

JCIA ANNUAL REPORT 2022



Japan Chemical Industry Association

Implementing innovations in society toward the realization of carbon neutrality

In an aim to become carbon neutral by 2050, the chemical industry must not only provide products and services that support healthy, comfortable, and convenient lifestyles, but also contribute to society as a solution provider for various issues.

In order for the chemical industry to continue to provide products, services, and solutions needed by society, and to ensure its healthy development, we will continue to work toward building a sustainable society by focusing on three key themes: further contributing to carbon neutrality, strengthening communication with society, and providing peace of mind by enhancing safety in operations and chemical product management.



1 Further contributing to carbon neutrality

With growing expectations for technological development that contributes to the transition to a sustainable society, there is a need to accelerate the implementation of innovations in society in response to the Japanese government's Carbon Neutral Declaration by 2050. JCIA will support "energy conversion" and "raw material conversion" in the chemical industry. In energy conversion, in addition to shifting to renewable energy, we will build a foundation that contributes to the reduction of CO₂ emissions through technological innovation of manufacturing processes to minimize energy use. In the area of raw material conversion, we will support the development of technologies aimed at "carbon cycle" through the recycling of waste plastics, CCU (CO₂ capture and utilization), and artificial photosynthesis. It is also important to foster a society that recognizes the environmental value of sustainable products made with these technologies. JCIA will work together with the government and other industries to promote efforts to realize these goals so that Japan as a whole will be able to exert its power to achieve them.

2 Strengthening communication with society

We believe that it is necessary to promote a change in the awareness of society as a whole and to spread new solutions created through technological innovation, JCIA will endeavor to communicate the importance and benefits of the chemical industry to society by establishing a system that enables quantitative evaluation of the contribution of chemical products to reducing environmental impact throughout their lifecycle.

In global communication, we will strengthen international collaboration and communicate that the chemical industry is a solution provider for social issues through activities at international bodies such as the International Council of Chemical Associations (ICCA) and by deepening exchanges with overseas industry associations.

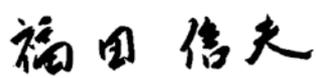


3 Providing peace of mind by enhancing safety in operations and chemical product management

Providing peace of mind by enhancing safety in operations and chemical product management is the most important theme, foundation, and premise for the chemical industry's continued existence. To ensure safety and security, we will work to strengthen risk assessment based on past cases, as well as develop and share Accident-Prevention Guidelines and a collection of best practices. In chemical product management, we will establish robust risk management integrated with the supply chain to provide safe and secure chemical products at all times.

The chemical industry is facing challenges such as high facility aging and labor shortages due to a declining birthrate and aging population. To ensure continued safe operations, we will promote smart safety by supporting the establishment of a system that make full use of cutting-edge digital technologies such as IoT and big data, and the development of human resources to support it.

The Carbon Neutral Declaration made by the Japanese Government to become carbon neutral by 2050 is an ambitious target which cannot be achieved as an extension of the past. However, this is the future vision which should be realized for a sustainable society. Moreover, the chemical industry plays a very important role in helping to achieve this by solving various problems. As JCIA Chairman, I would like to lead the association to enhance the presence of the chemical industry by communicating the innovation and value that it creates in response to the changing times and environment. I hope for your continued support.


 Chairman
 Japan Chemical Industry Association (JCIA)

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About the Japan Chemical Industry Association

Japan Chemical Industry Association

The Japan Chemical Industry Association (JCIA) engages in various activities with the aim of contributing to the sustainable development of human society. It does this by providing value to its members and the public, while at the same time monitoring changes in the environment surrounding the Japanese chemical industry and working with government bodies, related organizations, academic associations, and the International Council of Chemical Associations (ICCA).



JCIA at a glance

Name

Japan Chemical Industry Association (JCIA)

Established

April 1948 : JCIA formed as a voluntary association
 June 1991 : Shifted to an incorporated association as a legal entity
 April 2011 : Shifted to a general incorporated association

Mission

JCIA seeks to promote the healthy development of the chemical industry through the research and study of the production, distribution and consumption of materials relating to the chemical industry. JCIA also focuses on the research and study of various issues relating to the technology, labor, environment and chemical safety of the industry, and on planning appropriate measures and actions for the economic prosperity of Japan and the betterment of the national standard of living.

Activities

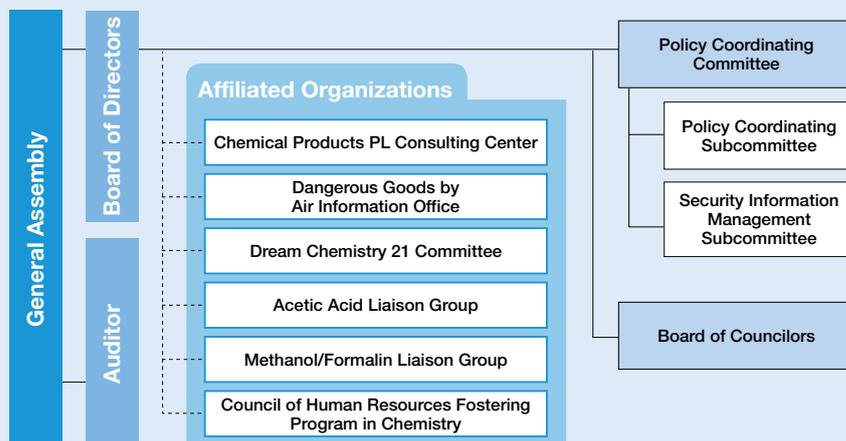
1. Research and study on the production, distribution and consumption of chemical products.
2. Research and study on issues concerning technology, labor, the environment, chemical safety, etc., as well as planning and promoting measures and actions.
3. Commendations for outstanding achievement in new technologies and safety records.
4. Collection and dissemination of information, communication and cooperation with related organizations in Japan and overseas.
5. Public outreach and advocacy activities, workshops and seminars.
6. Other operations in addition to the above that are necessary to achieve JCIA's mission.

Fiscal Year

From April 1 to March 31 of the following year

Organizational Chart of JCIA

The Japan Chemical Industry Association (JCIA) is organized into the General Assembly, the Board of Directors, Auditors, the Policy Coordinating Committee, the Board of Councilors, business-specific committees and the Secretariat. The General Assembly, which is composed of all JCIA member companies and organizations, is the supreme decision-making body. The Assembly resolves important issues related to JCIA management, as well as the business plan, budget and financial statements. The Board of Directors consists of the Directors and Executive Directors elected from among the member companies and resolves issues related to JCIA business and activities.



Board members of the Japan Chemical Industry Association (As of July 1, 2022)

Chairman (Representative Director)	FUKUDA Nobuo	Mitsubishi Chemical Corporation Representative Director of the Board
Vice Chairman (Representative Director)	IWATA Keiichi	Sumitomo Chemical Company, Limited Representative Director & President
Vice Chairman (Representative Director)	SHIMAMURA Takuya	AGC Inc. Director, Chairman
Vice Chairman (Representative Director)	KUWADA Mamoru	Tosoh Corporation Representative Director, President
Vice Chairman (Representative Director)	TANAKA Minoru	KANEKA CORPORATION President, Representative Director
Director	KUDO Koshiro	Asahi Kasei Corporation President & Representative Director
Director	HASEBE Yoshihiro	Kao Corporation President and Chief Executive Officer
Director	KAWAHASHI Nobuo	JSR Corporation Representative Director, President
Director	MORIKAWA Kohei	Showa Denko K.K. Representative Director, Chairman
Director	KATO Keita	SEKISUI CHEMICAL CO., LTD. President and Representative Director
Director	OGAWA Yoshimi	Daicel Corporation President and Chief Executive Officer
Director	INO Kaoru	DIC Corporation Representative Director, President and CEO
Director	IMAI Toshio	Denka Company Limited Representative Director, President & CEO
Director	TAKAMURA Mikishi	TOAGOSEI CO., LTD. President and Representative Director
Director	YOKOTA Hiroshi	Tokuyama Corporation Representative Director, President and Executive Officer
Director	MIYAJI Takeo	NOF CORPORATION President and Chief Executive Officer
Director	GOTO Yujiro	NIPPON SHOKUBAI CO., LTD. Member of the Board, Chairman
Director	GOTO Teiichi	FUJIFILM Holdings Corporation President and CEO, Representative Director
Director	HASHIMOTO Osamu	Mitsui Chemicals, Inc. President & CEO
Director	IZUMIHARA Masato	UBE Corporation President & CEO
Director General	SHINDO Hideo	The Japan Chemical Industry Association
Executive Director	FUKAO Yuji	The Japan Chemical Industry Association
Executive Director	OZAKI Satoshi	The Japan Chemical Industry Association
Executive Director	HANDA Shigeru	The Japan Chemical Industry Association
Executive Director	SUKATA Tokuo	The Japan Chemical Industry Association
Auditor	WAKUMOTO Atsuhiko	Nippon Kayaku Co., Ltd. Representative Director, President
Auditor	FUJII Masashi	MITSUBISHI GAS CHEMICAL COMPANY, INC. Representative Director, President

Committees



Organizational Chart of JCIA Secretariat



Toward a Sustainable Society

The chemical industry supports innovation throughout the industry by providing a wide variety of materials. At the same time, through Responsible Care activities, the industry has strived to deliver solutions to a wide range of issues in order to protect the environment, health, and safety across all stages from development and manufacture through consumption and disposal of chemical products.

Under these circumstances, in order to realize the Japanese government's Carbon Neutral Declaration by 2050, innovation is essential in all industries, and expectations for the chemical industry to support these innovations are growing ever higher. JCIA is working to ensure that the chemical industry plays an important role in creating innovation as a solution provider.



Climate change countermeasures: Toward a carbon-neutral society

In May 2021, JCIA released The Chemical Industry's Stance on Carbon Neutrality in response to the government's 2050 Carbon Neutral Declaration. Subsequently, we collaborated with the Material Industry Division of the Ministry of Economy, Trade and Industry to reflect the views of the chemical industry in the Technology Roadmap for Transition Finance in Chemical Sector, which was formulated and published in December 2021.

This roadmap is positioned as a guideline for financing technical efforts during the transition period and transition phase toward achieving carbon neutrality by 2050. It covers a wide range of activities required for transition finance, including not only investments in technology development and equipment, but also costs related to the removal of existing equipment, and products that contribute to the decarbonization of not only a company's own manufacturing processes but also those of other industries.

In addition, it covers not only entities with strategies and plans to reduce emissions from their own economic activities, but also

entities that plan to enable other companies to realize their transition strategies through their own products and services.

By organizing the chemical industry's efforts to become carbon neutral in an easy-to-understand manner, the roadmap aims to gain the understanding and support of the financial community, which may not be familiar with the chemical industry or its technologies, and to facilitate smooth financing.

The technology roadmap was sorted by product and process-based sectors, recognizing the main sources of emissions in each, and organizing each of the methods for decarbonization to provide a technological pathway to carbon neutrality.

<https://www.meti.go.jp/press/2021/12/20211210004/20211210004-1.pdf>



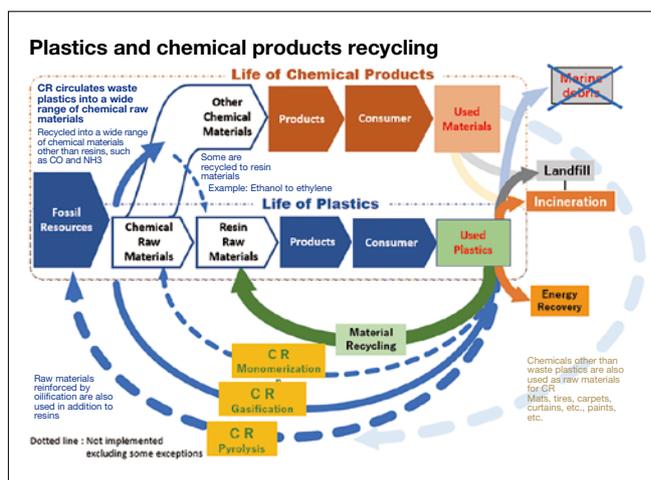
Resources circulation: Toward a recycling-oriented society

With the expectation of early establishment of recycling use for all kinds of resources, JCIA established the Chemical Recycling (CR) Working Group (WG) for Waste Plastic in November 2019, and the Chemical Industry's Future Vision on the Chemical Recycling of Plastic Waste, which provides solutions for the waste plastic problem, was published in December 2020. Subsequently, the CR Standardization SWG discussed the direction of the CR domestic certification system and international standardization, and as a result, created a concept of CR that is not limited to the circulation of plastics only, but utilizes all carbon sources to circulate a wide range of chemical products, including those besides plastics.

Currently, we are focusing on international standardization and the establishment of a certification system in order to increase awareness of recycled products and to gain the understanding of society that the cost increase should be broadly shared by society.

In particular, with regard to the international standardization of the CR concept, the CR International Standardization TF was established to establish the concept of recycling not only plastic but also chemical products in general, including the concepts of gasification, oilification, and monomerization, as an international

standard. A proposal for an international standard was submitted to the ISO/TC47 Secretariat and the ISO Central Secretariat, and received a majority of votes in favor. Going forward, we will proceed to the next step of drafting a concrete standard.





Responses to the issue of marine plastic wastes

■ Planning and preparation for the 2nd Outreach to Asia Training Seminar

The Japan Initiative for Marine Environment (JaIME) is currently planning and preparing for the 2nd Outreach to Asia Training Seminar scheduled to be held in 2022. Although the training program will be the same as the first training held in February 2020, targeting policy makers from ASEAN countries, the second training will introduce the Material Flow Analysis (MFA) prepared by Thailand and add a discussion on issues in the deployment of MFA in Asian countries. In addition, the number of countries invited to participate in the training has been expanded to 11, including the seven member countries of the ASEAN Federation of Plastic Industries (AFPI) and the four member countries of the Asia Plastics Forum (APF) (India, China, Bangladesh, and Sri Lanka).

■ Production of an educational DVD (English version)

In July 2021, the English version of *Plastics and Us*, which was produced as a video teaching material for junior high school science education, was completed. JCIA introduces “*Plastics and Us*” at international meetings attended by Southeast Asian countries, and uses it for educational activities overseas.



■ Organization and dissemination of information, and responding to domestic developments

We contracted to an American research firm, on the plastic-related initiatives of foreign governments, NGOs, and other parties, in North America, Europe, and elsewhere around the world, and prepared six reports.

JaIME also is involved in discussions on policies for responding to domestic issues, including resource circulation, and offers opinions on behalf of the industry.

■ Accumulation of scientific knowledge

In September 2021, we began LCA evaluations to compare the environmental impact reduction effects of new recycling technologies in order to study the optimal recycling treatment methods for waste plastics in the future. The new recycling technologies include chemical recycling (monomerization, etc.) using industrial waste plastics as input materials, which were not included in the LCA evaluations conducted to date. A final report is scheduled to be prepared by August 2022.



SDG initiatives

■ Progress of SDG initiatives

In December 2020, we reviewed the three-year activities of the SDGs Subcommittee, and in April 2021, we shifted to a network for exchange the SDG information (opinions), in which any JCIA member can participate. Activities are conducted in two main areas: WG activities, which are voluntary study groups of volunteers, and an information exchange and study session on topics of interest to participating members.

In FY2021, the WG activities focused on how to evaluate the contribution of our products to the SDGs, and through interviews with leading companies, we gained suggestions to addressing this issue. In the information exchange and study session, an expert was invited to give a lecture, followed by an exchange of opinions with the lecturer and session participants, providing an opportunity to deepen understanding and gain new insights.

<https://www.nikkakyo.org/sdgs>



■ Overview of initiatives

In 2018, JCIA established the SDGs Subcommittee and began activities to support JCIA members' initiatives toward achievement of the United Nations Sustainable Development Goals (SDGs). The subcommittee members have been engaged in working group activities to think and learn together, holding study sessions, and introducing SDG activities of member companies, and in December 2018, a dedicated SDG website was launched. In October 2020, we published examples of SDG activities (22 examples) from member companies as a collection of SDG case studies to show stakeholders that the chemical industry is making considerable contributions toward achievement of the SDGs. Furthermore, in cooperation with the Japanese government and associations related to chemicals, we are striving to promote SDG activities by JCIA members.

Activities as a Member of the International Community

JCIA's activities are not limited to Japan. As a member of the International Council of Chemical Associations (ICCA), representing the Japanese chemical industry, JCIA participates in international specialized chemical industry conferences and other activities, including programs intended to train human resources and convey expertise on chemicals management to support the progress of the chemical industry in the East Asia and Southeast Asia regions. On the subject of 'Energy and Climate Change' in particular, which the ICCA has identified as one of the major themes, we play an important role as the Chair in harmonization of the chemical industry's global message on its contributions to responding to climate change.

ICCA (International Council of Chemical Associations) Activities

ICCA was established in 1989 by the chemical industry associations of Japan, the United States, Europe, and Canada. Currently, with the addition of China and India as new members, its full members now include chemical industry associations from North America, South America, Europe, Asia, Oceania, and the Persian Gulf States, bringing the total membership to approximately 50 countries and regions. The organization consists of five core Leadership Groups, which are responsible for implementing strategic initiatives to solve issues in their respective fields, as well as for policy recommendations and other activities. See the ICCA website for more information.

<https://www.icca-chem.org/>



ICCA Energy and Climate Change Leadership Group (E&CC LG) Activities

The E&CC LG proactively communicates information on the roles and achievements of the chemical industry as a solution provider in response to global energy and climate-change issues and strives to earn the international community's understanding.

In 2021, it published the ICCA Statement on Climate Neutrality¹, a statement on carbon neutrality, and Life Cycle Assessment of Circular Systems-Guide & Case Studies², and Life Cycle Assessment of Circular Systems-Approach and Methodology³, which examine circular systems involving chemical products from the perspective of LCA. In addition, it held a webinar during the UNFCCC Asia-Pacific Climate Week and participated in the Climate Action Programme for the Chemical Industry, a developing country assistance program supported by the German government, to introduce the activities of ICCA E&CC LG.

The above materials can be obtained from the QR code below. ▼



*1



*2



*3

ICCA Chemical Policy and Health LG (CP&H LG) Activities

The meetings of the CP&H LG and related task forces (Joint Capacity Building TF, Advocacy TF, ICCM5 Planning Team, and

Global Regulatory Cooperation TF) were all held online in 2021 as well. Similar to last year, the ICCM5 planning team continued to participate in the virtual working group for post-SAICM due to the postponement of the ICCM5, where industry submitted its views and discussions. JCIA also provided opinions through the ICCA and through the Ministry of Economy, Trade and Industry of Japan and the Ministry of the Environment. In addition, the Microplastics Steering Group (MSG), jointly operated by the CP&H LG and the Plastics Leadership Group (PLG), has completed the activities of the Microplastics Task Force (MPTF), and its proposal to establish the Microplastics Advanced Research and Innovation Initiative (MARII), whose purpose of activity is to introduce industry's scientific efforts and demonstrate industry's initiatives to academia, government research institutions, and others in each country, was approved by the Board of Directors. At the MARII Kick-off Webinar, JCIA members participated in MARII activities by submitting opinions and engaging in discussions, including an introduction of microplastics research at JCIA.

ICCA Responsible Care LG (RCLG) Activities

The RCLG is the organization tasked with promotion of Responsible Care (RC) activities in the ICCA. Normally, it holds regular meetings in person twice a year, in spring and fall, but due to the COVID-19 pandemic, online meetings were held again in 2021. The RCLG is working towards unanimous association support for the Responsible Care Global Charter, to publicize the chemical industry's RC activities in ICCM5 planned to be held in Germany in 2021 (postponed: date to be determined). In addition, the RC Status Report 2021, which is published every three years, was issued in November 2021. RCLG members, the China Petroleum and Chemical Industry Federation (CPCIF) and the Indian Chemical Council (ICC), have been promoting RC activities with the aim of becoming full members of ICCA, and RCLG has been supporting in this endeavor. In recognition of the success of these activities, they became a full member of ICCA in January 2022.



ICCA Organization Chart [As of July 1, 2022]



ICCA ASEAN Regulatory Cooperation Project (ARCP) Activities

The ASEAN Regulatory Cooperation Project is a project under the ICCA Global Regulatory Cooperation framework that aims to promote activities under a risk-based chemicals management approach in member states of the ASEAN Economic Community and apply the ICCA's global policy on regulatory cooperation to chemical regulations being developed in the region. JCIA participates in this project led by the Singapore association as a member of the organization along with the ACC and Cefic. In November 2021, an online seminar on GHS, chemical inventories, and the current state of chemical management in each country was held for participants from governments and industry in ASEAN member states.

APEC Activities (Chemical Dialogue)

APEC (Asia-Pacific Economic Cooperation) is a framework for economic cooperation by 21 economies in the Asia-Pacific region. JCIA participates in the Chemical Dialogue, a sub-forum of the APEC Committee on Trade and Investment. The Chemical Dialogue is a forum for representatives of regulators and industry that aims to identify solutions to the challenges faced by the chemical industry in the Asia-Pacific region. Together with promoting trade and improvements in the levels of sound management of chemical substances through supporting expansion of regulatory cooperation and harmonization in the region, it also promotes understanding of the roles of the chemical industry as a provider of innovative solutions for sustainable economic, environmental, and social development. It also serves as a venue for effective cooperation between industry and government to improve chemical product stewardship and safe use. JCIA actively provided opinions and recommendations as a representative of the Japanese chemical industry in the Chemical Dialogue.

AMEICC Activities

The ASEAN Economic Ministers (AEM) and the Minister for Economy, Trade and Industry (METI) Economic and Industrial Cooperation Committee (AMEICC) is a subordinate organization of the AEM-METI that implements practical economic and industrial cooperation in the ASEAN region. The Technical Working Group and the Working Group on Chemical Industry were held online in August 2021, and reported on topics including updated information on regulations in each country, the state of management of plastic wastes, and ARCP activities.

Report on the Activities of the United Nations Environment Assembly (UNEA)

UNEA is the decision-making body of the United Nations Environment Programme (UNEP) and is an international meeting held every two years. In addition to the online meeting held in February 2021, the 5th General Assembly was held in person in Nairobi, Kenya from February 28 to March 2, 2022, and was attended by government representatives from approximately 175 countries, as well as representatives of relevant international organizations and NGOs. ICCA, to which JCIA belongs, contributed to the adoption of resolutions on marine plastic pollution and chemical substances through outreach activities to governments.

Participation in OECD Conferences

JCIA participated in various conferences held by the Organisation for Economic Co-operation and Development (OECD) (Chemicals and Biotechnology Committee, Working Party of National Coordinators of the Test Guidelines Programme, Working Party on Manufactured Nanomaterials, Working Party on Hazard Assessment, Working Party on Exposure Assessment, Working Party on Risk Management, and Extended Advisory Group on Molecular Screening and Toxicogenomics) as a member of the Business and Industry Advisory Committee (BIAC), an advisory body to the OECD representing the private sector. In doing so, we gathered and communicated useful information for members as well as expressing their views.

MESSAGE

Committee Chairman, MIURA Hidetsune

(Senior Executive Officer UBE Corporation)



Contributing to the Continuous Improvement of RC Activities and the Realization of a Sustainable Society

Based on our goal of “contributing to the realization of a sustainable society,” we will strive to further raise awareness of RC activities and strengthen the presence of the chemical industry through continuous improvement of our RC activities and deployment of open activities. In Japan, we will respond to the changing environment of the chemical industry through proceeding with enhanced activities that reflect the views of members. Around the world, in addition to supporting the activities of member companies’ business establishments overseas and supporting the activities of Japan-affiliated firms in Asia, we also will strive to broaden the base of RC activities through proactive participation in the RC activities of Japanese firms. To continue RC activities with an emphasis on communication even amid the COVID-19 pandemic, we will focus on holding online events, both in Japan and around the world.

FOCUS

RC Exchange Meeting

The RC Committee holds two-part member exchange meetings consisting of RC Award presentations and subcommittees to share best practices of various RC activities undertaken by member companies.

In FY2021, two sessions were held online in November and March. The themes of the first subcommittee meeting were human resource development for reducing process problems, efforts to reduce security accidents, and efforts to reduce environmental impact, while the second meeting exchanged opinions on training efforts to maintain and strengthen production site capabilities, chemical risk assessment initiatives, and regional communication in the COVID-19 pandemic. Each group was divided into groups of 8 to 10 members, who exchanged opinions on the contents of the RC Award and information on their own initiatives. At the end of the subcommittee meetings, each group reported on the results of their discussions to conclude the program.

For some of the themes, further information exchange sessions were held after the members’ exchange sessions upon the request of the participants.

In order to facilitate effective discussions at the subcommittees, a questionnaire was sent to participants in advance of the subcommittees.



Overseas Support Activities

Lectures and workshops for local staff were held in Thailand in August 2021 and in Indonesia in March 2022 with the support of the Chamber of Commerce and Industry. Due to the difficulty of holding lectures and workshops locally because of the COVID-19 pandemic, it was decided to hold them online in 2021. In Thailand, 80 people attended the lectures and 116 people attended the workshops, and in Indonesia, 25 people attended the lectures and 44 people attended the workshops, more than the number of participants in 2019.

One of the activities of AMEICC’s Chemical Industry WG is to improve occupational safety, industrial security, and environmental protection in the ASEAN chemical industry. In FY2021, the AMEICC gave up holding the local meeting due to the COVID-19 pandemic, and conducted online lectures for four ASEAN countries (Cambodia, Vietnam, Thailand, and the Philippines). The number of participants from each country was larger than expected: 43 from Cambodia, 69 from Vietnam, 55 from Thailand, and 94 from the Philippines.



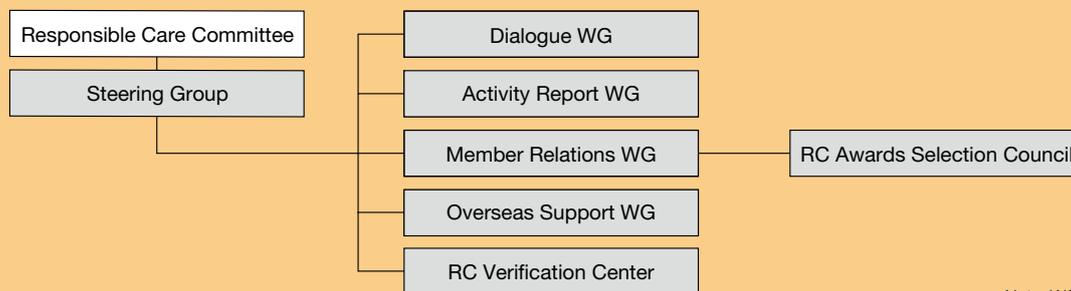
Participants from Cambodia

New e-learning materials (in English, Thai, Indonesian, and Vietnamese) were created for the workshops in Thailand and Indonesia and for training on AMEICC activities, and were incorporated into the lectures. In a survey of participants, the e-learning lectures were well received and many requests to continue the program were received, so we plan to increase the number of similar materials in the future.



Activity Outline

The purposes of the RC Committee are to support member's RC activities, to help improve further society's trust in members and in the chemical industry, and to contribute to the sustainable progress of the chemical industry and of society. Toward this target, the Committee focuses its efforts on supporting the continuation of RC activities and tackling the important tasks of stimulation and expansion of the range of these activities.



Note: WG/Working Group

TOPICS

TOPIC 1 RC Consumer Dialogue Meetings

The RC Committee held consumer dialogue meetings in the Tokyo area on November 16, 2021 and in the Osaka area on November 24, 2021. Due to the impact of the COVID-19 pandemic, the meetings were held online as in FY2020.

The FY2021 dialogue meeting featured a lecture on the current situation of plastics recycling by Hitoshi Tomita of the Plastic Waste Management Institute, in addition to presentations on different topics by different companies in both regions, all of which led to active Q&A sessions and exchanges of opinions. In addition, a video tour of member companies' factories was conducted as the first attempt.



TOPIC 2 Risk Communication Training

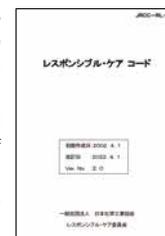
Risk Communication Training is held once a year to help participants understand the other party's position and values and learn practical communication skills on dialogue meetings of RC activity.

In FY2021, an online training was held on September 10 in a one-day program instead of the traditional two-day group training program due to the impact of the COVID-19 pandemic. For the first time, mock dialogue training, an effective method for communication skills improvement, was conducted online and participants were able to learn and improve their ability to respond to unexpected questions.



TOPIC 3 Revision of RC Code

The RC Code consists of a total of seven codes (Management System, Environmental Protection, Process Safety and Disaster Prevention, Occupational Health and Safety, Distribution Safety, Chemical and Product Safety, and Social Dialogue), including general remarks of the RC Code. Since the first edition in 2002, global trends and business responsibilities related to RC have changed significantly due to changes in global and societal trends, changes in laws and regulations, and changes in ISO and other international and domestic regulations related to the composition of the RC Code. Accordingly, the RC Code has been reviewed in order to promote RC activities and RC verification activities of JCIA and business operators.



TOPIC 4 RC Verification Activities

RC activities are the basis of the activities of chemical companies. While protecting this foundation, each company engages in corporate activities by taking elements of the SDGs and ESG in order to achieve sustainable growth over the long term, and publishes the results to society through annual reports and sustainability reports. JCIA conducts verification activities incorporating RC perspectives with the aim of enhancing the quality and reliability of these reports. In FY2021, while incorporating online verification, 10 RC member companies were audited for verification of reports, and for verification of actions, two companies were audited for the first time in six years. As a result, the cumulative total number of reviews completed since the verification activity began in 2002 has reached 249 reviews.

TOPIC 5 Publication of Quarterly Magazine Responsible Care NEWS

The quarterly magazine Responsible Care NEWS reached its 99th issue with the Autumn/Winter 2021 issue published in January 2022. The Japan Responsible Care Council was established in April 1995 and published its first issue in February 1996, and has continued to disseminate information for the past 25 years. The commemorative 100th issue is scheduled to be published in FY2022.



Activity Report: Environment and Safety Committee

Environment and Safety Department

MESSAGE

Committee Chairman, **TOBITO Masami**

(Corporate Officer, Showa Denko K.K.)

Safety and Environmental Considerations during Manufacture of Chemical Products are the Top Priority

We are addressing various issues related to the environment, health, and safety in the chemical industry under the Principles of JCIA regarding the Environment, Health and Safety, with environmental protection, process safety and disaster prevention, occupational health and safety, and distribution safety as important issues. In addition, we will keep abreast of the latest domestic and international trends and actively disseminate information to our members in order to keep them informed, as well as to voice our opinions in consideration of the current situation of the chemical industry. Through the implementation of voluntary activities, we will produce appropriate results, thereby continuously enhancing the trust of society in the chemical industry as a whole.



FOCUS

Safety and Accident-Prevention Initiatives

As part of our safety and accident-prevention initiatives, we support the autonomous activities of our member companies in cooperation with administrative authorities and related organizations. We attend meetings of the Ministry of Economy, Trade and Industry's (METI's) Subcommittee on Basic System for Industrial Safety and Disaster Prevention and related subcommittees, and communicate the obtained information to the members of the JCIA Process Safety and Disaster Prevention Subcommittee. At the same time, we are also compiling the opinions of the JCIA subcommittee and speaking on behalf of the industry at METI's subcommittee meetings on issues such as support for small and medium-sized enterprises. In order to reflect the opinions of the chemical industry on the introduction of smart process safety, including the revision of laws, which is currently underway, several meetings were held to exchange opinions between the Ministry of Economy, Trade and Industry, JCIA, and member companies. To support the autonomous activities of member companies, the JCIA supports human resource development in terms of both safety infrastructure and safety culture, with the aim of improving process safety capabilities. We held the Industrial Safety Course and Improvement Training for Chemical Plant Production Sites Leaders online, providing opportunities to learn about the best practices of member companies' initiatives. We also held a Lecture on Scenario Non-Presentation Type Training and Lecture on Preventing Tsunami Disasters to support the strengthening of response capabilities in the event of disasters and accidents.

Workplace-Accident Prevention Initiatives

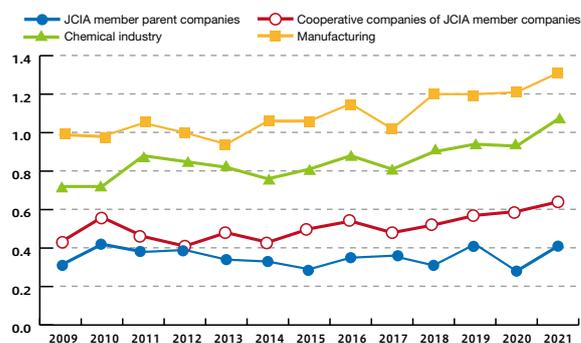
JCIA's workplace-accident prevention initiatives are based on cooperative efforts to promote the government measures such as the 13th industrial accident prevention plan and sharing timely and important information among member companies. JCIA is promoting specific actions in cooperation with the Ministry of Health, Labor and Welfare during the implementation phase of the Industrial Safety and Health Act. The Occupational Health and Safety Subcommittee shares information on these trends and holds briefings for its members and affiliated organizations to promote understanding.

Meanwhile, the Public-Private Council for Safety Measures in the Manufacturing Industry participated in the development of a method for identifying and locating hazardous sources in the workplace and in the development of an evaluation system for the investment effects of safety measures.

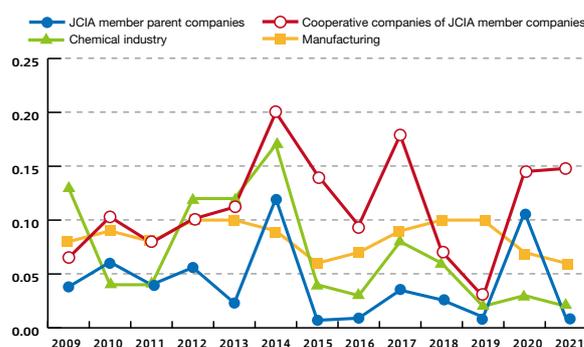
Environmental Protection Initiatives

As initiatives toward thorough compliance with environmental laws and

Frequency rate (The frequency of occurrence of industrial accidents.)



Severity rate (Working days lost due to workmen's accident.)



regulations, we collect the latest information concerning matters such as amendments to laws and regulations and share this information with members in Environmental Subcommittee meetings, etc., as well as collecting the opinions of the chemical industry and reporting them to government, related organizations, and others. In addition, environmental protection initiatives of member companies steadily reflect new tasks required as a result of amendments to laws and regulations. Furthermore, as an autonomous effort to reduce the risks posed by chemical substances to the environment, we are promoting efforts to reduce emissions of volatile organic compounds (VOCs) identified by JCIA independently in addition to those for which notification is required under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act). We also have set autonomous targets for wastes and are promoting resource recycling through means such as reducing the volume of landfill waste disposal and encouraging recycling, as well as disclosing the results of these efforts publicly.

Activity Outline

The Environment and Safety Committee promotes environmental protection, process safety and disaster prevention, occupational health and safety, and distribution safety, which are the pillars of responsible care. The committee supports the autonomous activities of its member companies by sponsoring various lectures and safety awards, and it also disseminates and shares useful information from administrative authorities and related organizations through its three subcommittees, and collects members' opinions and requests and submits them to administrative authorities and other organizations.



Note: WG/Working Group

TOPICS

TOPIC 1 Autonomous VOC Reductions

Our autonomous reduction target for VOCs in FY2020, which include substances subject to the PRTR Act and those surveyed by JCIA, is 50% reduction from the FY2000 level and no deterioration from the FY2010 level, as well as efforts to reduce individual highly harmful substances. In FY2020, the final year of the program, the target was achieved with a 78% reduction from the FY2000 level and a 42% reduction from the FY2010 level. In FY2021 and going forward, our goal is to maintain the FY2020 target, and we will continue our voluntary reduction efforts to this end.

TOPIC 2 Reducing, Reusing, and Recycling (3R) Industrial Wastes

We participate in the Japan Business Federation (Keidanren) Voluntary Action Plan for Establishing a Sound Material-Cycle Society, with an FY2020 industry target of reducing the percentage of wastes subject to final landfill disposal by 70% compared to the FY2000 level and achieving a recycling rate of 65%. In FY2020, the final year of the plan, the landfill rate was reduced by 73% and the recycling rate was 71%, achieving the targets. In light of considerations such as societal and economic conditions and future trends in resource recycling, we have set a future target of keeping the final disposal volume to no more than 170,000 tons and achieving a recycling rate of at least 65% in FY2025 to further reduce waste and promote resource recycling.

TOPIC 3 Training Program on Safety Management in Transport of Dangerous Goods

To support the promotion of distribution safety, we offered a Training Program on Safety Management in Transport of Dangerous Goods on demand, which was attended by about 150 participants. The program featured explanations provided by experts from each field in six lectures covering all modes of transport by land, ocean and air on "International Regulations Related to Transport of Dangerous Goods," "Air Transport of Dangerous Goods," "Sea Transport of Dangerous Goods," "Road Transport of Dangerous Goods and Yellow Cards," "Testing Methods and Categories Based on UN Recommendations," and "Roles of and Precautions for Shippers."

TOPIC 4 Lecture on Preventing Tsunami Disasters

Together with the Petroleum Association of Japan and the Japan Petrochemical Industry Association, each year we hold a lecture on preventing tsunami disasters, to mark World Tsunami Awareness Day (November 5). In FY2021, three lecturers from the public and private sectors were invited to give online lectures on the Cabinet Office's recent disaster prevention efforts and the status of studies on natural disaster response, including the Nankai Trough, at which approximately 170 people participated. Participants asked many questions about specific initiatives that reflect a high level of disaster awareness, such as risk assessment and the concept of tsunami inundation heights.

TOPIC 5 The Safety Symposium

The purpose of the Safety Symposium is to deepen understanding of common occupational safety issues such as fostering a safety culture through panel discussions and introduction of safety activities of the JCIA Safety Award winners. Due to the impact of the COVID-19 pandemic, the Safety Symposium was held online again in FY2021, but with a record 266 participants. In the first part of the Safety Symposium, presentations on safety activities were made by four plants, including Kaneka Corporation's Shiga Manufacturing Site, which won the top prize of the 45th JCIA Safety Award (2021). The second part, a panel discussion on the theme of how to continue with no accidents, focusing on the role of top management, was moderated by Dr. Suzuki, Chairman of the JCIA Safety Award Council (Professor Emeritus of Okayama University), during which representatives from award-winning companies exchanged opinions on how to continue to achieve zero accidents.



MESSAGE

Committee Chairman, ITO Takanori

(Executive Officer, Sumitomo Chemical Co., Ltd.)



Toward the Firm Establishment of Efficient Chemicals Management as a Business Strategy

The basic policies are to strengthen support for chemicals management in business activities and to further spread and expand voluntary contributions from the industry. We are doing a variety of activities, such as dispatch of information related to chemical management to member companies and compliance to the revision of related laws and regulations in Japan and overseas. Regarding legal compliance in Japan, JCIA actively participates in various governmental committees and working groups on behalf of the chemical industry, and offers opinions to relevant authorities. JCIA also aims to establish and disseminate more efficient and sophisticated risk assessment technologies, and we are further strengthening our research support activities for risk assessment technologies.

FOCUS

Trends in Domestic Chemicals Laws and Regulations, and Our Responses

In addition to swiftly ascertaining trends in domestic regulations on management of chemicals and communicating related information to members, JCIA also collects the opinions of member companies and offers these to regulators. The evaluation system under the amended Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. (Chemical Substances Control Law) that took effect in 2017 calls for checking of new chemical substances produced in small quantities based on their structural similarities to Class I Specified Chemical Substances and Chemical Substances Subject to Monitoring and on quantitative structure-activity relationship (QSAR) estimation. In response, JCIA asked regulators to take steps including clarification of the related judgment criteria and secured publication of the assessment flow for such checking on the Ministry of Economy, Trade and Industry website from 2020.

In accordance with the "Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof" (PRTR Act), we submitted to the administrative authorities the necessity of a new substance comparison table and a draft format for the review of surveyed substances, checked proposals from the authorities in advance and suggested some improvements. We also continued to submit our opinions on the draft revision of the Ministerial Ordinance on the provision of CAS registration numbers for designated substances and on the PRTR (Pollutant Release and Transfer Register) reporting. The old and new substance comparison tables and CAS registration numbers for designated substances were published on the METI website along with the October 2021 public notice of the revision of the Cabinet Order regarding the review of target substances. As a result of this revision, chemical companies, which are upstream businesses, are required to provide information by SDS reflecting the revised contents prior to the simultaneous enforcement of SDS (Safety Data Sheet) and the revised Cabinet Order regarding PRTR on April 1, 2023.

In relation to Industrial Safety and Health Act, we participated in the Risk Assessment WG of the Study Group on the Management of Chemical Substances in the Workplace regarding the revision of the Industrial Safety and Health Act, and gathered opinions from member companies on technical details regarding the autonomous management of chemical substances and submitted them to the authorities.

In addition, we swiftly collect and provide information on trends in chemicals regulations to members, including the Poisonous and Deleterious Substances Control Act, the Act on Pharmaceuticals and Medical Devices, and the Narcotics and Psychotropics Control Act.

Trends in International Chemicals Laws and Regulations, and Our Responses

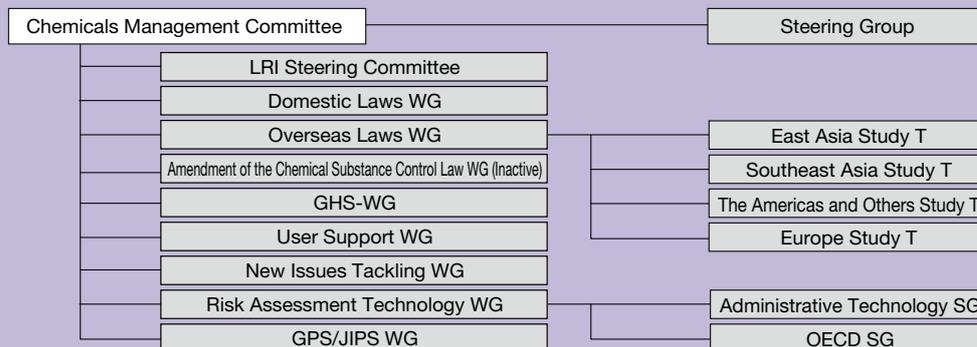
We ascertained information on the latest trends in chemical management regulations around the world and communicated the information to members, as well as holding periodic study meetings on important topics (such as the EU Chemicals Strategy for Sustainability [CSS]). To respond appropriately to regulatory trends around the world, we also collected the views of member companies and offered opinions to regulators as necessary in Europe, China, South Korea, Thailand, Vietnam, Philippines, and other countries. In particular, JCIA has submitted 11 letters of opinion to the authorities in relation to REACH/CLP in Europe. In addition to JCIA's independent submission of opinions, we prepared and submitted position papers jointly in cooperation with industrial associations in various countries and regions.

GHS Trends, and Our Responses

In addition to providing basic training, in an annual chemical risk forum course, on JIS Z7252: 2019 (Classification of Chemicals Based on Globally Harmonized System of Classification and Labelling of Chemicals [GHS]) and JIS Z7253: 2019 (Hazard Communication of Chemicals Based on GHS-Labeling and Safety Data Sheet [SDS]), both of which are Japanese GHS standards based on the Sixth Edition of UN GHS published May 25, 2019, we also support GHS utilization through means such as responding to inquiries from members. We cooperated in the dissemination and education regarding NITE-Gmiccs, a tool for GHS classification and labeling of mixtures, which was released on the website of the National Institute of Technology and Evaluation (NITE) in April 2021, and NITE conducted a workshop for our members in September 2021. Regarding the 9th revision of the UN GHS, the English version of which was released in September 2021, we confirmed the draft Japanese translation provided by the GHS-related Ministries and Agencies Liaison Committee, and submitted a proposal for revision in December 2021.

Activity Outline

The Committee have established close relationships with relevant organizations, including administrative authorities, in order to communicate useful information to members about domestic and overseas regulatory trends regarding chemical management, and collects opinions and requests of members to submit them to the administrative authorities. As voluntary activities in the industry, the Committee is promoting GPS/JIPS and tackling new issues, as well as supporting research related to risk-assessment techniques for chemical products.



Note: WG/Working Group
SG/Subgroup
T/Team

TOPICS

TOPIC 1 LRI Activities

The Long-range Research Initiative (LRI) is an initiative launched by the ICCA to study the effects of chemical substances on human health and the environment as a global voluntary initiative underway through cooperation among chemical industry associations in Japan, the United States, and Europe.

In FY2021, JCIA's LRI program adopted two new research projects on the themes of development of testing methods for solutions to emerging issues and research on human exposure.

The findings of LRI research are reported at regular annual meetings. The meeting for FY2021 was held online on August 20, 2021. In addition to reports on the results of completed research topics and on progress on ongoing research topics, a symposium was held at the same time to discuss the theme of developing human resources for chemical substance management.

JCIA has established the JCIA LRI Awards to recognize researchers who have generated outstanding research results. In FY2021, winners of the Seventh Japanese Society of Toxicology LRI Award and the Sixth Japanese Society for Alternatives to Animal Experiments LRI Award were Associate Prof. Yasumitsu Nishimura (Department of Hygiene, Kawasaki Medical School) and Mr. Takayuki Abo (Kao Corporation), respectively.

TOPIC 2 FY2021 JIPS Awards

JCIA presents the JIPS Award to member companies that have made outstanding efforts in voluntary activities related to risk assessment and risk management of chemicals in consideration of the supply chain (JIPS activities). The JIPS Awards for FY2021 were reported at a meeting of the Chemicals Management Committee held on February 24, 2022, with Showa Denko K.K. winning the Grand Prize and Kao Corporation winning an Excellence Award. In addition, Showa Denko gave a special lecture titled "Product Stewardship Initiatives in the Showa Denko Group."



Grand Prize: Showa Denko K.K.
From left: Sato, Ogawa, Nishioka



Excellence Award: Kao Corporation
From left: Mizooku, Kameyama, Koike, Yamane

TOPIC 3 Chemical Risk Forum and Risk Assessment Seminar (for adults)

JCIA has operated the Chemical Risk Forum as a training forum for workers who conduct risk assessments of chemicals since 2008. In FY2021, a total of 10 sessions were delivered online, which included various activities, such as lectures on risk assessment fundamentals, training on tools necessary to conduct risk assessments, and information on topics such as trends in regulations both in Japan and overseas. Taking into consideration the greater demand for online lectures, we not only changed the course content so that participants could freely select how to attend lectures but also offered new courses that can be distributed in-house, which will be widely used for in-house training and similar activities. Due in part to this, the number of online attendees has increased significantly to a total of approximately 4,000 people, making it possible for a wide range of professionals to attend the seminars.

Furthermore, a basic and practical Risk Assessment Seminar for worker risk assessments required by the Industrial Safety and Health Act were held jointly with the Chemical Risk Forum. A total of 35 participants attended the seminar. In the basic seminar, participants learned the knowledge and risk assessment methods necessary for chemical management, while in the practical seminar, they were introduced to simplified measurement methods and learned how to assess the risk of mixtures.

TOPIC 4 Control of Chemical Substances in the Supply Chain

To promote appropriate control of chemical substances in the supply chain, JCIA has provided support for development of an appropriate management infrastructure related to domestic and international promotion of the chemSHERPA, a scheme to facilitate sharing of information on chemical substances contained in products, operated and managed by the Joint Article Management Promotion-consortium (JAMP). We also responded to the Global Automotive Declarable Substance List (GADSL) prepared and maintained by the Global Automotive Stakeholders Group (GASG), whose membership represents automakers, auto parts makers, and chemical companies in Japan, North America, and Europe through means including submittal of opinions on its maintenance and management, from the standpoint of the chemicals industry. Furthermore, we also cooperated in maintenance and preparation of international standards through participation in organizations including the Japan committee and working group for the TC111 international environmental standard on electric and electronic devices, being advanced by the electric and electronics industry, including the Japan Electronics and Information Technology Industries Association (JEITA).

MESSAGE

Committee Chairman, HOSOMI Yasuhiro

(Managing Executive Officer, Mitsui Chemicals, Inc.)



Efforts to Carbon Neutral and Recycling Society

Following the Japanese government's Carbon Neutral Declaration by 2050, JCIA has released its Chemical Industry Stance on CN in May 2021, and studied how the chemical industry can contribute to realizing the policy. In the CN Action Plan, we have set new targets for FY2030, including significant reductions in GHG emissions, and are working on the Challenge Zero initiative led by Keidanren. Aiming to realize a recycling society, we not only had a working group that focuses on chemical recycling, a field that the chemical industry can contribute, present a recycling concept for all chemical products, but also accelerated activities to achieve that society. As the Technical Affairs Committee, we will strive toward achieving these goals by further deepening communication and mutual cooperation among member companies.

FOCUS

Carbon Neutral Action Plan FY2020 Results and Status of Achievement of New Targets for FY2030

In March 2019, FY2030 targets were revised (FY2020 targets were left unchanged), and it was decided to set and achieve two targets—cutting emissions 6.50 million tons compared to BAU with FY2013 as the base year and 6.79 million tons in absolute terms. FY2020 will mark the third year of JCIA's activities under these new targets.

The FY2020 result for the FY2020 target of 1.5 million t-CO₂ reduction relative to BAU, which is the breakthrough for Phase I, was not achieved with a reduction of 900,000 t-CO₂ due to the COVID-19 pandemic (achieved in FY2019 in effect). The FY2020 result for the FY2030 target of 6.5 million t-CO₂ reduction relative to BAU and 6.79 million t-CO₂ reduction in absolute terms was 710,000 t-CO₂ reduction relative to BAU (progress rate -11%) and 8.74 million t-CO₂ reduction in absolute terms (progress rate 129%) due to the impact of the production volume decline caused by the COVID-19 pandemic.

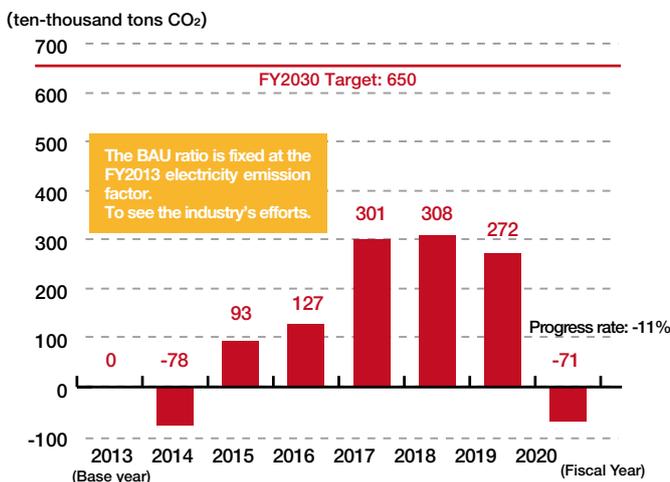
In addition, as in previous years, we were able to conduct a survey with a 100% collection rate of questionnaire forms, thanks to

the cooperation of participating companies. The content of the report was deliberated on and appropriately evaluated by Keidanren's Third-party Evaluation Committee and the Chemicals and Nonferrous Metals Working Group of METI's Industrial Structure Council.

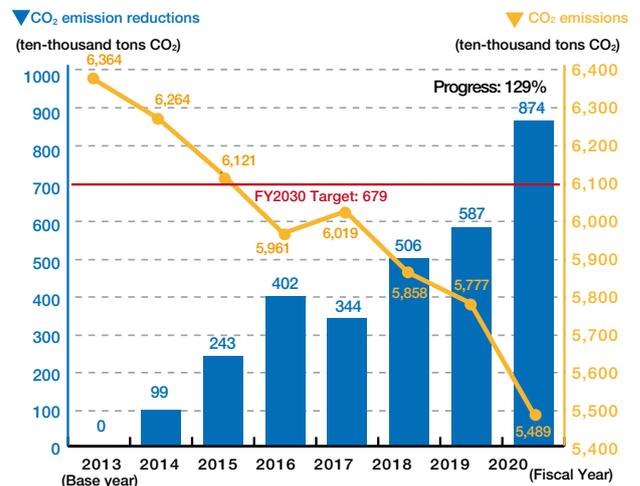
Achieved FY2030 Targets for Three CFC Substitutes

As for actual FY2020 results for three gases (PFCs, SF₆, and NF₃), the FY2020 targets for percent decline in emission intensity compared to 1995, the base year, has already been achieved for all three gases. For the fourth consecutive year, the FY2030 targets for the three gases were reached (PFCs: 97% [2030 target of a 90% reduction], SF₆: 98% [2030 target of a 90% reduction], NF₃: 99% (2030 target of an 85% reduction)). The contents of the report were discussed and evaluated by the Working Group on Fluorocarbons, etc. of the Subcommittee on Chemical Substance Policy under METI's Industrial Structure Council and approved as a target-achieving industry.

CO₂ emission reductions compared to BAU

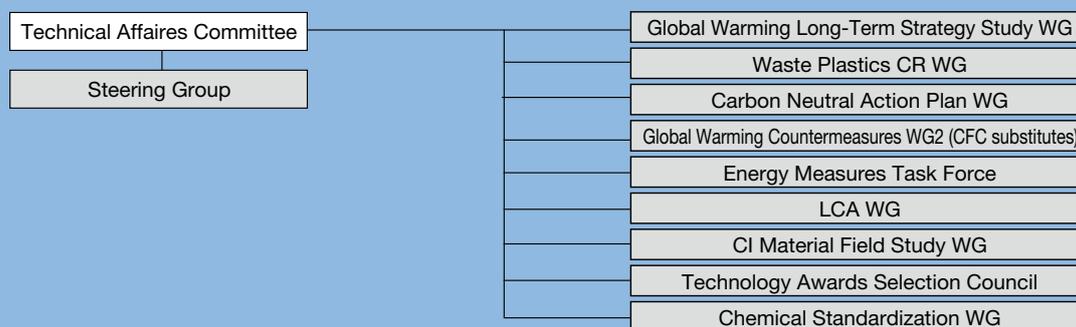


CO₂ emission reductions and emissions



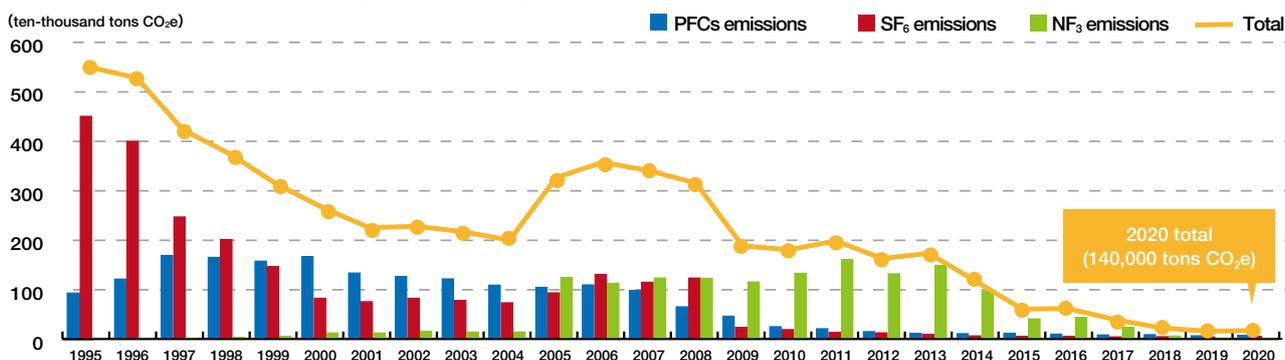
Activity Outline

We actively participate in both domestic and overseas activities related to preventing global warming and creating a recycling society, including a Carbon Neutral Action Plan, and work to tackle various issues. In addition, we are leading the Japanese government's policy response toward carbon neutrality, the creation of LCI calculation rules, activities to promote cLCA products, and E&CC LG's activities in ICCA. Furthermore, the committee promotes the chemical industry as a solution provider in global warming through activities to promote science and technology, such as the JClA Technology Award.



Note: WG/Working Group

PFCs, SF₆, and NF₃ emitted during manufacturing process



TOPICS

TOPIC 1 LCA WG Activities

Of 21 activities using FY2020 evaluation criteria, which were introduced in FY2014, for 14 cLCA activities, the comparable case that assumptions were based on was revised, and the impact from the FY2030 evaluation criteria was calculated. The results were published on the JClA website in December 2021.

In addition, for acrylonitrile and E-SBR, which were selected by the LCI (Life Cycle Inventory) SWG, a subcommittee was established to begin LCI calculations for each product. Moreover, we have started to create guidelines for LCI calculation rules common to the domestic chemical industry in accordance with global rules, referring to calculation rules for individual products and examples from Europe and the United States.

TOPIC 2 Examining the Global Warming Long-term Strategy

In May 2021, JClA compiled and released The Chemical Industry's Stance on Carbon Neutrality in response to Japanese Prime Minister Yoshihide Suga's 2050 Carbon Neutral Declaration in 2020. Subsequently, we expressed the chemical industry's basic stance at the Basic Policy Subcommittee organized by the Agency for Natural Resources and Energy, as well as in cooperation with the Material

Industry Division of the Ministry of Economy, Trade and Industry, on the Technology Roadmap in the Chemical Sector on Transition Finance formulated and published in November 2021 (see page 5 for details).

TOPIC 3 Activities of Waste Plastics and Chemicals Recycling WG

Based on the Chemical Industry's Future Vision on the Chemical Recycling (CR) of Plastic Waste released in December 2020, the CR Standardization SWG discussed the direction of the CR domestic certification system and international standardization. As a result, created a concept of CR that is not limited to the circulation of plastics only, but utilizes all carbon sources to circulate a wide range of chemical products, including those besides plastics. Furthermore, we established the Task Force for International Standardization of CR, prepared a New Work Item Proposal (Form 4) and a Working Draft, which were necessary for the international standard proposal, and submitted them to the ISO/TC47 Secretariat and the ISO Central Secretariat in January 2022. In addition to explaining the contents of the proposal to the participating countries of ISO/TC47, we called for their endorsement of the proposal and participation in the working group, which resulted in a large number of endorsements. Going forward, we will proceed to the next step of drafting a concrete standard.

MESSAGE

Committee Chairman, ASADA Koji
(Executive Officer, DIC Corporation)



Gathering Information on Trade Issues and Dealing with Unfair Trade

While free trade agreements and economic partnership agreements such as TPP11 (CPTPP), Japan-EU EPA, the Trade Agreement between Japan and the United States of America, the Japan-UK Comprehensive Economic Partnership Agreement, and RCEP are expected to be utilized, the environment surrounding international trade is changing, including the promotion of WTO reform, market-distorting industrial subsidies, Environmental Goods Agreements (EGA), and business and human rights. In this changing environment, we will work with the government to advocate the intentions of chemical companies with regard to economic partnership agreements, remediation of unfair trade, trade remedies, and requests for tariff revisions. We will also work on realization of a sustainable society and development of the chemical industry through ICCA activities and interaction with business associations in China, South Korea, etc.

Activity Outline

The committee strives to ascertain trade issues related to the chemical industry and provide information to member companies. In addition, it gets authorities to reflect the opinions of the domestic chemical industry, strengthens its relationships with the chemical industries of China, South Korea, and other overseas chemical-related organizations through dialogue, and participates in the administration of the ICCA. By doing so, the committee deals with the association's international affairs.



FOCUS

Holding the RCEP Seminar

Following the entry into force of the Regional Comprehensive Economic Partnership (RCEP) Agreement in Japan in January 2022, involving 15 countries including Japan, the JCIA invited a lecturer from the Economic Partnership Division, Trade Policy Bureau, Ministry of Economy, Trade and Industry to hold an RCEP seminar online for JCIA members.

The RCEP Agreement is an economic partnership agreement among regions that account for about 30% of the world's GDP, total trade, and population. It covers a region that accounts for about 50% of Japan's total trade, including China and South Korea, with whom Japan will conclude an economic partnership agreement for the first time. It is also expected that preferential tax rates under the agreement will be available to all export destinations in the region under common Rules of Origin and customs procedures.

For this reason, the seminar attracted a great deal of interest from members, with approximately 160 participants, mainly those involved in import and export operations. At the seminar, the participants were given an overview of the RCEP and its operational framework after it comes into effect, the different concession schemes for each party, the timing of tariff reduction and elimination for trade in goods of each party, the rule of differential tariff rates for roundabout imports, origin determination criteria, origin certification procedures, consultation services, etc., and questions were also actively exchanged.

Going forward, we will continue to provide support to promote understanding of rules including Rules of Origin, as well as introduce ways to access information on how to utilize the agreement and points to keep in mind.



TOPICS

TOPIC 1 12th Japan-South Korea Annual Meeting Held Online

In January 2022, the 12th Japan-South Korea Annual Meeting was held online. This meeting between JCIA and the Korea Chemical Industry Council (KOCIC) is held annually in order to share information and exchange opinions regarding the latest trends on chemicals management, etc. in the two countries. In the area of energy and climate change, South Korea explained their efforts toward carbon neutrality, and Japan explained energy conversion and feedstock conversion. Afterwards, they exchanged opinions.



In the area of chemicals management, we explained and exchanged views on Japan's revision of chemical substance regulations under the revised Industrial Safety and Health Act, the status of registration of polymeric substances under South Korea's K-REACH, occupational safety and security disaster prevention in Japan, and South Korea's Serious Accidents Punishment Act.

TOPIC 2 Holding a Hybrid Seminar on Rules of Origin

Every year, JCIA invites instructors from Tokyo Customs to hold a seminar on Rules of Origin. In FY2021, the JCIA and the Kansai Chemical Industry Association jointly hosted the seminar in December in a hybrid format of JCIA's conference room and online, with a total of about 200 participants in the morning and afternoon sessions.



Once again, under the title of "Overview of Rules of Origin under Economic Partnership Agreements (EPAs) - Focusing on Imported Chemicals," the seminar provided an overview of EPAs, how to check EPA preferential tax rates, and explanations regarding Rules of Origin, as well as introducing case studies using chemicals as examples. The Regional Comprehensive Economic Partnership (RCEP) Agreement, which entered into force on January 1, 2022, was also explained.

Department of Business/Economic Information

MESSAGE

Committee Chairman, KASUYA Toshiro
(Senior Executive Officer, AGC Inc.)

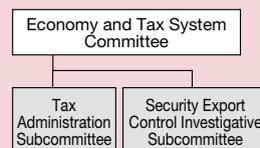


Aiming for New Growth of the Chemical Industry in a Rapidly Changing Social Environment

The economic environment surrounding the chemical industry is becoming increasingly uncertain, with energy costs and raw material prices soaring amid the prolonged impact of the COVID-19 pandemic and the recent international situation. Furthermore, achieving carbon neutrality by 2050 is an ambitious challenge for the chemical industry. For the new growth, it is necessary to tackle a variety of issues related to generating innovation, promoting DX, carbon pricing, and equal footing in international taxation. In response to these challenges, we will strive to make proposals on various regulations and systems, such as the tax system, and disseminate useful information for operating businesses.

Activity Outline

In addition to loosening various regulations and revising the tax system, other related laws and regulation are being introduced to create a vigorous business cycle and thus further grow Japan's economy. In order to respond to these developments and make it possible for the chemical industry to achieve further growth, we gather and share information on the economy and tax system and we make recommendations and requests for policies. We also implement necessary responses to current issues related to the economy and business.



FOCUS

FY2022 Requests for Revisions to the Tax System

In FY2021, we have identified the following six priority request issues to promote capital investment for the creation of breakthrough innovation and decarbonization that will contribute to growth toward achieving carbon neutrality.

- 1 Establishment of a tax system to promote capital investment
- 2 Expansion of the tax system to promote innovation such as research and development
- 3 Reduction of administrative burden for workstyle reform
- 4 Review of adjustments to book value of stocks
- 5 Fundamental review of the taxation system related to global warming countermeasures
- 6 Exemption of gasoline tax and petroleum and coal tax on raw materials for manufacturing petrochemical products from the main taxation system

We also conducted joint request activities in cooperation with other industry associations, resulting in the expansion and extension of the open innovation promotion tax system. Going forward, we will continue to request further expansion of the tax system to accelerate innovation, and we will also request expansion of the system for capital investment to promote investment in the chemical industry to achieve carbon neutrality.

TOPICS

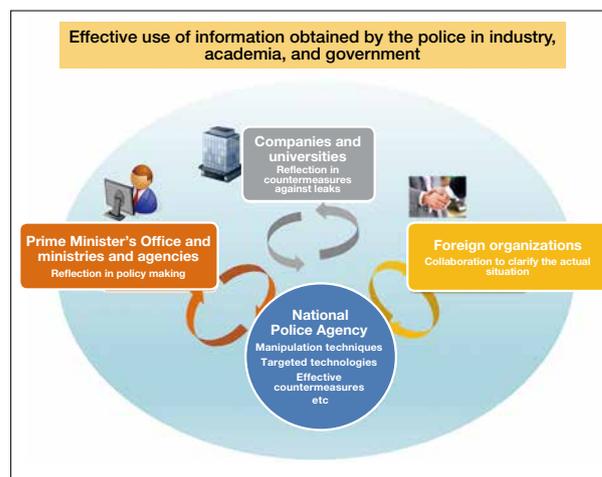
TOPIC 1 Response to Carbon Pricing

We collected information from relevant ministries and agencies on carbon pricing, which is expected to have an impact on the tax system as one of the measures to achieve carbon neutrality, and shared this information with the Economy and Tax System Committee and the Tax Administration Subcommittee. In addition, the Technical Affairs Department and the Department of Business/Economic Information co-hosted a study session for members of the committee and the

subcommittee, inviting outside lecturers. Through these efforts, in relation to the carbon tax in particular, the committee and the subcommittee determined how to handle JCIA's FY2022 tax reform request, and reflected JCIA's opinions in the joint request with other organizations.

TOPIC 2 Holding of Lecture on Leakage of Technical Information

An online lecture for members titled "Current Situation and Issues Concerning Leakage of Technical Information" was held with a lecturer from the Foreign Affairs Division, Foreign Affairs and Intelligence Department, Security Bureau, National Police Agency. Recently, the risk of technical information leakage to foreign countries as a threat to economic security and the vulnerability of supply chains is becoming more apparent than ever. In particular, valuable technical information held by companies, universities, and other research institutions is an extremely important foundation for Japan's international competitiveness. In order to prevent the leakage of such important information, it is essential to raise awareness of this risk by sharing information widely among those in the field who may be targeted. In the lecture, we alerted the audience with information on specific methods and shared information on measures to prevent the leakage of technical information.



MESSAGE



Committee Chairman, TAKEDA Makoto

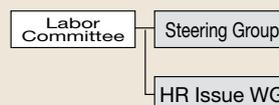
(Executive Officer, Nippon Kayaku Co., Ltd.)

Continuing to Promote Support for Human Resource Development at and Appropriate Information Sharing with Member Companies

In FY2021, we established the HR Issue WG and discussed the theme of the path forward for the people and organizations of Japanese companies looking ahead to 2030. In human resource development, we held a training program for production site leaders at chemical plants using an online system. We also continue to gather and disseminate various types of labor information, such as that on wages, bonuses, etc., and regularly hold information sharing meetings with labor organizations. We will continue to promote the sharing of meaningful information and provide human resources development support for member companies.

Activity Outline

We offer support for human resource development that would be difficult for member companies to provide on their own through Human Resources & Labor Affairs Staff Development Seminars, training for production site leaders, and HR Issue working group-driven activities as well as provide opinions to the government regarding labor-related measures and law revisions through Keidanren. We also regularly exchange information with labor union organizations to maintain good relationships.



Note: WG/Working Group

FOCUS

Activities of the HR Issue Working Group

In the activities of the HR Issue WG, specific issues for consideration are derived from an understanding and analysis of the current status of HR and labor issues common to each company, discussed in light of the situation in the chemical industry, and the measures taken are compiled as proposals. The FY2021 HR Issue WG was established after approval at the first Labor Committee meeting (July), and under the theme of thinking about the ideal way for the people and organizations of Japanese companies to respond to various major changes in the world and society, not limited to the post-COVID-19 period, but also those changes that are expected to occur by 2030, 12 companies participated in the working group and discussed solutions.

The activities of the HR Issue WG were divided into two groups, with one group taking the HR as its starting point and examining what is needed for Japanese companies to continue to ensure international competitiveness after 2030 under the theme of new systems for securing and retaining human resources to survive the competition. The second group, taking the theme of software as its starting point, examined the mindset of organizations and people who can understand and actively adapt to change from the perspective of immediate response to “change” that is expected to accelerate in the future under the theme of the VUCA era: people and organizations resilient to change.

Recommendations were compiled through a total of 25 meetings including general meetings and subcommittee meetings, and reported to the second meeting of the Labor Committee in January 2022. The recommendations are posted on the JCIA member website.



TOPIC

Training for Chemical Plant Production Site Leaders

In FY2021, training for production site leaders at chemical plants was held online four times in June, August, October, and February. In addition, a new educational material titled Lessons Learned from Dust Explosion Accidents was created this time and used for learning safety measures related to the handling of powder starting from the October training.

This training program is a two-part package of lectures on safety and disaster prevention, occupational health and safety, and risk assessment, with the aim of developing and strengthening the skills of chemical plant production site leaders. Lecture 1 was provided online via Zoom and included both a lecture and group discussion, so it was possible for participants to study lessons learned from actual accidents, process risk assessments, and best practices related to safety and disaster prevention and occupational health and safety. Lecture 2, which was given by a JCIA instructor, covered the basic approach and methods related to chemical risk assessment and was distributed via YouTube, making it possible for participants to learn at their own pace.

After the COVID-19 pandemic is under control, we will operate the training program in such a way that more on-site leaders can participate, using both conventional face-to-face training and online training.



Public Relation Department

MESSAGE



Committee Chairman, KOGA Meiko

(Executive Officer, SEKISUI CHEMICAL CO., LTD.)

For Raising the Presence of the Chemical Industry

The chemical industry contributes to our daily lives and economic development through the supply of a wide variety of products while addressing environmental, health, and safety issues.

Working with members, academia, and the media, we will provide various information and promote understanding of the usefulness and reliability of the chemical industry and strive to further raise the presence of chemistry and the chemical industry by holding chemistry related events for the youth.

Activity Outline

In order to enhance the presence of the chemical industry, the JCIA widely disseminates information to society on its activities related to the environment, health, safety, and human resource development, and implements the Dream Chemistry 21 project to convey the usefulness and attractiveness of chemistry to elementary, junior high, and high school students.

Public Relations Committee

Chemistry Day Promotion WG

Note: WG/Working Group

FOCUS

Timely Communication

To communicate information, JCIA holds press conferences, issues press releases, and participates in interviews regarding issues that the chemical industry faces and solutions to those problems.

In FY2021, the JCIA held four chairman's press conferences to explain economic trends surrounding the chemical industry, as well as JCIA's safety activities, responsible care activities, chemical management activities, and human resource development measures. In particular, the importance of the Chemical Industry's Stance on Carbon Neutrality, which defines the chemical industry's approach to contributing to carbon neutrality in response to the Japanese government's 2050 Carbon Neutral Declaration, was emphasized in press releases and at the press conferences.



TOPIC 2 Updating the Dream Chemistry 21 Website

The official website of the Dream Chemistry 21 Committee was renewed for the first time in six years, with enhanced security and improved operability for smartphone browsing. In addition, we adopted a friendly and easy-to-read design and devised a new way to post information on events to encourage children to take an interest in chemistry.



TOPIC 3 Status of Dream Chemistry 21 Events

As part of the Dream Chemistry 21 project, we hold the What? Why? Science Experiment Lab and Kids' Chemistry Experiment Show every year. In FY2021, although the Kids' Chemistry Experiment Show was cancelled both times due to the COVID-19 pandemic, the What? Why? Science Experiment Lab was held once with a limited number of participants, and approximately 40 elementary school students were able to experience chemical experiments.



TOPICS

TOPIC 1 Communicating Information Through Published Works

We issue Chemical Industry of Japan in Graphs, which explains statistics regarding Japan's chemical industry in an easy-to-understand manner using numbers and graphs, each year and distribute it to not only member companies but also education-related entities, etc. Additionally, we release the JCIA Annual Report, a summary of JCIA's activities, every year to foster understanding of chemical industry's activities.



JCIA's Human Resource Development

The chemical industry supports the development of both society and the economy by providing various materials, and human resource development is important for the industry to continue to grow. Therefore, JCIA implements various human resource development measures for the next generation. For elementary, junior high, and high school students, we hold educational events to stimulate interest in chemistry, and for university and graduate students, we hold exchange events with companies and provide chemical industry education, as well as scholarships. In addition, for adult members, we also hold seminars and training courses on numerous topics including safety and disaster prevention, occupational health and safety, and chemical management to promote the development of the next generation of human resources who will carry the future of the chemical industry.

Chemistry Personnel Cultivation Program (for college students)

Summary

JCIA promotes the Chemistry Personnel Cultivation Program in order to train young people, who takes an important role as the foundation for strengthening the international competitiveness of and promoting Japan's chemical industry. The program provides information on the human resource needs of the chemical industry to graduate-level chemistry majors throughout Japan and supports doctoral candidates in fields that meet those needs. At present, 32 JCIA member companies participate in the program, and in FY2021, the following activities were undertaken.

Offering scholarships

JCIA scholarships of 200,000 yen/month were provided to each of 34 students recommended by the majors, which is under the JCIA program. The scholarship is available for up to three years, until the end of the doctoral program.

Promoting exchanges program between universities and JCIA companies

The Industry-Academia Exchange Meeting 2021, a venue for exchanges with universities and companies, was held online in September. At the meeting, 12 scholarship recipients who are in the second year of their doctoral course, gave presentations on their research and three doctors, who now work at JCIA member companies shared their experience at the companies.

The forum was attended by 32 members from member companies and 46 faculty members and students from universities, who engaged in lively discussions on the research presentations by the scholarship recipients. In a case study report on doctoral activities, a graduate of the program gave a lecture on what companies expect from a doctoral student, their attitude toward work, and what they would like the student to work on during their time as a student. A video of the case study lecture is available on the website of the Chemistry Personnel Cultivation Program.

Supporting job search activities

JCIA held the online Student-Company Exchange Meeting 2021 in December to support the job search of doctoral students. 69 doctoral students from supported majors and 20 member companies participated in the event, which featured presentations by students who wanted to learn more about their research and other topics, as well as company presentations by participating companies. Participants visited students and companies of their respective interests and deepened mutual exchanges.

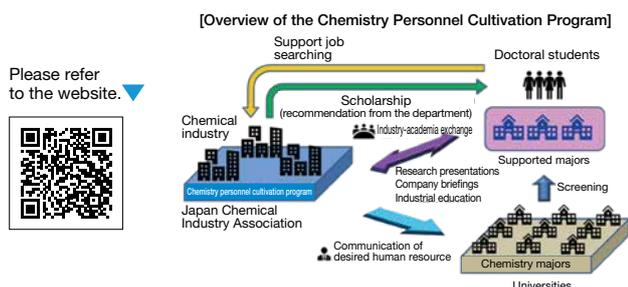
Supporting chemical industry education

With the cooperation of member companies, we offer the Chemical Industry Course to some supported majors in order to deepen undergraduate and graduate students' understanding of the chemical industry. Employees working on the frontline of chemical companies serve as instructors, explain the history, present, and future of the chemical industry from a solution provider perspective, and present information on various subjects, including topics companies are currently focusing on and what they personally find appealing about the industry. In FY2021, in addition to lectures at Osaka City University, Yokohama National University, and Tohoku University, lectures were newly offered at the University of Tokyo. Most of the lectures in FY2021 were online lectures, but some face-to-face lectures were held in the second semester, allowing students to deepen their understanding of the chemical industry through direct interaction between corporate lecturers and students. Participants made comments such as, "I want to use what I learned in this lecture when I work in the chemical industry in the future," and "I can now proudly say that the chemistry and science I am learning now are useful to the world."

Calling for applications and screening supported major

In September, there was a call for the 12th applications for support in FY2022. Applications were received from six majors, which included one new major, and the screening committee met in November and selected four majors to provide support starting in FY2022 (three reselected majors and one new major).

The Chemistry Personnel Cultivation Program has been highly praised by industry, academia, and the government as an initiative that educates and makes use of people with advanced science knowledge. In FY2021, ten scholarship recipients in supported majors completed their doctoral program, and seven of them were employed by companies. Of those, three were hired by JCIA member companies. A total of 90 students have received scholarships through the program, and 73 of those, including 39 who were hired by the program member companies, are working in the industry.



Holders of doctorates who meet the human resource needs of the industry and are hired by companies are expected to play an active role because of their valuable skills to support the future development of the chemical industry. Through the Chemistry Personnel Cultivation Program, we will work to further strengthen the partnership between industry and academia and move forward with more extensive support activities.



Face-to-face lecture in the Chemical Industry Course

Dream Chemistry 21 Project (for elementary and junior and senior high school students)

Consisting of JCIA, the Chemical Society of Japan, the Society of Chemical Engineers Japan, and the Japan Association for Chemical Innovation, the Dream Chemistry 21 Committee hold events appropriate



for children of all ages to convey to them wonder and enjoyment of chemistry and to encourage their interest in chemistry. For elementary school students, there are the “Kids’ Chemistry Experiment Show” and “What? Why? Science Experiment Lab,” as hands-on events in which children conduct experiments and build things, and for junior and senior high school students, there is the Chemistry Grand Prix, a national competition in which students compete based on their chemistry skills. Although the hands-on events had to be scaled back or cancelled in FY2021 due to the COVID-19 pandemic, approximately 3,200 junior and senior high school students from across the country participated in the Chemistry Grand Prix, which was held online. In addition, we send students who do exceedingly well in the Chemistry Grand Prix as

representatives of Japan to the International Chemistry Olympiad, where high school students from about 80 countries and regions around the world compete based on their chemistry skills annually.

(Tokyo) Industrial Safety Course (for working people)

The Industrial Safety Course is jointly sponsored by JCIA, the Petroleum Association of Japan, and the Japan Petrochemical Industry Association. The course, headed by Dr. Atsumi Miyake (Vice President and Professor at Yokohama National University), is mainly for members of the three organizations in the Tokyo area, and aims to develop future managers, administrators, and safety promotion specialists who understand safety in the petroleum and chemical industries.

Due to the impact of the COVID-19 pandemic, the face-to-face sessions were cancelled in FY2020, and a total of four online special lectures were held as an alternative. In FY2021, we applied the breakout room function of the online tool, including group discussions and get-togethers, and held all lectures in an online format.

A total of 13 lectures on safety and security activities were given by invited lecturers who guide the three co-sponsoring organizations, and managers in charge of relevant ministries and agencies, and 23 students from 19 member companies participated. The course participants learned the basics of industrial safety, the background of accidents that have occurred in the past, advanced safety initiatives in the industry, safety education and awareness-raising, etc., and deepened their insight on the ideal approach to safety in the petroleum and chemical industries through group discussions.



Various lectures and seminars for human resources development of JCIA

Name of lecture or seminar	Purpose	Frequency
Security Export Control Seminar	Provide introduction to export of products and manufacturing technologies based on the Foreign Exchange and Foreign Trade Act	Once a year
Improvement Training for Chemical Plant Production Sites Leaders	Training and skill enhancement of front-line supervisors at production sites (Particularly in the areas of process safety and disaster prevention, occupational health and safety, and risk assessment)	Four times a year
Safety Management Seminar For Transportation of Dangerous Goods	Acquisition of knowledge on land, sea, and air transportation of dangerous goods	Once a year
Chemical Risk Forum	Training of practitioners in risk-based chemical substance management (Series of 10 educational seminars per year)	May to February of the following year (Ten times per year)
Issues in International Commerce Seminar	Explain the anti-dumping system, rules of origin, unfair trade practices report, EPA/FTA, and so on	Once or twice a year
Industrial Safety Course	Develop managers who can understand future safety in the oil and chemical industries, and safety experts who have a broad purview (13-part lecture series)	November to March of the following year (13 times per year)
Human Resources & Labor Affairs Staff Development Seminar	Cultivate leaders in the HR and labor affairs divisions who are responsible for the next generation of workers (a series of 8 seminars held every second year)	May to December (Eight times/ every other year)
Lecture on the Importance of Standardization	Teach and spread the importance of standardization through lectures that have a different theme every year	Once a year
Risk Assessment Seminar (using BIGDr.Worker)	Learn about risk assessment methods for workers Learn how to perform risk assessment including mixtures by utilizing BIGDr.Worker	Twice a year
Risk Communication Training	Improvement of communication skills in community dialogue (ability to understand the other person's position and values and to respond appropriately to unexpected questions)	Once a year

Three JCIA Awards

The 46th JCIA Safety Award

These awards are conferred on chemical plants that have achieved high-level safety records through occupational health and safety and process safety and disaster prevention activities and are implementing extremely excellent safety initiatives, which serve as models for the industry. In addition to having the representatives of the awarded sites present their safety activities as best practices, a safety symposium is held in conjunction with the awards to discuss the major theme of how to maintain zero accidents among the representatives of the sites, providing many members with reference for their safety activities.

Award	Award Winner
JCIA Annual Safety Award Grand Prize	Tsukuba Plant, Japan Fine Coatings Co., Ltd.
JCIA Annual Safety Award First Prize	Fujifilm Corporation Fujinomiya Plant
JCIA Annual Safety Award First Prize	Sumitomo Bakelite Co., Ltd. Utsunomiya Plant
JCIA Annual Safety Award First Prize	Toray Industries, Inc. Nagoya Plant
JCIA Annual Safety Award First Prize	KUREHA CORPORATION Polymer Processing Research Laboratories
JCIA Annual Special Safety Award First Prize (Research institutes)	Showa Denko K.K. Institute for Integrated Product Development (Toke)



I would like to express our deep appreciation for the honor of being awarded the JCIA Annual Safety Award Grand Prize on behalf of JFC Tsukuba Plant. The safety knowledge, skills, and culture have been inherited and deepened in our plant as a result of steadily implementing meticulous Japanese-style safety culture activities such as safety morning meetings and on-the-job training. Tsukuba Plant has also conducted the integration of Japanese and European safety cultures by implementing global safety tools such as the Safe Start Program. In addition, we have continuously struggled to advance equipment safety. As the result, the safety record of accident-free operations more than 20 years has been achieved, and it is a great honor to receive this brilliant award.

Tsukuba Plant, Japan Fine Coatings Co., Ltd. **Takahiko Kurosawa**

The 54th JCIA Technology Award

JCIA Technology Awards recognize companies that have contributed to the progress of the chemical industry and economic society through the development and industrialization of excellent chemical technologies in order to promote chemical technologies. JCIA awards the Grand Prize, the Special Technology Prize, and the Environmental Technology Prize, and values their excellent achievement.

Award	Award Winner	Awarded Theme
Grand Prize	Sumitomo Chemical Company	Development and industrialization of chlorine production process by hydrogen chloride oxidation with low environmental impact
Special Technology Prize	Kuraray Co., Ltd.	Development and industrialization of Purear ^{GL} membrane module with high water permeability and high turbidity
Environmental Technology Prize	ENEOS Corporation	Development of new electrolysis technology for renewable energy fixation



We would like to express our sincere appreciation for receiving the Grand Prize. This technology efficiently recycles HCl, a byproduct of the chlorine-based chemical manufacturing process, into Cl₂, and we have licensed this technology in Japan and overseas as an energy-saving and environmentally friendly Cl₂ production technology. We have been aiming to contribute to the reduction of the environmental impact of the chlorine chain through this technology, and we are honored to be recognized in this respect. We will continue to contribute to the realization of a sustainable society through technological development.

Group Manager, Essential Chemicals Research Laboratory, Sumitomo Chemical Company **Kohei Seki**

The 16th JCIA Responsible Care (RC) Award

These awards, which are conferred on individuals or groups that have contributed to promoting RC activities, are aimed at further motivating and energizing the people involved in RC activities.

Award	Award Winner	Awarded Theme
Grand Prix Award	Kao Corporation, SCM Division	Batch process anomaly sign detection using advanced AI
Jury's Special Award	Mitsubishi Chemical Corporation, Toyama Plant	Various efforts and results for development of safety culture
Outstanding Award	Mitsui Chemicals, Inc., Environment Section, Manufacturing Department 1, Iwakuni-Ohtake Works,	Activity for Stability of Activated sludge process at Mitsui Chemicals Iwakuni-Ohtake Works



We are very honored to receive the RC Grand Prix Award. The main point of this activity was thinking about what is useful in the manufacturing site, and how to apply AI to the manufacturing facilities. We were able to achieve this goal by implementing the project with passionate members. As a result, we achieved a reduction in the workload of operation monitoring operators, improved occupational safety, and stabilized quality, and we are very happy to have received the RC Grand Prix Award. Going forward, we will continue our activities to improve safety in the chemical industry as a whole.

Electricity & Instrument, Fundamental Engineering Group, Manufacturing Plant Center, SCM, Kao Corporation **Jin Tamura**

Introduction to the Chemical Products PL Consulting Center

When the Product Liability (PL) Act was promulgated in 1994, the Chemical Products PL Consulting Center was established as an independent organization within JCIA because of the need to create an out-of-court dispute settlement system that draws on specialized knowledge of each product field. The Center consults on a wide range of issues related to chemical products sought from not only consumers but also businesses and Consumer Affairs Centers nationwide from a professional perspective. The Center also emphasizes providing information that can help prevent chemical product accidents as well as educational activities such as publishing booklets and holding on-demand lectures. In addition to offering on-demand lectures for general consumers and businesses, the Center adjusts the content of the lectures to meet the needs of clients as much as possible.

The Center's activities are reported monthly in the Activity Note, which is available to the public on our website. In addition to the contents of all consultations and responses, the website also contains related information, such as Special Notes and Topics.

<https://www.nikkakyo.org/plcenter/>



New information is provided through news email. Register your email address at PL@jcia-net.or.jp



Newsletter distribution

Phone consultation to the Chemical Products PL Consulting Center

Weekdays 9:30 to 16:00

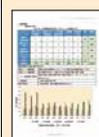
Number of consultations (FY2021) 241



Activity Note (Monthly report)



Consultation info



Special Notes



Column



Publishing booklets



Activity Report meetings (Venues: Tokyo and Osaka)

On-demand lecture dispatching

For consumers

For businesses

Provision of educational materials



Information Distribution Services by JCIA

JCIA distributes the following email magazines to members. If you would like to receive an email magazine, please contact the relevant office.

Ankan-Net (Safe Environment Network)

In addition to information on revisions to laws and regulations concerning environmental preservation, process safety and disaster prevention, occupational health and safety, distribution safety, and chemical safety, as well as notices and notifications from administrative authorities and calls for public comments, JCIA also provides information on various related lectures and seminars in a timely manner.

Contact: Environment and Safety Department

RC net

This mail magazine is for member companies of the Responsible Care (RC) Committee. It provides information on RC-related events, such as RC activity report meetings; sponsored events, including informal member get-togethers, and member seminars; and calls for event sign-ups.

Contact: Responsible Care Department

Chemical Standardization Information Net

The Chemical Standardization Information Net provides information on seminars of related organizations and domestic and international trends in the field of chemical standardization. The email magazine is issued twice a month, and the current number of subscribers is approximately 100.

Contact: Technical Affairs Department

Chemical Management Net

We provide the latest information on trends in Japanese and overseas laws and regulations related to chemical management and on seminars sponsored by JCIA.

Contact: Chemicals Management Department

PR Net

We distribute information on JCIA sponsored events, such as seminars and Chemistry Experiment Shows, and subsequent event reports. The email magazine is issued once or twice a month, and the current number of subscribers is approximately 330.

Contact: Public Relations Department

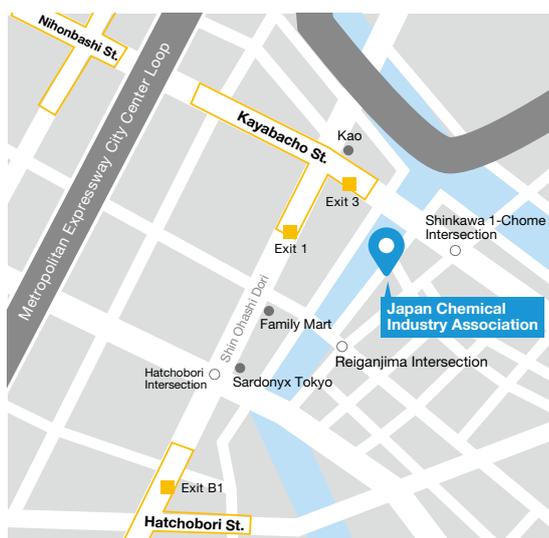
Glossary

Term/abbreviation	Official name	Explanation
ACC	American Chemistry Council	
AMEICC	ASEAN Economic Ministers and METI Economic and Industrial Cooperation Committee	Subordinate organization of the ASEAN Economic Minister (AEM) - METI Consultation.
APEC	Asia-Pacific Economic Cooperation	Framework for economic cooperation by 21 economies in the Asia-Pacific region.
ARCP	ASEAN Regulatory Cooperation Project	
ASEAN	Association of South-East Asian Nations	A regional cooperative organization comprising ten countries in Southeast Asia for economy, society, politics, security, and culture. The headquarters is located in Jakarta, Indonesia.
BAU	Business as usual	Natural case for which no special countermeasures were taken.
BIAC	Business at OECD (The Business and Industry Advisory Committee to the OECD)	Private Economic advisory committee to the OECD. It consists of private economic organizations in affiliate countries of OECD. (Business and Industry Advisory Committee)
BIGDr	The Base of Information Gathering, sharing & Dissemination for risk management of chemical products	Total information system that comprehensively supports and promotes GPS/JIPS activities.
BIGDr.Worker	The Base of Information Gathering, sharing & Dissemination for risk management of chemical products. Worker	Evaluation software tool that JCIA developed to support chemical risk evaluations. It is possible to easily calculate the exposure concentration in the work environment and make evaluations.
Cefic	European Chemical Industry Council	
Chemical Inventory	—	Inventory of Chemical Substances
chemSHERPA	Chemical information Sharing and Exchange under Reporting Partnership in supply chain	Information transmission scheme of chemicals in products
cLCA	carbon-Life Cycle Analysis	Carbon footprint and life cycle assessment. The CO ₂ emissions during the life cycle (material sampling, manufacturing, distribution, use, and disposal) of final product using chemical products and that of final product using comparative products are compared, and that difference is considered as emissions that increase when those chemical products were not used and calculated as net contribution to avoided emissions.
CLP	Classification, Labelling and Packaging of substances and mixtures	A regulation on the classification, labeling and packaging of substances and mixtures in the EU based on the GHS.
CN	Carbon Neutral	When the volume of CO ₂ emissions accompanying people's daily activities and CO ₂ absorption are in balance. The aim is to achieve effective zero emissions of CO ₂ , the cause of global warming.
CP&H LG	Chemical Policy and Health Leadership Group	An organization within ICCA.
DX	Digital Transformation	Increasing the quality of life and business through information technology (IT), such as high-speed Internet access, cloud service, and artificial intelligence (AI).
E&CC LG	Energy and Climate Change Leadership Group	An organization within ICCA.
EPA	Economic Partnership Agreement	
ESG	—	ESG refers to Environment, Social, and Corporate Governance. These are three core factors in measuring whether a company can sustainably develop.
GADSL	Global Automotive Declarable Substance List	List of substances already restricted or planned to be restricted worldwide by countries and published by the GASG with the possibility of being contained in automotive products.
GASG	Global Automotive Stakeholders Group	Organization constructed and established by representatives of automotive, automotive parts, and chemicals manufacturers in Japan, Europe, and United States for the purpose of continuously exchanging and sharing information through the supply chain of the global automotive industry in order to achieve reductions in the environmental load through the life cycle of automotive.
GHG	Greenhouse Gas	
GHS	Globally Harmonized System of classification and labelling of chemicals	Globally harmonized system concerning classification and labeling of chemicals. System for classifying chemicals by type and degree of hazard according to globally unified rules with labeling to make the information understandable at a glance and provide a safety data sheet. Issued from UN in 2003.
GPS	Global Product Strategy	Voluntary approaches for performing risk evaluations of chemical products by each company in order that each company minimizes the risk of chemicals through the whole supply chain by implementing appropriate management based on the risk and disclosing the information on safety and risk to general society including customers.
ICCA	International Council of Chemical Associations	
ICCM	International Conference on Chemicals Management	International conference on the management of chemical substances.
JAMP	Joint Article Management Promotion-consortium	A consortium for promoting article management that appropriately manage information on chemical substances contained in an article (parts and finished products) and promotes a system for conveying the information throughout the supply chain.
JEITA	Japan Electronics and Information Technology Industries Association	
JIPS	Japan Initiative of Product Stewardship	Risk evaluation considering the supply chain and voluntary approaches by the industrial field on the basis of risk management.
LCA	Life Cycle Assessment	Method for objectively and quantitatively evaluating the environmental impact of all stages, from acquisition of materials for the product through production, use, disposal, transportation, etc.
LCI	Life Cycle Inventory	Indicates resource and energy input and emissions for products and services at all stages by looking at the whole life cycle from material purchasing to production, distribution, use, disposal, and recycling.
LRI	Long-range Research Initiative	Voluntary long-term research (Activities that support studies on the impact of chemical substances on human health and environment over a long period of time based on funds invested by LRI member companies). The initiative is driven by the cooperation of three chemical associations from Japan, the U.S., and European countries (JCIA, ACC, and Cefic).

Term/abbreviation	Official name	Explanation
NF ₃	Nitrogen trifluoride	Nitrogen trifluoride is a type of greenhouse gas.
NGO	Non-Governmental Organizations	Non-government organization created by private citizens and citizen organizations.
PFCS	Perfluorocarbons	Perfluorocarbons such as CF ₄ and C ₂ F ₆ .
PRTR	Pollutant Release and Transfer Register	A system for notifying the release and transfer of chemical substances. The PRTR system is designed to identify, collect and disseminate data on the amounts and sources of a variety of toxic chemicals released to the environment or transferred outside of facilities in the form of waste.
QSAR	Quantitative Structure-Activity Relationship	Quantitative relationship between chemical substance structure and biological (pharmaceutical and toxicological) activity. The purpose is to predict the efficacy of chemical substances with similar structures.
RC	Responsible Care	Activities wherein each company handling chemical substances voluntarily secures the environment, safety, and health in all processes of development of chemical substances, manufacturing, distribution, use, final consumption, disposal, and recycling and then discloses the outcome of activities and communicates with society.
RCEP	Regional Comprehensive Economic Partnership	A regional free trade agreement consisting of 15 countries (Indonesia, Singapore, Thailand, Philippines, Malaysia, Brunei, Vietnam, Myanmar, Laos, Cambodia, Japan, China, Korea, Australia, and New Zealand), primarily Association of Southeast Asian Nations (ASEAN) members. Signed November 2020.
RCLG	Responsible Care Leadership Group	An organization within ICCA.
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	Regulation on registration, evaluation, authorisation and restriction of chemicals.
SAICM	Strategic Approach to International Chemicals Management	Compiled by the 2006 International Conference on Chemicals Management, this is a strategic approach toward international chemical management with 2020 as the target year.
SDGs	Sustainable Development Goals	Seventeen goals until 2030 concerning poverty, starvation, energy, climate change, industry and innovation as agendas of 2030 for sustainable development were adopted by the UN in September 2015. Successor of Millennium Development Goals.
SDS	Safety Data Sheet	Safety data sheet for chemical substances, containing information describing the safety of chemical substances. Formerly called MSDS in Japan.
SF ₆	Sulfur hexafluoride	Sulfur hexafluoride is a type of greenhouse gas.
SWG	Sub Working Group	
TPP11	Trans-Pacific Partnership or Trans-Pacific Strategic Economic Partnership Agreement	The TPP Agreement was signed by 12 countries in February 2016, but after the US declared its withdrawal in January 2017, the agreement was broadly agreed at the TPP ministerial meeting in Vietnam in November 2017. 11 ministers signed the agreement in March 2018, and it entered into force in December 2018.
TF	Task Force	Special team established to tackle particular urgent issues.
VOC	Volatile Organic Compounds	This is a general name for volatile organic compounds that evaporate into the air. It includes various substances such as toluene, xylene, and ethyl acetate.
VUCA	Volatility, Uncertainty, Complexity and Ambiguity	An acronym for volatility, uncertainty, complexity, and ambiguity, which describes a state in which the future is difficult to predict.
WTO	World Trade Organization	An organization that handles global trade rules between countries.
WG	Working Group	Working group organized for promoting investigations and planning of particular problems.
Equal Footing	—	Equalizing the various terms when competing. For example, eliminating preferential treatment for only a particular company in an industry.
Carbon Pricing	—	General term for efforts to encourage reductions in emissions by attaching a price to carbon emitted by companies, households, etc. and placing a burden proportional to the volume emitted.
Japan-EU Economic Partnership Agreement	—	EPA between Japan and EU that came into effect February 1, 2019.
Japan-UK Comprehensive Economic Partnership Agreement	—	EPA newly concluded between Japan and UK because the Japan-EU Economic Partnership Agreement is no longer applicable as the UK left the EU. Came into effect January 1, 2021.
Trade Agreement between Japan and the United States of America	—	Agreement between Japan and U.S.A. to reduce/eliminate restrictive measures, such as customs and import quotas that came into effect January 1, 2020.
Product Stewardship	—	Activities to ensure the health and safety of people and minimize the impact on the environment through the whole product life cycle.
Position Paper	—	Document in which a government, organization, individual, etc., states their own position and understanding regarding important issues, concerns, etc.

Editor's Policy

The JCIA Annual Report is released each year to broadly inform all stakeholders, including members, of JCIA activities. In addition to activity reports for each committee, it concisely summarizes JCIA's various efforts to create a sustainable society. There are also plans to issue the JCIA Annual Report Reference Material, a compilation of various data related to JCIA activities, in fall.



Access Information

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JCIA ANNUAL REPORT 2022



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