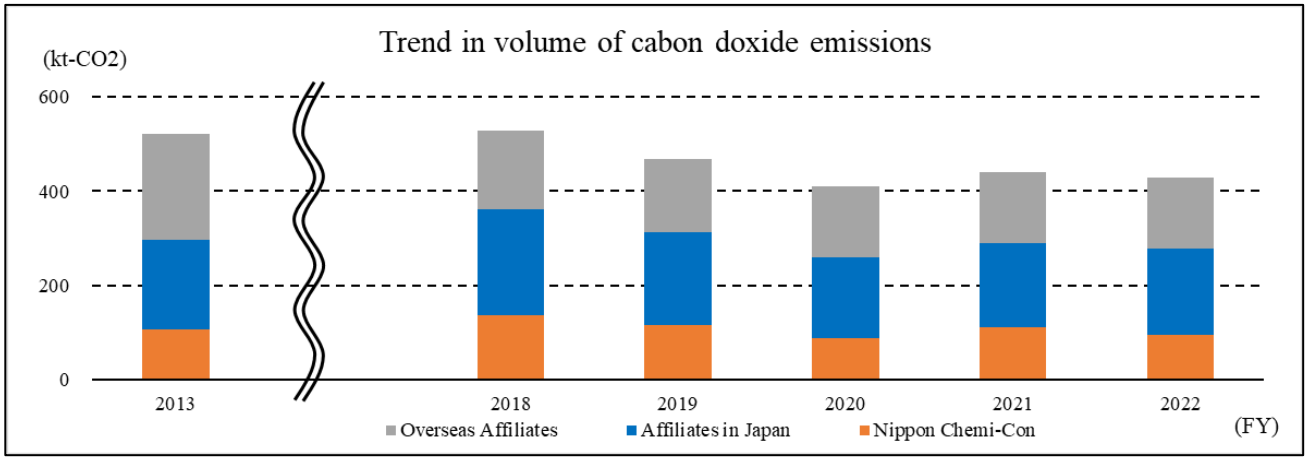
Energy conservation

The Nippon Chemi-Con Group has the target of 1% and higher per unit of improvement rate a year based on “Carbon Neutrality Action Plan Phase II” set by electrical and electronics industries from FY2021. To realize carbon neutrality by 2050, we will pursue a reduction of approximately 46% for CO_2 emissions caused by our production operations in FY2030 on a FY2013 basis. In addition, activities promoting mainly through the Energy Conservation Working Group, which is composed of the Group's energy management managers.

1. Trend in volume of carbon dioxide emissions by Nippon Chemi-Con Group (Unit: t-CO_2)

(FY)	2017	2018	2019	2020	2021	2022
Nippon Chemi-Con Group	571,346	527,198	469,062	411,936	439,839	428,126
Japan	380,583	361,675	311,990	259,604	289,251	278,260
Parent Company (head office and manufacturing bases)	134,448	136,070	116,894	116,894	110,530	95,381
Affiliates in Japan (manufacturing bases)	246,135	225,605	195,096	195,096	178,721	182,879
Overseas Affiliates (manufacturing bases excluding Samyoung Electronics and Qingdao Samyoung Electronics)	190,764	165,523	157,072	152,332	150,588	149,866

(Calculated by CO_2 emissions coefficient after adjustment)

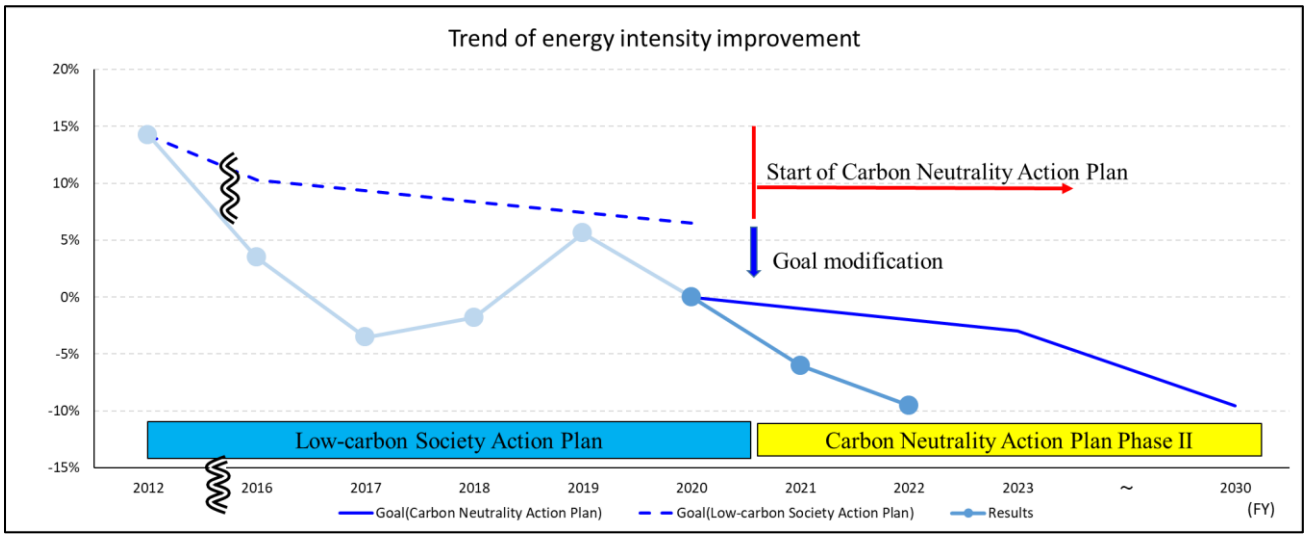


2. Trend of energy intensity improvement

[Manufacturing bases in Japan and overseas (excluding Samyoung Electronics and Qingdao Samyoung Electronics]

(Unit: %)

(FY)	2012	2017	2018	2019	2020	2021	2022
Rate of based year FY 2020	14.2	-3.5	-1.8	5.6	0.0	-6.0	-9.5



3. Investigation of GHG emission for Scope 3

We regard the reduction of carbon dioxide emissions as an important theme, and we are also conducting a survey in Scope 3 as an indirect emission.

[Fuel and energy-related activities]

(Unit: t-CO_2)

The scope of the calculation has been expanded to include upstream energy used within the Group in FY2022.

(FY)	2017	2018	2019	2020	2021	2022
Category3, Scope3	-	-	-	-	-	70,781

* Scope: Overseas manufacturing bases (excluding Samyoung Electronics and Qingdao Samyoung Electronics), manufacturing bases in Japan and parent company (head office).

[Upstream Transportation and Distribution]

(Unit: t-CO_2)

(FY)	2017	2018	2019	2020	2021	2022
Category4, Scope3	512	529	434	367	467	419

* Scope: Main materials in Japan

[Waste Generated in Operations]

(Unit: t-CO_2)

The scope of the calculation has been expanded to include the Group's waste management activities in FY2022.

(FY)		2017	2018	2019	2020	2021	2022
Category5, Scope3	Transportation Scope:Parent company(head office)and manufacturing bases in Japan	356	415	314	307	305	-
	Total Scope: Overseas manufacturing bases (excluding Samyoung Electronics and Qingdao Samyoung Electronics), manufacturing bases in Japan and parent company (head office).	-	-	-	-	-	2,060

[Business Travel]

(Unit: t-CO_2)

(FY)	2017	2018	2019	2020	2021	2022
Category6, Scope3	12	12	12	12	11	11

* Scope: Parent company (head office)

[Employee commuting]

(Unit: t-CO_2)

(FY)	2017	2018	2019	2020	2021	2022
Category7, Scope3	1,268	1,259	1,196	1,212	1,133	1,100

* Scope: Parent company (head office) and manufacturing bases in Japan

[Operation of upstream leased assets in Nippon Chemi-Con Group]

(Unit: t-CO_2)

(FY)	2017	2018	2019	2020	2021	2022
Category 8, Scope3	0	0	0	0	0	0

* Scope: Overseas manufacturing bases (excluding Samyoung Electronics and Qingdao Samyoung Electronics), manufacturing bases in Japan and parent company (head office).

[Downstream Transportation and Distribution]

(Unit: t-CO_2)

(FY)	2017	2018	2019	2020	2021	2022
Category 9, Scope3	1,678	1,918	1,578	1,603	1,780	1,506

* Scope: Parent company (head office) and manufacturing bases in Japan

[Use of sold products]

(Unit: t-CO_2)

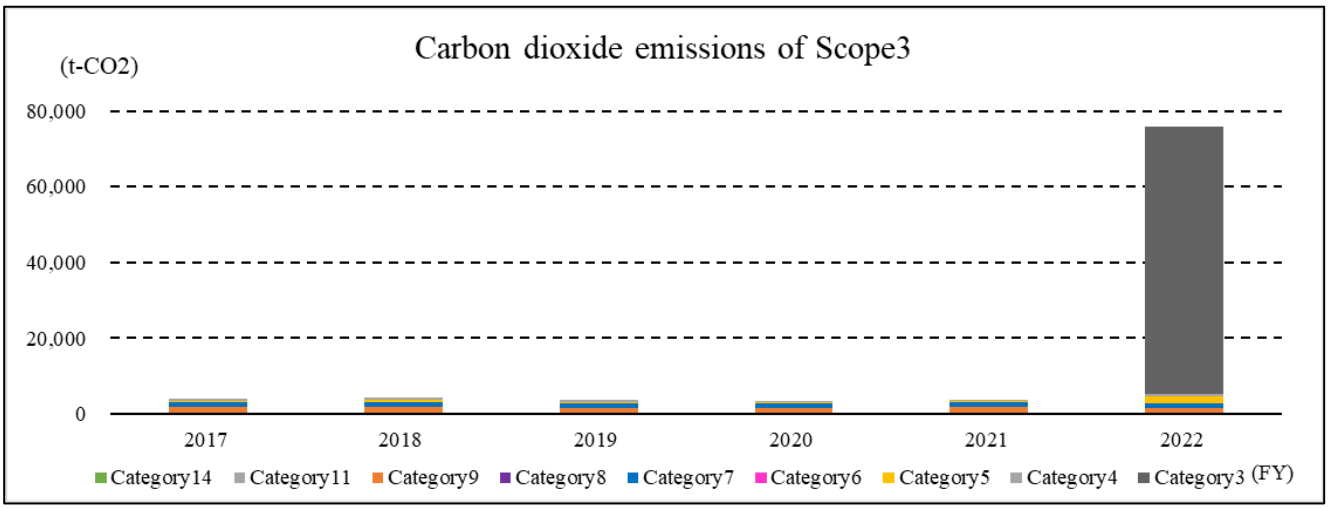
(FY)	2017	2018	2019	2020	2021	2022
Category 11, Scope3	0	0	0	0	0	0

* Scope: Overseas manufacturing bases (excluding Samyoung Electronics and Qingdao Samyoung Electronics), manufacturing bases in Japan and parent company (head office).

[Franchises]

(Unit: t-CO_2)

(FY)		2017	2018	2019	2020	2021	2022
Category 14, Scope3	Japan	62	62	59	60	60	54
	Overseas	881	895	850	861	806	782



* For Scope 3, the capture rate has been increasing every year, hence the CO_2 emission figures.

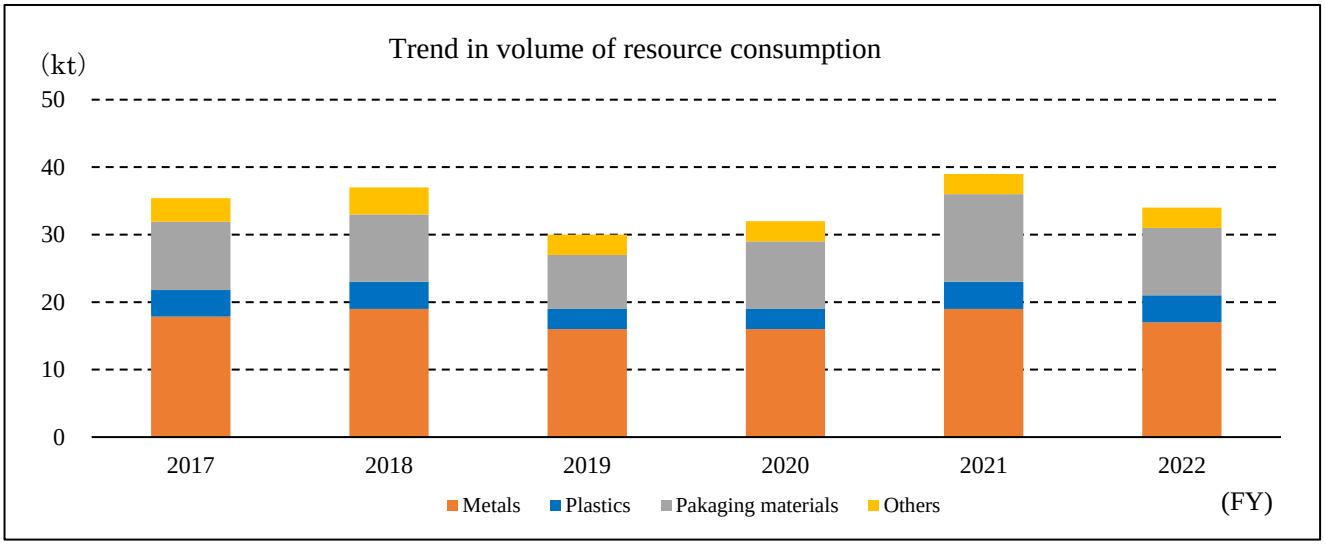
Resource conservation

In the manufacturing activities of industries, the resources are essential element. Efficient use of such resources will protect global environment and ecology. We encourage the “3R,” recycling, reusing, and reducing activities in order to contribute to the preservation of the environment.

1. Trend in volume of resources consumed by Nippon Chemi-Con Group (Unit: t)

(FY)	2017	2018	2019	2020	2021	2022
Metals	17,865	18,554	15,620	15,504	19,375	17,067
Plastics	3,928	4,090	3,147	3,523	3,955	3,911
Packaging materials	10,136	10,371	8,365	10,120	12,544	10,323
Others	3,470	3,597	2,946	2,925	3,159	3,140
Amount	35,398	36,612	30,078	32,073	39,033	34,441

* Scope: Manufacturing bases in Japan and overseas



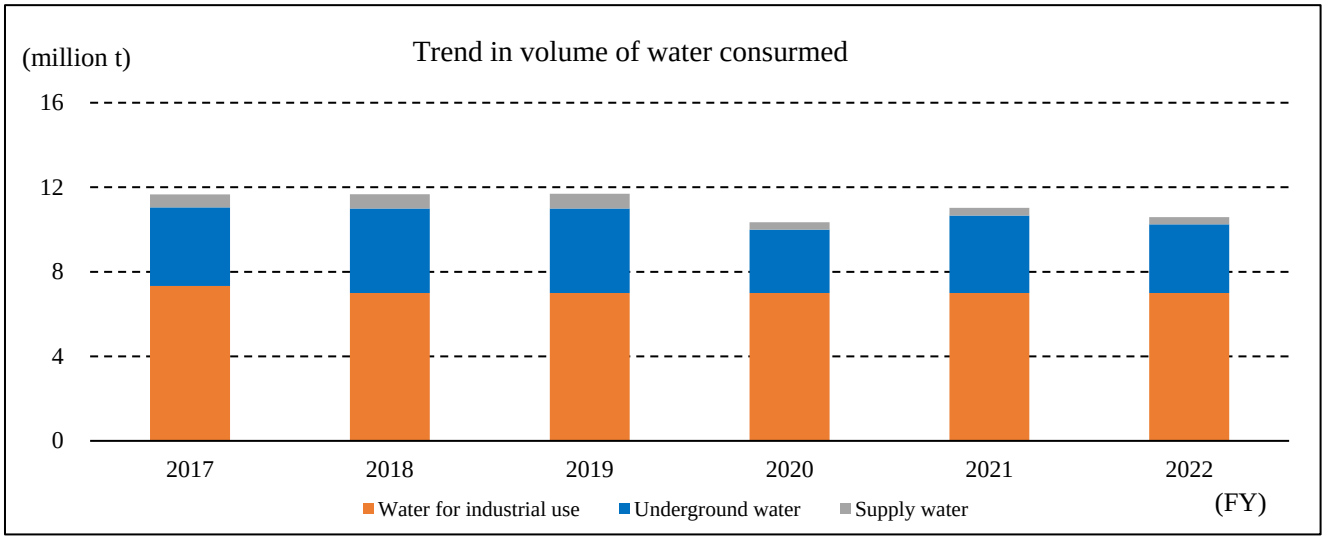
* Scope: Overseas manufacturing bases (excluding Samyoung Electronics and Qingdao Samyoung Electronics), manufacturing bases in Japan and parent company (head office).

2. Trend in volume of water consumed by Nippon Chemi-Con Group.

(Unit: kt)

(FY)		2017	2018	2019	2020	2021	2022
Water consumed	Water for industrial use	7,332	7,234	7,238	7,131	7,186	7,022
	Underground water	3,714	4,015	3,831	3,169	3,658	3,249
	Supply water	619	674	690	346	368	336
	Amount	11,665	11,923	11,759	10,647	11,211	10,607
Water discharge		9,535	10,120	9,714	9,105	9,316	8,917

* Scope: Manufacturing bases in Japan and overseas (excluding Samyoung Electronics and Qingdao Samyoung Electronics), head office



* Scope: Overseas manufacturing bases (excluding Samyoung Electronics and Qingdao Samyoung Electronics), manufacturing bases in Japan and parent company (head office).

[Trend in water consumed volume per unit of production]

(Unit: kt / million JPY)

(FY)	2017	2018	2019	2020	2021	2022
Japan	135	134	153	145	140	119
Overseas	10	11	14	11	9	8

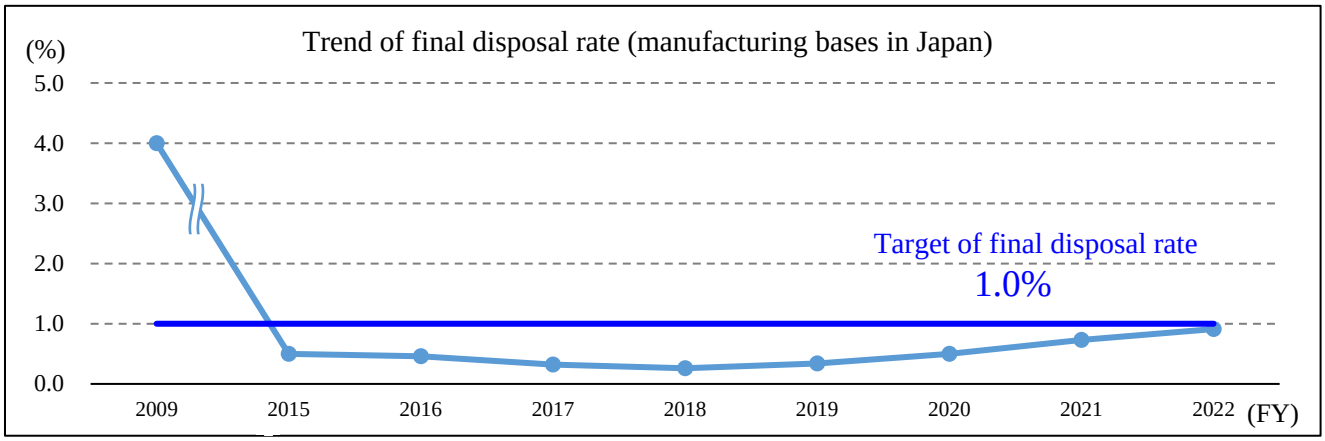
Waste Reduction

The Nippon Chemi-Con Group has addressed activities for resource recycling and reduction in landfill disposal volumes by reducing the amount of industrial waste generated. We further promote 3R, effective utilization and recycling of resources to reduce wastes including plastic waste and improve the final disposal rate.

1. Trend of final disposal rate (manufacturing bases in Japan)

(Unit: %)

(FY)	2017	2018	2019	2020	2021	2022
Final disposal rate	0.3	0.3	0.3	0.5	0.7	0.9



2. Trends in waste generated

(Unit: t)

	(FY)	2017	2018	2019	2020	2021	2022
Total waste generated	manufacturing bases in Japan	60,014	67,417	56,389	54,776	58,309	50,723
	Overseas Affiliates (manufacturing bases excluding Samyoung Electronics and Qingdao Samyoung Electronics)	6,842	6,646	6,580	6,284	6,242	6,409
	Total	66,856	74,063	62,969	61,060	64,551	57,132
Total waste recycled	manufacturing bases in Japan	59,146	66,551	55,556	53,985	57,455	49,887
	Overseas Affiliates (manufacturing bases excluding Samyoung Electronics and Qingdao Samyoung Electronics)	342	1,046	658	496	1,070	318
	Total	59,488	67,597	56,214	54,481	58,525	50,205
final disposal volume	manufacturing bases in Japan	193	180	189	271	426	464
	Overseas Affiliates (manufacturing bases excluding Samyoung Electronics and Qingdao Samyoung Electronics)	6,500	5,600	5,922	5,788	5,172	6,091
	Total	6,693	5,780	6,111	6,059	5,598	6,555

Chemical Management

We, Nippon Chemi-Con Group, proper manage of chemical substances and every year, we inform the report for below the substances following on Japanese PRTR (Pollutant Release and Transfer Register).

1. Outline of the reports for Japanese PRTR in FY2021

(Unit: kg)

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Class I designated chemical substances	Cabinet Order Number	Release		Transfer		Amount of release	Amount of transfer
		Released into the atmosphere	Released into public water areas	Transferred to a sewage system	Transferred outside the besiness site		
Antimony and its compounds	31	0	0	0	12	0	12
Xylene	80	23	0	0	0	23	0
Cobalt and its compounds	132	0	0	0	0	0	0
Triethylamine	277	0	0	2	1,540	0	1,542
1,2,4-trimethylbenzene	296	27	0	0	0	27	0
Toluene	300	3,600	0	0	900	3,600	900
Boron compounds	405	313	12,888	33	7,758	13,201	7,791
Manganese and its compounds	412	0	0	0	0	0	0
Methylnaphthalene	438	119	0	0	0	119	0

2. Trend of amount of release and transfer concerning Japanese PRTR.

(Unit:t)

(FY)	2017	2018	2019	2020	2021	2022
Transfer	20	20	16	9	9	10
Release	20	19	18	18	18	17

3. Consume of chemical substances

[Amount of Entire Nippon Chemi-Con Group]

(Unit:t)

(FY)	2017	2018	2019	2020	2021	2022
Consume of chemical substances	5,953	5,974	5,145	5,434	6,344	7,624

[Consume of chemical substances per production]

(Unit:t / million JPY)

(FY)	2017	2018	2019	2020	2021	2022
Japan	1.29	1.39	1.19	1.36	1.41	1.38
Overseas	0.11	0.11	0.11	0.11	0.11	0.11

Environmental Accounting

Our Group is engaged in activities to improve and prevent environmental accidents by investing in environmental measures such as energy conservation, resource conservation, keeping legal compliance, and preventing from environmental risk.

(Unit: million yen)

(FY)	2017	2018	2019	2020	2021	2022
Investment and measures evaluated	45	49	39	50	68	53
Environment-related amount of the above investment	132	644	356	71	210	325
Direct Effect	333	359	127	44	48	62
Indirect Effect	9	9	12	4	3	4

Others (Environmental load)

We prepare and disclose standard data on the environmental load of electrolytic capacitors from a Life Cycle Assessment perspective. The data is available on the website of the Japan Electronics and Information Technology Industries Association (JEITA).

URL: https://home.jeita.or.jp/cgi-bin/page/detail.cgi?n=1288&ca=21

Nippon Chemi-Con Activity for SDGs（Sustainable Development Goals）

Goal		Implementation content
Goal 1 （No Poverty）	End poverty in all its forms everywhere。	－
Goal 2 （Zero hunger）	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	－
Goal 3 （Good health and well-being）	Ensure healthy lives and promote well-being for all at all ages	Healthy Company (Chemi-Con Report)
Goal 4 （Quality education）	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	－
Goal 5 （Gender equality）	Achieve gender equality and empower all women and girls	Human Resources Investment（Chemi-Con Report） Business Conduct Guidelines (Official site)
Goal 6 （Clean water and sanitation）	Ensure availability and sustainable management of water and sanitation for all	Environment Management (Chemi-Con Report) Environmental Data (This document)
Goal 7 （Affordable and clean energy）	Ensure access to affordable, reliable, sustainable and modern energy for all	What we offer (Chemi-Con Report) Environment Management(Chemi-Con Report) Environmental Data (This document)
Goal 8 （decent work and economic growth）	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Human Resources Investment（Chemi-Con Report）
Goal 9 （industry, innovation and infrastructure）	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	－
Goal 10 （Reduced inequalities）	Reduce inequality within and among countries	－
Goal 11 （Sustainable cities and communities）	Make cities and human settlements inclusive, safe, resilient and sustainable	－
Goal 12 （Responsible consumption and productions）	Ensure sustainable consumption and production patterns	Environment Management(Chemi-Con Report） Environmental data (This document)
Goal 13 （Climate action）	Take urgent action to combat climate change and its impacts	Environment Management(Chemi-Con Report） Environmental data (This document)
Goal 14 （Life below water）	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Environment Volunteer Activities (Chemi-Con Report
Goal 14 （Life below water）	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Environment management（Chemi-Con Report） Business Conduct Guidelines (Official site) Environmental data (This document)

Goal		Implementation content
Goal 16 (Peace, justice and strong institutions) 	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Business Conduct Guidelines, responsible minerals procurement, and Participation in the UN Global Compact. (Official site)
Goal 17 (Partnership for the goals) 	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	Participation in the UN Global Compact (Official site)

CHEMI-CON REPORT:

https://www.chemi-con.co.jp/en/company/ir/library/chemi-con-report/

Environmental data:

https://www.chemi-con.co.jp/company/sustainability/environment/data.html

Nippon Chemi-Con Group Business Conduct Guidelines:

https://www.chemi-con.co.jp/en/company/sustainability/governance/compliance/charter.html

Responsible minerals procurement:

https://www.chemi-con.co.jp/en/company/sustainability/society/procurement/minerals.html

Participation in the UN Global Compact:

https://www.chemi-con.co.jp/en/company/sustainability/philosophy/ungc.html