

Addressing the Avoided Emissions Challenge

Guidelines from the chemical industry for accounting
for and reporting greenhouse gas (GHG) emissions avoided
along the value chain based on comparative studies

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Foreword

“The earth
we live on
is a precious
resource
for all”



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Developments in science and technology have enabled people to live longer, healthier, more agreeable and more prosperous lives. Minimizing environmental impacts whilst furthering these developments is critical to a sustainable future. The chemical industry contributes to almost every modern technology and has long been developing innovative products that improve sustainability. With that in mind, the industry supports the use of life cycle assessment (LCA) methodologies because these enable the assessment of the environmental impact of products and technologies over their complete life cycle, including production, use and end-of-life handling. As such, they are critical to assessing – and ultimately improving – sustainability.

Greenhouse gas (GHG) emissions are one of the many environmental impacts that LCAs can quantify. By comparing greenhouse gas emissions along the life cycle of two alternative products of equal benefit to users, we can understand which technology avoids greenhouse gas emissions, improving sustainability. LCA standards help to improve the quality and reliability of these assessments. The consistent measurement and reporting of LCAs increases credibility and comparability of the results, leading to better decision making by stakeholders along the value chain. Measuring avoided emissions of greenhouse gases over the value chain of products in particular, is an area where consistency of approach is essential. But, it has often given rise to debate among stakeholders.

To address these concerns, in early 2012 the International Council of Chemical Associations (ICCA) and the World Business Council of Sustainable Development (WBCSD) Chemical Sector project, Reaching Full Potential, formed a taskforce to develop practical guidelines to improve consistency in the assessment and reporting of avoided emissions.

We expect these guidelines to improve reporting consistency across the industry. In the future, we intend to expand them to cover other environmental impacts. We therefore aim to engage all stakeholders in the value chain so as to further improve the guidelines and the quality of our methodology. We believe this is an important step in improving the sustainability of our society.