

IGNITE YOUR SPIRIT

NGK SPARK PLUG CO., LTD.

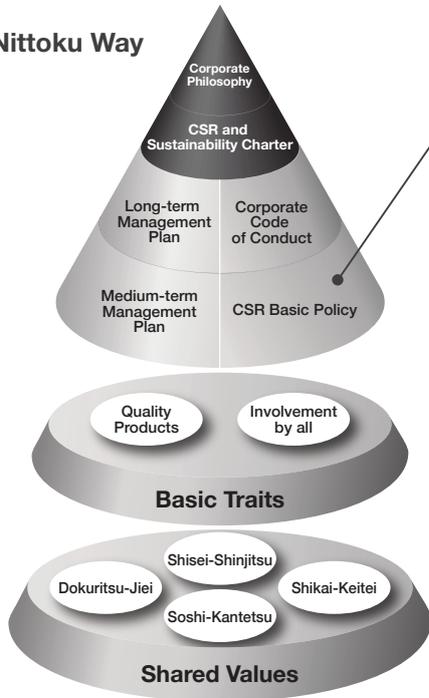
Sustainability Data Book 2020

CSR and Sustainability Charter

We contribute to develop a sustainable society, thereby improving our corporate value.

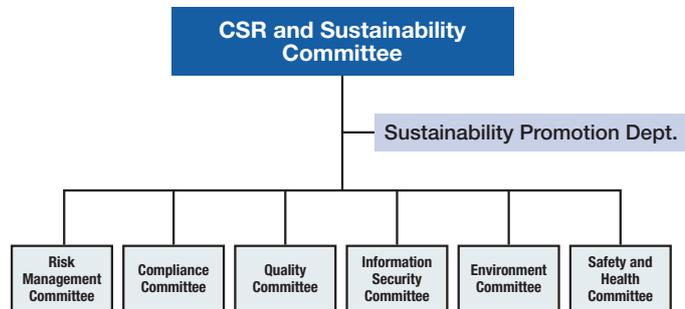
- We build relations of trust with our stakeholders while making highly transparent decisions and actions.
- We cocreate and provide new value to solving social issues.

The Nittoku Way



- Risk Management Policy
- Compliance Policy
- Human Rights Policy
- Quality Policy
- Information Security Policy
- Procurement Policy
- Information Disclosure Policy
- Environmental Policy
- Human Resource Policy
- Occupational Safety and Health Policy
- Social Contribution Policy
- Tax Policy

CSR and Sustainability Promotion System



CONTENTS

02 Environment

Environmental burdens from business activities

Material Balance

03 Environmental management

ISO14001 Certified Locations

Compliance with Environmental Laws and Regulations

04 Providing Environmentally Friendly Products

Responding to Climate Change

06 Conservation of Water Resources

Management of Waste

Management of Chemical Substances

07 Environmental Accounting

08 Social

Global Human Resource Management

Status of employees

09 Diversity

Work-life balance

10 Human resource development

11 Occupational Safety and Health

Social Contribution

12 Communication with Stakeholders

13 Governance

Corporate Governance

Board of Directors and Board of Auditors

Nomination and Remuneration for Directors

14 Compliance

In-house Reporting System

Political Donation

R&D

Participation in Initiatives

15 Social and Environmental Information Verification Report

Editorial policy

In this Sustainability Data Book, we mainly include the information (numerical data) that attracts institutional investors and research organizations from among non-financial information provided in our Integration Report and CSR website. For details about our CSR and sustainability activities, please refer to our CSR website:
<https://www.ngkntk.co.jp/english/csr/>

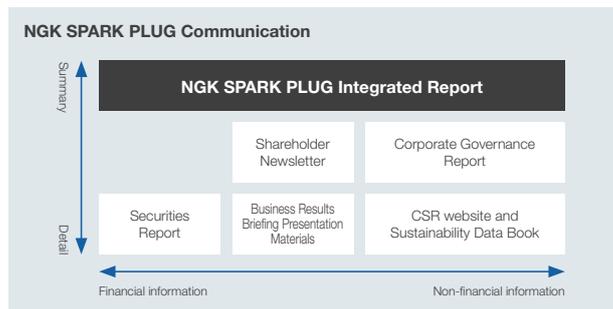
Period covered

Fiscal year ended March 31, 2020
(From April 1, 2019 to March 31, 2020)

*Unless otherwise indicated separately

Organizations covered

Indicated separately



Environment

Environmental burdens from business activities

Material Balance

Environmental burdens from business activities (Fiscal year ended March 31, 2020)

INPUT		Scope covered *1				OUTPUT		Scope covered *1							
		NGK SPARK PLUG	Group companies in Japan *2	Overseas group companies *3				NGK SPARK PLUG	Group companies in Japan *2	Overseas group companies *3					
Raw materials	Ceramic and metal materials Ceramic and metal materials purchased 53,000 tons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 Suppliers	Output into waters	Wastewater Released into sewerage systems and public waters; consumption volume of tap water and well water. 1,480,000 m³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
	Energy	Electricity Used in offices and plants 454,178 MWh	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	 Research, Design, Manufacturing, Sales	Output into air	Chemical substances (PRTR) Released into waters and notified by sites 1.7 tons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
City gas Used in offices and plants 11.34 million m³		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 Products	Green house gas emissions Energy-based Green House Gas Emissions 313,800 tons-CO₂	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>				
LPG Used in offices and plants and for testing, travel and transportation 7,253 tons		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		 Logistics	Chemical substances (PRTR) Released into air and notified by sites 86 tons			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Other fuels Used in offices and plants and for testing, travel and transportation 8,234 kL [crude oil equivalent]		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			 Customers			Waste generated (and treated on commission) Total 21,874 tons	Waste	Effectively used (including waste sold) 19,212 tons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renewable energy Generated by solar power generators and small hydroelectric generators 278 MWh		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						Not effectively used 2,662 tons		 Product shipment			
Water Tap water, ground water and river water used 1,480,000 m³		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						 Customers					
Chemical substances PRTR Handled and notified by sites 766 tons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Logistics				CO₂ emitted by external transporters CO₂ emissions due to externally commissioned transportation 2,567 tons-CO₂	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Logistics Fuels used for transportation (outsourced) Fuels used for transportation by trucks, ships, and aircraft 965 kL [crude oil equivalent]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												

*1 The covered scope of each amount reported in INPUT and OUTPUT is indicated with .

*2 Domestic group companies: (scope of consolidated certification) NITTOKU ALFA SERVICE CO., LTD., CERAMIC SENSOR CO., LTD., NTK CERAMIC CO., LTD., CERAMIC SENSOR NAKATSUGAWA CO., LTD., NANSEI CERAMIC CO., LTD., KAMIOKA CERAMIC CO., LTD., Spark Tec WKS CO., LTD., NICHIBA KIKI CO., LTD., Spark Tech TONO CO., LTD., (outside the scope of consolidated certification) NITTOKU Smile NITTOKU DENSHI CO., LTD., NTK CERATEC CO., LTD.

*3 Overseas group companies: (manufacturing & sales organization) NGK SPARK PLUG [SHANGHAI] CO., LTD., CHANGSHU NGK SPARK PLUG CO., LTD., NTK TECHNICAL CERAMICS KOREA CO., LTD., NGK SPARK PLUGS (THAILAND) CO., LTD., SIAM NGK SPARK PLUG CO., LTD., NGK SPARK PLUGS (ASIA) CO., LTD., NGK SPARK PLUGS MALAYSIA BERHAD, PT NGK BUSI INDONESIA, NGK SPARK PLUGS (INDIA) PVT. LTD., NGK SPARK PLUGS (U.S.A.), INC., Wells Vehicle Electronics, L.P., CERAMICA E VELAS DE IGNICAO NGK DO BRASIL LTDA., NGK SPARK PLUGS (FRANCE) S.A.S., NGK SPARK PLUGS SA (PTY) LTD. (sales organization) TAIWAN NGK SPARK PLUG CO., LTD., NGK SPARK PLUGS (VIETNAM) CO., LTD., NGK SPARK PLUGS (PHILIPPINES), INC., NGK SPARK PLUG (AUSTRALIA) PTY. LTD., NTK TECHNOLOGIES, INC., NGK SPARK PLUGS CANADA LIMITED., BUJIAS NGK DE MEXICO S.A. DE C.V., BUJIAS NGK DEL ECUADOR CIA LTDA., NGK SPARK PLUG EUROPE GmbH, NGK SPARK PLUGS (UK) LTD., LIMITED LIABILITY COMPANY NGK SPARK PLUGS (EURASIA), NGK SPARK PLUG MIDDLE EAST FZE

Environmental Management

ISO14001 Certified Locations

In order to make progress with systematic, effective environmental preservation activities, we have established an environmental management system that is based on our Group-wide environmental policy. Under this system, all Group companies strive to achieve the Eco Vision. As of the end of fiscal 2019, the ISO 14001 certification acquisition rate was 93% in terms of the rate of employees belonging to the certified sites.

Certification covering multiple units (Scope of applicability)

Country	Name of factories and companies	Certified initially in:
Japan	NGK SPARK PLUG CO., LTD.	
	Headquarters and Nagoya Plant	'99.8
	Komaki Plant, Miyanojo Plant, Ise Plant	'00.12
	Takenami Plant	'07.1
	Inuyama Logistics Center	'99.8
	NITTOKU ALPHA SERVICE CO., LTD.	'99.8
	CERAMIC SENSOR CO., LTD.	'00.12
	NTK CERAMIC CO., LTD.	
	Komaki Plant	'00.12
	Iijima Plant, Kani Plant	'02.12
	CS NAKATSUGAWA CO., LTD.	'16.12
	NANSEI CERAMIC CO., LTD.	'02.12
	KAMIOKA CERAMIC CO., LTD.	'04.1
	SparkTec WKS CO., LTD.	
	Head Office Plant	'04.1
	Satsuma Plant	'09.12
	NICHIWA KIKI CO., LTD.	'04.1
	SparkTec TONO CO., LTD.	
	Nino Headquarters Plant	'15.12
	Tono Plant	'04.1

Certification obtained individually

Country	Name of factories and companies	Certified initially in:
Japan	NTK CERATEC CO., LTD.	'04.10
U.S.A.	NGK SPARK PLUGS (U.S.A.), INC.	
	WV Plant	'00.7
	WELLS VEHICLE ELECTRONICS, L.P.	'03.3
Mexico	BUJIAS NGK DE MEXICO S.A. DE C.V.	'12.11
Brazil	CERAMICA E VELAS DE IGNICAO NGK DO BRASIL LTDA.	'01.12
France	NGK SPARK PLUGS (FRANCE) S.A.S.	'00.5
U.K.	NGK SPARK PLUGS (UK) LTD.	'01.12
Germany	NGK SPARK PLUG EUROPE GmbH	'04.11
Thailand	SIAM NGK SPARK PLUG CO., LTD.	'02.11
	NGK SPARK PLUGS (THAILAND) CO., LTD.	'12.10
	NGK SPARK PLUGS (ASIA) CO., LTD.	'16.11
South Korea	NTK TECHNICAL CERAMICS KOREA CO., LTD.	'06.4
Malaysia	NGK SPARK PLUGS MALAYSIA BERHAD	'06.3
China	NGK SPARK PLUG (SHANGHAI) CO., LTD.	'07.4
	CHANGSHU NGK SPARK PLUG CO., LTD.	'13.3
Indonesia	PT NGK BUSI INDONESIA	'07.10
India	NGK SPARK PLUGS (INDIA) PVT. LTD.	'10.12
South Africa	NGK SPARK PLUGS SA (PTY) LTD.	'08.4

Compliance with Environmental Laws and Regulations

To ensure compliance with environmental laws and regulations as well as agreements with local municipalities, we set stringent voluntary standards to prevent violations and complaints. Against a violation or complaint that occurred, we take measures immediately, including those to prevent recurrence.

(fiscal year)	2015	2016	2017	2018	2019
Environment-related non-compliance (cases)	5	2	0	0	3
Environment-related complaints (cases)	0	2	1	3	1

[Scope of tabulation] Environment-related non-compliance : NGK SPARK PLUG Group
Environment-related complaints : NGK SPARK PLUG CO., LTD. and Groups in Japan

Providing Environmentally Friendly Products

We develop and supply environmentally friendly products, through which we aim to meet the expectations of customers across the world and also contribute to the global environment.

(fiscal year)	2015	2016	2017	2018	2019
Sales ratio of precious metal plugs*	34	36	37	39	39
Sales ratio of wide range oxygen sensor + NOx Sensor*	22	24	26	34	41

*"Precious metal plug", "wide range oxygen sensor", and "NOx sensor" are types of environmentally friendly products and are selected as priority issues. We aim to increase each of the "sales ratio of precious metal plugs" and the "sales ratio of wide range oxygen sensor + NOx sensor" to not less than 50%

Responding to Climate Change

As a part of our activities to contribute to mitigating climate change, we set targets for CO₂ emission basic unit in fiscal 2020 under Global Eco Vision 2020. To attain these targets, we are working to reduce our energy use, thereby also curbing CO₂ emissions from the use.

Energy consumption

(fiscal year)	2015	2016	2017	2018	2019
Total energy consumption (MWh)	736,928	805,055	807,804	834,334	793,216
Total nonrenewable energy consumption (MWh)	736,735	804,709	807,413	833,758	792,938
Fuels (MWh)	333,321	365,433	357,555	366,880	338,760
Electricity (MWh)	403,414	439,276	449,858	466,878	454,178
Total renewable energy generation (MWh)	193	346	391	576	278

[Scope of tabulation] NGK SPARK PLUG Group

Greenhouse gas emissions (Scope 1,2)

(fiscal year)	2015	2016	2017	2018	2019
Total direct GHG emissions [Scope 1] (10,000 tons-CO ₂)	6.40	6.95	6.84	7.01	6.46
Total indirect GHG emissions [Scope 2] (10,000 tons-CO ₂)	22.23	24.23	24.64	25.56	24.93
Scope 1+2 (10,000 tons-CO ₂)	28.63	31.17	31.48	32.57	31.39
CO ₂ emission basic unit	1.30	1.27	1.18	1.15	1.15

[Scope of tabulation] Scope 1, Scope 2, Scope 1+2 : NGK SPARK PLUG Group

CO₂ emission basic unit : NGK SPARK PLUG CO., LTD. and Groups in Japan (with integrated certification)

[Calculation method] Scope 1 : Calculated by using the global warming potential as provided for in the Act on Promotion of Global Warming Countermeasures.

Scope 2 : Calculated by using the global warming potential as provided for in the Act on Promotion of Global Warming Countermeasures in Japan, while in other countries calculated by using the emission factor given to each of the countries by the GHG Protocol.

Greenhouse gas emissions (Scope 3)(10,000 tons-CO₂)

(fiscal year)	2016	2017	2018	2019
1 Purchased goods and services	7.24	7.91	8.07	7.75
2 Capital goods	11.77	12.54	17.13	17.01
3 Fuel- and energy-related emissions not included in scope 1 or scope 2	2.90	3.07	3.10	3.10
4 Upstream transportation and distribution	0.26	0.25	0.27	0.25
5 Waste generated in operations	0.08	0.10	0.39	0.01
6 Business travel	0.19	0.20	0.21	0.21
7 Employee commuting	0.69	0.71	0.74	0.76
8 Upstream leased assets			N/A	
9 Downstream transportation and distribution	—	—	—	—
10 Processing of sold products	—	—	—	—
11 Use of sold products	57.75	54.44	63.31	62.52
12 End-of-life treatment of sold products	0.02	0.02	0.02	0.07
13 Downstream leased assets			N/A	
14 Franchises			N/A	
15 Investments	1.67	1.90	1.90	1.94

[Scope of tabulation] NGK SPARK PLUG Group

[Calculation method] 1: Calculated by multiplying the figures shown in the material balance sheet by the relevant values retrieved from the database of emissions unit values built for the calculation of organizations' greenhouse gas emissions across their supply chains

2: Calculated by multiplying the cost of acquiring tangible fixed assets (shown in the financial statements) by the relevant value retrieved from the database of emissions unit values built for the calculation of organizations' greenhouse gas emissions across their supply chains

3: For power consumption, calculated by multiplying the amount used by the relevant value retrieved from the database of emissions unit values built for the calculation of organizations' greenhouse gas emissions across their supply chains. For gases, etc., calculated by multiplying the amount used with the relevant value retrieved from the IDEA LCA database.

4: Extracted from the data notified (for products) by shippers specified under the Act on Rationalizing Energy Use

5: Calculated by totaling CO₂ emissions from the transportation of the company's waste (extracted from the data notified (for waste) by shippers specified under the Act on Rationalizing Energy Use and CO₂ emissions from the treatment of waste (calculated by multiplying the cost of waste treatment (for fiscal years up to fiscal 2018) or the amount of waste treated (for fiscal 2019) by the relevant value retrieved from the IDEA LCA database)

6: Calculated by multiplying the number of employees by the relevant value retrieved from the database of emissions unit values built for the calculation of organizations' greenhouse gas emissions across their supply chains

7: Calculated by multiplying the result of multiplying the number of employees by the number of their working days by the relevant value retrieved from the database of emissions unit values built for the calculation of organizations' greenhouse gas emissions across their supply chains

11: Calculated by multiplying the amount of CO₂ emissions per one ton of products calculated by using the Japan Auto Parts Industries Association's LCA tool by the weight of shipped products

12: Calculated by multiplying the weight of shipped products by the relevant value retrieved from the IDEA LCA database

15: Calculated by multiplying the amount of CO₂ emitted by the five companies that are ranked in the top five in terms of the monetary value of the stocks owned by NGK SPARK PLUG by the stockholding ratio

Conservation of Water Resources

We contribute to the resolution of water resource issues by recognizing the water used in our business activities as water resources, and by undertaking the effective usage, as measures to combat the depletion of resources.

(fiscal year)	2015	2016	2017	2018	2019
Total water consumption (10,000 m ³)	162	167	163	154	148

[Scope of tabulation] NGK SPARK PLUG Group

Management of Waste

We contribute to society by improving our manufacturing processes to reduce the generation of waste and prevent the depletion of resources and furthermore by treating waste in a manner that facilitates recycling.

(fiscal year)	2015	2016	2017	2018	2019
Total waste generated (tons)	17,552	20,522	19,966	21,451	21,874
Effectively used (tons)	16,168	18,650	17,447	19,490	19,212
Not effectively used (tons)	1,383	1,871	2,519	1,960	2,662

[Scope of tabulation] NGK SPARK PLUG Group

(fiscal year)	2015	2017	2017	2018	2019
On-site inspection at waste disposal company facilities (cases)	62	71	74	84	82

[Scope of tabulation] NGK SPARK PLUG CO., LTD. and Groups in Japan

[Calculation method] On-site inspection at waste disposal company facilities : Number of waste treatment sites where inspection was carried out on-site

Management of Chemical Substances

To respond appropriately to increasingly strict chemical substance regulations worldwide, we perform non-containment management for products and usage management within plants. For substances subject to the PRTR law, we are managing them appropriately by identifying the relevant amounts, including treatment, release, and transfer amounts.

(fiscal year)	2015	2016	2017	2018	2019
Amount of PRTR substances treated (tons)	863.8	856.2	862.7	920.0	765.7
Amount of PRTR substances released (tons)	140.6	141.2	136.0	132.3	88.1
Toluene (tons)	131.1	130.3	125.6	120.9	77.1
Xylene (tons)	3.2	3.1	3.2	2.9	1.6
Other (tons)	6.3	7.8	7.2	8.6	9.4

[Scope of tabulation] NGK SPARK PLUG CO., LTD. and Groups in Japan (with integrated certification)

Environmental Accounting

Environmental conservation cost

(Unit : million yen)

Classification		Major efforts	Investment		Expense	
			2018	2019	2018	2019
Costs within the business area	Pollution prevention cost	Air/water pollution prevention and noise reduction	95	624	699	644
	Global environmental conservation cost	Global warming prevention, energy conservation	50	70	521	229
	Resource circulation cost	Effective resource utilization, industrial waste treatment/disposal	81	55	744	318
	Sub-total		226	749	1,964	1,191
Upstream & downstream cost		Employee environmental education, EMS construction and operation	0	0	6	5
Management activity cost		Employee environmental education, EMS construction and operation	11	10	894	320
R&D cost		R&D of products promoting environment preservation	1,488	1,395	8,626	7,898
Social activity cost		Nature protection, afforestation, environmental ads	0	0	12	4
Environment damage correction cost		Repair of soil contamination, disrupted nature	0	0	0	0
Other costs		—	0	0	0	0
Total			1,726	2,153	11,502	9,417

*Any inconsistency between an aggregate of all itemized figures and a "Total" figure is due to rounding of fractions.
[Scope of tabulation] NGK SPARK PLUG CO., LTD. and Groups in Japan (with integrated certification)

Economic benefits associated with environmental conservation activities

(Unit : million yen)

Area of recognized effect		2018	2019
Revenue	Revenue generated from the recycling of waste generated in operations or used products	207.6	123.6
Cost saving	Energy cost saving achieved from energy conservation efforts	166.0	126.1
	Reduction of water expenses through water saving	6.1	2.1
	Waste disposal cost saving achieved by resource conservation and recycling efforts	9.1	0.8
Total		388.8	252.6

[Scope of tabulation] NGK SPARK PLUG CO., LTD. and Groups in Japan (with integrated certification)

Quantity of environmental conservation benefits

Effect measured in the business area	Types of effect	2018	2019	Difference from the previous fiscal year	
Effect measured with respect to resource input into operations	Energy consumption	Purchased electricity (GWh)	35,239	34,695	-544
		Gas (million m ³)	1,077	1,130	53
		LPG (million m ³)	6,954	6,669	-285
	Water consumption	Tap water (m ³)	708,464	731,407	22,943
		Well water (m ³)	421,390	363,704	- 57,686
	Amount of PRTR substances treated (tons)		920	764	- 156
Effect measured with respect to environmental load and waste from business activities	CO ₂ emission from energy consumption (tons)		251,549	249,023	-2,526
	Waste	Effectively used (tons)	11,376	11,161	-215
		Not effectively used (tons)	93	68	-25
	Amount of PRTR substances released into air and water (tons)		132.3	86.3	-46.0

[Scope of tabulation] NGK SPARK PLUG CO., LTD. and Groups in Japan (with integrated certification)

[Calculation method] Energy consumption · CO₂ emission from energy consumption : Excluding the amount used for and CO₂ emitted from the transportation activities

Global Human Resource Management

Status of employees

Human resources are the most important management resource. We promote the sustainable growth of the NGK SPARK PLUG Group by striving for human resources development that respects the diversity and individuality of our employees and by encouraging individual employees to reach their own full potential, to grow and to participate actively in a state of physical and mental health.

Total number of employees

(fiscal year)	2015	2016	2017	2018	2019
NGK SPARK PLUG Group (people)	14,524	14,926	15,322	15,994	16,430
NGK SPARK PLUG CO., LTD. (people)	5,829	5,719	5,851	5,863	5,883

[Calculation method] NGK SPARK PLUG Group : As of March 31 *Adopted IFRS for fiscal 2019 onwards
 NGK SPARK PLUG CO., LTD. : Number of employees as of March 31, excluding those temporarily transferred from the company and those taking a leave of absence, while including those temporarily transferred to the company, those reemployed after retirement, and contract employees

Number of temporary workers

(fiscal year)	2015	2016	2017	2018	2019
Temporary employees (people)	313	346	303	505	649

[Calculation method] As of March 31

Status of employees

(fiscal year)		2015	2016	2017	2018	2019
Average age	Men (aged)	38.4	38.6	38.6	39.0	39.7
	Women (aged)	35.5	35.9	35.9	36.9	37.6
	Total (aged)	37.9	38.2	38.2	38.6	39.3
No. of years of service	Men (years)	16.3	16.4	16.4	16.8	17.1
	Women (years)	14.9	15.2	15.2	16.1	16.4
	Total (years)	16.1	16.2	16.2	16.7	16.9
Average annual salary (yen)		6,607,006	6,767,466	6,570,683	6,912,014	6,759,462
Turnover rate	Total employee turnover rate (%)	2.52	2.57	2.06	3.13	3.73
	Voluntary employee turnover rate (%)	1.09	1.08	1.42	1.83	2.27

[Scope of tabulation] NGK SPARK PLUG CO., LTD.

[Calculation method] Average age/No. of years of service : Calculated based on the number of regular employees as of March 31

Average annual salary Including bonuses and extra wages

Total employee turnover rate : Calculated based on the number of employees who retired / quit the company

Voluntary employee turnover rate : Calculated based on the number of employees who quit the company for personal reasons

Employee engagement

(fiscal year)	2015	2016	2017	2018	2019
Rate of employees with high work satisfaction (%)	—	75.5	73.2	67.3	54.1
Response rate (%)	—	89.6	70.4	88.1	90.9

[Scope of tabulation] NGK SPARK PLUG CO., LTD. and Groups in Japan [Calculation method] 2016,2018,2019 : Targeted all employees

2017 : Targeted employees belonging to the business departments

Diversity

We consider diversity to be one of our most important management strategies as we believe that diversity and inclusion are essential for companies to attain sound growth and ensure happiness for all employees. We strive to promote diversity in order to utilize new values and ideas coming from an employee-friendly workplace that accepts different people regardless of their gender, age, disabilities or nationality.

	(fiscal year)	2015	2016	2017	2018	2019
Regular employees	Men (people)	4,786	4,641	4,701	4,730	4,784
	Women (people)	1,001	1,012	1,028	1,037	1,045
	Percentage of women (%)	17.3	17.9	17.9	18.0	17.9
Manager	Women (people)	8	10	12	15	18
	Percentage of women (%)	0.84	1.05	1.24	1.53	1.83
Supervisor	Women (people)	28	28	27	26	37
	Percentage of women (%)	2.87	2.77	2.49	2.28	2.94
Generalist (Classified, Considered)	Percentage of women (%)	14.2	14.2	14.7	14.8	15.4
Ratio of women, foreign nationals and career recruits in managerial positions (%)		9.9	10.7	11.7	12.5	13.6
Percentage of disabled employees (%)*		1.82	1.90	2.17	2.21	2.25
Reemployed (people)		229	251	223	204	190

[Scope of tabulation] NGK SPARK PLUG CO., LTD.

[Calculation method] Regular employees : As of March 31, excluding employees temporarily transferred to Group companies

Manager, Supervisor, Generalist : As of April 1, including employees temporarily transferred to Group companies

Percentage of Disabled Employees : As of March 31, including employees temporarily transferred to Group companies and the special subsidiary in Japan

Reemployed : As of March 31, including employees temporarily transferred to Group companies

*We aim to increase the "ratio of women, foreign nationals and career recruits in managerial positions" to 25% in fiscal 2030.

Work-life Balance

In order to nurture a corporate culture that helps diverse employees fully display their abilities, we are fostering work style reforms and supporting employees in keeping their work-life balance.

Maternity/child care/long-term nursing care leave

	(fiscal year)	2015	2016	2017	2018	2019
Employees who took maternity leave (%)		44	62	35	61	47
Employees who took child care leave	Men (people)	2	2	6	4	5
	Women (people)	46	56	42	46	53
Percentage of employees who returned to work after taking child care leave (%)		100	96	95	100	96
Users of the short working hour system for child care (people)		25	36	35	42	30
Employees who took nursing care leave (people)		2	1	1	2	3
Users of the short working hour system for nursing care (people)		0	0	0	0	1

[Scope of tabulation] NGK SPARK PLUG CO., LTD.

[Calculation method] Employees who took maternity leave : Number of employees whose maternity leave started in the fiscal year

Employees who took child care leave : Number of employees whose child care leave started in the fiscal year

Percentage of employees who returned to work after taking child care leave : Percentage of employees who returned to work among those whose child care leave period expired in the fiscal year

Users of the short working hour system for child care : Number of employees who became users of the system in the fiscal year

Employees who took nursing care leave : Number of employees whose nursing care leave started in the fiscal year

Users of the short working hour system for nursing care : Number of employees who became users of the system in the fiscal year

Working hours

(fiscal year)	2015	2016	2017	2018	2019
Prescribed working hours (hours/year and person)	1,899	1,899	1,899	1,899	1,899
Actual working hours (hours/year and person)	1,981	1,986	1,993	1,994	1,982
Average overtime working hours (hours/month)	20	20	21	22	19

[Scope of tabulation] NGK SPARK PLUG CO., LTD. [Calculation method] Excluding employees temporarily transferred to Group companies and those on leave

Paid holidays

(fiscal year)	2015	2016	2017	2018	2019
Paid holidays granted to employees (day(s))	19.19	19.23	19.31	19.63	—
Paid holidays taken by employees (day(s))	14.42	14.85	15.41	16.56	—
Rate of usage (%)	73.39	75.64	78.52	84.36	—

[Scope of tabulation] NGK SPARK PLUG CO., LTD.

[Calculation method] Calculated for a fiscal year from October to next September (example : fiscal 2018 was started in October 2018 and ended in September 2019), excluding employees temporarily transferred to Group companies and those on leave

Labor union

(fiscal year)	2015	2016	2017	2018	2019
NGK SPARK PLUG Group labor union participation rate (%)	83	84	84	84	83

[Scope of tabulation] 2015-2017 : NGK SPARK PLUG CO., LTD. 2018-2019 : NGK SPARK PLUG CO., LTD., Ceramic Censor, Nittoku Supertech Tounou and Nittoku Supertech WKS

[Calculation method] As of March 31

Human resource development

We conduct a range of educational and training activities in a planned manner to provide employees with learning and growth opportunities.

(fiscal year)	2015	2016	2017	2018	2019
Total hours of training (hours)	82,059	84,816	86,252	81,632	87,613

[Scope of tabulation] NGK SPARK PLUG CO., LTD. [Calculation method] Calculated for the training (level-specific, global, etc.) provided by the Strategic Human Resources Department by multiplying the number of hours with the number of trainees

Occupational Safety and Health

With a view to providing comfortable workplaces with zero occupational accidents, we have been conducting various safety activities for the prevention of accidents other than recurrence prevention. Aiming at the establishment of a safety culture from the viewpoint of “personnel,” “object,” and “mechanism,” we are taking the initiative to assign the first priority to safety.

(fiscal year)	2015	2016	2017	2018	2019
Total accident frequency rate	1.06	0.74	0.63	1.08	0.77
Frequency rate of accidents requiring leave from work	0.08	0.08	0.08	0.08	0.00
Employees	—	0.09	0.08	0.08	0.00
Temporary employees	—	0.00	1.20	0.00	0.00
Frequency rate of occupational diseases	0.00	0.00	0.00	0.00	0.00

[Scope of tabulation] NGK SPARK PLUG CO., LTD. (Including temporary employees)

[Calculation method] Total accident frequency rate : Total number of victims per 1 million working hours

Total accident frequency rate=Number of victims of all occupational accidents÷Total working hours×1million hours

Frequency rate of accidents requiring leave from work : Number of victims who took leave per 1million working hours

Frequency rate of accidents requiring leave from work=Number of victims of accidents requiring leave from work÷Total working hours×1million hours

Frequency rate of occupational diseases : Number of employees who took leave due to occupational diseases per 1million working hours

Frequency rate of occupational diseases=Number of employees who took leave due to occupational diseases÷Total working hours×1million hours

Social Contribution Activities

The NGK SPARK PLUG Group respects local culture and customs in our established sites of the respective regions in the world while engaging in smooth communication with local communities. As members of those communities, we aim to work together in building a comfortable society, while striving to participate in regional development, environmental preservation, and other activities that contribute to society.

(Unit : million yen)

Type of contribution	Total amount
Cash contributions	361.60
Time: employee volunteering during paid working hours	7.6
In-kind giving: product or services donations, projects / partnerships or similar	51.3
Management overheads	29.65

[Scope of tabulation] NGK SPARK PLUG Group

Communication with Stakeholders

To deepen mutual understanding, we are fostering dialogue with our stakeholders through various opportunities.

Stakeholder	Communication	Major activities in FY2019	Frequency & no. of participants per year
Shareholders and investors	We disclose information in compliance with the law and also disclose information promptly via the media and at our website.	● Organization of the ordinary general meeting of shareholders	June
		● Dialogue with institutional investors and securities analysts	336 times
		● Organization of briefings on our technologies for institutional investors and securities analysts	Not held
		● Organization of briefings on the company for personal investors	Three times (A total of 900 people)
		● Publication of the newsletters for shareholders	Once
		● Publication of an annual integrated report	Aug.
Customers	We offer information meaningful to customers at our website and through exhibitions so that they can purchase and use our products and services with peace of mind.	● Communication through sales activities	From time to time
		● Provision of information via the website (on products, events, etc.)	From time to time
		● Explanation about products and technologies at exhibitions	From time to time
		● Communication at venues of events, such as racing events	From time to time
Suppliers	We are working to build relationships of trust with suppliers as their sound partners and achieve growth together. To this end we conduct activities across the supply chain, such as holding briefing sessions on our corporate policies.	● Communication through daily procurement activities	From time to time
		● Organization of briefings on the corporate principles	May
		● Organization of seminars on practical issues	34 seminars
Local communities	We respect the local culture and customs at each of our bases located across the world and work for smooth communication with local communities. We also participate in various social contribution activities to help create a comfortable society as a corporate citizen.	● Communication through social meetings and events	From time to time
		● Participation in local events such as festivals	From time to time
		● Local cleanup activity	From time to time at each plant (A total of 931 people)
		● Environment-related plant tours	From time to time at each plant (A total of 867 people)
		● Environmental meetings	From time to time at each plant (A total of 302 people)
		● Communication through cultural and sport events	
		· 2020 NGK SPARK PLUG Suzuki 2&4 Race	Canceled due to the spread of the novel coronavirus
		· NGK SPARK PLUG FC Gifu football class for children	June
		· Musical for families held in the NTK Hall	Dec.
		· Marathon Festival Nagoya Aichi	Mar.
● Provision of information via the website (environmental information, etc.)	From time to time		
Employees	To maintain safe and sound workplaces and help employees work with vigor, the management team proactively visits work sites to have dialogues with on-site employees.	● Communication through daily operations and at workplaces	From time to time
		● Publication of an in-house magazine	Booklet : 8 times Website : from time to time
		● Organization of various labor-management meetings	From time to time
		● Utilization of the corporate ethics helpline (for employees)	80 calls received
		● Organization of various training sessions	A total of 8,192 participants
● Employee satisfaction survey	All employees, Nov.		

Corporate Governance

Board of Directors and Board of Auditors

	(fiscal year)	2015	2016	2017	2018	2019
Directors	Men (people)	9	9	9	9	10
	Women (people)	1	1	1	1	0
	Percentage of women (%)	10	10	10	10	0
	Outside directors (independent officers) (people)	3	3	3	3	3
	Percentage of outside directors (%)*	30	30	30	30	30
	Percentage of female and non-Japanese directors (%)*	10	10	10	10	10
	Average tenure (years)	—	5.4	5.4	3.2	3.8
Auditors	Men (people)	4	3	3	3	3
	Women (people)	0	1	1	1	1
	Percentage of women (%)	0	25	25	25	25
	Outside directors (independent officers)(people)	2	2	2	2	2
Board of directors	Frequency (times)	16	13	14	12	12
	Average attendance rate (%)	99.5	97.8	98.5	99.4	98.3
Board of auditors	Frequency (times)	14	13	14	13	13
	Average attendance rate (%)	98.2	94.2	96.4	100	100

[Scope of tabulation] NGK SPARK PLUG CO., LTD.
We aim to increase the rate of outside directors and the percentage of female and non-Japanese directors to at least one-third and 30% of the total number of directors, respectively, by fiscal 2030.

Remuneration for Director and Auditor

Officer remuneration is intended to raise awareness regarding the contribution to improving corporate performance and maximizing corporate value over the medium- to long-term and is based on a fundamental policy of officers sharing interests with shareholders through ownership of Company shares.

Remuneration and bonus paid to directors and auditors in fiscal 2019

	Total remuneration (million yen)	Total remuneration of compensation by type (million yen)			Number of eligible executives (number of people)
		Fixed remuneration	Performance-linked remuneration		
			Bonus	Stock compensation	
Directors (excluding outside directors)	476	334	90	52	8
Auditors (excluding outside auditors)	50	50	—	—	3
Outside directors	42	42	—	—	4
Outside auditors	28	28	—	—	2

*The amounts listed above include the amounts of compensation paid to three directors and one auditor who resigned following the end of the 118th Ordinary General Meeting of Shareholders (held on June 26, 2018).

*1 : The amount of compensation to be paid to directors has the following limits based on the resolution made at the 117th Ordinary General Meeting of Shareholders (held on June 29, 2017).

Total amount of compensation (excluding the total amount of bonuses): Up to 60 million yen a month

Total amount of bonuses: Up to 180 million yen a year

Also based on the resolution made at the 117th Ordinary General Meeting of Shareholders, performance-linked stock compensation of up to 1,000 million yen in total will be paid to directors and corporate officers over four fiscal years from April 1, 2017 to March 31, 2021.

*2 : The amount of compensation paid to auditors has the following limits based on the resolution made at the 106th Ordinary General Meeting of Shareholders (held on June 29, 2006):

Total amount of compensation (excluding total amount of bonuses): Up to 10 million yen a month

Total amount of bonuses: Up to 10 million yen a year

*3 : The amounts above include remuneration paid to one outside director who retired due to passing away on May 2, 2019 and one director and one auditor who resigned at the conclusion of 119th annual shareholders meeting (held on June 25, 2019).

*4 : "Bonus" and "Stock compensation" are the amounts recorded as expenses in fiscal 2019.

Compliance

In-house Reporting System

We have opened the “Corporate Ethics Helpline” as an in-house reporting system that encourages employees to consult regarding compliance. Regarding consultations and reports received, facts are investigated with discretion, so the reporting employee is not identified and does not feel uncomfortable, and if problems are confirmed, they are dealt with promptly.

(fiscal year)	2015	2016	2017	2018	2019
Consultation requests/ reports made internally (cases)	50	54	65	73	80

[Scope of tabulation] NGK SPARK PLUG Group [Calculation method] Number of cases of consultation requests/reports received through the Corporate Ethics Helpline

Political Donation

In order to maintain sound and normal relationships with the political circles, we ensure compliance with the Political Funds Control Act and will never make donations to individual politicians. In principle we will also make no donations to political parties and political fund-managing organizations.

(fiscal year)	2015	2016	2017	2018	2019
Political donations (cases)	0	0	0	0	0
Total amount (yen)	0	0	0	0	0

[Scope of tabulation] NGK SPARK PLUG CO., LTD.

R&D

By making use of optimal technologies and our past experiences, we are widely conducting R&D activities to propose new value to people across the world.

(fiscal year)	2015	2016	2017	2018	2019
R&D expenses (millions of yen)	23,123	23,416	25,283	28,071	28,315
Ratio of R&D expenses to sales (%)	6.03	6.28	6.17	6.60	6.64

Including expenses for improving existing products and for applied research as well as the development cost recognized as the cost of an intangible asset

Participation in Initiatives

United Nations Global Compact

NGK SPARK PLUG CO., LTD. Participated in United Nations Global Compact in November 2016. We will uphold ten principles consisted of four issues such as “Human rights, Labour, Environment, Anti-corruption” being advocated by the U.N. global compact as good members of society, and will make every effort to promote activities.



Task Force on Climate-related Financial Disclosures (TCFD)

NGK SPARK PLUG CO., LTD. has announced its endorsement of the recommendations of TCFD in July 2020. Based on the TCFD recommendations, we will assess and proactively disclose the financial impacts of climate-related risks and opportunities.



Social and Environmental Information Verification Report



No.1811003922

Independent Verification Report

To: NGK SPARK PLUG CO., LTD.

1. Objective and Scope

Japan Quality Assurance Organization (hereafter "JQA") was engaged by NGK SPARK PLUG CO., LTD. (hereafter "the Company") to provide an independent verification on "FY2019* CSR Data Calculation Report" (hereafter "the Report"). The content of our verification was to express our conclusion, based on our verification procedures, on whether the statement of information regarding GHG emissions, Energy consumption, Water consumption, Waste Amount, Lost Time Injury Frequency Rate (employees), Lost Time Injury Frequency Rate (temporary employees) and Occupational illness frequency rate (employees) in the Report was correctly measured and calculated, in accordance with the "Standard for Aggregating Rules of Environmental Performance Data (ESKW-027-1)", "Standard for calculating the Injury frequency rate (ZESAF-001)" and "Standard for calculating the occupational illness frequency rate" (hereafter "the Rules").

The purpose of the verification is to evaluate the Report objectively and to enhance the credibility of the Report.

*The fiscal year 2019 of the Company ended on March 31, 2020.

2. Procedures Performed

JQA conducted verification in accordance with "ISO 14064-3" for GHG Emissions and Energy consumption, and with "ISAE3000" for Water consumption, Waste Amount, Lost Time Injury Frequency Rate (employees), Lost Time Injury Frequency Rate (temporary employees) and Occupational illness frequency rate (employees), respectively. The scope of this verification assignment covers energy-derived CO2 emissions from Scope 1, 2 as GHG emissions, Energy consumption, Water consumption, Waste Amount, Lost Time Injury Frequency Rate (employees), Lost Time Injury Frequency Rate (temporary employees) and Occupational illness frequency rate (employees). The verification was conducted to a limited level of assurance and quantitative materiality was set at 5 percent each of the total emissions, total amount of Water consumption and frequency rates in the Report.

The organizational boundaries of this verification include the domestic and international Group sites (41 domestic sites and 26 international sites) on the Company and its group companies for GHG Emissions, Energy consumption, Water consumption and Waste Amount; and the Company only for Lost Time Injury Frequency Rates and Occupational illness frequency rate.

Our verification procedures included:

- Visiting three domestic sites: NGK SPARK PLUG CO., LTD. Komaki Plant, NTK CERAMIC CO., LTD. Komaki Plant and CS NAKASTUGAWA CO., LTD, selected by the Company.
- On-site assessment to check the report scope and boundaries; monitoring points of activity data; monitoring and calculation system; and activity data. The number and location of sampling sites for on-site assessment were selected by the Company.
- Visiting NGK SPARK PLUG CO., LTD. Komaki Plant for validation of the Rules and verification of Occupational illness frequency rate and Lost Time Injury Frequency Rate.

3. Conclusion

Based on the procedures described above, nothing has come to our attention that caused us to believe that the statement of the information regarding the Company's FY2019 GHG emissions, Energy consumption, Water consumption, Waste Amount and Lost Time Injury Frequency Rates and Occupational illness frequency rate in the Report is not materially correct, or has not been prepared in accordance with the Rules.

4. Consideration

The Company was responsible for preparing the Report, and JQA's responsibility was to conduct verification of GHG emissions, Energy consumption, Water consumption, Waste Amount, Lost Time Injury Frequency Rates and Occupational illness frequency rate in the Report only. There is no conflict of interest between the Company and JQA.

Sumio Asada, Board Director

For and on behalf of Japan Quality Assurance Organization

1-25, Kandasudacho, Chiyoda-ku, Tokyo, Japan

July 31, 2020



NGK SPARK PLUG CO., LTD.

14-18 Takatsuji-cho, Mizuho-ku, Nagoya 467-8525

<https://www.ngkntk.co.jp/>

Public Relations Dept., Corporate Strategy Gr.

Phone: 81-52-872-5896 Fax: 81-52-872-5951