



Responsible Care[®] commits the chemical industry to:

→ Proactively support safe chemicals management.

- → Safeguard people and the environment by continuously improving our environmental, health and safety performance; the security of our facilities, processes and technologies; and by driving continuous improvement in chemical product safety and stewardship throughout the supply chain.
- → Strengthen chemicals management systems by participating in the development and implementation of lifecycleoriented, sound-science and riskbased chemical safety legislation and best practices.

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- → Influence business partners to promote the safe management of chemicals within their own operations.
- → Engage stakeholders, understand and respond to their concerns and expectations for safer operations and products, and communicate openly on our performance and products.
- → Contribute to sustainability through improved performance, expanded economic opportunities and the development of innovative technologies and other solutions to societal challenges.



Notes on Responsible Care® & the Responsible Care Leadership Group

First conceived in Canada more than 30 years ago, Responsible Care has been the global chemical industry's premier performance initiative since 1985. By the end of 2017, Responsible Care was being implemented by 62 chemical associations in nearly 70 economies around the globe.

Those associations are responsible for the detailed implementation of Responsible Care in their country. Individual country's programs are at different stages of development and have different emphases and are monitored and coordinated by the Responsible Care Leadership Group (RCLG) of the International Council of Chemical Associations (ICCA)*. Expansion of Responsible Care is set to continue with expressions of interest and applications from new countries in Asia, Africa and Europe.

The Responsible Care Global Charter (see page 4), launched publicly at the first UN International Conference on Chemicals Management in February 2006, was revised and strengthened under an ICCA review process in 2014. The Charter seeks to harmonize, govern and expand the Responsible Care ethic globally. It also launched a new focus on product stewardship throughout the supply chain and promised continued contributions to sustainable development. As of November 2018, more than 590 chemical companies belonging to ICCA associations, and representing 96% of the world's largest chemical companies, had signed on to the 2014 Global Charter.

The RCLG continues to pursue efforts to achieve additional support for the Charter from leading global chemical firms. It seeks to fully implement the Responsible Care Global Charter through the efforts of national chemical associations and company members.

*Four Leadership Groups report to the ICCA Board: Chemical Policy & Health, Energy & Climate Change, Communications and Responsible Care



THE RESPONSIBLE CARE® GLOBAL CHARTER

First published in 2006, the Responsible Care Global Charter was revised in 2014 to respond to current stakeholder expectations, as well as to the opportunities and challenges facing the global chemical industry. CEO signatories to the Charter commit to actively strengthen Responsible Care worldwide by dedicating their company, people, technologies and business practices to these six Key Elements:



A Corporate Leadership Culture that proactively supports safe chemicals management through the global Responsible Care initiative.

Charter signatories commit to provide leadership and resources to:

- Implement Responsible Care principles and practices wherever the company manufactures or sells products;
- Participate in national Responsible Care programmes where the company has significant business activities¹;
- Contribute to the further expansion of Responsible Care in other regions where the company has significant business activities;
- Promote industry and public awareness of Responsible Care;
- Provide practical support and share best practices to enable other parties to successfully implement Responsible Care.



Safeguarding People and the Environment by continuously improving our environmental, health and safety performance; the security of our facilities, processes and technologies; and by driving continuous improvement in chemical product safety and stewardship throughout the supply chain.

Charter signatories commit to:

- Implement corporate principles, policies and procedures to safeguard employees, contractors, the public and the environment;
- Strive for continuous improvement with respect to workplace health and safety, public safety, process safety, environmental performance and the security of the company's facilities and products.



Strengthening Chemicals Management Systems by participating in the development and implementation of lifecycleoriented, sound-science and risk-based chemical safety legislation and best practices.

Charter signatories commit to managing the safety of chemical products in accordance with the expectations of the ICCA Global Product Strategy (GPS), including:

- Active collaboration in the development and implementation of effective, risk-based chemicals management policies, regulations and performance standards;
- Active participation in capacity building initiatives to advance the safe management of chemicals across the globe;
- Contributions to national and international education and research that advances understanding of the safety of chemicals, such as the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS) and the Long-

range Research Initiative (LRI).

¹The effective implementation and credibility of Responsible Care and fulfilment of related commitments in the Global Charter requires the fullest participation of leading chemical companies, wherever they have significant business activities.





Influencing Business Partners to promote the safe management of chemicals within their own operations.

Charter signatories commit to:

- Drive continual improvement in product safety and stewardship processes and management;
- Provide information and assistance to enable safe chemicals management along the value chain;
- Collaborate with chemical users on maintaining and improving processes for the safe and effective uses of chemicals;
- Champion Responsible Care along the chemical industry value chain and encourage similar approaches in other industrial sectors.

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Engaging Stakeholders, understanding and responding to their concerns and expectations for safer operations and products and communicating openly on our performance and products.

Charter signatories commit to:

- Engage stakeholders to understand and respond to their concerns and expectations about chemical manufacturing and product safety;
- Provide stakeholders with company performance and product safety information;
- Provide performance information to national and international Responsible Care organizations to facilitate effective dialogue with the industry's stakeholders.



Contributing to Sustainability through improved performance, expanded economic opportunities and the development of innovative technologies and other solutions to societal challenges.

Charter signatories commit to:

- Implement corporate principles, policies and processes to drive continuous improvement in waste management, greenhouse gas emissions and the efficient use of resources including energy, raw materials and water;
- Promote the importance of chemicals in improving quality of life and contributing to sustainable development;
- Participate in initiatives which confirm Responsible Care as a contributor to sustainable development and encourage others to make their own contributions to sustainability.



FROM THE MOMENT I took over the RCLG Chairmanship, I've been keen to make Responsible Care® more understandable, achievable for SMEs and offer addedvalue to all practitioners. We're addressing the maturation of the Responsible Care Management Framework and the need for rejuvenation efforts, and I have been very encouraged by the tremendous response of leading member associations as I reach the end of my tenure.

It is always a pleasure to welcome new member associations to the Responsible Care family. Since our last Responsible Care Status Report in 2015, we have added the lead chemical organization from four more nations: Croatia, Egypt, Pakistan and Vietnam. These four and many other national associations, including priority ICCA targets India and China, have benefited from our capacity building efforts. In 2016, capacity building was restructured under a new task force to address future challenges and strengthen industry's chemicals management capabilities across the globe.

As outlined in this report, our work with UN Environment on joint projects in Argentina and Kenya is progressing, and future activities will be shaped as part of ICCA's commitment at the Third UN Environment Assembly (UNEA-3) in 2017

"I have been very encouraged by the tremendous response of leading member associations ."

PATRICK VANDENHOEKE

Patrick Vandenhoeke ICCA to support 30 capacity building workshops a year and introduce Responsible Care programs in five new countries by 2030. To this end RCLG supported and participated in a large event in Casablanca, Morocco in September 2018, targeting French-speaking countries in Northern Africa to foster Responsible Care implementation.

Another important development during 2017 was setting up a joint task force to explore closer collaboration between ICCA and the International Chemical Trade Association (ICTA), particularly in countries where chemical production is less developed than chemical distribution. Enthusiasm on both sides and pre-existing cooperation between our organizations, particularly at the national level, enabled efforts to move ahead rapidly. This year has seen the signing of a Memorandum of Understanding (MOU) and various joint activities that strengthen our commitment to continuous improvement of environmental, health, safety and security (EHS&S) performance throughout global chemical supply chains. Having worked in the distribution sector, I have a personal interest in this partnership and believe it is absolutely essential to the continued success of Responsible Care.

I admit I had scant knowledge of Responsible Care and its importance to our industry when I took on the role of RCLG Chairman in 2016. It was a fast-tracked, sometimes challenging, learning process but I had the support of experienced and highly committed members of the group. This process gave me firsthand knowledge of how essential it is to get individuals within our companies, our associations, partner organizations and other stakeholders actively involved.

Finally, as I step down from the role of RCLG Chair, I'm delighted to introduce my successor Baudouin Kelecom. Baudouin is Environmental and Regulatory Compliance manager at ExxonMobil and currently chairs the Responsible Care Issue Team at Cefic. His experience and knowledge will be invaluable in taking the group forward and meeting new challenges from October this year when the official handover takes place at the ICCA Board meeting in Amsterdam...

Solline

Patrick Vandenhoeke RCLG Chairman 2016-2018

THANK YOU, PATRICK, for your leadership, enthusiasm, and passion. I feel quite humbled to become a part of this global success story involving so many dedicated people living and working all over the world.

We live in extraordinary and complex times involving growing interaction with our stakeholders and improved knowledge on all sides.

We live in extraordinary times with more value-added delivered by the chemical industry than ever before.

At the same time the challenge to keep this valued-added, interaction, knowledge and complexity in balance has never been greater. Responsible Care® will support our industry's role in keeping that balance, evolving to meet fresh challenges more than three decades after its launch.

We can expect increased stakeholder scrutiny of industry's contribution to the UN Sustainable Development Goals (SDGs). The ICCA Sustainability Task Force approved by the Board in June of this year is a positive response, and as a member of this group I look forward to working closely with representatives from national associations and companies at the forefront of sustainability innovation, and from across all four ICCA leadership groups. We will strive to make the most of this important opportunity over the next three years.

This new focus is reflected in our report which outlines plans for an ICCA strategy for sustainability that connects to Responsible Care and sound chemicals management as a vital foundation, provides the substance of our contribution to the UN Strategic Approach to International Chemicals Management (SAICM) process, and charts the way forward beyond 2020. It is not only a matter for internal developments and actions but is also high priority for our continued engagement with UN Environment, national governments and non-governmental organizations (NGOs).

Responsible Care has proved an enduring and effective tool for driving our industry's EHS&S performance. But it is more than a tool: it is a set of values which requires us all to feel a sense of ownership in a continuously changing environment. I look forward to being a part of this team and of the Responsible Care journey as the global chemical industry takes on new and evolving societal challenges.

seal.

Baudouin Kelecom RCLG Chairman



"We live in extraordinary times with more value-added delivered by the chemical industry than ever before."

BAUDOUIN KELECOM

Please take time to read this report, we appreciate your feedback. Contact information can be found at the back of this report, and in the detailed section on our National Associations and their Responsible Care programs. Thank you for your time.

BEYOND SAICM 2020 CHEMICALS MANAGEMENT AND RESPONSIBLE CARE®

The business of chemistry impacts nearly every sector of the economy and is active virtually everywhere in the world. It is therefore essential that sound chemicals management guides all our interactions from the international level through to individual production sites and the whole supply chain, and forms the core of industry's Responsible Care[®] initiative.

Since the launch of Responsible Care over three decades ago, our chemicals management activities have expanded from an initial focus on environment, health and safety (EHS) and, later, security at manufacturing sites. Today, we encompass numerous diverse activities that help build and strengthen relationships with supply chains, governments and regulators. It also allows us to partner with international organizations and collaborate with other key stakeholders.

The importance of reaching out to and working with our stakeholders to ensure effective chemicals management is reflected in the Responsible Care Global Charter (page 2). This chapter highlights a selection of ICCA's current chemicals management activities illustrating ongoing efforts both within our industry and in partnership with others at the international and national levels, complementing the work of individual companies and associations worldwide.

NEXT STEPS AFTER 2020

Actions and

negotiations related to SAICM are an essential part of our industry's drive to ensure the safe management of chemical products. But with the deadline

THE SAICM GOAL:

To ensure that, by 2020, chemicals are produced and used in ways that minimize significant adverse impacts on human health and the environment...

approaching, it is clear the 2020 goal will not be fully met. Therefore, stakeholders are involved in intensive discussions to shape a future platform for the sound management of chemicals. Industry is seeking to retain the benefits of the voluntary, multi-stakeholder and multisectoral approach of SAICM under any future framework.

In the meantime, through its Responsible Care and Chemical Policy & Health (CP&H) Leadership Groups, ICCA continues to engage in joint projects and partnerships that reflect industry's full commitment to SAICM. We are actively involved in the SAICM intersessional process as well as in the UN Environment Assemblies. We work with our national associations, chemical companies, value chain partners and other stakeholders on a range of initiatives and programs – Responsible Care, the Global Product Strategy (GPS), capacity building and more – that have safe chemicals management at their heart and we will continue to expand and strengthen these efforts. Since its launch in 2006, GPS has helped industry build on its product stewardship efforts. It leverages the experience and knowledge of leading global chemical manufacturers to improve chemical management practices, especially in developing countries and those without robust chemical regulatory frameworks. It provides a vehicle for ICCA to share best practices and information about chemical safety and conduct trainings for small and medium sized companies and local governments. GPS helps ICCA achieve four primary objectives throughout the global chemical industry and the chemical value chain:

- Enhance product stewardship worldwide;
- Improve chemicals management through risk assessment and risk management;
- Enhance transparency about chemical substances and products;
- Reduce differences in the safe handling of chemical substances between developing, emerging and industrialized countries.

For more than a decade, GPS has formed an important part of industry's global capacity building efforts by helping to establish practices through projects and workshops that improve the EHS performance of chemical products at each stage of the lifecycle.

This chapter also offers examples of projects that reflect our commitment to increasing the worldwide adoption and implementation of the UN's Globally Harmonized System for Classification & Labelling (GHS) to enhance worker protection and to share information regarding the hazards and basic safe handling of chemicals. GHS provides the first step towards sound chemicals management and helps countries at the earliest stages of chemicals oversight to identify and communicate the hazards of chemicals. Its use of easily-understood symbols provides essential product information, including safety precautions, to workers and users. Since SAICM was established in 2006, more than 50 countries have begun implementing GHS.



CCA is an active p<mark>artic</mark>ipant at UN Environment Assemblie

>> Cooperation with...

... UN Environment

Originally signed in 2010 and renewed in 2016, the ICCA's MOU with UN Environment has fostered a wide range of joint activities, from workshops and symposiums to in-depth studies. At the UNEA-3 in December 2017, ICCA committed to hold 30 capacity building workshops a year and launch Responsible Care® in five new countries until 2030. During UNEA-3, Head of UN Environment, Erik Solheim, and UN Director Chemicals & Health Branch, Jacob Duer, acknowledged the chemical industry's contributions to the 2030 SDGs and stressed the importance of working together. In 2017, four joint projects were approved by the ICCA Board that are ongoing through 2018. These are:

- A study on knowledge and information sharing to improve understanding of the number of chemicals in commerce and provide an overview of available data sources.
- A study on the UN SDGs to demonstrate and offer external validation of the contribution of chemicals to sustainable development, and provide a roadmap for policy conditions, innovation and progress at industry level.
- Improving chemicals and waste management at the national level in Argentina through support for Responsible Care and the GHS, aimed at strengthening joint efforts between government authorities, industry, the UN and other stakeholders.
- Supporting Responsible Care development in Kenya where implementation is being championed by the Kenya Association of Manufacturers' Chemical and Allied Sector group together with leading local and multinational companies.

Industry preparations are already underway for UNEA-4 in Nairobi in March 2019. The theme – "Innovative solutions for environmental challenges and sustainable consumption and production" – provides an opportunity for industry to showcase achievements and progress in this field. (Further details on Kenya and Argentina projects in the chapter on Capacity Building.)



Responsible Care New Zealand's Barry Dyer and Phyllis Wakiaga Chief Executive of the Kenya Association of Manufacturers



... Distributors

The signing of a revised and strengthened MOU between ICCA and the International Chemical Trade Association (ICTA) in May 2018 provides new momentum for Responsible Care and the promotion of the Responsible Care and Responsible Distribution initiatives worldwide. Greater cooperation on capacity building with chemical distributors internationally is a key component of the agreement, enabling both industry sectors to enhance sound chemicals management globally - particularly in the focal regions of India, China and Africa. Developed by the joint ICTA and ICCA Task Force set up in 2017, the MOU includes several new elements: It emphasizes the commitment of chemical manufacturers and distributors to EHS and security performance throughout the supply chain. It also offers the possibility of developing common messaging to support close links with advocacy to international organizations such as the multi-stakeholder approach under the SAICM umbrella, and with the OPCW.

... OPCW

As a committed supporter of the Chemical Weapons Convention, ICCA has formalized and strengthened its cooperation with the Organization for the Prohibition of Chemical Weapons (OPCW) since 2014 through formation of a Joint Steering Committee that manages the relationship and a Chemical Industry Coordination Group to implement the committee's decisions. Activities include engagement with OPCW on verification, capacity building, and participation in relevant meetings, chemical safety and security activities. ICCA supports OPCW's publication of 'The Hague Ethical Guidelines' intended to build understanding among the science community and society about the culture and practice of responsible science. ICCA also encourages its member associations to further publicise and disseminate the Guidelines more widely.

... Governments

ICCA engages with national governments around the world to support chemicals management. Two very different examples involve close cooperation with the governments of Germany and Sri Lanka. ► A recent agreement with Germany's Ministry of Environment (BMUB) will drive a project to enhance implementation of GHS in Africa involving Ghana and Ivory Coast in pilot projects and building on guidance from Zambia where GHS is already implemented. Representatives from Ghana and the lvory Coast are working with ICCA and BMUB to develop individual roadmaps for GHS in their countries, and a workplan including the identification of potential challenges where industry can offer support and expertise. The project makes use of various tools including courses run by the United Nations Institute for Training and Research and the ICCA Regulatory Toolbox (see right). Over the five years since Sri Lanka joined the RCLG, mentored by Responsible Care New Zealand, the Lanka Responsible Care Committee (LRCC) has successfully built on the strong framework provided by nearly a decade of activity under the UN-led National Cleaner Production Centre (NCPC) program. A key objective was to ensure that Responsible Care enabled a strengthened focus on chemicals management. Thanks to funding granted under SAICM for a joint project with United National Industrial Development Organization (UNIDO) and NCPC, a new division for chemicals management has been set up under the Ministry of Environment. LRCC has played a major role in developing draft policy and regulations covering chemicals transport, storage, handling and use, and introduction of mandatory GHS labeling. LRCC will also be involved in capacity building with universities and industries, and in an intensive training program for EHS inspectors, training of trainers and consultants and of key people in Responsible Care companies.

... Regulators

Industry developed its Regulatory Toolbox guidance to promote greater understanding and use of step-wise, sound regulations where needed. It provides a collection of current information on the international regulatory environment for chemicals with the aim of providing a useful tool for national and international regulators, managers and staff members of chemical companies, and others involved in the effort to ensure the sound management of chemicals around the globe. It also ties such regulatory elements to each of the five SAICM objectives. It's a'living document' that is revised regularly to ensure it stays relevant and effective for users. The Toolbox is:

- Serving as a resource for national governments when developing or updating chemical management regulations
- Creating greater understanding regarding the assessment and use of chemicals
- Encouraging the establishment of sound, step-wise, regulations
- Collecting current information on the international regulatory environment for chemicals
- Providing support to national and international regulators, managers and staff members of chemical companies, and others involved in the effort to ensure the sound management of chemicals
- Identifying areas where improvement and/or greater coherence between current international regulations would significantly improve the ability of regulators and companies to meet EHS objectives while reducing obstacles to the manufacture and sale of chemicals in the global marketplace



... Multi-stakeholders

Chemicals management was the focus of the 4th Responsible Care Latin America Congress 2017 held in Quito, Ecuador in mid-November. The event brought together an impressive set of stakeholders including UNIDO, representatives from government ministries, state organizations, academia, and industry at both national and regional level. A key objective was to publicize and share experience built up over the 16 years since Ecuador adopted Responsible Care. The event also offered an opportunity for the region's national associations to discuss challenges and opportunities and continue work to establish a normative framework for GHS implementation. Efforts include development of a risk management guide for chemical substances handling and additional GPS activities. RESPONSIBLE CARE® OUR COMMITMENT TO SUSTAINABILITY

THE GLOBAL CHEMICAL INDUSTRY IS COMMITTED TO ACCELERATING PROGRESS TOWARDS THE UN

SUSTAINABLE G



HEALTH & WELL-BEING - Chemistry enables people around the world to live longer, healthier lives by providing clean drinking water, delivering a safe, adequate food supply to meet basic nutritional needs, and advancing

technologies that lead to groundbreaking medicines and medical treatments to help eradicate once deadly diseases.

LEARNING & EDUCATION - ICCA members actively collaborate

10 PLENCED

with governments and non-government organisations to advance educational programmes through our capacity building workshops that are socially, culturally and

economically relevant, promote equality and lead to greater empowerment of community members.

PARTNERSHIPS & CAPACITY BUILDING - ICCA partners with UN Environment to catalyze action and achieve meaningful change. ICCA also teams with a range of stakeholders * - from small and mid-sized chemical companies in emerging economies, to non-governmental and inter-

governmental organisations - to address chemicals management issues.



and renewable energy sources and technologies depend on innovations in chemistry to become more efficient, affordable and

scalable. Chemical innovations improve energy efficiency in transportation and buildings to contribute to a less carbon-dependent society and support the fight against climate change and ozone depletion.

ECOSYSTEM PROTECTION - ICCA supports a more circular economy



that prioritises resource conservation and efficiency, innovations in product design that enable longer product lifespans, and reuse, recycling and recovery technologies that capture the greatest value from materials that have traditionally been discarded.

SUSTAINABLE ECONOMIES - Over 20 million people around the



globe are employed directly or indirectly by the chemical industry, and more than 96 per cent of manufactured goods are touched by chemistry. We are helping developing countries to create a sustainable

foundation for job creation, a healthy manufacturing sector and economic prosperity, while supporting local tax bases.

OCEAN CONSERVATION - ICCA is engaged in activities and partner-



ships to increase recycling, recovery and reuse of plastics so that they do not contaminate our environment or end up in our oceans. Plastic packaging provides a host of benefits while using significantly fewer resources and having lower environmental

impacts than many other materials.

SUSTAINABLE CONSUMPTION & PRODUCTION - ICCA is putting the power of chemistry to work to unlock solutions to society's biggest challenges in a safe and sustainable way and harnessing the power of chemistry's essential benefits. Our two flagship

initiatives, Responsible Care® and the Global Product Strategy, advance the safe handling and use of chemicals in our own operations and throughout the supply chain.

Visit www.icca-chem.org/SDGs to learn more.

The growing focus on sustainability both within our industry and externally has undoubtedly helped shape the evolution of Responsible Care® initiatives in many parts of the world over the past three decades and has enabled our continued engagement in the sustainable development debate at the international level.

Formation of a new ICCA cross-Leadership Group Sustainability Task Force in June 2018 further strengthens our commitment to sustainability. The new task force will lead the development of industry's strategy and positioning, ensuring Responsible Care and sound chemicals management are fit for purpose to provide the foundation for our contributions to sustainability.

The new team will also coordinate an ICCA inventory and develop a communications plan for sustainabilityrelated issues. Other work involves the development and implementation of a "Responsible Care Maturity" Model" under a project led by the European Chemical Industry Council (Cefic) aimed at harmonizing a global view of Responsible Care vis-à-vis sustainability and at unifying Responsible Care efforts as regions progress toward greater convergence between the two.

Our timing dovetails with increased external focus on the topic such as UN Environment's SAICM intersessional proceedings where stakeholders are examining how to connect the post-2020 chemicals agenda to the SDGs and the broader topic of sustainable chemistry.

A tangible result of this focus saw experts from various regions, sectors and backgrounds convene in Chengdu, China in September 2018 to identify opportunities, address challenges and facilitate innovative solutions aimed at unlocking the full potential of a circular economy (photo below). Hosted by ICCA and UN Environment, \rightarrow



and supported by the China Petroleum and Chemical Industry Federation (CPCIF), participants shared knowledge and experience of the technologies, business models, financing structures, and policy conditions required to fully achieve circularity. As an end product, government, academia, nongovernmental organizations and industry will develop key messages and next steps which they believe will maximize action and advance a circular economy on a global level.

ICCAs infographic on the previous page shows how industry is committed to accelerating progress towards the SDGs.

A UNIFIED APPROACH

Responsible Care® offers industry a unified approach to the major sustainability footprint issues we face, namely product stewardship, pollution prevention, occupational and process safety, emergency preparedness, community engagement, safe chemicals distribution, and chemical security. Responsible Care will continue to play a critical

USA

The American Chemistry Council is actively pursuing a sustainability strategy that responds to external stakeholders' expectations, including the standards set by the finance sector and increased focus on the circular economy. ACC engaged with its leading stakeholders on the development of a set of Sustainability Principles which were approved June 2017 and launched a three-phase Sustainability Implementation Plan taking it to 2020, with Responsible Care providing the implementation mechanism. ACC notes its commitment to sustainability "...goes beyond safe chemistry. We must put the power of chemistry and our industry's best scientific minds to work with experts in other business sectors, at universities and in government to develop new and innovative ways that chemistry can contribute to a sustainable future." The Council has publicly committed industry to:

- Develop new ways to measure and promote the safe and sustainable use of chemicals.
- Set high industry sustainability standards, hold ourselves accountable and exceed government regulations.
- Elevate the quality of life for people around the world through technologies that improve health and wellness, enable food security, increase access to clean water and provide comfortable shelter.
- Improve the availability, performance and costeffectiveness of renewable energy and energy efficient technologies enabled by chemistry.
- Reduce greenhouse gas emissions in the manufacture and use of our products.
- Protect our environment by supporting efforts to reduce and manage waste so oceans and water sources are not polluted with mishandled plastic or other materials.
- Promote innovations in product design, product re-use, repurposing and recycling to extend the useful life and value of all products.

role by providing the essential first steps in sound and sustainable chemicals management through building industry capacity in emerging economies. Sustainability aspects are already encompassed in the most mature Responsible Care models, including social issues and innovation agendas.

ICCA will use the Maturity Model developed by Cefic and tested with European members to demonstrate how the relationship with sustainability grows as an organization's Responsible Care program progresses. The project involves development of a tool to guide associations and companies of all sizes in the effective implementation of Responsible Care. It will be based on best practices and compatible with International Standards Organization (ISO) norms, Corporate Social Responsibility (CSR) and the UN SDGs. Guidance will be complemented by supporting assessment materials. The tool will support more advanced organizations that want to take their systems toward greater convergence with the broader issues encompassed by sustainability.

SPAIN

Spain's Responsible Care program underwent some sweeping changes in 2017 aimed at maximizing the synergies between Responsible Care and CSR. The changes are enabling national chemical association FEIQUE to effectively demonstrate and communicate industry's contributions to society and how these relate to the UN SDGs. A structural reorganization the previous year saw the Responsible Care Steering Committee replaced by a CSR Advisory Council with additional functions and scope reporting directly to the FEIQUE Board. Aim is to generate value for both individual chemical companies and the sector as a whole by:

- Securing recognition of Responsible Care from important stakeholders including government, public authorities, trade union organizations and consumer organizations, through effective advocacy
- Increasing societal awareness of companies' activities using CSR messaging in outreach to neighbourhood communities and wider society
- Increasing business value-added for Responsible Care companies with the application of advanced sustainability and CSR management practices
- Improving and streamlining management through the integration of CSR and Responsible Care activities, and adapting and responding to stakeholder expectations FEIQUE used its seven Responsible Care codes of practice to define the list of reputational risk issues and opportunities, and of relevant KPIs.



FRANCE

French national chemicals association Union des Industries Chimiques (UIC) is reinforcing its Responsible Care® program to provide a platform for bridge-building with CSR and sustainability. UIC has updated and revised its Responsible Care Management Framework document offering industry an effective tool to communicate with stakeholders and enable companies to conduct self-assessment under CSR norms, and the option to go beyond. UIC undertook an active campaign, engaging with key stakeholders including government and 65 NGOs to get their input into the framework development process with official launch of the new approach scheduled for September 2018.

JAPAN

In January 2017 the Japan Chemical Industries Association set up a task force to define industry's contribution to the UN SDGs. As part of its work, the task force developed the JCIA Three Visions:

- We create innovation through the power of chemistry and contribute to the healthy and abundant life of people
- We support worldwide initiatives for solving environmental and safety issues
- We promote the contribution of the chemical industry through dialogue with stakeholders

JCIA has elaborated the Visions to guide member companies on implementation and has encompassed its regional capacity building activities under the project. The task force has been gathering information from member companies on activities related to the UN SDGs; preparing and publishing guidance based on the approach of leading companies; and identifying innovative examples to illustrate industry's contributions.

INDIA

The Indian Chemical Council requires companies that sign up to Responsible Care to incorporate CSR elements into their management system. As part of the Emergency Response and Community Awareness code, for example, companies must have active social programs directed at the local community around plant sites. These are generally focused on areas such as education, health care, empowerment of women and similar topics which not only provides essential support to the community but also helps improve public perception. Companies are also expected to demonstrate programs for conservation of resources including energy and water, with some moving towards renewable energy sources. A number of companies are treating waste, converting it into saleable by-products; and treating and recycling effluents to achieve zero liquid discharges. Another important step being taken to reduce carbon footprint includes large-scale tree planting.

BELGIUM

essenscia published its fifth biannual sustainable development report in 2017, available to download from the website www.essenscia.be. It covers the activities of the chemicals, plastics and life sciences industry in Belgium. Four main sections cover People, Planet, Prosperity and Products. The report uses a matrix of indicators selected through dialogue with essenscia experts, its members and stakeholders and is based on official data; where none was available, information from essenscia experts or members was used. The report also looks forward, through "ambition texts" on people, energy and climate, environment, prosperity, product safety and products in society. These texts outline how the sector wants to evolve and how essenscia will support its members to realise these ambitions.

ARABIAN GULF

The Gulf Petrochemicals and Chemicals Association held two Sustainability Conferences and published reports in 2014 and 2015. Recognising that there is a general lack of clarity around sustainability prompted GPCA to include the topic on the agenda of relevant working committees and incorporate it into the association's three Excellence Awards programs (Plastics, Responsible Care and Supply Chain). A high proportion – around 50% – of its member companies produce annual sustainability reports. GPCA has drawn up a road map to provide increased clarity on how to transcend from the fundamentals of EH5&S to 'Sustainability Excellence' using the RC codes as a basis, and points to various regional activities that can be mapped against the SDGs.

REPORTING ON PROGRESS AND PERFORMANCE

The chemical industry is still at the forefront in terms of global environment, health and safety performance reporting compared with other industrial sectors although it is an increasingly challenging issue as our membership expands. Nevertheless, it remains a fundamental part of Responsible Care[®] and we continue efforts to improve this area of activity.

The challenge took on a new dimension when, in 2014, the China Petroleum & Chemical Industry Federation (CPCIF) became a member of the RCLG. This major player accounts for around 40% of global chemicals production according to Cefic Chemdata International (2016 sales), but its regulatory and operating structures are not aligned with the basic reporting processes followed by ICCA. We also recognize that Responsible Care reporting only offers an indicator of global chemical industry performance and trends rather than a complete picture of the industry because not all RCLG member associations require mandatory participation in Responsible Care, neither do they represent a country's entire chemical sector.

While acknowledging the challenges involved, ICCA continues to work on improving and expanding its performance reporting capabilities. The past few years have seen two important enhancements: development and launch of a new Key Performance Indicator (KPI) for process safety, and of a new website for global



data reporting through our National Association members. The website upgrade follows a prolonged period of interrupted and inconsistent data collection via the



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previous online reporting tool. This means that the current report does not include the usual comprehensive dataset of EHS indicators covered in previous Responsible Care® Status Reports.

We began the roll-out of the RCLG's new enhanced performance reporting website in June 2018, with a successful test run prior to the official launch in July. The new platform is more user-friendly for national chemical associations reporting on the core set of KPIs that track industry's EHS performance under Responsible Care (see panel page 17). It also enables ICCA to track Responsible Care implementation progress through members' annual completion of a comprehensive survey (further details on page 25).

Although KPI performance charts are not included in this report, we instead offer insight into progress of the global Responsible Care initiative in some key areas through the charts on pages 18-19 and in the chapter on Global Implementation, pages 24-48. The three charts provide a snapshot of the current status of associations' commitment to advancing sustainable development; their tracking and reporting of KPIs; and their approach to Responsible Care verification.

These are core elements of the Responsible Care initiative that we recognize are important not only to industry but also to our external stakeholders.

Process Safety KPI

The process safety KPI took several years to come to fruition after the ICCA Board tasked industry to come up with a globally harmonized approach to process safety in 2012. A task force comprised of multinational companies and RCLG associations worked throughout 2013 and 2014 to develop a global standard and reporting process, produce detailed guidance and introduce a flexible implementation schedule with mandatory reporting starting 2020. Many RCLG associations are already gathering data from their membership.

Associations report two data points: 'Total number of Process Safety Events (PSE)' together with 'Total employee hours', which is already collected under the RCLG performance metric on occupational safety rates. This enables calculation of a Process Safety Event Rate (PSER). The aggregated rate at national level will be reported publicly by ICCA when enough data is available.

A number of workshops on process safety and performance reporting have been held in all regions over the past few years and are set to continue utilizing RCLG capacity building funds and expertise.



The China Question

China's chemicals sector faces very particular challenges in performance reporting. Those challenges include a lack of relevant statistical records, for example on lost time injuries; the use of different units, such as coal per ton to measure energy consumption; inconsistent scoping and definitions; and, often a total absence of records. In the short term, this means the China Petroleum & Chemical Industry Federation is unable to collect meaningful ICCA performance data from the large enterprises and 30,000 or so SMEs that make up the chemical sector. The association is examining its options for a reporting approach that suits the reality of China's situation. As of mid-2018, there are a handful of actively involved companies leading the implementation of Responsible Care® in China and they will most likely be the organizations to demonstrate what might be feasible as a step-by-step process.

Measuring progress

The charts on page 18-19 are based on responses to a questionnaire sent to all members in April 2018 and supplemented by other information sources.

When reporting via the RCLG website, progress within our member associations is measured using a scale of four status levels: 'no progress to date', 'developing plan', 'fully implemented' and 'updating implementation'. This scale allows for demonstration of progress even when elements are not fully implemented. The chart on page 19 reflects the approach adopted by associations for their member companies to meet the requirement to have

ICCA's Key Performance Indicators

Health & Safety

- > Number of fatalities.
- Lost time injury rate, expressed as number of lost time accidents with at least one day out of work per million working hours.
- New from 2019: Number of Process Safety Events; data will enable calculation of a Process Safety Event Rate (PSER), normalized on a per 100 employee basis.

Environment

- > Emissions to air: sulfur dioxide (SO2) and nitrogen oxides (NOx), expressed as metric tonnes.
- Discharges to water: chemical oxygen demand (COD), expressed as metric tonnes of oxygen.
- Greenhouse gas emissions, expressed as millions of direct and indirect metric tonnes of CO2 equivalents emitted.
- Greenhouse gas intensity, expressed as metric tonnes of CO2 equivalents emitted per million metric tonnes of production.

Resources

- > Energy consumption, expressed as metric tonnes of fuel oil equivalent used.
- > Energy intensity, expressed as metric tonnes of fuel oil equivalents used per million metric tonnes of production.
- > Water consumption, expressed as millions of cubic meters of water consumed, with returns credited.

Distribution

> Number of transport incidents.

Reference parameters

- > Number of employees in the chemical industry reporting.
- Annual turnover and production for the chemical industry reporting

systematic procedures in place to verify the implementation of measurable elements of Responsible Care. There are four levels of verification starting with 'self-assessment' as the minimum; 'peer review' which involves verifiers from another member company; 'external verification' which could refer to verifiers from the national association or another organization; and 'third-party verification' which involves a totally independent approach. Out of the 62 RCLG member associations, nearly 60% completed and returned the 2018 survey questionnaire. Information from a further 36% was collated from other sources.

Commitment to advancing sustainable development

Association has programs in place that support sustainable development, specifically in regard to the social and economic pillars





The association tracks and reports performance against ICCA's KPIs

See page 17 for list of key performance indicators

% Updating implementation
% Fully implemented
% Developing plan
% No progress to date



18

National association's primary form of Responsible Care® verification

See page 17 for further detail on defining verification approaches





"Industry is... increasingly seen as a contributor to achieving the sustainable development goals."

JACOB DUER, CHIEF, CHEMICALS AND HEALTH BRANCH, UN ENVIRONMENT

hoto courtesy Dow Chemical Co

GLOBAL CAPACITY BUILDING ACTIVITIES

Capacity building enables ICCA member associations and companies to share EHS&S best practices and improve chemicals management and product stewardship throughout the supply chain. It forms an essential part of the work we do to help industry achieve the SAICM objectives.

Since the first International Conference on Chemicals Management (ICCM1) in 2006, ICCA has provided capacity building support for more than 245 projects in over 45 countries, reaching thousands of individuals involved in the chemical industry, its supply chains and partner organizations, as well as governments and regulators.

In 2016, a new Capacity Building Task Force was set up to take stock of future capacity building challenges and map out a strategy for the period to 2020 and beyond. Activities include development of a comprehensive range of training materials based on modules covering all fundamental aspects of sound chemicals management. The task force implemented a new results-oriented approach that also tracks beneficiaries' progress.

Global capacity building also involves working with regulators and the authorities to prevent illegal trafficking of chemical products, developing emergency response programs, and training distributors on safe handling. The task force, which includes representatives from ICCAs CP&H Leadership Group, also ensures capacity building efforts include strengthening product stewardship activities and GPS implementation.

ICCA developed a Regulatory Toolbox in 2013 and updated it in 2018. This guidance highlights best practice approaches to chemical regulations and helps developing economies establish high quality chemicals management practices while reducing cost and complexity (see page 9). In addition to the Regulatory Toolbox, ICCA maintains the RCLG Library for member associations, which houses capacity-building project results, implementation tools and company best practices.

Experts from leading multinationals and betterresourced associations have contributed many tens of thousands of hours in sweat equity, working closely with their counterparts across the globe to expand Responsible Care® to new geographies, as well as providing support to existing RCLG members. Efforts are focused on the following objectives:

- Strengthening the capacity of industry and governments in developing economies to implement sound chemicals management programs with a focus on local small and medium-sized enterprises through Responsible Care and risk-based regulation. This includes product stewardship, process safety, transportation safety, emergency response, product safety, and efficient regulation.
- Sharing the chemical industry's chemicals management expertise with regulators; supporting the implementation of science-and risk-based chemicals management schemes in countries which currently lack capacity; encouraging regulatory cooperation; promoting adoption of the UN Globally Harmonized System for Classification and Labelling of Chemicals (GHS) as a first step toward safe and responsible management of chemicals.
- Ensuring the global chemical industry is viewed as a positive contributor to safer and environmentally sound use of chemicals by key governments and intergovernmental organizations.
- Enhancing GPS awareness among key stakeholders, particularly in developing and emerging economies in order to emphasize voluntary actions underway to promote safe use and management of chemicals by producers and others throughout the value chain.
- Enhancing local association advocacy and communications by equipping representatives with technical and practical knowledge on implementing Responsible Care and risk-based chemical regulations.
- Increasing global awareness of chemistry's role in advancing sustainability.

Further information on capacity building activities can be found on our website at www.icca-chem.org including an ICCA Capacity Building Report.

CAPACITY BUILDING IN ACTION

International capacity building delivered by ICCA and company experts improves chemical safety in 45 countries worldwide. This chapter features a few examples of recent initiatives.

ASEAN Regulatory Cooperation

The ASEAN Regulatory Cooperation Project - an initiative based on the ICCA Global Principles for Regulatory Cooperation and led jointly by the Singapore Chemical Industry Council, American Chemistry Council and the Japan Chemical Industry Association – has held six workshops focusing on GHS alignment, chemical inventory requirements, and capacity building on prioritization of risk assessment. An event in the Philippines in July 2018 was attended by 40 representatives from industry associations and key government authorities from all of the ASEAN* markets. Enhancing regulatory cooperation and understanding through such events has the potential to significantly reduce costs for both government and industry. It helps economies to deliver their mandate of protecting human health and the environment without creating barriers to trade, thus facilitating sound chemicals management in the region. *ASEAN members: Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, the Philippines, Singapore, Brunei, Thailand and Vietnam.

ABIQUIM's Wealth of Activities

Capacity building by Brazil's national chemicals association ABIQUIM includes a range of tools and publications as well as conferences and seminars, and reached an estimated 2,000 people during 2015-16 alone, including over 500 representatives from government agencies. The ICCAs Global Product Strategy is disseminated via an 80-hour training course and a risk analysis tool developed by ABIQUIM known as Aquarela, as well as through ICCA guidance materials.

Extensive Outreach by Japan

The Japan Chemical Industry Association has developed and delivers a comprehensive capacity building workshop program ranging from basic awareness through to developing training materials on process safety, Responsible Care® and chemicals management in the local language. During 2016-17, JCIA delivered around 14 workshops in seven ASEAN countries, with activities continuing through 2018. Among 2018 efforts, it supported a process safety event (PSE) workshop in Chinese Taipei for the Taiwan Responsible Care Association which attracted 90 participants. Clear and practical demonstrations ensure participants know how to identify a PSE, offer a comprehensive understanding of why it needs to be measured, and how to improve. TRCA will require its member companies to start PSE reporting from 2019. ICCA guidance for reporting process safety metrics has been translated into traditional Chinese and is used on a regular basis as part of PS training activities and is being shared with China. JCIA is providing an English-language version of its PS Management data entry file for use by members of the Asia Pacific Responsible Care Organisation (APRO) and offers tools such as PowerPoint presentations and quizzes which can be adapted for use by other associations.

Morocco's Awareness-Raising Event

Capacity building funding enabled Moroccan chemicals association Fédération de la Chimie et de la Parachimie (FCP) to host a successful conference on chemicals management and Responsible Care for French-speaking Africa (below). Over 100 participants from nine countries including Côte d'Ivoire, Madagascar, Niger, Senegal and Tunisia gathered in September 2018 to hear from government ministers and speakers from the RCLG, Cefic, UN Environment and OPCW. Topics focused on the key principles and benefits of Responsible Care, its contribution to sound chemicals management and SAICM, while representatives from five Moroccan companies shared experience in roundtable events.



Focus on China's Chemical Parks

Two RCLG member organizations in China – the Association of International Chemical Manufacturers (AICM) and the China Petroleum & Chemical Industry Federation (CPCIF) – carry out important capacity building events in several of the country's largest chemical parks, offering a more efficient and costeffective way to target companies. During the past two China Responsible Care® Conferences in 2016 and '17, side events brought together representatives of chemical parks, Chinese chemical companies and multinationals. International experts provided examples illustrating the benefits of zero environment, health and safety incidents, strong relations with nearby communities, and mutual aid in emergency response. The workshops encouraged enterprises to engage with CPCIF to improve awareness of key areas such as product stewardship and to enable companies to share experience and best practices. A third RC forum on chemical parks involving ICCA/AICM/CPCIF cooperation takes place in Q4 2018.

US Support for India

Since being identified as a priority region in 2013, the Indian Chemical Council (ICC) has successfully worked with several organizations to improve and expand Responsible Care in India. The American Chemistry Council and the US government's Chemical Security Program (CSP) have helped fund and conduct more than a dozen workshops and other events related to ICC's development of its Responsible Care security code; efforts have also focused on updating other codes and supporting implementation materials covering product safety and stewardship, process safety and distribution. Experts from ACC and US organizations including Sandia National Laboratories, AccuTech Consulting, CRDF Global and others have proved major contributors, helping ICC enhance its Responsible Care activities and achieve increased commitment from members. These efforts build on overall capacity building in India which has received ICCA funding most years since 2009 mainly to improve product stewardship and Global Product Strategy implementation.

European Expansion

In Europe, recent outreach by Cefic has involved Responsible Care organizations in Croatia, Belarus, Romania, Serbia and Albania. The Croatian Responsible Care Group (CRCG) has also benefited from mentoring by Responsible Care New Zealand, resulting in its successful application for RCLG membership in 2017. The Romanian Chemical Producers and Distributors Association (APDCR) is currently a candidate for future membership.

Experience-sharing benefits Pakistan

New RCLG member Pakistan has benefited from extensive sharing of the materials and experiences of other national chemical associations, including the American Chemistry Council, the Gulf Petrochemicals and Chemicals Association, and Cefic. Capacity building running throughout 2017-18 includes workshops covering process safety, product stewardship and self-assessment. Multiple outreach activities involve government, emergency responders, chemical importers and transporters, with security elements given special focus.

Targeted Activities in Argentina

The Argentinian government's work to strengthen chemicals management is being supported under the ICCA's partnership with UN Environment through the active involvement of industry, improved information sharing, and product stewardship activities including the organization of targeted workshops and other outreach. Working closely with the national chemicals association ClQyP, efforts are focused on Responsible Care, chemicals management, and advancing adoption and implementation of the GHS. A meeting in April 2018, hosted by the Argentine Ministry of Environment and Sustainable Development in Buenos Aires and held in cooperation with the UN Environment Programme and ICCA, sought to strengthen joint efforts between government authorities, industry, the UN and other stakeholders in order to improve chemicals and waste management at the national level. The event attracted around 250 participants and 11 different government ministries together with value chain representatives.



Sharing Tools and Knowledge in Africa

Capacity building in Africa seeks to provide the tools and knowledge necessary to assist governments and business to effectively improve safety throughout the chemical life cycle. A small RCLG task force comprising American Chemistry Council, Responsible Care NZ and local multi-nationals Dow, BASF and Sasol, is assisting the Kenya Association of Manufacturers (KAM) to establish Responsible Care in Kenya. Like-minded organizations such as UN Environment, the Kenya Chemist Society and the US-based Sandia are supporting Responsible Care as a proven program for successfully addressing the chemical management challenges facing Kenyan society. UN Environment is lending its support for KAM events and liaising with government to encourage recognition for the initiative within Kenya's legislative and regulatory structures.

RESPONSIBLE CARE® GLOBAL IMPLEMENTATION

All national chemical associations that belong to the ICCA's Responsible Care[®] Leadership Group are required to submit an annual report on their implementation status. This chapter provides information on the 62 RCLG members as of mid-2018.

A new website launched during 2018 collects data on ICCA Key Performance Indicators and implementation progress as outlined on pages 15-17. However, as it was not yet fully operational in time to collate information for this report, a questionnaire was circulated to the membership to enable preparation of this section.

37 National Associations completed the 2018 survey of their Responsible Care program. Limited information was received from a further 12 associations giving us data on implementation progress from a total of 79% of RCLG members. The following figures are based on responses to the 2018 survey only.

Under the section on **Implementation programs and tools** (a series of systems, codes, guidance and checklists to assist companies to implement the commitment), **27** associations now also include materials applying to the **physical security of chemical facilities and systems**.

Under Governance processes - how best to encourage all member companies to commit to and participate in the program – Responsible Care is a condition of association membership at 18 associations with at least 3 indicating that they plan to make it mandatory within the next few years.

27 associations have a process in place to **assist companies not meeting Responsible Care obligations**; at **12** of these associations, the process results in **removal** from the initiative if progress not achieved after due process.

Under the section covering **stakeholder outreach and communication** on EH&S matters, **25** have established mechanisms or tools to obtain input on issues or concerns from interested parties outside the industry.

A dedicated section covering various **product related** topics included a question on whether the organization has advocated with national government regarding **adoption of the Globally Harmonized System** (GHS) for Classification and Labelling, to which **34** – or more than **90%** - responded positively.

Survey Compilation

Of the 62 associations surveyed, 37 returned the completed questionnaire. A further 12 responded in an abbreviated format. Some listings were compiled based on responses to 2016 Cefic survey. The National Association listing is not a comprehensive summary of each and every member's Responsible Care program, and is not always a reflection of the maturity or effectiveness of an association's RC activities. Information has also been drawn from other sources such as websites. Most data relates to RC programs in 2018.

Note: earlier chapters in this report feature additional information on several individual National Association activiti

Commonly used abbreviations

CoP = Code of (Management) Practice CSR = Corporate Social Responsibility EH&S/EHS&S = Environment, health & safety / & security GPS = Global Product Strategy KPI = Key Performance Indicator LSP = Logistic service provider MOU = Memorandum of Understanding RC = Responsible Care RCGC = Responsible Care Global Charter RCMF = Responsible Care Global Charter RCMF = Responsible Care Management Framework RCMS = Responsible Care Management System SD = Sustainable Development SQAS = Safety and Quality Assessment System

If you require further information, please use the contact data provided to reach a member association.

- Argentina Australia Austria Belgium Brazil Bulgaria Canada 9. Chile 10. China 11. China, Hong Kong SAR 12. Chinese Taipei
 13. Colombia 14. Croatia
 15. Czech Republic 16. Denmark 17. Ecuador 18. Egypt 19. Estonia 20. Finland 21. France 22. Germany 23. Greece 24. Hungary 25. India 26. Indonesia 27. Ireland 28. Israel 29. Italy 30. Japan 31. Latvia 32. Lithuania Malaysia
 Mexico
 Morocco 37. Netherlands 38. New Zealand39. Norway 41. Peru 42. Philippines 43. Poland 44. Portugal 45. Russia 46. Singapore 47. Slovak Republic
- 48. Slovenia
- South Africa
- 50. South Korea
- 51. Spain 52. Sri Lanka
- 53. Sweden 54. Switzerland
- 55. Thailand
- 56. Turkey

- 58. United Kingdom
 59. United States of America
- 60. Uruguay
- 61. Venezuela

* Saudi Arabia, Kuwait, United Arab Emirates, Qatar, Oman, Bahrain

Candidate associations**

- Kenya

** Countries where Responsible Care is being introduced under ICCA RCLG auspices but are not yet RCLG members

RCLG members New member since 2008

Candidate associations

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Key to National Association information starting page 28.

(i) General information

- Sustainability/sustainable development
- Implementation tools/approach
- Performance indicators
- Verification of Responsible Care[®]
- Global Product Strategy (GPS)/product stewardship

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Partnerships/cooperative activities

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A

ARABIAN GULF

GPCA

FACTFILE

Adopted Responsible Care in 2009

MEMBERSHIP: 250

RESPONSIBLE CARE COMPANIES: 29 Full Members + 9 LSPs ~US\$77bn sales

Full Members = 37 major manufacturers. 213 Associate Members = LSPs, business partners, international manufacturers and/or small producers. See page 13

 Over 75% of RC full members are RC14001 certified. Self-assessment is a mandated integral part of the GPCA RC program. A peer review program was initiated in 2017 and GPCA plans to review all full members by 2021.
 GPCA CoPs are primary form of implementation with regular

workshops and outreach campaigns; lessons learned and success stories also linked to the codes.

GPCA collects 21 KPIs from full members and publishes annual report including success stories on website. A new IT platform expedites data collection and report generation and offers valuable regional benchmarking and information sharing. Annual awards program linked to the RC Conference is under consideration.

After a successful pilot in 2017 GPCA launched RC for LSPs. Each must: complete Gulf Sustainability and Quality Assessment System (SQAS) process; head of company signs the RCGC; and submit annual KPIs. Successful completion of these steps entitles the company to use the RC logo. 9 signed up in 2017.

GPS is still a relatively new concept for the region; task forces set up in 2017-18 are examining implementation of the UN GHS and Carriage of Dangerous Goods by Road Regulations. Chemtrec (American Chemistry Council scheme) adopted for product-related emergency response issues from 2017.

GPCA and the Gulf Standardization Organization (GSO) signed an MOU in 2018 to collaborate on developing world-class standards for industry in the Gulf Cooperation Council (photo below). It aims to establish close cooperation framework in areas of mutual interest eg technical standards and regulations, consumer protection, environment and public health. Joint efforts will also focus on adoption of internationally recognized best practices on Dangerous Goods Transportation, the GHS and industrial waste.





ARGENTINA

CIQyP

Cámara de la Industria Quimica y Petroquimica Avda. Cordoba 629 - Piso 4 - Buenos Aires Rolando García Valverde rgarciavalverde@ciqyp.org.ar Héctor Mario Benavídez hbenavidez@ciqyp.org.ar www.ciqyp.org.ar

FACTFILE

Adopted Responsible Care in 1992 MEMBERSHIP: 130

RESPONSIBLE CARE COMPANIES: 40

✓ RC companies must complete annual self-evaluations. In 2018 the Argentine Accreditation Organization accredited DNV-GL to carry out external verification and certification.

CIQyP has developed courses to support companies on adoption of the GHS, a legal requirement for the workplace.

In April 2018, industry, government and international experts met in Buenos Aires to support strengthening the sound management of chemicals and waste in Argentina, including enhancing regulatory frameworks, RC implementation and awareness (see page 23 and photo above).

Under voluntary agreements, the RC initiative and logo authorized since 1996 through the Transport of Dangerous Goods Association (CATAMP) and since 2002 with the Association for Treatment of Hazardous Waste (CAITPA).

AUSTRALIA

Chemistry Australia

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FACTFILE

Adopted Responsible Care in 1989 MEMBERSHIP: 59 + 11 Partners

RESPONSIBLE CARE COMPANIES: 22

 Sustainability - or the 'social licence to operate' - is fundamental to Chemistry Australia's work. Social licence is one of the eight fundamentals described in its Strategic Industry Roadmap and is a core priority for members alongside policy and regulatory priorities. RC revamp project underway to strengthen links between RC and social licence/sustainability.
 Latest Health & Safety Performance Report: no fatalities reported by members for 2017; companies posted an improvement in the total recordable injury frequency rate. Members continued to improve on Lost Time Injury Frequency Rate (LTIFR) (5 year rolling average), achieving a reduction for the 14th consecutive year.

① Members support the sharing of best practices and learnings to help others; performance report includes numerous case studies and insights provided by members. A confidential Chemistry Australia Health and Safety Benchmarking Report is provided exclusively to participating companies, promoting internal discussion, new insights and generating ideas for the workplace.

AUSTRIA

FCIO

Austrian Chemical Industry Wiedner Hauptstrasse 63 Vienna A-1045 Pr. Dominique Schröder schroeder@fcio.at www.fcio.at

FACTFILE

Adopted Responsible Care in 1992 MEMBERSHIP: 245

RESPONSIBLE CARE COMPANIES: 31 (~33% of total sales of ~US\$6bn) Voluntary agreement on 'zero pellet loss' with Ministry of Sustainability

and Tourism, responsible for environmental protection. ✓ Implementation is monitored through a well-established thirdparty RC auditing process in a three-year cycle. In terms of objectives and procedures, the initiative is similar to EMAS and ISO 14001: the key difference is that RC also covers occupational safety and health. Assessment of a company's operations is carried out by two external independent auditors. It requires compliance with all legal obligations and involves around 300 questions covering energy, waste disposal, storage, employee protection, industrial accident prevention, environmental organization and others.

① Thanks to its rigorous high standards, RC achieved legal recognition in Austria in 2012 giving certain benefits for certified companies under the Environmental Management Act. In 2014, RC was recognized under the Energy Efficiency Act enabling certified companies to make use of an internal rather than an external energy audit.

FCIO celebrated its 25-year RC anniversary in 2017. The program requirements go beyond the legal requirements and regulations in force in Austria.

B

BELGIUM

ESSENSCIA

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FACTFILE

Adopted Responsible Care in 1991 ■ RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 720 All member companies are required to sign and subscribe to the RCGC. The essenscia RC program is part of the association's sustainable communication strategy and is integrated in the SD report published every 2 years www.essensciaforsustainability.be.

It fully supports development and promotion of RC via dedicated activities such as specific training for safe chemicals management. For example, over the past 10 years more than 200 workshops have been organized for Belgian chemical companies supporting the implementation of REACH legislation via dedicated trainings, experience sharing by mentors and providing individual assistance on being REACH compliant.
 essenscia teamed up with tank cleaning association EFTCO, chemical transport body ECTA and Cefic to develop an electronic EFTCO Cleaning Document (e-ECD), a digital data exchange platform providing information on the cleaning of transport tanks. 23 companies currently provide financial support for the initiative which will be launched in 2019 and available to more than 600 companies across Europe. The platform will improve security and increase efficiency in logistics and transport.

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BRAZIL

ABIQUIM

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FACTFILE

Adopted Responsible Care in 1992 ■ RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 118 + 45 partners with 2016 sales of US\$52.6 billion

Committee on Sustainable Development has a mission to work with other ABIQUIM committees and dialogue with stakeholders to discuss challenges and opportunities for collaboration for the sustainable development of the chemical industry and the use of chemicals in production chains.

C KPIs are monitored and discussed in the various committees, accidents reported as lessons learned; all CEOs and RC Representatives receive individual reports of their company's performance benchmarked against overall membership.

ABIQUIM translated the ICCA GPS Guidance, promotes GPS-related training and has developed a tool, 'Aquarela', based on the Guidance to support member companies' and associates' product risk assessments. The association also carries out training for users of Aquarela. It participated in the drafting and publication of GHS; regulation includes mandatory MSDS and labelling according to GHS criteria.



Responsible Care MOU signed with ASSOCIQUIM, the Brazilian Association of Distributors of Chemical and Petrochemical Products. The organizations are cooperating on harmonization of the RC program and PRODIR, the Responsible Distribution initiative.

 Similar harmonization efforts underway with ABRAFATI, the Brazilian Association of Paint Manufacturers, on the Coatings Care program.
 Cooperation agreements with ANTT (National Land Transport Agency), the Brazilian navy, ASSOCIQUIM and the Center for Chemical Process Safety.
 ABIQUIM has prepared and/or translated a wide range of support materials and guidance such as an implementation manual and roadmap for RC audits, RC video, performance indicators manual, community advisory council implementation manual, and others.

Developed and implemented since 1989 a 24/7 information and communications system based on ACC's Chemtrec responds to emergencies involving chemicals during transport or at fixed locations. A free service managed by ABIQUIM and operated by emergency services company SUATRANS.

(1) Annual Congress brings together representatives of the chemical industry, regulators, government, NGOs, trade unions and others with an interest in RC. There were a record 650 participants in 2018 (photo, previous page).

Stakeholder engagement includes participation on panels in other associations, universities and community councils for example. A special network facilitates communication in four Brazilian states with the largest concentration of chemical industries.

BULGARIA

BCCI

Bulgarian Chamber of the Chemical Industry Al. Stamboliiski Blvd. 205, 1309 Sofia Reneta Kopandanova rk@bcci2001.com www.bcci2001.com

FACTFILE

Adopted Responsible Care in 2002 MEMBERSHIP: 42

RESPONSIBLE CARE COMPANIES: 29 accounting for ${\sim}65\%$ of Bulgarian chemical production

() RC enables BCCI to cooperate with other sectors and organizations on environmental and legislative issues, energy efficiency, and safe use of chemicals.

 BCCI has benefited from capacity building support from both ICCA and Cefic (financial and technical) over several years on a range of topics including product stewardship, bio-economy and the circular economy.
 Experts from different sectors participate and knowledge sharing has been beneficial for Bulgarian industry. EH&S best practice-sharing between Bulgarian and other European companies together with open doors events are major activities.

BCCI has had a Cooperation Pact with Bulgarian trade-unions since 2007 and renewed in 2015, covering EH&S, education and lifelong learning. It has partnerships with the Mine and Geology Chamber and the Metallurgical Association for improving energy efficiency.

С

CANADA

CIAC

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FACTFILE

Founded and adopted Responsible Care in 1985 RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 34 members + 9 partners + 9 associates total sales ~ Can\$40bn excluding associates As its original founder, CIAC plays a pioneering and lead role in many areas of RC. Full details on the website.

All member companies commit to the RC Ethic and Principles for Sustainability and the RC Codes. CEOs recommit on an annual basis and RC discussed at Leadership Group Meetings. Sustainability initiatives include, for example, Marine Litter Targets of 2030 and 2040 for Plastics. Through RC, member companies strive to "do the right thing and be seen to do the right thing." They innovate for safer, greener products and processes, and work to continuously improve EHS performance.

Each code discipline has a set of guides or tools and/or selfassessment. The committee / network / task group associated with the discipline revises available documentation and analyzes company reports on a regular basis with proof of all requested by verifiers.

 ✓ Companies must be transparent about their activities: CIAC has a 3 year cycle for member verification audits to ensure the RC ethic and management systems in place. Team made up of 3 verifiers minimum from industry, member and local community. Verification reports available to public. The protocol is the same for partner companies with several "not applicable" sections. CIAC is working with an associate member to potentially develop a verification protocol for associates as well.
 ✓ CIAC's RC program covers all aspects of a company's business over the entire life cycle of its products; it requires companies to engage with communities near facilities and along transportation corridors, emergency responders, governments and other stakeholders, to advance laws and regulations supporting sustainability.

Partner companies encouraged to adopt RC and act as responsible stewards of chemical products by providing reliable transportation, equipment, environmental and emergency management services. CIAC has a partnership with Responsible Distribution Canada that recognizes the Responsible Distribution initiative as equivalent to RC for companies engaged in chemical distribution.

 Signed MOU with ACC on recognition of RCMS and RC14001 audits and active involvement in ICCA Steering Committee and OECD. Voluntary agreements with local industrial organizations and mutual clean air groups.
 National Advisory Panel (community leaders + environmental groups + academics) advises members on how to understand and exceed public expectations through RC.

 $\label{eq:energy} Emergency Response System = \mathsf{TEAP} \, \mathsf{III} \ to \ \mathsf{certify} \ \mathsf{response} \ \mathsf{contractors} \\ \mathsf{and} \ \mathsf{national} \ \mathsf{emergency} \ \mathsf{notification} \ \mathsf{system} \ \mathsf{using} \ \mathsf{available} \ \mathsf{media}.$

CHILE

ASIQUIM

Asociación Gremial de Industriales Químicos de Chile Andrés Bello 2777 Of. 501, Las Condes, Santiago

Cinthya Rojo subgerente@asiquim.cl www.asiquim.cl

FACTFILE

Adopted Responsible Care in 1994

MEMBERSHIP: 129

RESPONSIBLE CARE COMPANIES: 53 with total 2016 sales of ~US\$40bn ASIQUIM membership includes producers and LSPs. Sales figure applies to producers only.

Sustainability activities are carried out under the RC program

Since 2006, companies implement RC through a management system approach. Annual self-assessment comprises 347 questions and 54 KPIs.
 Full 3rd party verification being introduced from end 2018; prior to this

it involved 1 person from ASIQUIM and 2 external verifiers. All member companies must be RC verified and RC will be a condition of membership from 2023. If the company fails the verification process, membership can be revoked.

① Capacity building activities include internal auditor course attended by several companies and a representative of Peru's national association. Also conducted a university course for the RCMS at 4 universities.

CHINA

CPCIF

China Petroleum and Chemical Industry Federation Building No. 16, siqu, Anhuili Asian Games Village, Beijing 100723

 Image: with the second secon

FACTFILE

Adopted Responsible Care in 2014

MEMBERSHIP: 473 RESPONSIBLE CARE COMPANIES: 576*

*includes Chemical Parks, central and state-owned enterprises, joint ventures, private enterprises and other organizations.

① Unlike other RCLG member associations, CPCIF represents the country's ~30,000 Chinese chemical companies even if they are *not members*. The official membership is the supporting framework. This results in there being 576 RC companies/Global Charter signatories even though only 34 are on the membership list.



CPCIF established a specialized organization to support implementation—the Responsibe Care Working Committee (RCWC). 6 workgroups are aligned with each RC CoP for the development of strategy and activities using existing frameworks. Additional workgroups address training, chemical park activities, and cooperation with academia. RC implementation takes place through CPCIF promotion, government support and industry action, embodied as leadership, organizational and infrastructure development, publicity, training, education and communication.

Supply chain partnerships include, for example, cooperation with the national associations dealing with pesticides and with polyurethanes to launch behavior-based safety (BBS) training, expanding RC awareness and product stewardship.

▶ In April 2017, CPCIF officially released an action plan for development of the oil and chemical industry for 2017-2020. It addresses six leading topics: industrial wastewater management, waste gas management, solid waste disposal, energy saving low carbon, improved safety management, and oil and chemical industrial park green development.

CPCIF supported the circular economy event in Chengdu (photo, below left) hosted by ICCA and UN Environment in September 2018.

☑ Indicators are in place and data reporting is underway at some companies for the following key disciplines: worker health & safety, emissions to environment, energy & water consumption, and SOX/NOX emissions.

(i) China's emergency response is state-mandated under the Ministry of Emergency Management.

CHINA, HONG KONG SAR

AICM

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berylma@aicm.cn www.aicm.cn

FACTFILE

Adopted Responsible Care in 1992 RC = Mandatory for manufacturers MEMBERSHIP: 61 RESPONSIBLE CARE COMPANIES: 40

(i) AICM works closely with CPCIF on a number of areas, lending its expertise based on 25 years of RC activities.

AICM has formed a Sustainability subcommittee under its RC Committee and begun development of a sustainability program including a set of principles; also has an annual workshop with East China University of Science and Technology (ECUST) on this topic, and is looking at



cooperating with CPCIF to support the spread of sustainability.

Program includes the 6 state-issued CoPs under the China RC Standard: Community Awareness and Emergency Response, Distribution Safety, Occupational Health and Safety, Process Safety, Product Stewardship and Pollution Prevention; AICM has also developed a 7th Security Code aimed at ensuring security practices in all member companies.

 A self-assessment checklist and peer review checklist covers the 6 CoPs. An Award ceremony recognizes members' achievements.
 In 2008 and 2014, AICM organized special group signing-ceremonies for member company leadership on the Responsible Care Commitment and repeated it for the Global Charter in September 2018 (photo, previous page).

AICM promotes RC to Chemical Parks and cooperates with CPCIF on the RC Conference and technical workshops. Recent capacity building has focused on process safety self-assessment and compliance-related training. Open Days have taken place for past decade; meetings are held with government and universities; and RC is promoted to suppliers and customers.

AICM includes value chain partners in capacity building events on risk assessment; the ICCA Risk Assessment guidance has been translated and posted on the AICM website.

A road safety assessment system (based on Cefic's SQAS) enables LSPs to aim for continuous improvement in chemicals transport safety based on assessment audits.

CHINESE TAIPEI

TRCA

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FACTFILE

Adopted Responsible Care in 1997

RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 71

A Task Force has been established to discuss TRCA action plans in line with the UN SDGs.

TRCA approach based on 6 CoPs

✓ Currently working to adopt RCMS (developed by ACC) and is in the process of introducing RC14001 audit for manufacturing members; current verification involves self-assessment + peer review. Transport companies participate as associate members.



Periodic task force discussions, symposiums, workshops and conferences are held for CEOs and RC Coordinators.

Tull range of KPIs and performance improvement processes include publicizing aggregated company performance.

By law, producers, LSPs and importers are responsible for transport safety of toxic chemicals. These parties must be on the scene of a spill or leakage caused by a transport accident within 2 hours. To support this, TRCA has established mutual aid teams for 17 toxic chemical substances; prior to joining, members must prove they are qualified and have the capabilities needed to handle the substance. Service providers must undergo RSQAS verification to join.

 A series of workshops helped raise awareness of product stewardship and GPS with support from RCLG, CP&HLG and JCIA (see photo). TRCA and leading member companies have also raised awareness of risk assessment and risk management with EPA Toxic and Chemical Substance Bureau and EPA Soil and Groundwater Pollution Remediation Funds.
 TRCA holds regular Public Advisory Panel meetings and encourages members to hold open door events.

COLOMBIA

RI Committee

Colombian Plastic Industries Association – ACOPLASTICOS National Business Association of Colombia – ANDI Colombian Safety Council – CCS

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🛉 Ana María Ocampo

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FACTFILE

Adopted Responsible Care in 1994

RESPONSIBLE CARE COMPANIES: 46 with sales ~US\$3.5 bn

(1) The above organizations – Acoplasticos, Andi and CCS – jointly promote RC through the Responsabilidad Integral (RI) Committee. In 2015, 88% of member CEOs signed the commitment based on the Global Charter; in a 2018 renewal process, 54% had ratified it by mid-year with work ongoing to complete the process.

RC implementation is enabled through a management system, SGRI, based on the CoPs. Created in 2005, SGRI technical specifications have been reviewed and updated four times, most recently in 2017, aligned with ISO and strengthened in the areas of product stewardship and process safety. Updates also to the implementation guidance, and the mandatory online course for RC coordinators.

 ✓ Self-assessment and verification systems in place and recently updated. Since end-2013 verifications carried out by audit firm; although focus is on ISO, member feedback shows verification by RI (with added focus on product stewardship, process safety etc) offered more value.
 ♣ RI Colombia developed and implemented the Responsible

Transportation Program based on Cefic's SQAS and aimed at improving the economic, environmental and social performance of chemical transporters and chemicals safety in the value chain. Mutual aid enables RI's emergency response program for road transport and helps reduce response costs. (1) A range of communications and supporting activities include annual meetings for Executive Leadership Committee and for Coordinators and four National Workshops to strengthen RC issues, for example raising awareness of the importance of RC as a tool for CSR and SD, product stewardship, GPS and process safety. Capacity building events supported by ICCA, ACC, RCNZ and ABIQUIM. RC Coordination Committee (composed of the three entities that support RC) meets monthly; regional committees meet regularly to help companies work together on RC action plans, provide support and share experiences. Technical committees cover logistics, GPS and process safety management. ① RC Colombia publishes an annual report and participates in the regional RCLA group set up end-2014.

① Colombia's national disaster prevention and response system has lacked strength, especially for chemical emergencies on the road, although entry into the OECD has put pressure on the development of legal requirements for the safe management of chemical substances. Since 2004, RI has a voluntary agreement with the National Disaster Management Unit and USAID-OFDA for emergency prevention and response.

CROATIA

- -

CCIA CRCG

Croatian Chemical Industry Association, Croatian Responsible Care Group Croatian Chamber of Economy Draškovićeva 45, HR-10000 Zagreb Prenata Florjanić rflorjanic@hgk.hr www.hgk.hr

FACTFILE

Adopted Responsible Care in 2016

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 9 with sales ~€2.2bn ① The Croatian Chemical Industry Association (CCIA) is part of the Croatian Chamber of Economy (CCE); all chemical companies are CCIA members.

 (i) As a new member the Croatian Responsible Care Group (CRCG) has not had an opportunity to collect KPI data from its member companies. Most RC activities are at an early stage; compliance with Croatian/EU legislation is the baseline. CCIA / CRCG workshop on Process Risk Assessment with support from CEFIC and company experts scheduled for Q3 2018.
 (i) CRCG received extensive capacity building support and mentoring from RCNZ and Cefic to prepare for RCLG membership.

CZECH REPUBLIC

SCHP ČR

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Ladislav Špaček sekretariat@schp.cz www.schp.cz

FACTFILE

Adopted Responsible Care in 1994 MEMBERSHIP: 93

RESPONSIBLE CARE COMPANIES: 84

(1) The Sustainable Development Award of SCHP CR, launched in 2006 and aligned with the Global Charter, has been awarded to 13 companies. A partner program involves secondary schools, technical universities and non-profit organizations. SCHP CR has a voluntary agreement with the Interior Ministry for fire brigades since 2006 and renewed in 2016.

D

DENMARK

PI

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FACTFILE

Adopted Responsible Care in 1995 MEMBERSHIP: 75 RESPONSIBLE CARE COMPANIES: 7

E

ECUADOR

APROQUE

Asociación de Productores Químicos del Ecuador

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direccion@aproque.com

www.aproque.com Facebook: Aproque Responsabilidad Integral

FACTFILE

Adopted Responsible Care in 1999

RC = Mandatory

MEMBERSHIP/RESPONSIBLE CARE COMPANIES: 38 with total sales \sim \$1.1bn

Development of a sustainability program is underway; APROQUE has an agreement with the Ministry of Industries and Productivity to identify, develop and implement strategies for the efficient use of resources in cleaner production. Energy audits planned of 10 member companies.

Technical visits by APROQUE to members support RC implementation through good practices and provide advice on compliance with EH&S legislation, emergency response and transportation. Also provide safety and environmental inspections, training eg HAZOP for risk assessment. Agreements established with organizations specializing in EH&S issues to benefit members.

Regular meetings for members, technical committees and the CAM (Mutual Assistance Committee) supplemented with social network



since 2011 (Facebook, Twitter and Whatsapp) to disseminate news and information. Latin America Congress took place in Quito in October 2017 (see page 9 and photo, previous page).

Z KPIs published on website after annual meeting; data collected and verified by technical assistants during visits to each member company; information published in annual report. RC Ecuador Award for best performing companies.

✓ RC verification involves technical support staff from other member companies.

GHS workshops organized for members plus state technicians invited to ensure implementation and control of regulations for proper labelling. APROQUE also participates in several commissions with national authorities and focused on legislation: eg safe mercury handling, control and handling of chemical substances used in illegal narcotics production, hazardous materials management, etc.

EGYPT

FEI ECO

Federation of Egyptian Industries Environmental Compliance Office and Sustainable Development (ECO SD) FEI - 7th floor, 26 A Sherif St, El Emobilia Building, Downtown, Cairo Adel Taha ataha@eco-fei.net www.eco-fei.org

FACTFILE

Adopted Responsible Care in 2016 MEMBERSHIP: 4825 chemical facilities

RESPONSIBLE CARE COMPANIES: 35

FEI ECO provides technical support and consultancy services to the industrial sector in the field of environmental compatibility, environmental management, and energy efficiency. As one of the newer RCLG members, Egypt's RC activities are at a relatively early phase.

The RC committee was set up early 2016 with FEI ECO technical experts cooperating closely with Chamber of Chemical Industries together with ACC mentoring support to draft letter of commitment and guiding principles. Companies signed up at the RC launch conference in December 2016.

ECO SD is a member of the UN Global Compact and launched the "Pioneer business annual competition to achieve sustainable development" in 2014, aimed at SMEs that are undertaking SD activities and encouraging them to share their initiatives to enhance awareness among Egyptian companies.

RC implementation practices via CoPs; FEI ECO held a series of workshops and training to raise company awareness and related stakeholders about RC and RC codes. Additional training and capacity building activities are focused on chemical safety and security, chemical security risk assessment. Periodic networking meetings with member companies provide technical support on several issues including RC.

✓ ACC has supported FEI ECO to conduct RC site visits to assess companies, and in other RC-related activities.

ESTONIA

FECI

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FACTFILE

Adopted Responsible Care in 2002 MEMBERSHIP: 56

RESPONSIBLE CARE COMPANIES: 13

FECI membership includes many of the chemical value chain actors from manufacturers through to distributors and academia, enabling development of close relations and cooperation with supply chain partners. FECI also has close links with associations representing users of chemicals (food, water, plastics, oil, textiles, electronics, etc), and provides consultation and guidance on chemical safety and regulations.

To support RC as industry's contribution to sustainability, FECI actively participates in governmental and NGO discussions on SD related issues and facilitates opportunities for SD projects for members.

(i) As a small association, meetings and newsletters cover relevant topics including (but not limited to) RC issues. Over the years FECI has sought assistance from other associations (Finnish; Cefic); collaborated with others (Baltic states) and supported others (Croatia, Romania). At national level FECI has communication on EH&S issues with relevant government agencies and NGOs. At local level communication is facilitated by companies and open door days are used frequently.

Partnership framework is defined by REACH; GHS is covered under the EU's CLP Regulation; GPS has been communicated to members.

F

FINLAND

KT RY

Chemical Industry Federation of Finland

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🙀 Alexandra Peth / Merja Vuori

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FACTFILE

Adopted Responsible Care in 1992

MEMBERSHIP: ~400 + 13 Associations

RESPONSIBLE CARE COMPANIES: 98 ~80% of total production () RC program implementation is coordinated by KTRY. The Industrial Union, Trade Union Pro and the Federation of Professional and Managerial Staff participate in program monitoring and development.

♥ Under the RC program, corporate responsibility is based on strong interaction and clear goals. Central themes include: Sustainable use of natural resources; Sustainability and safety of production and products; Well-being of the work community; Open interaction and co-operation

The development of companies' corporate responsibility work is supported through cooperation in networks and development projects. The results of corporate responsibility work are monitored through indicator data collected annually. KT RY supports member companies through training and advice, as well as through RC.

GKTRY issues a comprehensive RC report including, for example, a breakdown of material and energy streams. Results for about 50
indicators are reported annually and provide information on investment, resource efficiency, emissions, occupational safety and wellbeing, product chains and interaction and collaboration.

FRANCE

UIC

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FACTFILE

Adopted Responsible Care in 1990 MEMBERSHIP: 793 RESPONSIBLE CARE COMPANIES: 387

Current activities include comprehensive relaunch of RC to strengthen ties to sustainability and overhaul the 2003 management system framework (see page 13) for Q3 2018 launch. The refreshed framework will enable companies to self-assess in CSR, and to achieve a sectoral "CSR label".

Work on the overhaul is mainly directed at supporting SMEs with little time and few resources by providing guidelines and actions aligned with RCGC implementation. Implementation of RC is also supported through annual regional and national RC awards, quarterly meetings of the 20-strong RC committee/forum – which includes representative of partner organization representing distributors, UFCC – and expert-led courses eg on environment and security.

Display the set of the

 While self-assessment is the current approach to verification, discussions are underway to move to association or peer review assessment.

① UIC operates with distinct responsibilities at national and regional level. At the regional level, UIC develops dedicated, targeted programs to assist less advanced companies; at national level, the association provides more general conferences and courses covering all areas of RC such as crisis communication, developing networks and sharing expertise with emergency responders etc.



Stakeholder consultation was an important part of UIC's relaunch of Responsible Care

G

GERMANY

VCI

Verband der Chemischen Industrie e.V. Mainzer Landstrasse 55, 60329 Frankfurt am Main Martina Schönnenbeck schoennenbeck@vci.de www.responsible-care.de

FACTFILE

Adopted Responsible Care in 1991

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 1700 with total sales ~€167bn

① Membership covers wide mix including sites, SMEs, and sector association members. In 1995 the VCI general assembly agreed RC Guidelines for all member companies. It is mandatory to participate in RC survey for members using the RC logo.

♥ RC is part of Chemie³, the sustainability initiative of the German chemical industry. Chemie³ was founded in May 2013 by VCI together with the Federal Employers Association for Chemicals (BAVC) and the labor union (IG BCE) in order to embed sustainability as a guiding principle in the German chemical industry and to expand the industry's contribution to SD. Chemie³ has developed 12 "Guidelines for Sustainability for the Chemical Industry in Germany" and supports its members in their application in everyday business.

 Recent activities include development of support materials: Chemie³ Sustainability check, Guide to supply chain management, and a Guide to sustainability reporting.

Implementation based on management systems, Cefic self-assessment tool, RCMF and Security Code. Annual RC Competition enables best practice sharing.

Annual KPI reporting on full set of indicators as basis for the VCI Responsible Care report.

✓ Self-assessment is the primary method of verification. VCI itself is third party verified annually and the certificate is attached to the RC report; detailed audit report is not published.

Partnership Agreement with Verband Chemiehandel e.V. (association of chemical trade) includes annual exchange on current topics, and participation in VCH workshops twice a year.

Product stewardship-related issues are mostly implemented in Europe via REACH, CLP and sector specific regulations. In addition to REACH implementation the VCI has various initiatives e.g. cooperation with authorities on Nano (Nanodialog) and Human Biomonitoring (HBM).
 Emergency response system, TUIS, long established and integrated with activities; level 3 (most serious) extends to technical assistance at accident site with special equipment and operating know-how by chemical firefighters.

53 member companies have signed the Global Charter.

GREECE

HACI

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FACTFILE

Adopted Responsible Care in 1995 MEMBERSHIP: 72 RESPONSIBLE CARE COMPANIES: 32

Н

HUNGARY

MAVESZ

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FACTFILE

Adopted Responsible Care in 1992 MEMBERSHIP: 52

RESPONSIBLE CARE COMPANIES: 32 with ~85-90% of total sales

Sustainable development issues are a priority and MAVESZ supports member companies' efforts through meetings and conferences offering information and experience sharing.

① Most member companies have signed the RC Guiding Principles at CEO level. MAVESZ holds regular awareness events and communicates through the website and in monthly Information bulletins. Also organizes regular meetings and yearly conference on HSE-RC for senior executives and middle management.

RC implemented through full set of CoPs. Most member companies operate quality, environmental and safety management system.
 In 2014 MAVESZ started development of an external, independent verification program for measuring RC compliance, completing the process and raising awareness in 2015 with RCLG/capacity building support. Currently 7 companies have been audited under the system which is carried out by a MAVESZ group of internal and external experts.
 RC partnership programs with Plastics and Cosmetics industry associations. Voluntary agreements on drug precursors (with Interior Ministry), on emergency response and with other industry associations.
 Under Europe-wide emergency response system ICE, association's VERIK system involves agreement with the National Directorate General for Disaster Management since 2002.

INDIA

ICC

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FACTFILE

Adopted Responsible Care in 1993

MEMBERSHIP: 403 RESPONSIBLE CARE COMPANIES: 135 with ~US\$57bn sales (55 RC audited = ~US\$12bn sales)

SD see panel, page 13

✓ Verification audits, carried out in three-year cycles, ensure program elements are in place, test the company's commitment to RC and review CSR activities. As of 2018, of the 135 companies signed up to RC, 55 have gone through the ICC verification process that entitles them to use the logo. Verification is carried out by panel of ICC auditors mainly from RC companies or retired with RC experience.

ICC has adopted RCMS to support implementation of CoPs. Association conducts training programs on product safety and stewardship, environment protection, emergency response and transportation. More recently ICC introduced security code and has held several training programs with support from ACC, the US State Chemical Security Program and other overseas experts.

Companies share experience / best practices during their participation in annual ICC awards.

ICC established the Nicer Globe initiative enabling real time electronic tracking and monitoring of chemicals and hazardous waste transport and involving increasing numbers of manufacturers and logistics service providers. Major routes have been mapped including key points of interest such as fire stations, hospitals, logistics providers and chemical companies, enabling prompt information retrieval and support in the event of an emergency.
 More than 40 ICC members and 230 transportation companies actively participate in Nicer Globe. ICC companies use information captured under the scheme to review transporters' performance and establish additional safeguards for products moving throughout the country.

(i) Several sector-specific, plus formulators association, are affiliate members of ICC and involved in RC dialogue. Logistics companies also joining as associate members and intend to implement RC.

(i) ICC has MOU with Gujarat Pollution Control Board (GPCB) which entitles RC logo holding companies to operate for an extended period and be considered for fast track environmental clearances. Nicer Globe includes agreements with Maharashtra Pollution Control Board and GPCB.



Opening ceremony at ICC Responsible Care Code Workshop



INDONESIA

RCI

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FACTFILE

Adopted Responsible Care in 1997

RESPONSIBLE CARE COMPANIES 100 (~60:40 members:associates) ① Indonesia has several chemical industry associations, two of the largest being INAPLAS covering olefins, aromatics and plastics (76 member companies) and FIKI, the Federation of Indonesian Chemical Industry Associations, comprising 24 associations (~130 companies). RC companies account for less than 10% of total.

Manufacturers implement all 7 CoPs; associate members include supply-chain companies, LSPs, and hazwaste processing companies and must apply at least 4 RC codes. Companies participate in training workshops, also in best practice sharing program for the implementation of each RC CoP which is conducted as a site visit to award-winning companies.

Z RCI member companies submit annual KPI reports.

 ✓ Annual self-assessment, also verification by RCI which utilizes independent competent verifiers, often retirees from RCI member companies. RC verification is a 3-year cycle and successful companies are entitled to use logo, valid for 3 years. RC Award Program held every 2 years.
 ① Most MNC members are committed to advancing sustainable development but RCI itself is still at early stage and needs support at ICCA/RCLG level to advance through capacity building and other means. Capacity building support – particularly from Japan's JCIA, ACC and other US organizations – continues to be important to enable RCI activities: advance training on RC Security Code improvement and process safety training feature in 2018 and beyond (photo above).

Face to face RCI leadership meetings take place at least every two months; work groups such as Regulatory Affairs and Capacity Building teams at least bi-monthly.

O A "Road-Show" enables RCI to communicate RC program both on company production sites and to relevant government agencies.

IRELAND

BPCI

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FACTFILE

Adopted Responsible Care in 1992 RC = Mandatory for manufacturing companies

MEMBERSHIP: 65

RESPONSIBLE CARE COMPANIES: 44

Member companies report annually on performance on several KPIs which are similar to both Environmental Protection Agency (EPA) and Health & Safety Authority (HSA) reporting requirements. 2018 marks the sixth year since introduction of a web-enabled online data collection system which has facilitated significantly more efficient data collection and analysis.
 BPCI self-assessment codes had all reached maturity and were discontinued in 2016 in order to focus on using the indicator data for benchmarking purposes. The benchmarking exercise was completed in 2016 and was well received by members.

(1) The upward trend in the lost time injury rate has been reversed; last year achieved a record low level of 1.9 per million hours worked.

ISRAEL

MAI/CPECS

Manufacturers' Association of Israel (MAI)/ Chemical, Pharmaceutical & Environmental Society 29 Hamered St, Tel-Aviv 68125 Carmel Feldman chemical@industry.org.il www.industry.org.il

FACTFILE

Adopted Responsible Care in 2001 MEMBERSHIP CPES: 170 RESPONSIBLE CARE COMPANIES: 14

ITALY

Federchimica

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FACTFILE

Adopted Responsible Care in 1992

MEMBERSHIP: 1400 companies with total sales of ~€55.3bn RESPONSIBLE CARE COMPANIES: 165 companies with total sales of ~€30.3bn

Italian chemical companies are strongly engaged in sustainable development, involving significant investment (about €1bn in 2015). All main environmental indicators register positive performance and the chemical industry is now one of the safest sectors in Italy.

Since 2006, the National Institute for Insurance against Injuries at Work (INAIL) has had an agreement with Federchimica to provide discounted rates for RC companies. The agreement, renewed in 2013 and 2016, recognizes companies' workplace accident prevention and safety promotion efforts.

J

JAPAN

JCIA

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FACTFILE

Adopted Responsible Care in 1990 MEMBERSHIP: 177

RESPONSIBLE CARE COMPANIES: 116 >50% of total member sales JCIA has launched an initiative to support sustainable development and started to develop a sustainability program (see page 13). Company case studies are being collected and will be publicized on JCIA website. Specific work groups address topics such as marine plastics, PRTR (Pollutant Release and Transfer Register), VOC, etc.

JCIA has played a lead role for many years in the region's capacity building activities, sending experts and providing materials to events in a number of different countries (see page 22 and photo below). JCIA member Mitsui co-chairs the ICCA Capacity Building Task Force with RC New Zealand.
 As a mature program, RC implementation mainly through company

management systems, CoPs and wide range of guidance materials developed by JCIA. RC is not a condition of membership but it is mandatory for members to protect health, safety, and environment.

Members report on a comprehensive set of KPIs – not including energy – which are reported publicly and discussed with stakeholders; JCIA has mechanisms to recognize strong performers and support less advanced companies.

Self-assessment and association or peer review assessment are the main verification approaches; external RC verification exists but is not common.
 Quarterly meetings for senior industry executives include discussion of RC. The Responsible Care Committee was fully integrated into JCIA in 2012.
 Meetings with local residents in industrial areas include use of questionnaires to collect opinions, and periodic meetings also involve consumers' representatives to get their direct input.

Real Partnership programs include project with JAMP (Joint Article Management Promotion-consortium) and JCIA for development of guidance for SMEs and others.

JCIA has established GPS/JIPS (Global Product Strategy/Japan Initiative of Product Stewardship) Promotion Subcommittee: It covers information disclosure, evaluation technology, dissemination promotion and progress management under the Chemicals Management Committee



JCIA leads many capacity building initiatives

and RC Committee to support and promote JIPS activities (planning, organization and implementation). JCIA also prepared guidance on risk assessment and management for GPS/JIPS and published on website. (i) Under agreements with local government, chemical production sites usually store essential supplies such as tents, blankets, water, and food so in the event of an emergency, items can be distributed as required.

L

LATVIA

LAKIFA

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FACTFILE

Adopted Responsible Care in 2004

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LITHUANIA

LChPĮA

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FACTFILE

Adopted Responsible Care in 2004

MEMBERSHIP: 18 (16 companies + 2 colleges) RESPONSIBLE CARE/SQAS: 10

① Additional detail: website at www.chemija.lt/beta/me/chart1.html Several companies have been active in RC focused mainly on product stewardship. While transport and logistic companies are not members they are involved under the Cefic scheme SQAS, which offers an RC approach for the logistics sector.

Μ

MALAYSIA

CICM

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FACTFILE

Adopted Responsible Care in 1994 RC = Mandatory MEMBERSHIP: 106

RESPONSIBLE CARE COMPANIES: 133 including some non-CICM members

Total number of RC companies exceeds total association membership because the RC initiative is also open to non-CICM members. RC became mandatory for CICM members in 2015; efforts are still ongoing to secure commitment from remaining non-signatories.

RCMS has been developed, published and shared at seminars and awareness briefing sessions. CICM launched its 7th Code, Security, at end 2017, with the support of ICCA, ACC and the US State Chemical Security Program. CICM is currently focused on capacity building to local companies on security code implementation and plans to include as part of annual Awards scheme by 2020. Periodically, companies are invited to share best practices in implementing CoPs with other companies at CICM seminars and briefing sessions. Evaluation and judging of high performers in Awards scheme is based on CoPs implementation.

Scholar Schola

✓ Verification is based on self-assessment with peer reviews conducted only as part of the Awards process. Independent verification is being considered as an option from 2021.

① 4 Regional Zone Committees in Peninsular Malaysia cover the northern, central, southern and eastern regions and each is led by one of the RC signatories located in that region. Regular meetings discuss implementation practices, safety & environment regulatory compliance, and other RC related activities. CICM's RC Committee based in Kuala Lumpur provides guidance and direction to the zones.

Deriodically, CICM compiles issues of concern pertaining to EH&S and road transport safety and has dialogue sessions with the relevant government authorities and parties. Safe Road Award honors chemical transporters for good performance.

GPS briefings for members included in various RC awareness sessions. CICM set up a task force to facilitate GPS implementation, tapping into MNC resources and expertise. Work still underway. CICM has been working closely with government on GHS implementation in Malaysia, starting with industrial workplace sector, and is part of the government-led National Co-ordination Committee on cross-sector GHS Implementation.

MEXICO

ANIQ

Asociación Nacional de la Industria Química Gerente de Responsabilidad Integral, Insurgentes Sur 1070 Pisos 10 y 11, Col. Insurgentes San Borja, C.P. 03100, Delegación Benito Juárez, México Distrito Federal Duan Pablo Díaz Garzón Carballido pdiaz@aniq.org.mx www.aniq.org.mx

FACTFILE

Adopted Responsible Care in 1991 RESPONSIBLE CARE COMPANIES: 87

ANIQ uses a management system approach known as SARI for RC implementation. The program involves distribution and storage companies, and LSPs as well as chemical producers.

① Quarterly meetings held to enable experience exchange and best practice sharing among RC companies. A virtual tool supports members in more remote locations and unable to participate in person.

✓ An annual independent 3rd party verification of RC standards of ANIQ companies using competent auditors.

SETIQ, the chemical emergency response system, is similar to the ACC's Chemtrec and provides 24/7 coverage. ANIQ has voluntary agreements with the Environment and Labour Ministries.

MOROCCO

FCP

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FACTFILE

Adopted Responsible Care in 1998

MEMBERSHIP: 125 (~US\$5bn sales) RESPONSIBLE CARE COMPANIES: 36 (~US\$3.75bn sales)

♥ FCP has started to develop a sustainability program and set of principles after sponsoring a 2015 doctoral study about social practices which aim to promote the ISO social responsibility standard, and has doubled the number of companies involved as a result. On the economic side, FCP signed an official agreement with the government to support the chemical sector in development of two ecosystems (green & organic) by attracting new investment opportunities and promoting domestic employment.

Management systems and codes support RC implementation. FCP ensures core principles are implemented by holding EH&S Committee monthly meeting at member company sites in a semi-formal review.
 Self-assessment is the main form of RC verification.

Development of full set of KPIs has room for improvement. Basic worker EH&S, energy and water consumption are main indicators at the current time.

(i) FCP holds annual workshop targeting a specific theme and audience. The event is also an opportunity to attract new RC members and/or renew RC commitment. Each year since 2014 FCP has invited 5-6 company CEOs to formally sign up to RC Global Charter principles.

Morocco has adopted the UN's GHS and activities include spreading good practice on use of the system with member companies and the wider chemical sector. FCP has an agreement with the Ministry of Environment on mutual assistance regarding development and implementation of regulations applied to the chemical sector under GHS.

() FCP hosted an important capacity building event in September 2018 to outreach to African French-speaking countries and expand RC (see page 23 and photo below).



MYANMAR

MIA MRCC

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FACTFILE

Adopted Responsible Care in 2012 MEMBERSHIP: 50

RESPONSIBLE CARE COMPANIES: 10

① As part of MIA, the Myanmar RC Council activities include RC and sustainability awareness training with workshops on self-verification and auditing, KPIs, future planning, knowledge sharing and cooperation with stakeholders including other national chemical associations. MRCC also enables information sharing and exchange to improve overall quality of activities. RC awareness-raising and expansion through visits to Industrial Zones, and activities shared through industry newsletter.

Management system approach is supplemented by codes and checklists. Companies commit to priority setting for CoPs and establishing RCMS.

✓ Self-assessments are audited by MRCC.

Z KPIs are discussed with government and cover GHGs, SOX/NOX but cannot yet be reported by all RC companies; government support required to ensure sufficient data measuring and technical help.

① MRCC has benefited from capacity building support at company and association level and continues to seek assistance from other national associations to build on, for example, process safety training delivered by JCIA.

 MRCC members are aware of GPS but need expert training and guidance. Adoption of GHS by chemical importers and manufacturers.
 Cooperation/commitments with following Government Ministries: Industry, to introduce risk assessment activities and hazmats; Environment, on conservation and hazardous waste control; Transport, covering Dangerous Goods; Home Affairs for control of chemical precursors; Labour for H&S. Cooperation also with supply chain partners, with one trading company implementing RC.

Ν

NETHERLANDS

VNCI

Association of the Dutch Chemical Industry P.O. Box 443, 2260 AK, Leidschendam

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 looijs@vnci.nl
 www.vnci.nl / www.responsiblecare.nl

FACTFILE

Adopted Responsible Care in 1990

RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 150 \sim 95% of total sector

VNCI has a well-established and comprehensive RC program in place and fully aligned with Responsible Care Global Charter (see dedicated website) and reinforced by SD program with three lines of action: a low carbon economy delivered through an Energy Roadmap towards 2050; minimal impact on people and environment, delivered through RC; and a positive contribution to wellbeing and welfare with activities detailed via KPIs under industry's contribution to the UN-SDGs (under development). Companies define and implement their RC program. SMEs account for less than 10% of Dutch chemical sector. The program's maturity means overall RC is well understood so specific themes are addressed in meetings. The VNCI Policy group Sustainable Development manages the overarching RC program, while Policy group Health, Safety and Environment takes care of the HSE-related RC topics.

Comprehensive set of KPIs with product stewardship addressed through legally binding REACH legislation and at company strategy level including areas such as sustainability, value chains and product development/improvements such as chemical recycling due to circular economy and low carbon economy.

Section and companies put major efforts in improving the value chain consequences of chemical production and products.

✓ Verification via association or peer review assessment; external, 3rd party verification of association by KPMG Sustainability. Future requested improvement steps cannot be supported by an external verifier or certification institute, due to their nature. A dedicated RC dashboard is available to members only and includes site scores against average association levels.

Voluntary agreements cover value chain, sustainable safety 2030, programs related to international CSR, climate change, UN Guiding Principles, the circular economy and resource efficiency.

The public in the Netherlands is well aware of chemical issues; chemical information is a legal obligation and mainly communicated via governmentcontrolled databases.

The 25th RC anniversary was marked with a dedicated brochure and meeting.

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NEW ZEALAND

RCNZ

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FACTFILE

Adopted Responsible Care in 1989 ■ RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 163

 RCNZ membership ranges from manufacturers and importers to waste disposal operators, representing the entire chemical product lifecycle.
 Partners include government agencies, local authorities, the Armed Forces and the Healthcare sector.

RCNZ Members commit to the ICCA Global Charter. The New Zealand programme has evolved over 25 years to meet the specific requirements of SMEs, together with national sustainability aspirations.

An innovative chemical management regime incorporating the UN GHS and UN Dangerous Goods (DG) systems provides a seamless transition for chemicals from transport to use in workplaces.

✤ RCNZ Codes of Practice enabling compliance with key chemical management requirements such as GHS-compliant Safety Data Sheets (SDS), labels, storage, site signage and emergency preparedness are reflected in national workplace health and safety legislation and enforced by government agencies. These disciplines, together with best practice are implemented through corporate product stewardship initiatives and assessed in a comprehensive, three-tier site performance and compliance evaluation.



One of several LRCC events mentored by Responsible Care New Zealand in Sri Lanka and supported by ICCA capacity building funding

✓ The Premises Inspection and Certification (PRINCE[®] and PRINCE Gold[®]) award recognizes companies and organisations which meet and exceed society's and workplace health, safety and environmental protection expectations.

① RCNZ is very active in mentoring new Responsible Care associations, most recently in Sri Lanka, Croatia and Kenya and providing GHS training and implementation advice in countries worldwide. New Zealand jointly leads the ICCA Capacity Building Taskforce with JCIA member company Mitsui.

① A subscriber-based, 24/7 emergency response advisory service meets the mandatory requirements for rapid access to technical advice arising from a chemical incident. RCNZ responders with extensive chemical industry experience are supported by partnerships with Chemtrec (US) and the NCEC (UK) emergency centers. This popular RCNZ service is free to the emergency services, healthcare providers and schools.

NORWAY

Norsk Industri

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FACTFILE

Adopted Responsible Care in 1993

Ρ

PAKISTAN

РСМА

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FACTFILE

Adopted Responsible Care in 2017 MEMBERSHIP: 73

RESPONSIBLE CARE COMPANIES: 12 accounting for ~75% total sales () PCMA is the newest RCLG member and is making fast progress with support, including capacity building events (photo, below), from ICCA and other RCLG members particularly ACC, GPCA and Cefic. Currently RC is not a condition of membership but will become mandatory within the next few years.

PCMA is in the process of drafting a set of principles aligned with UN SDGs and is working with Pakistan Green Building Council.

✓ PCMA signed an MOU on RC14001 with ACC in April 2018. Selfassessment and independent verification are the main forms of RC verification.

8 CoPs being launched covering full range of topics to strengthen RC implementation through the value chain including a specific discipline for Port Operations. PCMA uses the RC14001 management system, self-assessment checklist and the CoPs to close identified gaps.

A set of 26 EHS&S performance metrics will be issued early 2019 for reporting year 2018 including security-related incidents covering both on site and value chain activities to help PCMA address chemical security concerns.

PCMA is communicating with major stakeholders including regulatory bodies and government on various EHS&S issues including adoption of GHS.

(1) Association is spreading awareness of RC utilizing a range of options; in time, it will seek to develop more established forums such as Community Advisory Panels.

PCMA has voluntary agreements/MOUs with the emergency response system Rescue 1122, National University Science and Technology (NUST), University of Engineering and Technology (UET). PCMA is training Rescue 1122 on chemical-related ER and developing a guide book for responding to chemical emergencies. With academia, PCMA gives lectures on RC and proposes chemical-related projects.



PERU

CIQ-SNI

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FACTFILE

Adopted Responsible Care in 1996

PHILIPPINES

SPIK

Samahan sa Pilipinas ng mga Industriyang Kimika (Chemical Industries Association of the Philippines) Unit 2201 Cityland 10 Tower I 6815 Ayala Avenue North 1226 Makati City, Philippines 1226 Panet Marcellana spik.secretariat@gmail.com www.spik.com.ph

FACTFILE

Adopted Responsible Care in 1996 ■ RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 79 SPIK membership includes a number of traders and LSPs as well as

manufacturers. Member companies use self-assessment to align practices with the 7 CoPs

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✓ Companies have 2 years to implement RC after joining, and can then request verification of their management system based on the adopted CoPs. Use of the RC logo awarded to members that pass the verification process. A SPIK Verification Center available to companies for verification and/or assistance from RC Verifiers. RC is being promoted to regulators as an alternative to ISO.

Quarterly general meetings inform members on current issues and concerns affecting SPIK and the chemical sector; Officers and Board of Directors meet monthly. The RC Council meets monthly and leads implementation of programs and activities.

Under product stewardship efforts, SPIK runs workshops and seminars to enable cooperation with supply chain partners and other industry associations. Some members offer free seminars and trainings to customers and assist them with risk assessment prior to entering into contracts.

 SPIK has a partnership with regulators for promotion of GHS.
 CoPs shared with the Paint Manufacturers association (PAPM) and regulators under RC Awareness program.

POLAND

PIPC

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FACTFILE

Adopted Responsible Care in 1992 MEMBERSHIP: 141

RESPONSIBLE CARE COMPANIES: 22

RC companies commit to implementation under the RC Management Framework aligned with the Global Charter, to continuous improvement in all aspects of activity particularly health and environment protection and process safety. Audit conducted during the first two years of joining RC.

♥ PIPC working groups includes SD Commission for the implementation of CSR and communication on SD activities and sharing good practice. Sustainability program as such has not been developed but within RC implementation there are many voluntary actions and activities directly related to the principles and goals of SD. Initiatives include "Tree for a bottle" campaign directed at children for collection of PET bottles and other waste with more than 29 million bottles and 17 tonnes of other waste collected and ~30,000 trees planted.

Z KPIs cover environment and health, process safety and work safety and are presented in annual RC report which is distributed to the authorities, institutions and other organizations.

✓ Audit verification and certification of RCMF guidelines implementation carried out by RC Secretariat. Self-assessment carried out every two years. Every three years RC members are required to set goals and tasks to achieve improvements in risk management and control in fundamental areas such as EH&S.

(1) ICCA and Cefic have provided capacity building funding and other support to PIPC for RC-related projects. Regular, frequent meetings held to support implementation including trainings, seminars and conferences including annual Ecological Forum of the Chemical Industry and "Care about the environment" site meetings involving best practice sharing of ecological solutions and innovations.

() RC activities promoted through PIPC communication channels such as Facebook, Twitter, dedicated RC website and newsletter.

① The SPOT System offers operational security support for the transport of hazardous materials to all PIPC members and the State Fire Service. It is voluntary and, while not implemented under RC, is consistent with RC safety principles.

PORTUGAL

APQuímica (formerly APEQ)

Associação Portuguesa das Empresas Químicas Av. D. Carlos I, 45 – 3º, 1200-646 Lisboa v José Barardo Ribeiro jose.ribeiro@apquimica.pt www.apequimica.pt

FACTFILE

Adopted Responsible Care in 1993 MEMBERSHIP: 63

RESPONSIBLE CARE COMPANIES: 23

(i) In May 2018, chemicals association APEQ merged with the Associação das Indústrias da Petroquímica, Química e Refinação (AIPQR) under a new

name, APQuímica – Associação Portuguesa da Química, Petroquímica e Refinação.

(i) APQuimica is a Cefic member and continues to practice RC.

Membership comprises 40 industrial associates, the majority SMEs. RC membership includes 6 large companies and 17 SMEs.

☑ In 2018, priority is being given to reviewing the annual KPIs submitted by companies to simplify data submission and number of indicators while continuing to meet ICCA requirements.

Action also being taken to clarify and renew CEO and RC Coordinators' voluntary commitment to Global Charter Principles, and full revision planned of association's RC guidance manual.

① APEQ is a founding member of PACOPAR, the Community Advisory Panel of the Responsible Care Program of Estarreja set up in 2001. The area's chemical companies work with APEQ, municipal services and several local community groups to improve quality of life of Estarreja, applying RC commitments – see www.pacopar.org. Pacopar won the European RC Award in 2005.

Companies verify RC program through self-assessment.

APQuimica collaborates with other associations on issues of common interest such as legislation, waste, EH&S, and transport of dangerous goods by road and rail.

R

RUSSIA

RCU

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FACTFILE

Adopted Responsible Care in 2007 MEMBERSHIP: 182

RESPONSIBLE CARE COMPANIES: 62

(1) Training on RC best practices for the industry through the Mendeleev University of Chemical Technology together with OPCW and ICCA support. The goal is development and implementation of RC in satellite countries; traditionally, representatives of Eastern European countries (Belarus, Moldavia, Bulgaria, Armenia, Azerbaijan, Kazakhstan, etc.) and Central Asia (Uzbekistan, Tajikistan, Kyrgyzstan, Mongolia, etc.) take part in this training workshop.

✓ Self-assessment approach with plans for independent verification of performance.

The Chemical Logistics Regulation is an RCU initiative designed to support dissemination of RC principles, primarily in the areas of chemical logistics and industrial equipment. Several major players in the sector are committing to implement the Regulation.

SQAS is being actively implemented by RCU in the Russian chemical market in close cooperation with Cefic.

① RCU, together with partners including the Russian Union of Industrialists and Entrepreneurs, is implementing an intersectoral project: Health 360 - the Occupational Health Management System. Development of international standards relating to workers' health and industrial medicine are underway.

S

SINGAPORE

SCIC

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FACTFILE

Adopted Responsible Care in 1990 MEMBERSHIP: 171

RESPONSIBLE CARE COMPANIES: 74

 SCIC's activities under RC and other initiatives support SD and the association has started to develop a sustainability program.
 SCIC membership covers the entire value chain from manufacturers to

LSPs, traders and consultancy firms; RC is relevant to 123 members. The head of new RC signatory companies attends face-to-face meeting with SCIC for briefing on commitments, alignment of RC codes to business operations and tentative indication of implementation timeframe and plans. RC membership is open to SCIC members only.

✓ Mandatory annual self-evaluation against 7 CoPs and KPIs; SCIC tracks submissions and member companies failing to submit after 3 reminders are delisted as RC members. Verification of self-evaluations is part of Awards scheme and is undertaken by a panel comprising industry and government officials; award winning companies publicized.

Detailed guidelines are incorporated in the self-evaluation forms for CoPs implementation. SCIC adopted its 7th code on Security in 2017. SCIC is piloting process safety event rate reporting during 2018 for all RC signatories following earlier awareness campaign.

SCIC RC members cover LSPs including waste management companies, using the Distribution and Product Stewardship Codes as management guidance for the supply chain.

() RC Awards recognize high performers at an annual presentation event attended by Minister or Minister of State, industry leaders and government officials.

SCIC has adopted the GPS and is actively driving awareness and understanding not only in the chemical industry but also in government agencies, including several workshops, working closely with JCIA. GPS implementation plan being endorsed by SCIC Board. Also driving implementation of GHS in Singapore. SCIC co-chairs the National Chemical Management & GHS Task Force.

(i) SCIC meets with new signatories and others on request for assistance to improve RC implementation. RC Clinic sessions (photo below)



introduced in 2017 to provide company coordinators with opportunity to engage RC code teams to better understand the gaps and areas for improvement. Also has a targeted SME mentorship program. ① Emergency response programs are part of the CAER Code. Joint transportation spill exercise between chemical logistics companies and regulators – the National Environment Agency, Singapore Civil Defence Force and Singapore Police Force. SCIC RC works closely with government in this area through community outreach, exercises and collaboration in audit and document submission.

The Singapore Civil Defence Force-SCIC Emergency Response Collaboration and Recognition Scheme encourages member companies to improve ER preparedness. SCIC RC members demonstrating excellence in the CAER code assessment can be exempted from certain documentation requirements by the competent authority.

The Workplace Safety & Health Council of Ministry of Manpower (WSHC-MOM)-Responsible Care Collaboration and Recognition Scheme is for companies gaining RC Achievement Award or higher for Employee Health & Safety and entitles them to seek direct entry to WSHC's bizSAFE Level 3.

SLOVAK REPUBLIC

ZCHFP SR

Association of Chemical and Pharmaceutical Industry Hattalova 12, 83103 Bratislava 3 Silvia Surova surova@zchfp.sk www.zchfp.sk / www.rcsk.sk

FACTFILE

Adopted Responsible Care in 1996

MEMBERSHIP: 51

RESPONSIBLE CARE COMPANIES: 11 accounting for ~65% total sales

Association membership includes LSPs and pharmaceutical companies.
 Management systems (ISO) and RC verification questionnaire supports companies with implementation.

✓ Self-assessment and peer review via completed questionnaire monitored by the RC Committee.

Association members report on set of KPIs with results presented and discussed as part of dedicated RC program at conferences such as Chemia held for the past 13 years, and annual assembly.

Voluntary agreement on control of drug precursors with Ministry of Interior.

①ZCHFP SR supports companies, particularly SMEs, with understanding and implementation of REACH and CLP regulation. GPS is a regular agenda topic at the annual Chemia – Responsible Care conference. ER System, DINS, is headquartered at member company; achieved strong performance in tests as part of European ICE scheme.

SLOVENIA

ACIS

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FACTFILE

Adopted Responsible Care in 1998 MEMBERSHIP: 83 RESPONSIBLE CARE COMPANIES: 18 ~77% of total sales ACIS has an active Working Group for Circular Economy since 2017 related to sustainable development. The WG is focused on promotion of and providing support to companies on closing the materials loop.
RC implementation based on CoPs and self-assessment. Association seeks to benefits from assistance and support from other chemical association. RC meetings includes peer assistance by high performers for less advanced companies.

(1) ACIS had Cefic support for a seminar in April 2016 focused on H&S: it mapped industrial accidents in the country, and introduced important GHS labelling changes for first responders.

SOUTH AFRICA

CAIA

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FACTFILE

Adopted Responsible Care in 1994

RC = Mandatory

MEMBERSHIP: 140 RESPONSIBLE CARE COMPANIES: 1

RESPONSIBLE CARE COMPANIES: 112 RC signatures + 7 due to sign + 18 consultants

① Membership open to chemical manufacturers, distributors, traders, spill responders, drum reconditioners, service providers, waste managers, testing laboratories and consultants. Companies must be members of CAIA in order to become RC signatories. Implementation begins with a public signing commitment to the guiding principles by the CEO and is renewed every 3 years.

Hauliers already accredited by SQAS-Southern Africa can also join.
 CAIA has aligned RC to the 17 Sustainable Development Goals (SDGs) and RC is being positioned as the overarching voluntary sustainability program for the chemical and allied industries in South Africa, providing signatories and stakeholders with value and metrics.

✓ Independent verification undertaken by approved auditors every 2 years for hauliers or 3 years for most other membership categories; verification entitles member companies to access the RC brand.

Implementation achieved through a Plan-Do-Check-Act management system supported by a comprehensive program of guidance documents, advisory forums and reporting requirements.

Annual provision of RC data - Quantitative Indicators of Performance (QIPs) - to CAIA is a requirement; associated monitoring takes place and aggregation of performance results publicized in annual RC report. Non-compliance can result in suspension or expulsion from the association. Data covers EH&S metrics, information on traded products, independent verification, chemicals management, product stewardship, complaints, community engagement, emergency response, certification, annual reporting, investment and RC training.



CAIA hosted the Responsible Care Leadership Group meeting in Cape Town in 2015

① Members are supported by proactive CAIA secretariat dedicated to advancing RC in South Africa. CAIA periodically holds workshops and networking sessions addressing process safety, other RC issues, industryspecific legislative/standards concerns and updates with presentations available for download.

RC Award recognizes and rewards companies for exceptional performance and is based on year-on-year improvements in QIPs, with site visits to shortlisted entrants.

CAIA maintains a constructive relationship with government and NGOs so that industry is represented at the policy and legislative level, and encourages members to maintain public trust by engaging in ongoing and visible projects that respond to public and scientific concern.

SOUTH KOREA

KRCC

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FACTFILE

Adopted Responsible Care in 1999

■ RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 53 ~US\$84bn sales ①KRCC established by industries and institutions involved in petrochemistry, specialty chemistry, fertilizers and soda. Local US and EU Chambers of Commerce also promote RC.

Program based on CoPs across range of disciplines; verification implemented through self-assessment. KRCC has developed product stewardship checklist for Korean conditions based on ICCA guidelines and is carrying out awareness raising with members.

SPAIN

FEIQUE

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FACTFILE

Adopted Responsible Care in 1993

MEMBERSHIP: 29 + 19 associations

RESPONSIBLE CARE COMPANIES: ~100 sites with sales ~US\$17.2bn FEIQUE has published CSR guidelines in support of SD (see page 12). High performers recognized under a biennial CSR Prize Award with 15 categories; only RC companies can apply.

() FEIQUE represents 19 associations and 29 companies with around 1,500 sites and covering 75% of national chemical production.

In May 2018 the Spanish Chemical Distributors Trade Association (AECQ) was granted use of the RC logo and trademark under an agreement updated and signed with FEIQUE.

Program based on 7 CoPs using scoring system to evaluate implementation.

RC program generates company KPI data and self-assessment.
 FEIQUE collects scoring data from all RC companies, aggregates figures and follows up with verification visits. External auditors are engaged for verification process.

RC workshops organized for topics of special interest and monthly technical communication circulated to FEIQUE members includes a section of national and international RC news.

National Emergency Centre CERET is part of Cefic's ICE network for road transport. In addition, FEIQUE and the Spanish authorities have set up a response center for maritime incidents involving dangerous goods known as CEREMMP.

FEIQUE has signed an agreement to improve performance against regulations covering precursors for explosives and drugs.

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SRI LANKA

LRCC

Lanka Responsible Care Council 67337, 6g B345 Nugegoda 67337 Plakmini Edirisinghe ncpcsl@ncpcsrilanka.org / lakmini@ncpcsrilanka.org

FACTFILE

Adopted Responsible Care in 2012 ■ RC = Mandatory

RESPONSIBLE CARE COMPANIES: 70

0 The LRCC evolved from the local UNEP National Cleaner Production Centre organization. Most of the 70 Member Companies are SMEs with fewer than 300 workers and sales between US\$4.5-9.5m.

Under the RCLG mentoring initiative, Responsible Care New Zealand is providing ongoing technical support, knowledge sharing, verification and the development of additional products and services.

The RC program is based on CoPs and compliance check lists. Members submit annual checklists reflecting regulations and best practice.

✓ LRCC conducts annual evaluations based on the self-assessment reports. Independent 3rd party verification scheduled from 2020.

LRCC is focusing on improving workplace chemical management, reflected in a close collaboration with authorities. Initiatives include a leadership role in developing draft national chemical policy and performance standards, training for Industry and government inspectors and advocating mandatory GHS implementation. Further details page 9.
 The Sri Lankan Ministry of Environment seeks to accelerate environmental protection measures by 2019. The LRCC is advocating Members' support to enable government agencies to improve workplace chemical safety, environmental protection and emergency preparedness. Encouraging and enabling product stewardship initiatives is a key LRCC strategy.

(i) An annual conference, including practical workshops targeting SMEs, government agencies and academia together with presentation of RC awards, is an increasingly popular event enhancing the reputation and recognition of the LRCC in the Sri Lankan community.

SWEDEN

IKEM

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FACTFILE

Adopted Responsible Care in 1991 MEMBERSHIP: ~1,400

RESPONSIBLE CARE COMPANIES: 37 + 12 distributors

 IKEM is an industrial and employer organization representing around 1,400 companies; member companies work in a broad cross-section of the chemical industry both as producers, distributors and users.
 Based on information reported by both the RC signatory manufacturing and distribution companies, a number of opportunities for improvement have been identified. These include, for manufacturers, a higher degree of reporting transport volumes; reporting of process safety incidents and adaptation of PS KPIs to Cefic guidelines; and better sharing of best practice examples. Distributors identified the need for improvement in employee health, reduced waste and reuse, and safety at loading and unloading activities.

SWITZERLAND

scienceindustries

Business Association Chemistry Pharma Biotech Nordstrasse 15, Postfach, 8021 Zürich Dinda Kren linda.kren@scienceindustries.ch www.scienceindustries.ch

FACTFILE

Adopted Responsible Care in 1992 ■ RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 250 (i) Membership heavily weighted towards pharmaceutical sector (accounts for 63% of worldwide sales) and includes chemical distributors who are also part of the RC program.

Signing of the RC Principles is compulsory when joining the association. The Swiss RC program was revised in 2016 to align with the updated Global Charter and all members were asked to sign the revised principles as a renewal of their commitment. This took place with the publication of the "We Care" brochure offering practical case studies from various member companies and sets out the view taken by the authorities regarding implementation of RC in Switzerland. The equivalent website http://www. responsible-care.ch is updated with further illustrative case studies. "Annual capacity building events are held with external partners and companies to share best practices. Events are currently focused on supporting companies to report against the new ICCA KPI process safety metric.

In 2018 scienceindustries became one of the founders of Go For Impact (https://go-for-impact.ch), a platform for the discussion of topics and the implementation of projects related to sustainability in the private sector. The association's stakeholders are also joint founders of the platform: the Swiss Federal Office of Environment, NGOs such as WWF, and other Swiss business associations. Projects discussed include, for example, development of a guideline to help companies setting "SMART" (specific, measurable, achievable, realistic, and timely) environmental goals, and the sustainable management of supply chains. These projects are still in the embryonic phase.

Т

THAILAND

RCMCT

Responsible Care Management Committee of Thailand (RCMCT) Chemical Industry Club, The Federation of Thai Industries, Queen Sirikit National Convention Center, Zone C, 4th Floor, 60 New Rachadapisek Rd., Klongtoey, Bangkok 10100 Netsai Aumngamarj netsai@responsiblecare.or.th www.responsiblecare.or.th

FACTFILE

Adopted Responsible Care in 1996

MEMBERSHIP: 74 RESPONSIBLE CARE COMPANIES: 41

(i) RCMCT aims to manage and develop RC in Thailand by providing support to member companies implementing the initiative as a management system for EH&S issues for business and their communities, and to be continuously effective and sustainable. RCMCT activities also seek to communicate the principles and activities of RC to be generally recognized by the general public.

TURKEY

TCMA / TKSD

Turkish Chemical Manufacturers Association Türkiye Kimya Sanayicileri Demegi Ibrahim Aga Sokak, No: 13, SOM Plaza, Kat:7 Kozyatagi Mahallesi, Bostanci, Kadikoy 34742 Istanbul Caner Zanbak caner.zanbak@tksd.org.tr www.tksd.org.tr

FACTFILE

Adopted Responsible Care in 1993

MEMBERSHIP/RESPONSIBLE CARE COMPANIES: 77

(1) TKSD's RC program is currently not very active in contrast with previous years. While all member companies are RC signatories, related interactions with TKSD are at a low level, exacerbated by significant changes in the Turkish chemical industry during the 2017-2018 period due to the geopolitical unrest in the Middle East region, together with energy costs and currency fluctuations.

① The association nevertheless continues with its RC Technical Working Group meetings with a core group of companies and informs all TKSD members on the outcomes. It has upgraded local language RC Guidance to incorporate the Security Code and continues facility RC visits albeit less frequently.

In addition, TKSD continues to cooperate with relevant government entities on emerging regulatory matters, emphasizing importance of RC, and maintains contacts with Cefic.

(i) The effect of the EU-Acquis Harmonization and increased regulatory reporting of the companies under current EH&S and other areas has resulted in companies favoring audited ISO Standards (9000, 14000, 18000 etc) against reporting on RC. Collection by TKSD of meaningful metrics data from member companies has been increasingly challenging.

U

UKRAINE

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Ukraine Chemists Union 15 M. Raskovoy Str, Kyiv 02660 Oleksandr Sadovskyi rc.office@chemunion.org.ua www.chemunion.org.ua

FACTFILE

Adopted Responsible Care in 2011 MEMBERSHIP: 42 RESPONSIBLE CARE COMPANIES: 6

UNITED KINGDOM

CIA

Chemical Industries Association Kings Buildings, Smith Square, London SW1P 3JJ Phil Scott ScottP@CIA.org.uk www.cia.org.uk

FACTFILE

Adopted Responsible Care in 1989

RC = Mandatory

MEMBERSHIP/RESPONSIBLE CARE COMPANIES: 96

CIA's work on sustainability is developing and includes a Steering Group of member companies led by a CIA manager. Sustainability principles are in draft.

CIA does not represent all companies in the UK that practice
 Responsible Care: transport, logistics and warehousing mainly participate
 through CIA's RC partnership with the Chemical Business Association.
 CIA's RC Guiding Principles were revised and re-launched in 2017.
 Revision was endorsed by CIA Council, and included an exercise to ensure
 Global Charter elements are included. It is a condition of CIA membership
 that sites commit to the RC Guiding Principles.

RC implementation is mainly through company management systems; CoPs; association guidance; regulatory requirements eg where safety and environment aspects align with RC; and best practice sharing which CIA facilitates.

✓ CIA has operated a RC verification programme for several years. It is CIA-led but with independent peers from other companies joining site visits; results generate improvement opportunity recommendations to businesses and are shared with industry.

 Mutual assistance and capacity building meetings and publications monitor RC progress, issues and priorities periodically reported to CIA Council comprising senior leaders. CIA RC Strategy Group for member companies and 11 Regional RC Cell groups give UK-wide coverage, facilitated by CIA, each meeting 3 times/year. Stakeholder engagement activities, from local community panels to wider Stakeholder Forums where CIA represents the sector. Annual RC Partnership review meetings with CBA.

① Emergency response required under UK's COMAH legislation for Seveso sites plus voluntary scheme for transport emergencies operated for the chemicals sector by the National Chemical Emergencies Centre, with voluntary participation by chemical companies. Voluntary agreement for management and regulation of bulk chlorine (the 'Chlorine Covenant'), facilitated by CIA and signed by the UK regulators, trade unions, and CIA on behalf of all the chemical businesses manufacturing or supplying bulk chlorine.

UNITED STATES of AMERICA

ACC

American Chemistry Council 700 2nd Street NE, Washington, DC 20002 Padford Johnson bradford_johnson@americanchemistry.com / Alexa Burr alexa_burr@americanchemistry.com www.americanchemistry.com/rc

FACTFILE

Adopted Responsible Care in 1988

RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 151 manufacturers + 103 supply chain partners

RC provides the implementation mechanism for development of ACC's Sustainability program (see page 12).

At international level, ACC has acted as the RCLG secretariat, sharing responsibility with the European Chemical Industry Council (Cefic), for around 3 decades. It provides extensive RC mentoring support for other national associations and candidate associations, and shares various materials and tools through capacity building, participation in events etc.
 ACC pursues global opportunities to strengthen regulatory cooperation and coherence that both facilitate trade and reduce compliance costs for member companies, with a focus on initiatives in South-East Asia, the Americas, and the Gulf Region. ACC works through the ICCA Global Regulatory Cooperation Task Force to help continue this progress.
 ACC members drive their performance through management systems based on established goals and adherence to policies, procedures and practices developed to improve performance over time.

The Responsible Care Management System® (RCMS) is based on effective, proven practices used by ISO and provides a set of required elements to help companies assess impacts, set performance goals, develop internal processes to drive performance and share progress with the public. RCMS follows a Policy-Plan-Do-Check-Act model.
 Companies report annually against full set of KPIs and information

can be accessed publicly on the dedicated website: responsiblecare. americanchemistry.com/Performance-Results/

ACC members and Partners are required to undergo mandatory,



ACC provides essential leadership to the RCLG. Photo shows key members of the Sustainability & Market Outreach team (I to r): Bradford Johnson, Director Responsible Care; Alexa Burr, Senior Director, Policy & Standards; and Debra Phillips, Vice President until her departure in September 2018.

third-party RCMS audits conducted by independent, accredited auditing firms on regular basis. Similar to ISO audits, the company is required to demonstrate conformance to the management system's requirements at headquarters and a sample of its facilities. Companies report their status to ACC and are encouraged to share audit results with relevant stakeholders. Companies failing to obtain their required certifications are subject to ACC's governance process.

🚑 ACC extends the RC ethic and management practices throughout the entire chemical supply chain through its Partnership Program. Partners adhere to the same RC requirements as ACC members; their CEOs make a commitment to uphold the following RC program elements: Endorsing the Responsible Care Guiding Principles

Measuring and publicly reporting performance on an annual basis

Implementing the RC Product Safety Code, Process Safety Code and Security Code within a firm time frame
Implementing the RCMS to achieve and verify results Obtaining independent certification that a management system is in place and functions according to professional specifications.

RC is industry's commitment to using and managing those materials with an essential role in thousands of products and technologies in everyday use both safely and responsibly. While more than a dozen federal laws regulate the safe use of chemicals, RC means that ACC members go above and beyond these requirements. Under the Product Safety Code, ACC member companies must adhere to a comprehensive set of practices and procedures to safely manage the products they manufacture.

S As well as the website listed above, the following sites offer further detailed information about ACC's sustainability efforts and other RCrelated initiatives reflecting the commitment to communicate openly with stakeholders.

www.americanchemistry.com/Sustainability/Principles.html www.chemicalsafetyfacts.org/ www.sciencebehindsustainability.org/

URUGUAY

ASIQUR

Asociación de Industrias Químicas del Uruguay Avda. Italia 6101, C.P. 11500 Montevideo Milton Vázquez asiqurcr@ciu.com.uy / asiqurcr@gmail.com www.asiqur.org

FACTFILE

Adopted Responsible Care in 1998 RC = Mandatory

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 37 sales ~US\$556mn A new formal RC commitment was signed in 2016 by all members. The concept of sustainable development is included in the RC program. Primary form of implementation are the CoPs; requirements of the RC program are established in the codes and each code includes explanation to help members with understanding and implementation.

 Independent verification of company RC program carried out and certification provided.

(i) Senior company managers meet annually with ASIQUR to discuss priority issues with RC topics given special consideration. ASIQUR cooperates closely with technical personnel of government ministries enabling constructive discussion of EH&S. Performance improvement achieved in OH&S by the chemical sector won first place in the 3M Occupational Safety 2016 award scheme.

ICCA € RC companies carry out audits of customers and suppliers. product stewardship guidance discussed with members. GPS product stewardship elements are being implemented as part of RC. Three GHS courses were carried out between 2010 and 2014 with participants from both member companies and the Ministries of Work, Health, and Fire Departments.

VENEZUELA

ASOQUIM

Asociación Venezolana de la Industria Química y Petroquímica Av. Francisco Solano López con 3era.

Av. Las Delicias,

Edf. Centro Solano, Piso 1, Ofc. 1-A, Chacaito, Caracas ZP 1050 🛉 Geraldina Palm de Pulido

gpulido@asoquim.com / responsabilidadintegral@asoquim.com www.asoquim.com

FACTFILE

Adopted Responsible Care in 2002

MEMBERSHIP: 140 + 82 Partners

RESPONSIBLE CARE COMPANIES: 19

Guiding Principles are published on ASOQUIM website and full set of CoPs implemented through management system specification. 🔁 2016 KPI data reported by 7 RC companies.

Performance is externally verified.

() CEO commitment to RC is renewed every 3 years or sooner if personnel change. ASOQUIM coordinates the activities of the RI (Responsibilidad Integral) Mutual Assistance Committee (CAMRI) of companies adhering to the program. Since 2012 ASOQUIM has given a Commitment Award to the company that demonstrates greatest commitment to RC activities and a Performance Award to the company demonstrating best performance. () In 2012 ASOQUIM developed an Information System for Emergency Response (SIRE).

The association is working with national government regarding adoption of the UN GHS.

VIETNAM

VRCC

Vietnam Responsible Care Council Chemical Society of Vietnam Hoi Hoa hoc Vietnam (CSV) So 2 , Pham Ngu Lao, , Hanoi 🛉 Do Tanh Bai baidotanh@gmail.com / phidoduy1948@gmail.com www.vrcc.com.vn

FACTFILE

Adopted Responsible Care in 2015

MEMBERSHIP / RESPONSIBLE CARE COMPANIES: 45 (i) Since VRCC was established in 2012, membership has grown from 30 to 45 members. 26 training courses have been held, of which 17 took place between 2016-18. Dialogue sessions between VRCC and government agencies have been held on 12 occasions since 2015.

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