and the reduction rate is calculated according to Nissan's internal standards.

Corporate average fuel economy (CAFE) in Japan



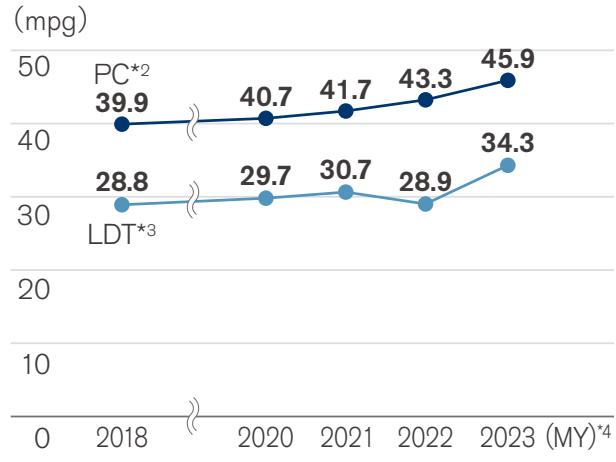
In fiscal 2023, the corporate average fuel economy*¹ in Japan was 21.9km/L. Strong e-POWER sales led to an increase in sales volume and the sales mix of EVs, however, fuel economy declined due to a decrease in the ratio of “kei” cars.

CO₂ emission index from Nissan vehicles in Europe



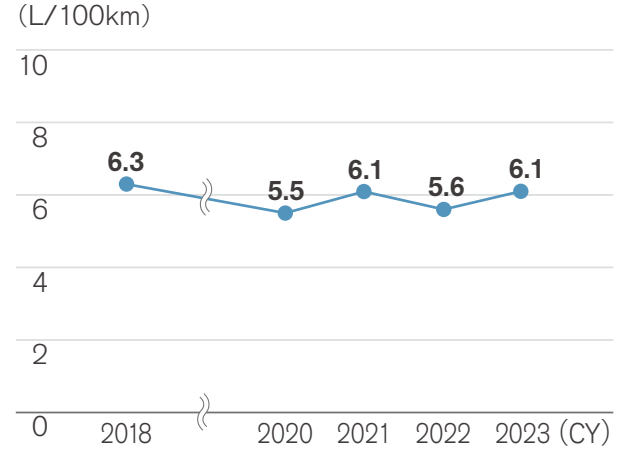
In 2022, e-POWER models were launched and CO₂ emission was 117g-CO₂/km. In 2023, the sales mix of compact models decreased, but CO₂ emissions are expected to keep even with the previous year due to an increase in the sales mix of e-POWER vehicles and hybrid vehicles. We note that the increase in average vehicle CO₂ emissions after 2021 reflects a change in assessment modes from NEDC to WLTP. *⁵

Corporate average fuel economy (CAFE) in the United States



In fiscal 2023, the corporate average fuel economy (CAFE) of Nissan’s passenger cars in the U.S.A. was 45.9 mpg and 34.3 mpg in the light-duty truck segment. CAFE improved in both segments due to an increase in the sales mix of compact models.

Corporate average fuel consumption in China



In 2023, the average fuel consumption of domestic production models in China was 6.1L/100km. Although the sales mix of EVs increased, fuel consumption increased due to higher sales mix of conventional models.

*1 Provisional values calculated in-house; some models include WLTC mode fuel consumption values.
 *2 Passenger Car
 *3 Light Duty Truck
 *4 MY: Model Year
 *5 Official figures for 2023 have not been published yet, so it is shown by provisional values.

Revenue, global sales volume and production volume data

(¥ billion)

	FY2022	FY2023
Revenue*1	11,811	13,580

(thousand units)

	FY2022	FY2023
Global Sales Volume*2	3,305	3,442
Japan	454	484
North America	1,023	1,262
Europe	308	361
Asia	1,201	961
Other	318	374

(thousand units)

	FY2022	FY2023
Global Production Volume*2	3,381	3,430
Japan	597	725
North America*3	992	1,235
Europe*4	288	325
Asia*5	1,378	1,020
Other*6	125	126

In Japan and Europe, where customers' interest in electrified vehicles is relatively high, e-POWER models and hybrid vehicles*7 now account for over 70% of total shipments. Nissan sees this as indicative of a situation where more sustainable product lines are becoming the core of its business in pursuit of environmental values.

Powertrain type ratios (Shipment-based)

	Unit	Gasoline- powered vehicles	Diesel- powered vehicles	e-POWER vehicles	Electric vehicles	Hybrid vehicles
Japan	%	27.5	0.2	44.5	9.5	18.4
North America	%	97.0	0.2	0.9	1.9	0.0
Europe	%	23.0	3.6	25.8	10.4	37.2
Asia	%	84.7	4.8	4.3	2.2	4.0
Other	%	77.2	13.9	3.5	0.2	5.2
Global	%	74.1	3.3	10.8	3.8	8.1

*1 Management pro-forma basis (includes Chinese joint ventures in proportionate consolidation).

*2 Global sales volume and global production volume for China and Taiwan consider values from January to December.

*3 Production in the U.S.A. and Mexico.

*4 Production in the U.K. and France.

*5 Production in Taiwan, Thailand, China and India.

*6 Production in South Africa, Brazil, Egypt and Argentina.

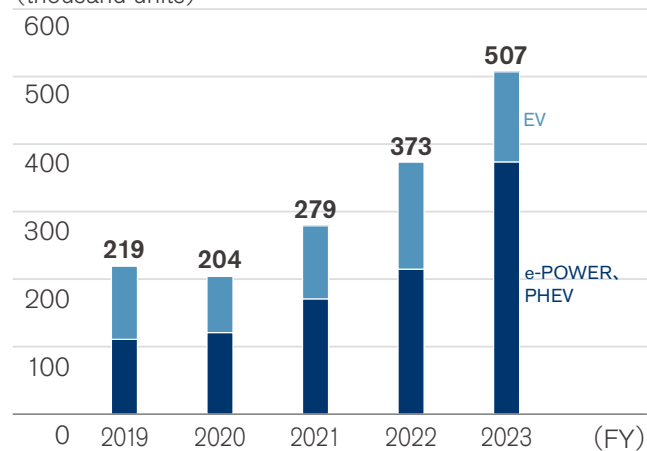
*7 Other than e-POWER models.

Sales volume of electrified vehicles (EV, e-POWER, PHEV)

The Arc business plan will promote electrification by strengthening the lineup of EV, e-POWER, and plug-in hybrid models. In fiscal 2023, strong sales of the new Qashqai, the new X-Trail, and the new Serena contributed to an increase in e-POWER sales, which in turn led to higher electrified vehicle sales.

Sales volume of EV, e-POWER, PHEV *1

(thousand units)



*1 PHEVs were sold in China in fiscal 2023.

Climate change (Corporate activities)

Energy input*¹

(FY)

	Unit	2018	2020	2021	2022	2023
Total	MWh	7,755,180	5,957,460	6,516,552	6,442,705	5,995,301★
By region						
Japan	MWh	3,845,585	3,034,932	3,432,988	3,403,180	2,987,580
North America	MWh	2,397,746	1,860,837	1,935,449	1,971,446	2,074,570
Europe	MWh	862,042	550,791	557,173	545,092	511,387
Other	MWh	649,807	510,899	590,941	522,987	421,763
By energy source						
Primary						
Natural gas	MWh	2,882,123	2,241,552	2,374,726	2,396,027	1,965,267
LPG	MWh	199,882	145,523	147,084	129,607	109,199
Coke	MWh	179,226	100,149	112,162	111,013	105,823
Heating oil	MWh	127,258	71,565	71,632	57,919	53,602
Gasoline	MWh	153,630	84,153	90,081	94,372	55,898
Diesel	MWh	57,068	54,967	49,218	48,110	9,800
Heavy oil	MWh	19,101	21,329	11,967	10,954	28,837

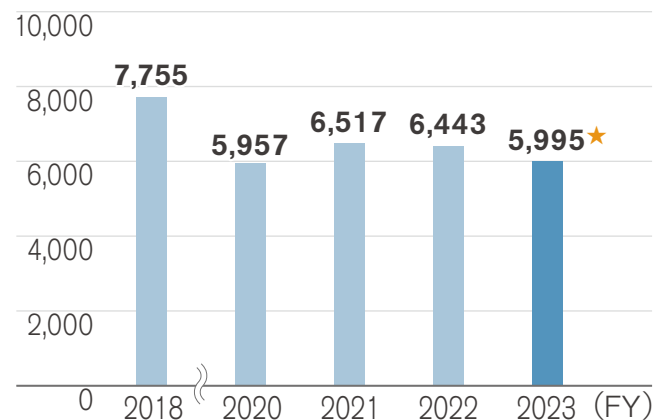
(FY)

	Unit	2018	2020	2021	2022	2023
External						
Electricity (purchased)	MWh	4,008,519	3,114,321	3,558,048	3,484,661	3,510,661
Renewable energy ²	MWh	150,623	160,694	220,768	239,875	215,351
Chilled water	MWh	5,473	3,529	3,597	3,929	4,643
Steam	MWh	63,577	119,527	74,565	94,423	140,282
Internal						
Electricity (in-house generation)	MWh	59,323	844	23,473	11,689	11,288
Renewable energy ³	MWh	59,323	844	23,473	11,689	11,288
Total renewable energy	MWh	209,946	161,538	244,242	251,563	226,639

Trend in energy consumption

The total energy consumption of our global corporate activities during fiscal 2023 was 5,995 thousand MWh ★, a 7% decrease from 6,443 thousand MWh in fiscal 2022.

(thousand MWh)

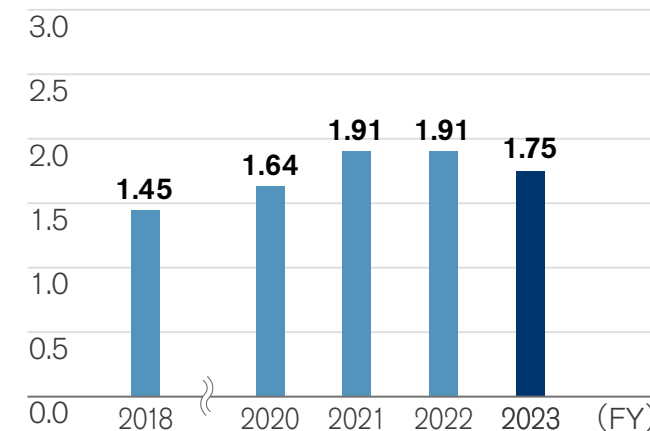


Energy per vehicle produced

In fiscal 2023, energy per vehicle produced was 1.75 MWh reduced by 8% compared to fiscal 2022. Data for the Japan region includes the manufacture of powertrains and other components for overseas assembly.

Since the denominator is vehicles produced in the region, this tends to result in higher values for Japan.

(MWh/vehicle)



(FY)

By region	Unit	2023
Japan	MWh/vehicle	4.12
North America	MWh/vehicle	1.68
Europe	MWh/vehicle	1.57
Other	MWh/vehicle	0.37

*1 The boundary has been changed to align with the financial consolidation group. The figures for fiscal 2018, 2020, 2021, and 2022 have been retroactively revised to reflect this change. (Previous boundary: Nissan Motor Co., Ltd., consolidated subsidiaries and some of its affiliates accounted for by the equity method. Revised boundary: Nissan Motor Co., Ltd. and consolidated subsidiaries)

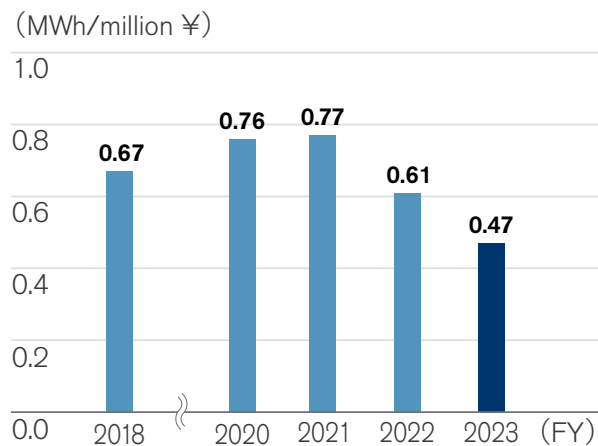
*2 Volume of renewable energy in electricity purchased by Nissan.

*3 Volume of renewable energy generated by Nissan at its facilities and consumed for its own purposes.

★ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see here. >>> P061

Energy per revenue

In fiscal 2023, global Nissan facilities saw energy per revenue result of 0.47 MWh, decreased by 22% from 2022. We are taking ongoing steps toward decoupling financial capital generation from energy use.



Carbon footprint of corporate activities*1

In fiscal 2023, the total of Scope 1 and 2 emissions of our global corporate activities was 1,727 thousand tons ★ (Scope 1 emissions: 462 thousand tons ★; Scope 2 emissions: 1,266 thousand tons ★), a 3% decrease from 1,772 thousand tons in fiscal 2022.

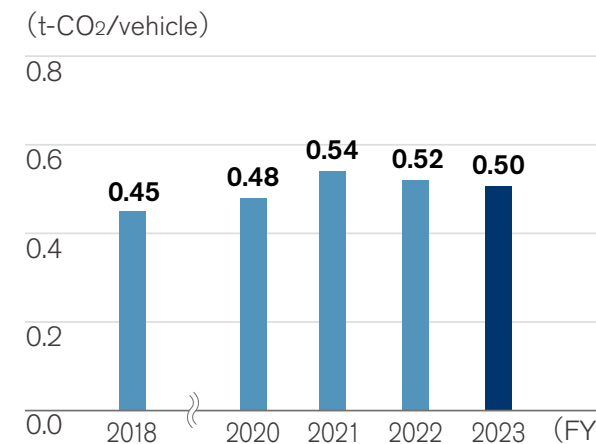
		(FY)				
	Unit	2018	2020	2021	2022	2023*2
Scope 1	kt-CO ₂	725	550	588	585	462★
Scope 2	kt-CO ₂	1,688	1,195	1,238	1,187	1,266★
Scope 1+2	kt-CO ₂	2,413	1,745	1,825	1,772	1,727★
Japan	kt-CO ₂	1,277	917	1,001	994	980
North America	kt-CO ₂	687	493	483	502	501
Europe	kt-CO ₂	131	88	89	81	86
Other	kt-CO ₂	318	246	253	195	161

Greenhouse gas (GHG) emissions other than energy-derived CO₂*3

By type	Unit	2018	2020	2021	2022	2023
CH ₄ (methane)	t-CO ₂ e	4,846	4,620	5,088	5,054	5,705
N ₂ O (nitrous oxide)	t-CO ₂ e	1,425	1,238	1,244	1,071	1,801
HFCs (hydrofluorocarbons)	t-CO ₂ e	3,594	1,873	1,320	1,878	148
PFCs (perfluorocarbons)	t-CO ₂ e	0	0	0	0	0
SF ₆ (sulfur hexafluoride)	t-CO ₂ e	43	43	43	43	128
NF ₃ (nitrogen trifluoride)	t-CO ₂ e	2	1	1	0	0

CO₂ emissions of scope 1 and 2 per vehicle produced

In fiscal 2023, overall corporate emissions were 0.50 per vehicle produced.



*1 The boundary has been changed to align with the financial consolidation group. The figures for fiscal 2018, 2020, 2021, and 2022 have been retroactively revised to reflect this change. (Previous boundary: Nissan Motor Co., Ltd., consolidated subsidiaries and some of its affiliates accounted for by the equity method. Revised boundary: Nissan Motor Co., Ltd. and consolidated subsidiaries)

*2 Due to some differences in the categorization from previous fiscal years, changes have been made starting from the fiscal 2023 by reclassifying a portion of Scope 1 to Scope 2. The impact of this change for the fiscal 2023 resulted in a decrease of 78 thousand tons of CO₂ emissions in Scope 1 and an increase of 78 thousand tons of CO₂ in Scope 2.

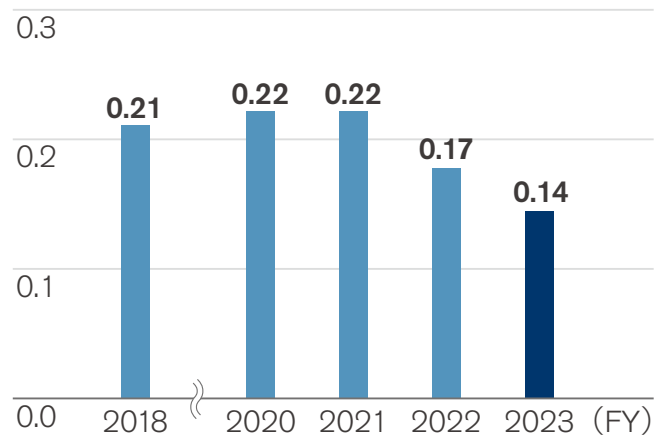
*3 GHG emissions from Nissan Motor Co., Ltd. manufacturing sites calculated based on the Act on Promotion of Global Warming Countermeasures.

★ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see here. [>>> P061](#)

Scope 1 and 2 CO₂ emissions per revenue

In fiscal 2023, CO₂ emissions from our global operations were 0.14 ton per ¥1 million of revenue.

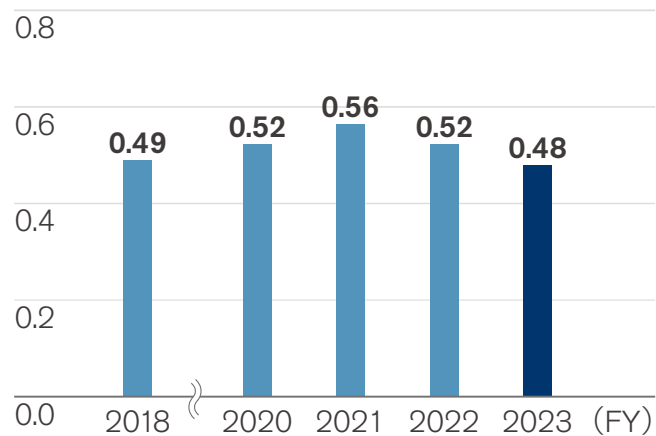
(t-CO₂/million ¥)



Manufacturing CO₂ per vehicle produced*1

In fiscal 2023, our manufacturing CO₂ emissions per vehicle produced were 0.48 tons, 0.5% less than fiscal 2018.

(t-CO₂/vehicle)



*1 CO₂ emissions per vehicle produced in the NGP management scope

Logistics volume

	Unit	2018	2020	2021	2022	2023
Total*1,2	mil ton-km	34,973	21,840	23,052	25,938	32,893
Inbound*3	mil ton-km	10,278	5,580	7,572	8,720	11,166
Outbound*4	mil ton-km	24,695	16,260	15,480	17,218	21,727
Sea	%	60.8	61.0	61.9	69.9	69.6
Road	%	23.5	24.6	24.0	19.1	20.4
Rail	%	14.8	13.9	13.7	10.7	9.8
Air	%	0.9	0.5	0.4	0.3	0.2

In fiscal 2023, global shipping increased by around 27% compared to the previous fiscal year, to 32.9 billion tons-km.

CO₂ emissions from logistics

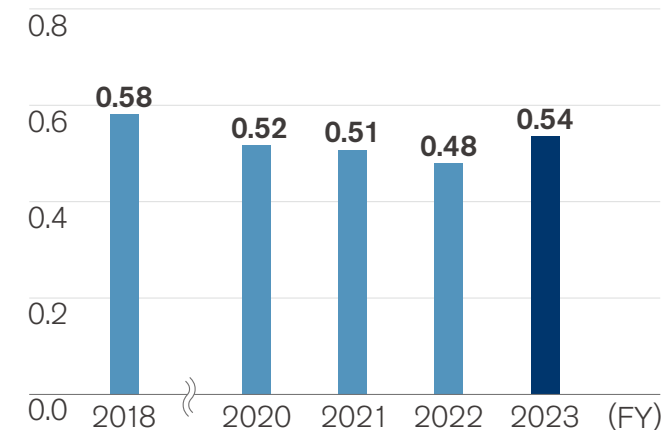
	Unit	2018	2020	2021	2022	2023
Total*1,2	t-CO ₂	2,471,320	1,618,503	1,610,452	1,590,741	1,981,139
Inbound*3	t-CO ₂	891,265	437,682	409,576	408,443	552,112
Outbound*4	t-CO ₂	1,580,055	1,180,822	1,200,876	1,182,298	1,429,027
Sea	%	29.1	26.8	26.4	35.1	37.0
Road	%	59.8	65.7	66.5	58.3	57.3
Rail	%	3.8	3.8	3.9	3.4	3.1
Air	%	7.2	3.7	3.2	3.1	2.6

In fiscal 2023, CO₂ emissions from logistics were 1,981 k-tons, up approximately 25% from the previous fiscal year.

CO₂ emissions per vehicle transported

In fiscal 2023, CO₂ emissions per vehicle transported were 0.54 tons.

(t-CO₂/vehicle)



*1 Due to the change in global emission factors based on GHG Protocol, changes have occurred in the figures since the fiscal year 2018.

*2 CO₂ emissions include those from transportation of parts to our manufacturing bases and transportation of vehicles from our manufacturing bases to dealerships.

*3 "Inbound" includes parts procurement from suppliers and transportation of knockdown parts.

*4 "Outbound" includes transportation of complete vehicles and service parts.

Scope 3 emissions by category

We conducted a study based on standards such as the Corporate Value Chain (Scope3) Accounting and Reporting Standard from the GHG Protocol and found that about 85% of our Scope3 emissions were from the use of sold products.

(FY)

Category	Unit	2023
1.Purchased goods & services	kt-CO ₂	12,012★
2.Capital goods	kt-CO ₂	1,277
3.Fuel- and energy-related activities	kt-CO ₂	249
4.Upstream transportation & distribution	kt-CO ₂	1,851
5.Waste generated in operations	kt-CO ₂	147
6.Business travel	kt-CO ₂	278
7.Employee commuting	kt-CO ₂	192
8.Upstream leased assets	kt-CO ₂	0
9.Downstream transportation & distribution	kt-CO ₂	605
10.Processing of sold products	kt-CO ₂	7
11.Use of sold products*1	kt-CO ₂	99,185★
12.End-of-life treatment of sold products	kt-CO ₂	257
13.Downstream leased assets	kt-CO ₂	499
14.Franchises	kt-CO ₂	0
15.Investments *2	kt-CO ₂	141
Total	kt-CO ₂	116,699

*1 Category 11 has changed the lifetime mileage conditions in China from the fiscal 2023 result.

*2 Due to the revision of definitions linked to financial statements, certain equity-method affiliates, which were previously included in Scope 1 and 2, were added to Category 15.

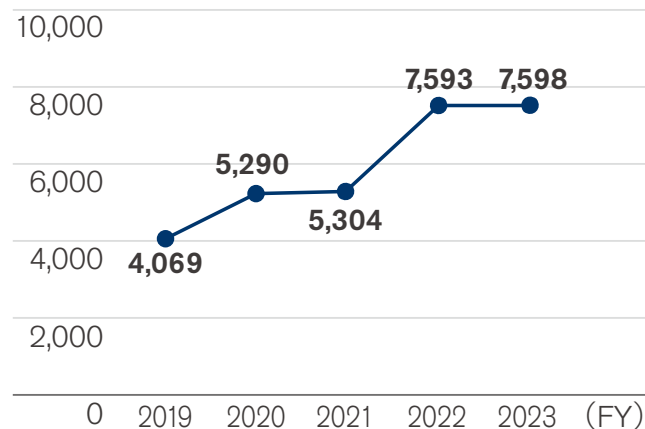
★ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see here. [>>> P061](#)

Resource dependency: Achievements in reuse

Proper use of regulated chemical substances

Nissan revised its standard for the assessment of hazards and risks, actively applying restrictions to substances not yet covered by regulations but increasingly subject to consideration around the world. As a result, the number of defined chemical substances covered in fiscal 2023 rose to 7,598. These steps are thought to be necessary for future efforts in the repair, reuse, remanufacture, and recycle loop for resources.*1

The number of defined chemical substances



Recycled plastic usage in vehicle

We are making efforts to expand the use of recycled plastic in our vehicles, as well as developing technologies for this. Recycled plastic use in fiscal 2023 was 5%, based on the rate achieved by our best-selling model in Europe.

Automotive shredder residue to landfill ratio

After removing ferrous and nonferrous metals from ELVs, in accordance with the End-of-Life Vehicle Recycling Law in Japan, the ratio of ASR taken to landfills for final disposal was zero once again in fiscal 2023.

Material ratio

In 2023, ferrous metals accounted for 61% of the materials used in our automobiles by weight. Nonferrous metals made up another 15% and resins 13%, with miscellaneous materials making up the final 11%. To further reduce our use of natural resources, we are advancing initiatives to expand the use of recycled materials in each of these categories.

Recovered bumpers

The number of bumpers collected in fiscal 2023 was 89,000, a 2.3% increase from fiscal 2022.

*1 Click here for more information on chemical substances governance. [>>> P023](#)

Resource dependency (Facility waste)

Waste

Global regular waste generated from corporate activities in fiscal 2023 amounted to 170,491 tons, waste generated globally from production sites in fiscal 2023 was 171,598 tons★ (regular waste*1 : 164,947 tons, non-regular waste*2 : 6,651 tons).

Regular waste generated from corporate activities

(FY)

	Unit	2019	2020	2021	2022	2023
Total*3	ton	199,470	153,160	158,199	157,982	170,491

By region

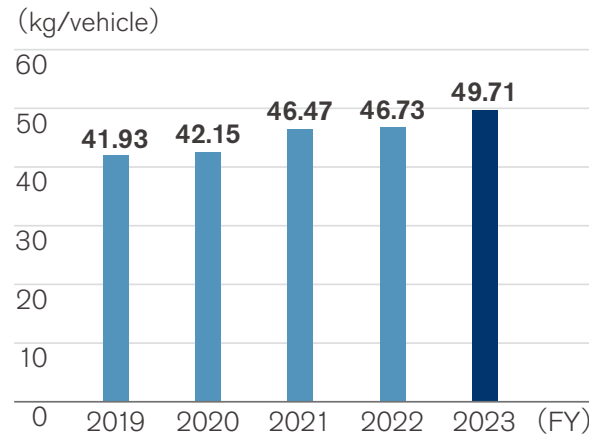
	Unit	2019	2020	2021	2022	2023
Japan	ton	63,294	48,921	52,386	51,069	57,638
North America	ton	58,970	48,043	51,062	52,007	53,802
Europe	ton	50,205	31,868	33,895	36,577	43,037
Other	ton	27,001	24,328	20,857	18,329	16,015

By treatment method

	Unit	2019	2020	2021	2022	2023
Waste for disposal	ton	6,365	6,539	7,208	8,688	7,746
Recycled	ton	193,105	146,621	150,991	149,293	162,746

Waste per vehicle produced

In fiscal 2023, waste per vehicle produced was 49.71 kg.

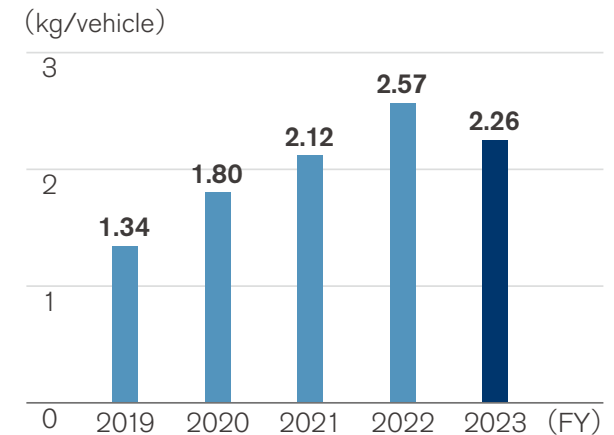


(FY)

By region	Unit	2022	2023
Japan	kg/vehicle	85.54	79.50
North America	kg/vehicle	52.43	43.56
Europe	kg/vehicle	127.00	132.42
Other	kg/vehicle	12.19	13.97

Waste for disposal per vehicle produced

In fiscal 2023, the volume of waste for disposal was increased to 2.26 kg per vehicle produced.



Responding to the Plastic Resource Circulation Act

The amount of industrial waste generated from plastic products in fiscal 2023 was 4,943 tons.*4

Plastic-related targets	FY2023 Achievements
Continue actions to reduce waste emissions of plastic packaging, etc.	Continued to reuse returnable containers
Maintain a 100% recycling rate for industrial waste from products using plastic	Maintained a 100% recycling rate

*1 Regular waste generated from production, maintenance, and issue resolution activities. ★ This figure is subject to assurance by KPMG AZSA Sustainability Co., Ltd. For details, please see here. >>> P061

*2 Waste generated irregularly from activities such as installing new processes, relocating equipment, and dismantling facilities.

*3 The total disclosed amount since 2019 is the total amount of regular waste generated from production sites and office sites, excluding *2.

*4 Plastic Resource Circulation Act : Law for plastic waste

Water resource management

Water intake for corporate activities

In fiscal 2023, water intake for our global corporate activities was 20,034 thousand m³, same level as 20,208 thousand m³ in fiscal 2022.

In fiscal 2023, water intake from global production sites was 18,939 thousand m³★, the same level as 19,065 thousand m³ in fiscal 2022.

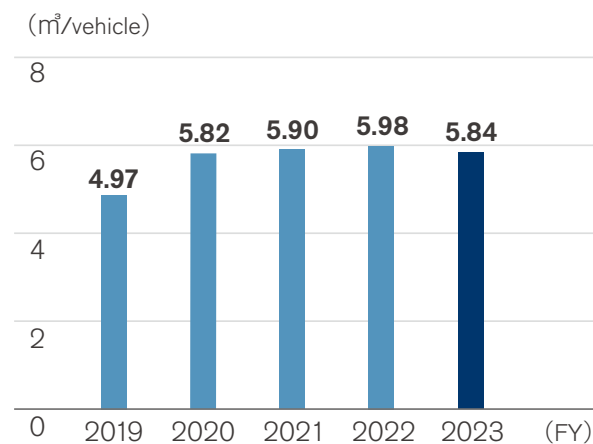
(FY)						
	Unit	2019	2020	2021	2022	2023
Total	thousand m ³	23,656	21,159	20,090	20,208	20,034
Japan	thousand m ³	11,918	10,797	10,317	10,472	10,564
North America	thousand m ³	4,768	3,888	4,047	4,235	4,382
Europe	thousand m ³	1,792	1,373	1,404	1,270	1,288
Other	thousand m ³	5,178	5,101	4,322	4,231	3,799

Water withdrawal by source

(FY)		
	Unit	2023
Total	thousand m ³	20,034
Surface water	thousand m ³	1,044
Groundwater	thousand m ³	6,399
Third-party water	thousand m ³	12,592

Water input for corporate activities (per vehicle produced)

In fiscal 2023, water input for corporate activities (per vehicle produced) was 5.84 m³/vehicle same level as 5.98 m³/vehicle in fiscal 2022.



(FY)			
Region	Unit	2022	2023
Japan	m ³ /vehicle	17.54	14.57
North America	m ³ /vehicle	4.27	3.55
Europe	m ³ /vehicle	4.41	3.96
Other	m ³ /vehicle	2.81	3.32

Water discharge from corporate activities

The total amount of water discharged in global corporate activities in fiscal 2023 was 13,929 thousand m³, same level as 13,319 thousand m³*1 in fiscal 2022.

(FY)						
	Unit	2019	2020	2021	2022	2023
Total	thousand m ³	15,391	13,624	13,620	13,319*1	13,929
Japan	thousand m ³	9,496	8,474	8,771	8,902	9,376
North America	thousand m ³	2,746	2,351	2,565	2,610	2,753
Europe	thousand m ³	1,389	1,094	707	596	613
Other	thousand m ³	1,760	1,705	1,577	1,210*1	1,186

Quality

Chemical oxygen demand (COD) Japan only	kg	22,269	18,017	19,941	24,884	24,811
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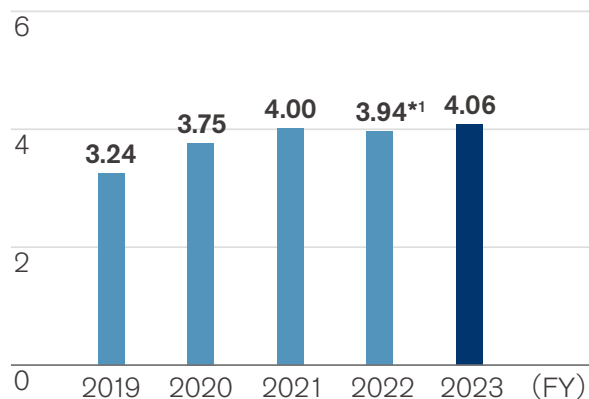
Water discharge by destination

(FY)		
	Unit	2023
Total	thousand m ³	13,929
Surface water	thousand m ³	9,134
Underground seepage	thousand m ³	0
Third-party water	thousand m ³	4,795

Water discharge from corporate activities (per vehicle produced)

In fiscal 2023, water discharge per vehicle produced was 4.06 m³, same level as 3.94 m³*1 in fiscal 2022.

(m³/vehicle)



(FY)

Region	Unit	2022	2023
Japan	m ³ /vehicle	14.91	12.93
North America	m ³ /vehicle	2.63	2.23
Europe	m ³ /vehicle	2.07	1.89
Other	m ³ /vehicle	0.80*1	1.03

Data for the Japan region includes the manufacture of powertrains and other components for overseas assembly. Since the denominator is vehicles produced in the region, this tends to result in higher values for Japan.

Water consumption in corporate activities

The total amount of water consumed in global corporate activities in fiscal 2023 was 6,105 thousand m³*2, a decrease from 6,889 thousand m³*1 in fiscal 2022.

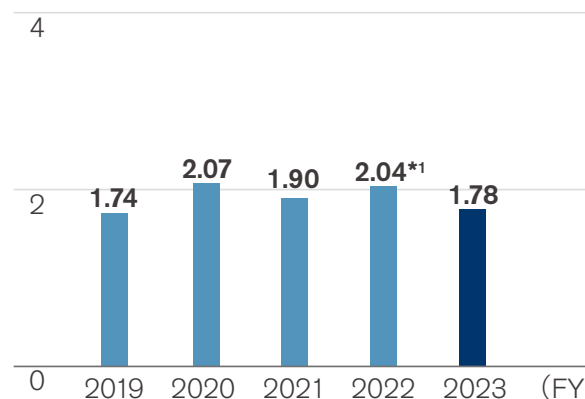
(FY)

	Unit	2019	2020	2021	2022	2023
Total	thousand m ³	8,265	7,535	6,470	6,889*1	6,105
Japan	thousand m ³	2,422	2,323	1,546	1,570	1,188
North America	thousand m ³	2,022	1,537	1,481	1,625	1,629
Europe	thousand m ³	403	279	697	674	675
Other	thousand m ³	3,418	3,396	2,745	3,021*1	2,613

Water consumption in corporate activities (per vehicle produced)

In fiscal 2023, water discharge per vehicle produced was 1.78 m³, which was a decrease from 2.04 m³*1 in fiscal 2022.

(m³/vehicle)



(FY)

Region	Unit	2022	2023
Japan	m ³ /vehicle	2.63	1.64
North America	m ³ /vehicle	1.64	1.32
Europe	m ³ /vehicle	2.34	2.08
Other	m ³ /vehicle	2.01*1	2.28

*1 Due to an error in the calculation of last fiscal year's figures, the figures for fiscal 2022 were revised.

*2 Based on GRI 303, total water consumption is total water withdrawn minus total water discharged as calculated by Nissan.

Air quality

Emissions of NOx and SOx

In fiscal 2023, NOx and SOx emissions from Nissan manufacturing facilities in Japan were 495 tons and 2 tons.

	Unit	2019	2020	2021	2022	2023
NOx	ton	380	364	373	340	495
SOx	ton	14	10	7	2	2

Volatile organic compounds (VOCs)

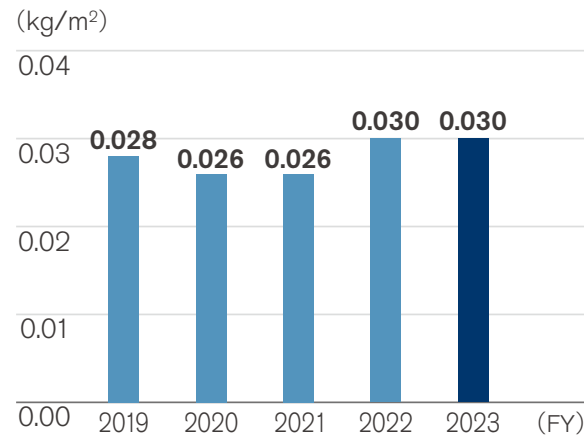
In fiscal 2023, VOC*1 emissions from manufacturing plants were 12,188 tons globally, an increase from fiscal 2022 owing to a higher number of vehicles manufactured at sites in Japan*2. We actively continue to promote activities to reduce VOCs, such as switching to materials including water-based paints.

	Unit	2019	2020	2021	2022	2023
Total	ton	13,211	10,451	10,653	11,104	12,188

	Unit	2019	2020	2021	2022	2023
Japan	ton	4,028	3,176	3,031	3,987	4,791
North America	ton	3,960	3,097	3,112	3,156	3,766
Europe	ton	858	839	519	877	1,061
Other	ton	4,365	3,339	3,991	3,084	2,570

VOCs per vehicle produced

In fiscal 2023, VOCs were 0.03 kg.



	Unit	2023
Total	kg/m²	0.030
Japan	kg/m²	0.052
North America	kg/m²	0.023
Europe	kg/m²	0.031
Other	kg/m²	0.023

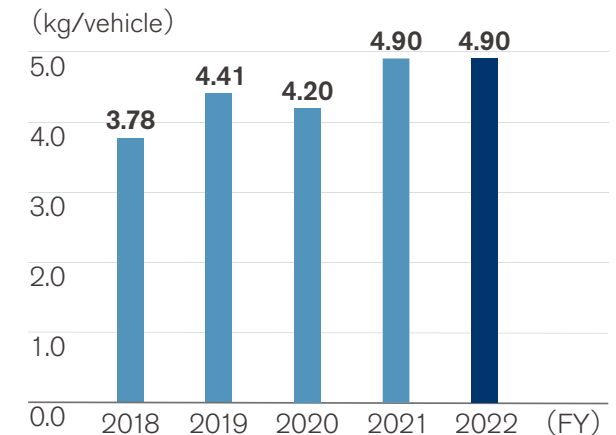
Released substances designated by PRTR Law (Japan)

In fiscal 2022, released substances designated by the the PRTR (Pollutant Release and Transfer Register)*3 Law in Japan were 2,924 tons, an increase from 2,183 tons in fiscal 2021.

By region	Unit	2019	2020	2021	2022
Japan site total	ton	3,339	2,173	2,183	2,924
Oppama	ton	1,022	697	881	959
Tochigi	ton	467	394	323	567
Kyushu	ton	1,391	1,042	942	1,369
Yokohama	ton	21	9	4	8
Iwaki	ton	62	6	4	4
NTC	ton	351	3	3	3
Zama Operation Center	ton	26	22	26	14

PRTR emissions per vehicle produced (Japan)

In fiscal 2022, PRTR emissions per vehicle produced in Japan were 4.90 kg, the same level as fiscal 2021.



*1 VOC: Organic chemicals that readily evaporate and become gaseous at normal temperature and pressure conditions.

*2 The transition values for 2019 have been revised due to the expanding scope of body and bumper painting for VOCs.

*3 The table shows chemical substance emissions calculated based on the Japanese government PRTR guidelines. PRTR emissions show total volume excluding substances adherent to the product.

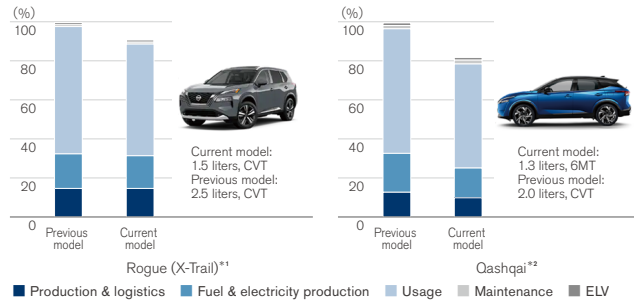
Strengthening our foundations to address environmental issues

LCA of gasoline models

We have been expanding the application of the LCA method to global sales model. Coverage on a unit basis has reached approximately 80% of models globally and approximately 90% in Europe.

In the case of the Rogue (X-Trail) and Qashqai, CO₂ equivalent emissions have been reduced compared to the previous models by improving powertrain efficiency and reducing vehicle weight.*1

Life cycle CO₂ equivalent emissions



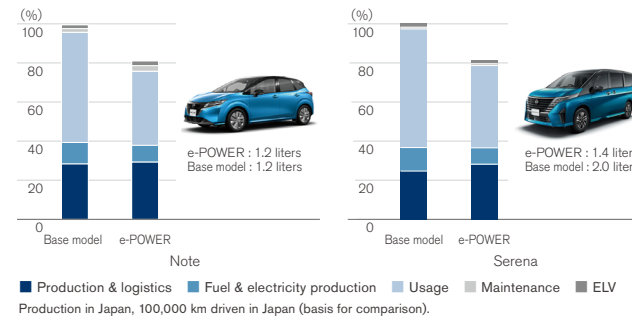
*1 Production in the U.S., 120,000 miles driven in the U.S. (basis for comparison).

**2 Production in EU, 150,000 km driven in EU (basis for comparison).

LCA of e-POWER models

Nissan introduced its new e-POWER powertrain in 2016, marking another significant milestone in the electrification strategy with lifecycle emission improvements. Compared to their gasoline-powered counterpart models, the Note e-POWER and Serena e-POWER have both achieved an approximately 20% reductions in CO₂ equivalent emissions.

Life cycle CO₂ Equivalent Emissions

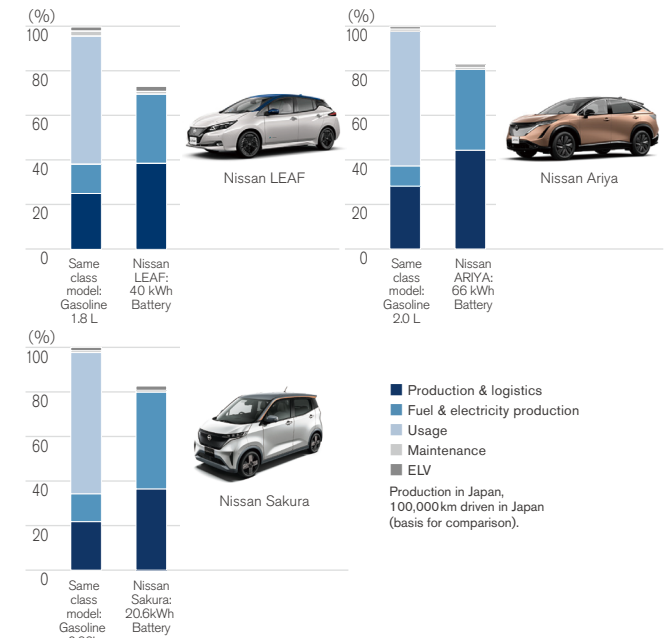


Production in Japan, 100,000 km driven in Japan (basis for comparison).

LCA of EV models

The Nissan LEAF reduces its lifecycle CO₂ equivalent emissions by approximately 30% compared to conventional vehicles of the same class in Japan. The Nissan Ariya and Nissan Sakura launched in 2022, further improve EV product appeal and reduce environmental impacts. Compared to Japanese gasoline-powered vehicles in the same class, the Nissan Ariya and Nissan Sakura offer longer cruising ranges while also reducing lifecycle CO₂ emissions by approximately 20%.

Life cycle CO₂ equivalent emissions

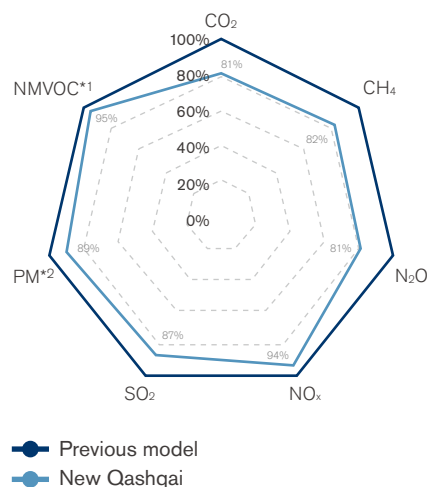


*1 Click here for further detail regarding Nissan's LCA <https://www.nissan-global.com/EN/SUSTAINABILITY/ENVIRONMENT/GREENPROGRAM/FOUNDATION/LCA/>

Lifecycle improvements beyond climate change

Nissan is expanding the scope of lifecycle assessment (LCA) to not only greenhouse gases but also a variety of chemicals. Our calculations show that the new Qashqai achieves reductions in emission 5-20% for all targeted chemical substances, and reduces environmental impacts throughout its life cycle compared with previous model.

New Qashqai lifecycle assessment (LCA)



Production in EU, 150,000 km driven in EU.

Material balance

Input

(FY)

	Unit	2022	2023
Raw materials	ton	3,987,890* ³	4,045,791
Energy	MWh	6,442,705* ⁴	5,995,301
Renewable energy	MWh	251,563* ⁴	219,462
Water withdrawal	thousand m ³	20,208	20,034

Output

(FY)

	Unit	2022	2023
Vehicles produced			
Global production volume	k unit	3,381	3,430
CO ₂ emissions	kt-CO ₂	1,772* ⁴	1,727
Water discharge	thousand m ³	13,319* ⁵	13,929
Emissions			
NO _x	ton	340	495
SO _x	ton	2	2
VOC	ton	11,104* ³	12,188
Waste			
For recycling	ton	149,293	162,746
For final disposal	ton	8,688	7,746

Environmental conservation cost*⁶

(FY)

	Unit	2022		2023	
		Investment	Cost	Investment	Cost
Total	mil ¥	6,955	134,697	15,557	165,353
Business area	mil ¥	392	1,829	1,908	2,207
Upstream/downstream	mil ¥	0	436	0	406
Management	mil ¥	0	12,370	0	13,324
R&D	mil ¥	6,563	119,909	13,649	149,238
Social activities	mil ¥	0	124	0	48
Damage repairs	mil ¥	0	29	0	130

Economic impact

(FY)

	Unit	2022	2023
Total	mil ¥	10,465	13,996
Cost reduction	mil ¥	478	3,293
Profit	mil ¥	9,987	10,703

*1 NMVOC:Non-Methane Volatile Organic Compounds

*2 PM:Particulate Matter

*3 Due to a change in the calculation method, the values for fiscal 2022 was revised.

*4 The boundary has been changed to align with the financial consolidation group.The figures for fiscal 2022 have been retroactively revised to reflect this change. (Previous boundary: Nissan Motor Co., Ltd., consolidated subsidiaries and some of its affiliates accounted for by the equity method. Revised boundary: Nissan Motor Co., Ltd. and consolidated subsidiaries)

*5 Due to an error in the calculation of last fiscal year's figures, the figures for fiscal 2022 were revised.

*6 All environmental costs are based on the guidelines provided by Japan's Ministry of the Environment, and calculated for activities in Japan only.