



TOGETHER FOR
SUSTAINABILITY

Improving and harmonising Scope 3 Reporting

TfS White Paper

Together for Sustainability (TfS) has produced a *White Paper, Improving and harmonising Scope 3 Reporting*, that explores the challenges and potential solutions to harmonise carbon accounting methodologies, and uncovers complexities and strategies for a more sustainable chemical industry.

In November 2022, TfS achieved a major milestone with the launch of the Product Carbon Footprint (PCF) Guideline, a collaborative effort involving experts from over 25 chemical companies. This guideline addresses a critical challenge within the chemical industry's commitment to combat climate change and offers specific guidelines for PCF calculation.

During this work on the PCF Guideline, TfS identified improvement potentials for corporate greenhouse gas (GHG) accounting that are captured and explained in this White Paper.

TfS has identified three key modifications needed to address this issue:



1 Biogenic carbon accounting

As biogenic carbon sources gain prominence, the development of a robust framework for their accurate accounting becomes essential.

- Biogenic carbon is derived from natural sources like plants and helps reduce carbon emissions. Currently, companies are not able to accurately account for the benefits of products containing biogenic carbon in their emission calculations in the scopes of the GHG Protocol that are important for purchasing decisions.
- The existing accounting approach, known as the 0/0 method, doesn't accurately consider the carbon removed from the atmosphere by biogenic materials. This omission occurs both when products are used and when they are recycled.
- TfS recommends adopting the newer and more meaningful -1/+1 approach, which factors in the carbon removed and emitted throughout a product's lifecycle.
- The recommended approach of TfS will allow companies to showcase the benefits of biogenic carbon products accurately and incentivise long-term sustainability efforts. Ultimately, this change would enable companies to claim carbon removal through biogenic carbon materials in their emissions reporting.



2 Mass balance as a transitional mechanism

Acknowledging the dynamic shifts underway, the adoption of a mass balance (MB) approach needs to be considered as a market-based mechanism that reinforces the industry's transition towards sustainable practices.

- This approach integrates biomass, recycled materials and energy sources into production systems. It enables the gradual inclusion of recycled materials alongside traditional resources, especially in cases where separating them during processing is challenging. It supports the industry in the faster transition to productions with significantly lower PCF.
- MB accounting offers several benefits, including transitioning to a circular economy, producing eco-friendly products without major investments, scalability, transparency for informed purchasing decisions and alignment with established sustainable sourcing programmes.
- The GHG Protocol does not currently account for the mass/energy balance approach. It treats alternative feedstocks as standard raw materials, missing the unique attributes of materials like recycled or bio-based resources.
- TfS suggests implementing several recommendations, including accepting MB as a valid approach for recycled and bio-based materials and defining specific sustainability characteristics.
- Additionally, TfS proposes a solution that involves site-specific mass/energy balance system expansion, certification and consideration of other renewable feedstock elements in GHG calculations.



3 Recycled materials and content

With the increasing integration of recycled materials and content within the chemical industry, there is a need to harmonise approaches to carbon accounting to recognise the positive effects of a circular economy at both corporate and product levels.

- Technologies like mechanical and chemical recycling show promise in reducing GHG emissions and keeping materials in a circular loop. However, incorporating recycled content into corporate GHG accounting presents challenges.

A reimagined corporate reporting methodology is key to enable the chemical industry's progression towards a circular economy, encouraging resource efficiency and GHG emission reduction.