

# The Nexus Chemistry – Climate Change: Understanding Trends, Risk and Opportunities

## Session 2: Innovation in and from the chemical sector as a key driver for low-carbon solutions

**Date:** Wednesday, October 6<sup>th</sup>, 2021

**Time:** 12:30 - 14:00 (CEST)

**Platform:** Virtual Event – MS Teams

**Moderator:** Dr. Reinhard Joas, CS3

**Further information:** [capci@giz.de](mailto:capci@giz.de)

**CONTEXT:** The Chemical Industry with all related value chains has enormous potentials for contributing to climate protection. The transformation of the chemical industry and related value chains with a focus on sustainable, low-emission processes and products is a huge challenge that requires enormous efforts and high levels of innovation, considering innovation as a driver of low-carbon solutions.

**OBJECTIVE:** To show options for low-emission development of the chemical industry and discuss the conditions necessary for stimulating innovation and achieving multiplication to market-scale.

### GUIDING QUESTIONS:

- What are promising technical options for greenhouse gas emission reduction in the chemical industry?
- Which type of framework conditions and incentives are needed for multiplying innovative solutions for climate protection and sustainable chemistry to market-scale?

## Agenda

| Time  |  | Speaker   |
|-------|--|---|
| 12:30 | Welcome & Introduction   | <b>Dr. Detlef Schreiber</b> , <i>Head CAPCI, Deutsche Gesellschaft für Internationale Zusammenarbeit - GIZ</i>  |
| 12:40 | Innovation highlights: Technology options for a low-carbon future in the chemical industry | <b>Dr. Ulf Auerbach</b> , <i>Senior Expert Energy and Climate, Evonik, ICCA</i>   |
| 12:55 | From innovative ideas to market scale: The example of green cooling                        | <b>Bernhard Siegele</b> , <i>Programme Manager Integrated Ozone and Climate Protection, Cluster of Projects on F-Gases, climate-friendly cooling, GIZ</i> |
| 13:10 | First round of questions and comments  |   |

|       |   |   |
|-------|---|---|
| 13:20 | <p>How to stimulate innovation for emission reduction. Experiences from the International Sustainable Chemistry Collaborative Centre (ISC<sub>3</sub>)</p> <p><b>Part 1: Possible pathways towards defossilization of the chemical industry and their technological implications. Promoting innovative start-ups</b></p> <p><b>Part 2: Future-oriented low-carbon technologies in the light of sustainable chemistry and a circular economy</b></p>   | <p><b>Dr. Alexis Bazzanella</b><br/><i>Director Innovation Hub ISC<sub>3</sub> – Head of Research and Project Coordinator DECHEMA</i></p> <p><b>Prof. Klaus Kümmerer</b><br/><i>Director Research and Education Hub ISC<sub>3</sub> Leuphana University</i></p> |
| 13:40 | <p>Moderated discussion; guiding questions:</p> <ol style="list-style-type: none"> <li>1. <i>What are promising technical options for greenhouse gas emission reduction in the chemical industry?</i></li> <li>2. <i>Which type of framework conditions and incentives are needed for scaling up innovative solutions for climate protection and sustainable chemistry to market-scale?</i></li> <li>3. <i>What are the success factors for GHG emission reduction with special regards to the chemical industry in developing countries and emerging economies?</i></li> </ol> | <p><b>Dr. Reinhard Joas, CS3</b></p>  |
| 13:55 | <p>Closing remarks</p>  | <p><b>Dr. Detlef Schreiber, Head CAPCI</b></p>  |