Chemicals and Waste Management Community of Practice (CoP)
Discussion 2 Summary

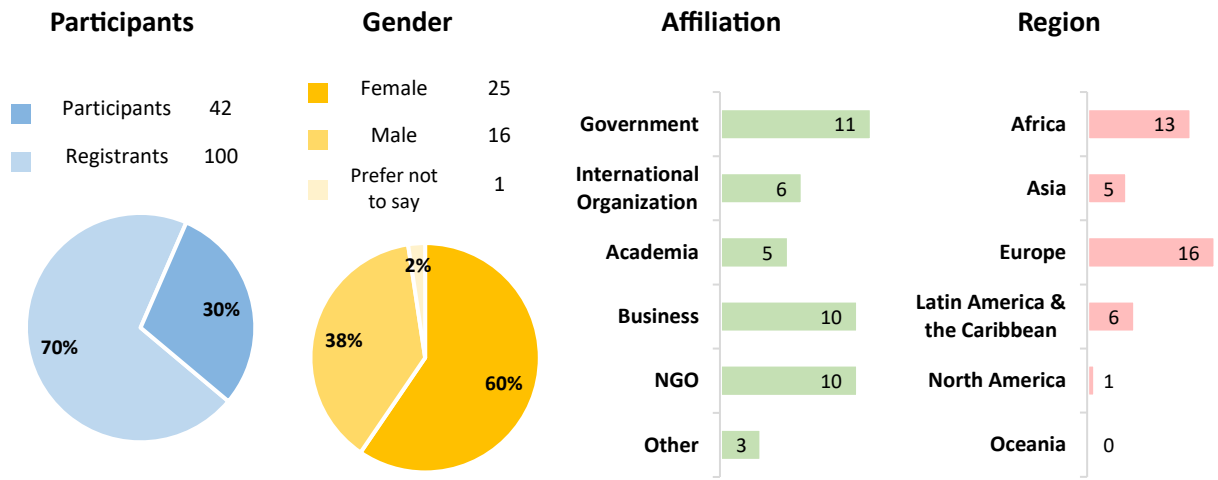
Title	Best Practices for Responsible Chemical and Waste Management in Companies and SMEs
Date & Time	31 May 2023, 14:00 – 15:30 (UTC+2)
Recording	https://youtu.be/zdCCTQDT8hA
SAICM CoP	ggkp.org/ChemAndWasteCoP

Effective management of chemicals and waste is a key issue facing many sectors of industry today. As our dependence on chemicals has increased in modern society, so has the importance of their proper handling and disposal. The CoP discussion highlighted the principles of Sound Management of Chemicals and Waste as a necessary business strategy, underpinning both environmental stewardship and business continuity.

Particular attention was paid to the role of small and medium enterprises (SMEs), their unique challenges, and the significant potential benefits they could reap from effective chemical management. It was noted that for many companies, a lack of awareness about the chemicals they use and their associated hazards remains a key hurdle.

The experts also stressed the importance of adopting a life-cycle approach to chemical management, considering all aspects from sourcing to disposal. In addition, they provided insights into a number of tools and resources available to various stakeholders, including businesses, NGOs, academia, and governments, that can facilitate and guide the development and implementation of robust chemical and waste management strategies.

Attendee Report



Contact

SAICM Secretariat: saicm.chemicals@un.org
Green Forum: info@thegreenforum.org

Presenters

Branko Dunjic, Director, Cleaner Production Centre of Serbia, Faculty of Technology and Metallurgy, University of Belgrade

Branko Dunjic is a director of the Cleaner Production Centre of Serbia, which is a part of the Faculty of Technology and Metallurgy, University of Belgrade and a specialist in eco-industrial parks and resource efficiency.

Since 2016, he is helping UNIDO as an International Expert and Chief Technical Advisor in their work on Eco-Industrial Parks (EIP), Sound Chemicals Management, Resource Efficient and Cleaner Production (RECP), Sustainable Industrial Zones (SIZ), Chemical Leasing (ChL), PCB and uPOPs management/elimination/reduction.

He has PhD in chemical engineering, with a specialization in polymeric materials. The experimental part of his PhD thesis was done in Lyon, France in the Laboratory for Catalysis, and the subject was the use of polymers in asymmetric catalysis and ion separation.

After taking his PhD, he worked at the University of Belgrade, teaching polymer chemistry. Then he joined the industry where he worked as an R&D manager and then as a manager of a synthetic resin production unit.

He published 43 scientific articles and participated at more than 30 conferences. He is a co-author of four protected patents. His main area of interest is correlation structure-mechanical properties of polymeric materials, new macromolecular architectures, functional polymers and sustainable chemistry.

Cherie L. Weible, Senior Director, Strategy and Global Affairs, Responsible Care®, Sustainability and Market Outreach, American Chemistry Council

Cherie Weible is an international trade professional with experience in both the public and private sectors and expertise in global affairs, U.S trade policy and commercial diplomacy. Cherie currently serves as Senior Director for Strategy and Global Affairs in the American Chemistry Council's Responsible Care® and Sustainability unit, where she develops and implements strategies to promote sound chemical management policies and strong industry environment, health, safety and security practices globally.

Cherie previously worked at the U.S. Department of Commerce where she served as Director of the Office of ASEAN and the Pacific Basin and, prior to that, as Director for Central and Southeast Europe. During her time at Commerce, she worked to expand U.S. market access overseas and successfully facilitated billions of dollars in sales of U.S. products and services.

	Cherie received numerous awards during her career, including the Department of Commerce's Gold Medal and the Stephen Kaminski Memorial Award for Individual Diplomacy. Ms. Weible was a Wolcott Fellow at George Washington University from which she received a Master of Business Administration in International Business. Cherie graduated Summa Cum Laude from Kent State University, where she received a Bachelor of Business Administration in Marketing. Cherie is a long-time member of Women in International Trade and served as a mentor to the Asian Trade Centre's Asia Women Exporters Mentorship Program.

Facilitator

Hannes Mac Nulty, Green Industry Platform Manager, Green Growth Knowledge Partnership (GGKP)

A mechanical engineer with 20 years of experience working within the industry, government and NGO sectors, Hannes has an active interest in developing market-driven solutions that can deliver extensive upscaling of existing industry support programmes. His specific area of expertise is in resource efficiency and industrial decarbonization, with a particular focus on bridging the communication gaps between related public and private sector stakeholders.

Summary of Discussion

Participants and panelists discussed the significance of sound management of chemicals (SMOC) and chemical waste in limiting exposure risks to both humans and the environment. It emphasized that comprehensive awareness of the life cycle of chemicals is vital, including their origin, transportation, application, and disposal.

For small and medium enterprises (SMEs), the benefits of proper chemical management link directly to cost-savings and business continuity. Regulatory compliance, employee safety, minimized environmental impact, and enhanced corporate reputation were noted as key profitability drivers.

Tools available from UNITAR, IOMC, IAMC and the Green Industry Platform were highlighted as valuable resources for businesses, governments, NGOs, and academia to facilitate chemicals management.

QUESTION 1

What methods or technologies have you found most effective in managing the risks associated with chemical and waste management, and how have these helped you to improve the sustainability performance of your business?

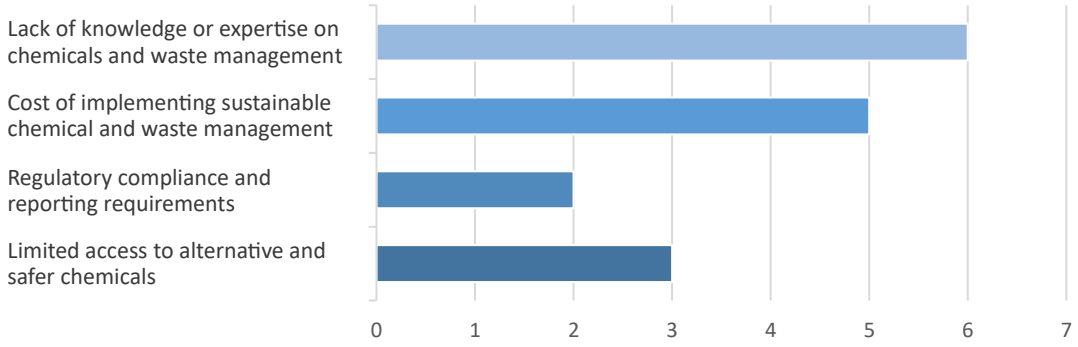
Key elements discussed by participants and presenter during the discussion:

The foundational step for businesses is to understand the nature of chemicals used and the associated potential risks. Participants underscored **differing regional practices** due to varying regulatory strength. It was suggested that companies should garner detailed chemical information from their suppliers, such as material and safety data sheets.

Despite the crucial role of chemical management, it is often undervalued compared to energy efficiency due to less visible immediate impact and the daunting variety of chemicals in use.

POLL 1-1

What are some of the key challenges that your company faces when it comes to chemicals and waste management, and how have you addressed these challenges in your own business?



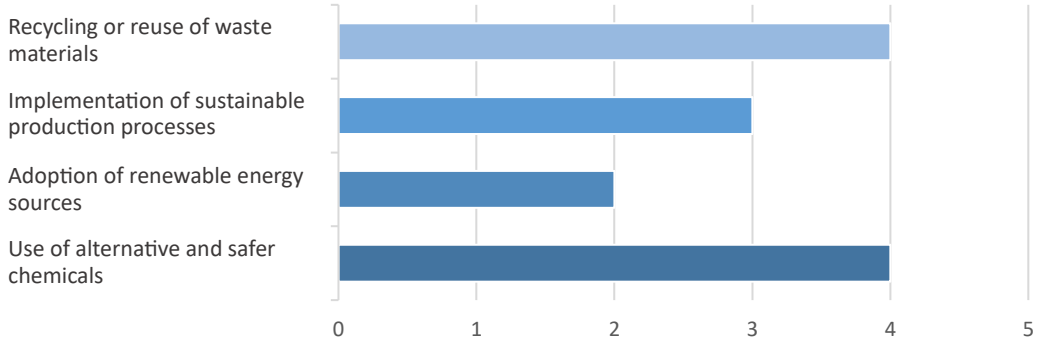
Other **challenges** included the lack of expertise and awareness on chemical and waste management, ineffective internal communication within companies, the cost of safer alternatives, and complexities of regulatory compliance.

Panelists gave some examples of methodologies used for sound chemical management including the use of expert tools such as the IAMC toolkit. Additionally, it was discussed that a clear understanding of the chemicals in use should precede any investment in new methodologies or technologies. Cooperation

with suppliers was encouraged, as they can provide useful knowledge and optimize chemical usage. Additionally, it was suggested that sound chemical management doesn't necessarily require substantial investments.

POLL 1-2

What technologies or innovations have you implemented in your business to reduce your environmental impact and improve your chemicals and waste management practices, and what results have you seen from these efforts?



On the topic of **technologies and innovations**, recycling and reusing waste materials was promoted as a cost-effective strategy. While the use of safer chemical alternatives is ideal, the panelists noted that only a limited number are currently available. The discussion also focused on sustainable production processes that consider energy efficiency.

In the pursuit of sound chemical management, a two-pronged approach was observed: companies striving for sustainability through alterations to their processes and products, and governments developing regulations and frameworks. Collaboration between industry and government was recommended for effective regulation.

QUESTION 2

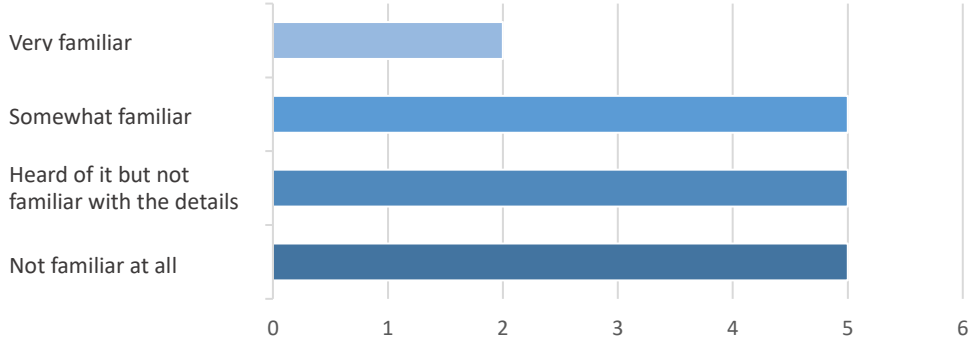
What are some potential areas of Responsible Care that you believe could be compelling and relevant to your organization's operations and goals? How do you envision the potential of the Responsible Care Self-Assessment tool to improve your organization's chemical management practices, overall sustainability performance, stakeholder engagement, and regulatory compliance?

Key elements discussed by participants and presenter during the discussion:

The participants of the webinar extensively discussed the Responsible Care Program, an environmental health, safety, and security improvement initiative by the chemical industry. The panelist mentioned the program supports the chemical industry's contributions to the SDGs across environmental, social, and economic aspects. It fosters stakeholder engagement, promotes transparency, and seeks to extend Responsible Care throughout the entire value chain.

POLL 2

How familiar are you with Responsible Care as a framework for chemical management?



A major focus was the Responsible Care Self-Assessment Tool, set to be publicly launched at ICCM5 in September 2023. This tool comprises 101 questions aimed at guiding companies, particularly SMEs, to identify gaps in their chemicals management implementation. By indicating the companies' maturity level, it directs them towards achieving the next level. The tool is available for annual use to track progress over time, and an online platform for its global deployment is currently under development.

The participants also touched upon the challenges faced by SMEs when participating in voluntary initiatives like Responsible Care. It was suggested that showcasing examples of similar companies

involved in the initiative could help motivate SMEs. Large companies were also encouraged to work with stakeholders in their value chain to propagate the program.

The Responsible Care Leadership Group, part of the International Chemical Council Association (ICCA), includes 64 chemical associations worldwide. Implementing Responsible Care within an economy is a prerequisite for joining this group. The program is currently focusing on expansion into Africa and is seeking host entity associations in the region.

QUESTION 3
How have changes in regulations and market demand influenced your chemicals and waste management practices, and how have you adapted your business strategies in response to these changes?

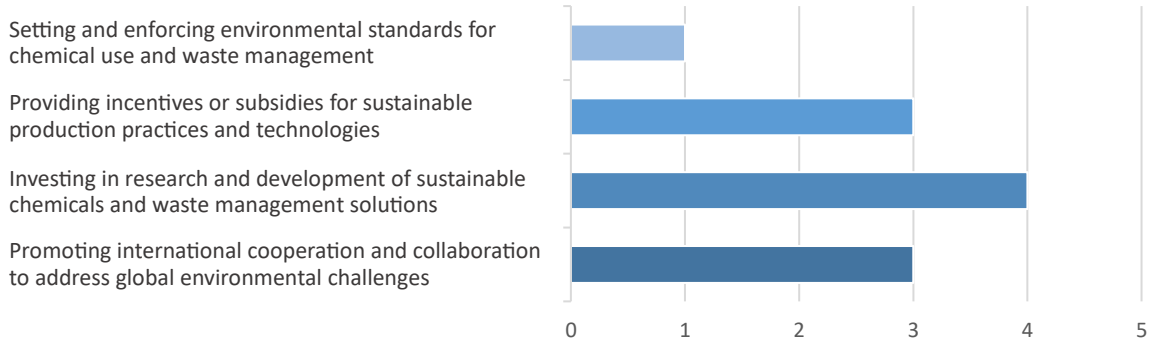
Key elements discussed by participants and presenter during the discussion:

Influence of Regulations and Market Demand on Chemicals and Waste Management

The discussion revolved around the profound influence of both national and international regulations on the chemical and waste management practices of organizations. Laws such as REACH and international agreements like the Basel, Rotterdam, Stockholm, and Minamata Conventions, significantly shape companies' chemical management behaviors. Notably, the role of voluntary initiatives such as Responsible Care was also highlighted in supporting the implementation of legislation in the industry and giving the industry the opportunity to engage with regulations. Companies, then, can also share challenges and provide inputs as regulations are being developed.

POLL 3

What role do you see for government policy and regulation in promoting sustainable chemical use and waste management practices?



One key observation was how regulations can motivate industry-wide changes. The shift from solvent-based to water-based products in the paint and coatings industry, driven largely by legislation limiting organic compounds, served as an illustrative example.

Panelists and participants emphasized the importance of training, tools, and metrics in helping companies understand regulatory requirements, effective measurement, and the benefits of compliance. They advocated for strong collaborations among governments, industries, and other stakeholders to develop effective legislation and enforcement mechanisms.

The panel underscored the need for a basic global regulatory framework in every country to ensure the safe management of chemicals. The goal is not to stifle innovation but to provide critical foundations for sound chemical management to avoid disasters like those seen in the 70s and 80s. Convincing businesses that regulations ultimately yield benefits and properly informing and educating people about safe chemical use were identified as key objectives.

Useful Resources

- Sound Management of Chemicals (SMC) in Small and Medium Sized Enterprises (SMEs)
- IOMC Toolbox
- IAMC Toolkit
- I-GO Assistant