

A major barrier to sustainable and responsible innovation in the sustainable chemicals and materials (SCM) sector is that SCM products do not qualify for existing decarbonization incentives and similar supporting policies despite also contributing to defossilization. This lack of policy parity is in turn aggravated by a lack of common sustainability frameworks and methodologies for assessing the defossilization capabilities of SCMs. Even SCMs in jurisdictions such as the Netherlands that do encourage SCM production must still compete against sustainable fuels producers, which benefit from widely accepted sustainability assessment methodologies, rather than working in a manner that is complementary to them. This outcome is detrimental given that the sequestration of atmospheric carbon in long-lasting products is increasingly needed to avert catastrophic climate change.

Molecule Group is a convening firm that is examining sustainability criteria, market access, and lifecycle analysis methodologies tailored to SCM applications, with an emphasis on enabling policy recognition and trade. It is also exploring how evolving regulations—such as product carbon disclosures, circular economy policies, and extended producer responsibility—can support innovation while ensuring environmental integrity. The project uses an iterative, dialogue-driven process working with stakeholders and participating governments to identify constraints to SCM industry market access in order to develop a framework in support of enhanced market access. The project's overarching aim is to create a supportive international policy environment that catalyzes sustainable chemicals and materials markets in parallel with sustainable fuels.

The results presented show what the project's industry stakeholders have identified as the primary policy and other constraints that are preventing SCM market access. The presentation also discusses the project's next steps to develop a consensus-based framework that is compatible with nascent policy frameworks in support of SCM development and improvement of SCM market access through alignment on technical criteria and governance principles.