

## **Informal Dialogue on Sustainable Chemistry**

### **Moderator Summary (Achim Halpaap, UN Environment)**

- Thank you Chair
- I am pleased to report back on the outcomes of our informal dialogue on opportunities and challenges of sustainable chemistry in the context of a beyond 2020 approach on chemicals and waste.
- I would like to thank our panelist, Ms. Jutta Emig, Ministry of Environment, Germany, Ms. Qian Cheng, Greenpeace East Asia, Ms. Marina Mattar, Brazilian Chemical Industry Association, and Ms. Souki Gwayi, Department of Environmental Affairs, South Africa for the diverse insights shared. The input inspired us in the true spirit of SAICM multi-stakeholder debates.
- We learned that global momentum around the concept of sustainable and green chemistry is growing. Important initiatives taken by governments, the private sector, and the research community include, for example, sustainable chemistry policies and substitution initiatives by chemical companies and major retailers, Germany's initiative to launch an international collaborating center, or international action on sustainable and green chemistry by OECD, GEF and UNIDO, to name just a few.
- Given this momentum, it became clear that sustainable chemistry has the potential to become an important pillar of the beyond 2020 approach for the sound management of chemicals and waste.
- However, just like for the term sustainable development, a better understanding of the sustainable chemistry concept, and how to turn it into specific action, targets and results is needed in order to avoid diverging interpretation of the concept by different stakeholders.
- An important point made was that sustainable chemistry encourages us to think about and create inter-linkages, how chemistry can help to achieve sustainable development goals and targets, such as zero hunger, safe and affordable housing, climate change, or decent employment.
- At the same time, and given that "sustainable" is in the title, sustainable chemistry suggests that the production, use and disposal of chemicals, as well as innovations in chemistry, need to be fully compatible with, and comply with all three dimensions of sustainable development, i.e. economic, environmental and social. In other words, achieving SDG objectives, such as zero hunger or climate change through a chemistry which would cause harm to human health and the environment would not be an option.
- Another important aspect of sustainable chemistry is its emphasis on innovation and accelerating the substitution of undesired hazardous chemicals in production and products, through safer chemical or non-chemical alternatives. In this context, advancing green chemistry research and innovation through knowledge sharing, technology transfer and capacity development play a particular role.

- To advance these efforts and to create drivers, transparency, access to information and the role of the public, consumers, and indigenous knowledge were emphasized.
- Another important point made by many stakeholders was that while sustainable chemistry has a lot of potential, it should not deter from prioritizing international, national and private sector action to address chemical pollution risks and legacies of the past, and to ensure that all countries have basic regulatory capacity in place to manage hazardous chemicals throughout the life cycle.
- In looking ahead, we started to explore, if sustainable chemistry is a (a) new type or subset of chemistry, (b) an analytical framework to assess chemicals throughout their life cycle in accordance with the three dimensions of sustainable, or (c) a destination or vision we seek to achieve in the long-term. We were only able to start this discussion, with all three interpretations relevant for advancing the concept further.
- While a common understanding of sustainable chemistry is desirable and needed, we heard that spending too much time on a definition at this stage may not be effective. Rather, based on the key principles developed through the discussion, focus should be placed on exploring areas of concrete action, and identifying the elements of an enabling framework for advancing sustainable chemistry, such as identifying alternatives, innovation, green chemistry education, and incentives structures.
- Thinking through and considering needs and opportunities of developing countries and countries with economies in transitions and related sustainable financing is a particularly important aspect further work on sustainable chemistry should explore.
- The call and mandate provided by UNEA 2 to countries and stakeholders to submit best practices on sustainable chemistry by 30 June 2017, and the preparation of an analytical report on the topic by UN Environment in early 2018 has a potential value to further develop the sustainable chemistry concept further globally. All stakeholders are encouraged to participate actively in this process.
- This work will allow UN Environment, working closely with its partners, to report back to the next intersessional meeting on the important potential role Sustainable Chemistry has in contributing to chemicals and waste management beyond 2020 and implementation of the 2030 Sustainable Development Agenda.