

ECAP28

October 25, 2022

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Section. **1** **Grand design toward achieving
carbon neutrality**

Track record of our efforts to address climate change

We have taken the initiative to address climate change by establishing dedicated organizations, declaring our support for TCFD and acquiring SBT certification, among other things

Milestones in Japan and globally		Sumitomo Chemical's initiatives	
1997	● Kyoto Protocol ratified		
2000		● Established the Responsible Care Office	
2005	● Kyoto Protocol put in force		
2010		● Established the Energy & Climate Change Office	
2016	● Paris Agreement put in force	● Started Sumika Sustainable Solutions	
2017	● Support for TCFD Recommendations announced	● Declared our support of the TCFD Recommendations	At the time only 2 Japanese companies had signed on. Now there are 590 organizations.
2018		● Recognized by the Science Based Targets (2.0°C Target)	First globally for a diversified chemicals company
2020	● Japanese government's Carbon Neutral Declaration		
2021		● Established the Carbon Neutral Strategy Council and the Carbon Neutral Strategy Cross-Functional Team	
		● Established the Business Development Office for a Circular System for Plastics	
		● Recognized by the Science Based Targets (WB2.0°C Target)	

Sumitomo Chemical aims to become carbon neutral by 2050

Obligations

Approach zero greenhouse gas
emissions for the Sumitomo
Chemical Group

Contributions

Reduce global greenhouse gas
emissions through our group's
products and technologies

Fulfill both obligations and
contributions to strive to become carbon neutral
the Sumitomo Chemical Group way

Section. **2** **Initiatives for obligations**

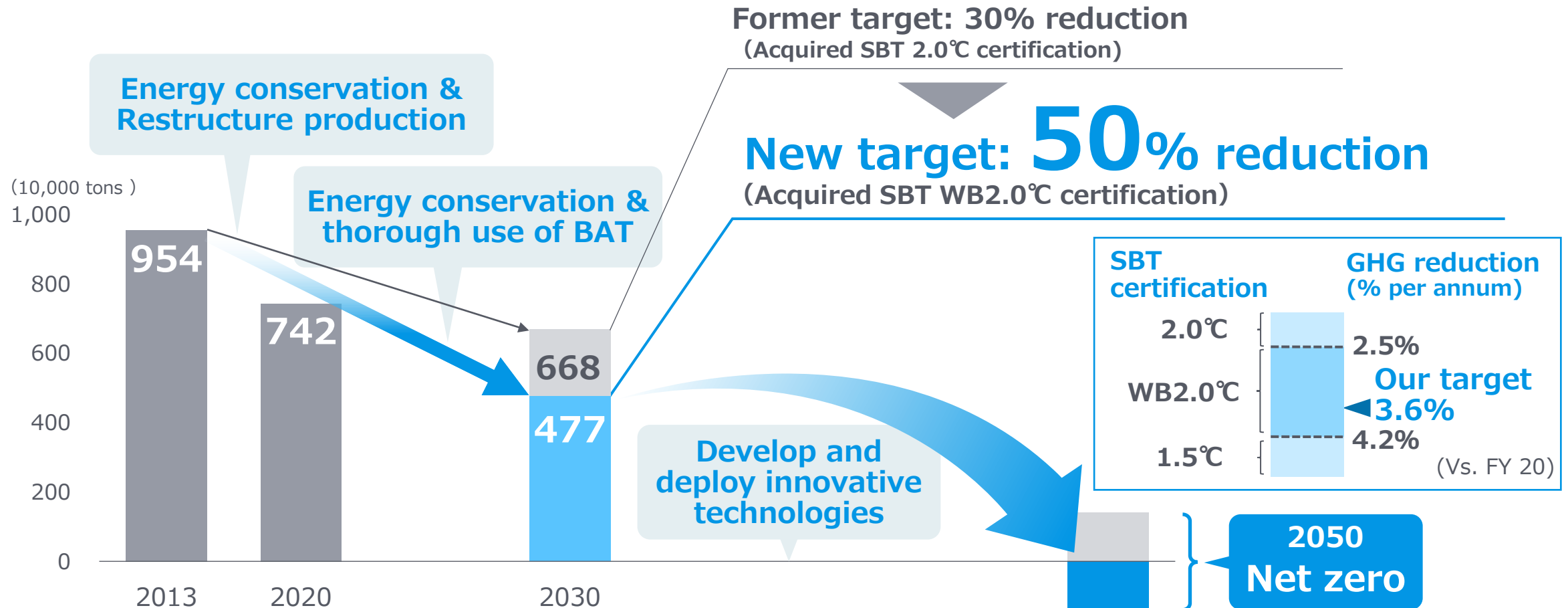
Greenhouse gas emissions at the Sumitomo Chemical Group

50% Reduce by 2030

Reach net zero by 2050

Sumitomo Chemical Group: Sumitomo Chemical + domestic and overseas subsidiaries. 50% vs. FY 2013 levels.

Raised our targets for reducing GHG and applied for a new SBT certification



Sumitomo Chemical Group: Sumitomo Chemical + domestic and overseas subsidiaries. 50% vs. FY 2013 levels.

Begin studying the introduction of clean fuels to become carbon neutrality by 2050

Natural gas

	Ehime	Chiba
Fuel	Coals and heavy oil ▶ LNG	Petroleum coke ▶ LNG
Amount of CO ₂ reduction	650k tons/year	240k tons/year



Building an LNG tank, the largest of its kind in Japan, on the premises of Ehime Works

Clean fuels



■ Study acquiring clean ammonia

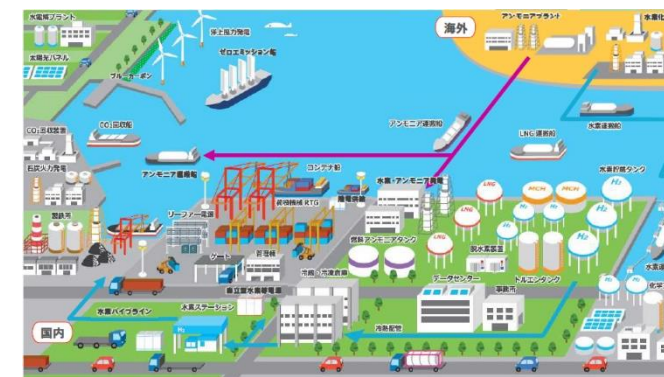
World's leading Ammonia manufacturer



住友化学
SUMITOMO CHEMICAL

(Studying working with other companies, too.)

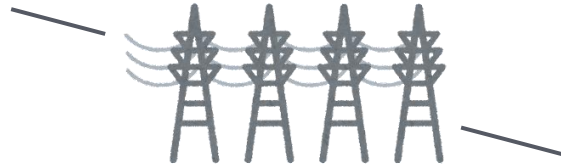
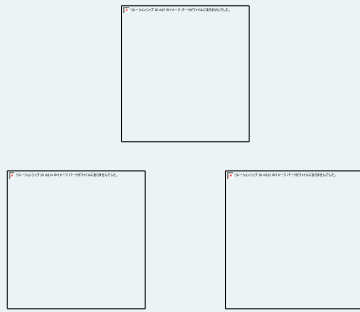
■ Coordinated studies on a carbon neutral port concept (Shikoku, Niihama, etc.)



(MLIT: <https://www.mlit.go.jp/common/001408123.pdf>)

At Oita Works, switched 100% of purchased power to renewable energy sources

Power from renewable energy



Oita Works



At Oita Works

- Reduced GHG 20% by switching all purchased power to **100% renewable energy**
- Reduced GHG 10% by **converting fuel** (from heavy oil to utility gas)

Reduced GHG by a
total of **30%**

(Reduction rate : Compared to fiscal 2013)

Size of investments aimed at becoming carbon neutral

Expect to **invest 200 bn. yen** to become carbon neutral

By 2021

80 bn. yen

(Already decided or executed)

- Rebuild production structures at Chiba and Ehime Works
- Plant energy conservation measures
- Fuel conversions from coal and heavy oil to LNG

By 2030

120 bn. yen

(To be studied)

- Energy conservation measures and production equipment upgrades at plants
- Chemical recycling of plastic resources
- CO2 separation, CCU and others

2013

Since FY2019, business investments factor in an:
Internal carbon pricing system

Make investment decisions based on economics calculations that reflect an internal carbon price of 10,000 yen per ton

Section. **3** **Initiatives for Contributions**

Contribute to GHG reductions in society through products and technologies from the Sumitomo Chemical Group

Work with a variety of stakeholders to be the first to deploy into society products and technologies that contribute to global GHG reductions

Three viewpoints

Viewpoint 1

Provide products and solutions that contribute to carbon neutrality

Viewpoint 2

Drive the development of technologies that contribute to carbon neutrality and their rapid deployment into society

Viewpoint 3

Take on long-term challenges including the development of carbon-negative and other technologies

Sumika Sustainable Solutions :

Designate the Group's products and technologies that contribute to addressing climate change and the reduction of environmental impact over the product's entire life cycle and promote their development and widespread use



**Sumika
Sustainable
Solutions**

Targets

560.0 bn. yen by 2021

(Billions of yen)

6,000

5,000

4,000

3,000

2,000

1,000

0

Round 1

Round 2

Round 3

Round 4

Round 5

Round 6

275.6 bn. Yen
21 products

293.4 bn. Yen
34 products

343.1 bn. Yen
44 products

381.3 bn. Yen
48 products

479.8 bn. Yen
54 products

463.3 bn. Yen
57 products

2015

2016

2017

2018

2019

2020 (FY)

**Manufacturing
technologies**

10 technologies

- On-purpose propylene oxide process
- Hydrochloric acid oxidation process
- UV adhesion process (polarizing film)

**Materials
products**

47 products

- **Li ion battery materials**
Separators, cathodes
- **Resin products**
Heatorage / Conformer
Temperature-sensitive agricultural film
TPE for non-coated air bag covers, etc.
- **Feed additives**
Methionine etc.

Work with a variety of partners to lead the deployment into society of products and technologies that contribute to GHG reductions and achieve carbon neutrality globally

Provide products and solutions that contribute to carbon neutrality

License out manufacturing technologies and provide innovative products

- Customer

Spread use of SSS-certified products

- Customer

Carbon footprint evaluation of products

- Customer
- Trade groups

Drive the development of technologies that contribute to carbon neutrality and their rapid deployment into society

Build a resources recycling society

- Customer
- Upstream and downstream industries
- National and local governments

Develop and deploy manufacturing process technologies

- Customer
- Academia
- Startups

Carbon
Neutral

Take on long-term challenges including the development of carbon negative technologies

Carbon negative, CCU

- Academia
- Startups

Thank you