

Realizing a Carbon-Neutral Society

Formulated a grand design to achieve carbon neutrality by 2050

• In December 2021, we formulated a grand design to achieve carbon neutrality by 2050, setting out a direction for our initiatives and goals for our activities. The Sumitomo Chemical Group*¹ commits itself to reducing its greenhouse gas emissions by 50% by 2030 compared to the level of emissions in FY2013, and to achieving carbon neutrality by 2050. Having raised our 2030 emissions reduction target to 50%, we once again received certification from the Science Based Targets (SBTs)*² initiative for this new target as meeting the standard of “well below 2°C.”*³ We will accelerate reductions in greenhouse gas emissions by approaching the issue from the perspectives of both obligations to bring our own greenhouse gas emissions close to zero and contributions through our products and technologies to reducing global greenhouse gas emissions.

Promoting such initiatives as fuel conversion to low-carbon fuels and energy savings

• In the Ehime region, we plan to switch from coal and heavy oil to LNG and, in the Chiba region, from petroleum coke to LNG. We expect this to yield reductions in annual CO₂ emissions of around 650 and 240 thousand tons, respectively. We began supplying LNG in the Ehime region from March 2022 and began operations of newly built LNG-fired power generation equipment from November. In addition, we set about a study to take advantage of clean ammonia.

Promoting Sumika Sustainable Solutions

• We are promoting Sumika Sustainable Solutions, which are initiatives to internally designate products and technologies that contribute to global warming countermeasures and environmental impact reduction. A total of 71 products and technologies have been designated, with combined sales of 682.8 billion yen in fiscal 2022 (consolidated). In addition, the Science-Based Contributions, which quantitatively and scientifically calculate*⁴ how much GHG emissions were reduced in society by utilizing the SSS-certified products and technologies that Company has sold and provided, in fiscal 2022*⁵ totaled 8.3 million tons of carbon dioxide equivalent (CO₂e), with technology accounting for 2.7 million and final products accounting for 5.6 million.

Realizing the Recycling of Plastic Resources and Solving Plastic Waste Problems

Practical application of plastic material and chemical recycling

• We set a KPI for the amount of recycled plastic resources used in manufacturing processes, targeting 200,000 tons annually by 2030.
• Regarding material recycling, from June 2021, we began considering a business alliance with Rever Holdings Corporation, which is a diversified recycling company that handles metals, automobiles, home appliances, and more, with the aim of recycling and effectively utilizing good-quality waste plastic resources. Regarding chemical recycling, in February 2022, four themes related to chemical recycling technology for manufacturing chemicals using waste plastic and alcohols were selected for Green Innovation Fund Projects,*⁶ enabling an even greater acceleration of technological development.

Conducting social contribution activities and participating in various alliances

• Since fiscal 2020, we have continued to provide education and raise awareness to enable people to take ownership of various issues related to recycling plastic resources, such as offering original educational videos regarding the basics of recycling plastic resources for all management executives and employees in the Sumitomo Chemical Group. In addition, we work daily on separating and collecting waste at each business location. In fiscal 2022, after taking thorough measures to prevent the spread of COVID-19, we carried out a total of 60 social contribution activities, such as cleaning up areas surrounding our business sites and cleaning up neighboring waterways and coasts, at 14 of 16 business locations in Japan.
• We participate in the Alliance to End Plastic Waste (AEPW), which is an international alliance working to solve the plastic waste problem, and the Japan Clean Ocean Material Alliance (CLOMA), which is a domestic alliance working to solve the marine plastic waste problem. Our participation in these alliances entails cooperating with others associated with the plastic value chain to address broad social issues that would be difficult to solve alone, such as upgrading the waste collection infrastructure in countries around the world with high emissions of plastic waste.

Management of Chemical Substances and the Promotion of Risk Communication

Reviewing Safety Information on Chemicals and Conducting Risk Assessments

• Performed risk assessments for 56 products in fiscal 2022. We publicly released safety summaries for 58 substances and are steadily revising the summaries. (https://www.jcia-bigdr.jp/jcia-bigdr/en/material/icca_material_list)

LRI*⁷ Initiatives

• Promoted research by actively participating in the LRI program implemented by the Japan Chemical Industry Association as a member of the steering committee and research strategy planning group. Furthermore, we participate in the microplastics task force, which has close ties to the LRI program, and provide feedback.

Enhancing Information Disclosure and Risk Communication

• Published the Annual Report, Sustainability Data Book, the Report on the Environment and Safety (at all worksites), local PR newsletters, etc., made information publicly available on the official website, made school visits, accepted student interns, and engaged in dialogue with local residents.

*1 Sumitomo Chemical and its consolidated subsidiaries in Japan and overseas

*2 Stringent GHG emission reduction targets set by companies based on scientific principles to achieve the goals of the Paris Agreement

*3 Shared long-term global targets laid out in the Paris Agreement. Defined as holding the global temperature rise from pre-industrial levels to below 2°C and mentioning continuing efforts aimed at holding the rise down to 1.5°C

*4 Although Sumitomo Chemical works to reduce Scope 1 and 2 emissions on its own as an obligation, Science Based Contributions (SBC) are different. They visualize the contributions to reductions in society's GHG emissions that we make by providing the Company's technologies and final products to others.

*5 The fiscal 2022 SBC indicators for the selected technologies and products were calculated as follows:

Technologies: • The propylene oxide (PO)-only process is compared with the average of other manufacturing methods, including chlorine method, and the hydrochloric acid oxidation process is compared with the salt electrolysis process.

• We calculate licensees' contributions to emission reductions.

Products: • Methionine is compared with non-additive feed. We calculate contributions to the reduction of N₂O in poultry excrement.

• The Sumisoya herbicide is compared with conventional farming methods for soybean cultivation. We calculate the contribution to emission reductions from no-till farming in the United States.

• Seed treatment agents and paddy rice nursery-box treatment agents are compared with conventional farming methods. We calculate contributions to emission reductions from avoiding the use of crop protection chemicals.

*6 To realize carbon neutrality by 2050, the Ministry of Economy, Industry and Trade created a 2 trillion yen fund in NEDO. These projects continuously support companies committed to ambitious targets pertaining to everything from research and development to pilot testing and practical application over a 10-year period.

*7 Long-range Research Initiative: Long-term support for research into the effects of chemical substances on human health and the environment