



HODOGAYA CHEMICAL CO., LTD.

2023-2024

Hodogaya Chemical Group's Sustainability



Basic Approach

The Hodogaya Chemical Group actively promotes sustainability activities based on the concept of balancing the pursuit of economic value and solutions to social issues and providing value to all stakeholders to fulfill its responsibility to realize a sustainable world and society in the medium- to long-term in line with the PURPOSE (Management Philosophy) and VISION (Target Corporate Image).

Philosophy Structure



Promotion Structure



External Evaluation

FTSE Blossom Japan Sector Relative Index constituent



**FTSE Blossom
Japan Sector
Relative Index**

FTSE Russell confirms that Hodogaya Chemical Co., Ltd. has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Sector Relative Index. The FTSE Blossom Japan Sector Relative Index is used by a wide variety of market participants to create and assess responsible investment funds and other products.

Introduction

In response to the growing social demand to tackle environmental issues, we recognize that our environmental initiatives are directly linked to our sustainability as the Hodogaya Chemical Group is a business that handles chemicals. As a chemical manufacturer closely involved in CO₂ emissions, we have continued our efforts to reduce CO₂ emissions for many years. As a result, **we have reduced our CO₂ emissions to one-tenth of the levels in the 1990s, mainly by reorganizing our business portfolio.**

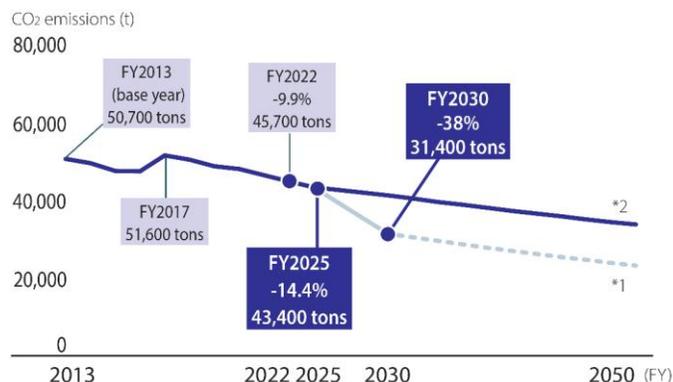
Disclosure of Information Related to Climate Change Based on TCFD

As a chemical company, Hodogaya Chemical is resolutely confronting climate change in accordance with the guidance by the TCFD, while proactively striving for information disclosure.



Responding To Climate Change

• Roadmap for reducing CO₂ emissions



*1 The dotted line after FY2030 is an unconfirmed value.

*2 The solid line after FY2025 is the expected decrease of 1% from the previous year.

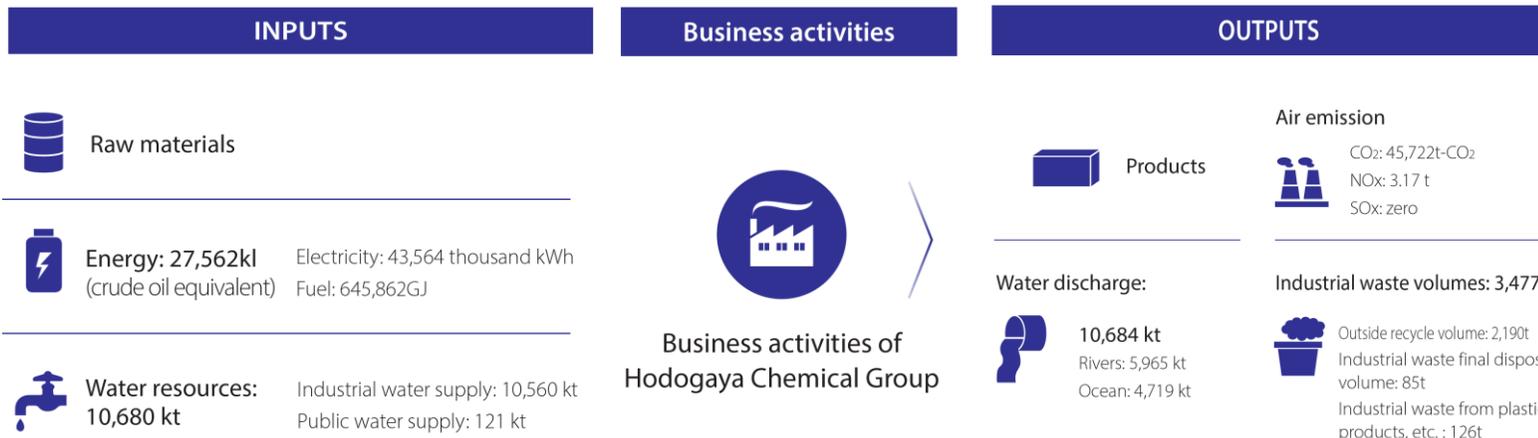
		2030 Toward achieving future goals	2050 Development of hydrogen society and challenge to carbon neutrality
Promotion of technological innovation	Process	<ul style="list-style-type: none"> Efforts to save energy <ul style="list-style-type: none"> Promotion of high efficiency through process improvement Promotion of waste heat recovery (heat pump) 	<ul style="list-style-type: none"> Study of hydrogen plant CO₂ recovery and use External procurement of green hydrogen
Emissions from own production activities (Scope 1)	Steam boiler	<ul style="list-style-type: none"> Efforts to save energy <ul style="list-style-type: none"> Active use of waste heat 	<ul style="list-style-type: none"> Improvement of electrification rate of heat source External procurement of green hydrogen Fuel conversion (LNG → hydrogen) <ul style="list-style-type: none"> Hydrogen-fired boilers introduced at all plants Introduction of cogeneration (hydrogen mixture → hydrogen-only combustion)
Expansion of use of renewable energy	Electricity	<ul style="list-style-type: none"> Efforts to create energy <ul style="list-style-type: none"> Introduction of renewable energy Efforts to save energy <ul style="list-style-type: none"> Promotion of high efficiency 	
Externally purchased energy (Scope 2)	Electricity	<ul style="list-style-type: none"> Gradual switch to CO₂-free power sources using renewable energy 	
Utilizing the ICP system	-	<ul style="list-style-type: none"> Promoting ICP system Continue switching to LED lighting equipment Continue to introduce top-runner equipment Reduction of heat loss through appropriate management of heat insulating materials and traps 	
Daily improvement through energy saving	-	<ul style="list-style-type: none"> Efficient operation 	

Environmental Protection

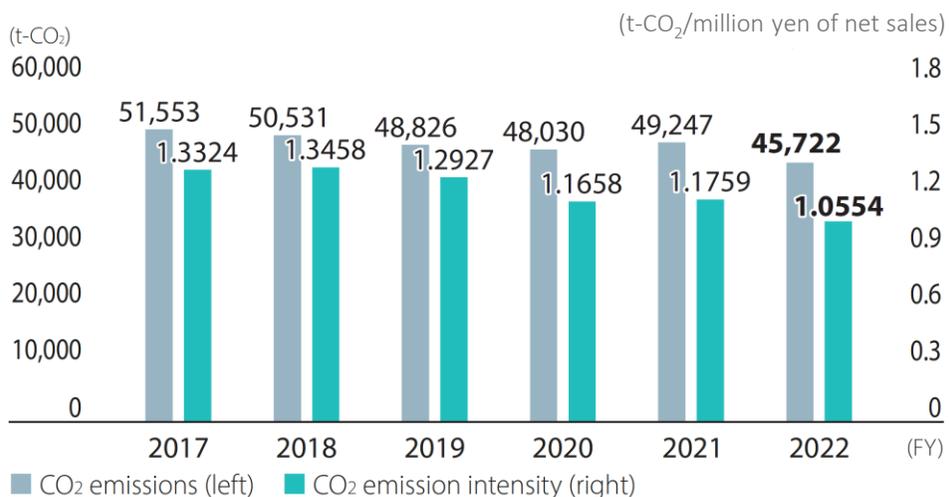
ISO14001 : 2015 Environmental Management System



Hodogaya Chemical Group Material Flow

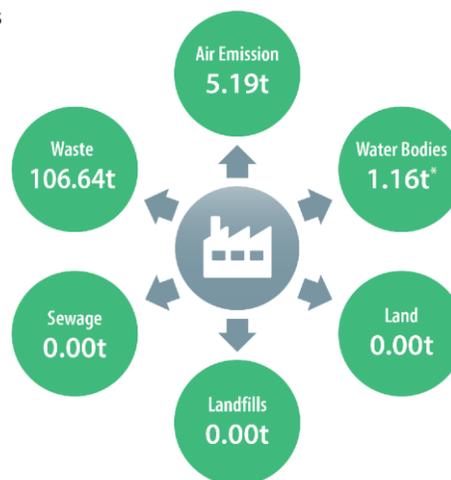


CO₂ Emissions, CO₂ Emission Intensity (Japan)



PRTR (Pollutant Release and Transfer Resister)

FY2022 release amounts and transfer amounts of PRTR listed substances



*Of which 1.15 tons have been sent to the adjacent wastewater treatment facility and released into the public water bodies after being treated.

Environmentally Friendly Products, Technologies, And Services

- Natural food dyes
- Hydrogen peroxide
- Bio-PTG (Polymer materials)
- Peracetic acid formulation
- ODI (Phosgene derivative)
- Oxygen supply material for agriculture



Collaborative Value Creation With Stakeholders



In addition to its shareholders, investors, customers, partner companies, personnel, local communities and society, the Hodogaya Chemical Group considers the global environment as one of its stakeholders. We are engaging in a variety of initiatives to promote collaborative creation of value with all stakeholders, which we recognize is indispensable for corporate activities based on our management philosophy as well as contributions to the resolution of social issues.

FY 2025 management targets

Non-financial targets	
CO ₂ emissions (CO ₂ emission intensity)	43,400 tons (0.868t-CO ₂ /million JPY of net sales)
Energy intensity	0.606kl/million JPY of net sales
Industrial waste volumes	Same level or less than previous FY

Environmental Data

	FY2018	FY2019	FY2020	FY2021	FY2022
Energy consumption (kl)	28,129	27,440	27,312	29,215	27,562
Energy intensity (kl/millions of yen in sales)	0.7491	0.7265	0.6629	0.6976	0.6362
Greenhouse gas emissions					
Greenhouse gas emissions Scope 1 (t-CO ₂)	25,794	24,999	24,729	26,093	25,064
Greenhouse gas emissions Scope 2 (t-CO ₂)	24,737	23,827	23,301	23,154	20,658
Scope 1 + Scope 2 (t-CO ₂)	50,531	48,826	48,030	49,247	45,722
Greenhouse gas emission intensity (t-CO ₂ /millions of yen in sales)	1.3458	1.2927	1.1658	1.1759	1.0554
Prevention of air pollution					
SOx (t)	0	0	0	0	0
NOx (t)	4.92	4.72	4.99	4.94	3.17
Dust emissions (t)	0.08	0.04	0.03	0.02	0.00
Prevention of water pollution					
Water usage (kt)	10,505	10,334	10,552	10,781	10,680
Water discharge volume (kt)	10,162	9,858	10,130	10,643	10,684
COD(chemical oxygen demand)emissions (t)	54.3	46.3	54.4	50.8	64.2
Industrial waste					
Industrial waste volumes (t)	2,452	2,753	3,017	2,746	3,477
Industrial waste final disposal volume (t)	430	257	200	52	85

Details can be found on our website. <https://www.hodogaya.co.jp/english/>

