

## Environmental Management

### Nippon Chemi-Con's Environmental Policy (Summary)

- Structures organization that operates at every level for conserving the global environment
- Sets environmental goals and targets, Improves environmental performances, Continuous improvements of EMS
- Considers biodiversity
- Observes all environmental laws, regulations, agreements, and internal standards
- Promotes Energy conservation, Proper control of Chemical substances in the products, Effective use of resources, Waste reduction
- Promotes the development and marketing of products that have a less environmental loads
- Educates and enlightens our entire workforce
- Prevents the environmental risks, and maintains management systems that minimize the impacts from the risks such as climate changes
- Releases information to the public positively, and promotes sufficient communication with the local community and stakeholders

### Compliance to the Laws and Significant accidents occurrence status

In corresponding to the laws and regulations, depending on regulation parameters, Nippon Chemi-Con Group sets stricter independent standard value for management, and all legal standards are observed.

No significant accident occurred that impact the environment.

### <Activities results>

#### Total volume of carbon dioxide emissions and breakdown

Fiscal Year	2013	2014	2015	2016	2017
Purchased Electric Power	471,148	483,070	475,603	489,601	518,243
A-grade Heavy oil	21,593	23,921	23,446	27,127	29,378
Kerosene	1,551	1,489	1,507	1,581	1,799
City Gas	23,249	23,449	22,295	17,587	18,463
Gasoline	361	351	325	310	304
LPG	343	340	308	304	366
LNG	490	382	510	0	0
Gas oil	79	106	155	65	233
Industrial steam	2,532	2,557	2,465	2,430	2,561
Waste Materials – Oil, Plastics	0	0	0	0	0
Waste Materials – Paper, Wood	0	0	0	0	0
Total	521,346	535,665	526,614	539,005	571,347

Notes:

1. Energy-CO<sub>2</sub> conversion factor used by the sites outside Japan is reappraised from 2014.
2. Amount of energy-origin CO<sub>2</sub> emissions is calculated by using emission factor (adjusted emission factor) released from Federation of Electric Power Companies.

### Environmental Activities

Energy conservation



The Nippon Chemi-Con group has the target of 1% and higher per unit of

improvement rate a year based on the Low-carbon society action Plan of Japanese 4 Industrial Associations from FY 2013, and we are promoting activities of the energy conservation working groups that are organized by the employees in charge of energy.

#### <Mid-term target>

In light of a "the Low-carbon society Action Plan" by the industrial associations:

Toward 2020  
Improvement target in energy consumption per unit

Annual average : 1% and higher

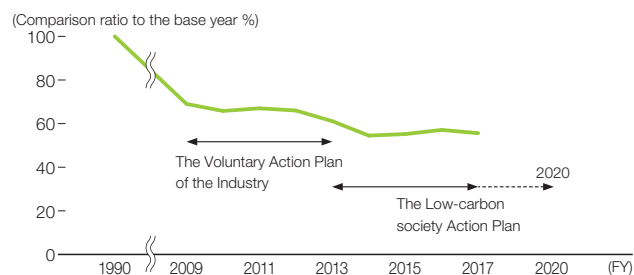
#### <Long-term target>

In light of a common target set by the industrial associations:

Toward 2030  
Improvement target in energy consumption per unit

Annual average : 1% and higher

### Trends in volume of carbon dioxide emissions and unit energy consumption (sites in Japan)



**Resource conservation**



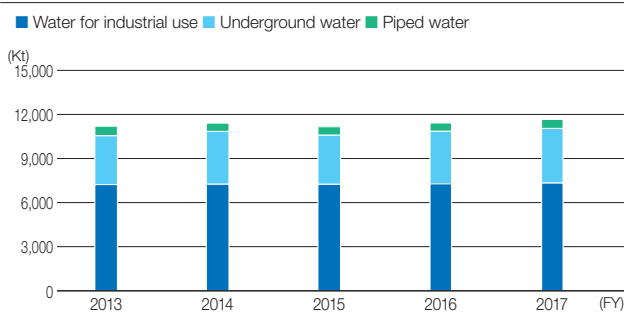
In the manufacturing activities of industries, the resources are essential

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

Trends in volume of resources consumed by entire Nippon Chemi-Con Group



Trends in volume of water consumed by entire Nippon Chemi-Con Group



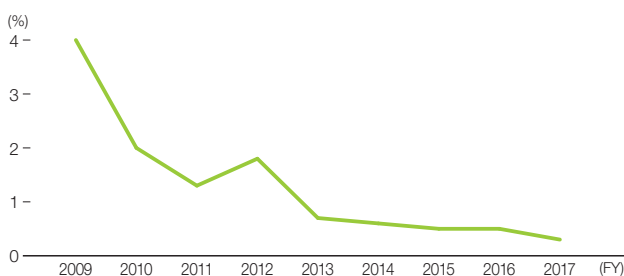
**Waste reduction**



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 and improve the final disposal rate.

Trends of final disposing rate (sites in Japan)



**Biodiversity Initiatives**



In the Nippon Chemi-Con Group's activities to conserve biodiversity, we will take actions for each of the three

- 1. [Impact from procurement of raw materials] In cooperation with our suppliers, we share views and mutual understanding concerning biodiversity, and move continuously ahead with activities.
- 2. [Impact on ecosystems caused by manufacturing] Our manufacturing processes use energy and resources, and they emit CO<sub>2</sub>, waste water and other emissions. As this is an area where our Group's business activities directly have an impact, effective and continuous activities are ongoing.
- 3. [Impact on biodiversity due to changes in environments surrounding our workplaces caused by our use of land] Consideration to local environment and surrounding ecosystem by securing green space in our premises and the social contribution activities.

Biodiversity offers indispensable and vital bounties (ecosystem services) to all of humanity. The activities that we are able to perform are steady and modest ones, we think. Yet we believe that each workplace employing its ingenuity, and continuing with what small activities it can accomplish, is a very significant thing. We will roll out such steady and continuous activities.



◀ Nippon Chemi-Con Corp. Niigata Plant  
Birdhouse placed in the premises to protect wild birds, and the “Visitor.”



▶ Chemi-Con Iwate Corp.  
A water quality analysis of the spring water “Suzu” which exists nearby the site. Analysis is conducted every year to monitor deterioration with age.



◀ Chemi-Con Fukushima Corp. Kitakata Plant  
Protection of Liliun rubellum (red list)  
A flower bed is set in the premises for raise.

• For more information, please see the website below.  
<http://www.chemi-con.co.jp/e/env/index.html>