

Communicating Sustainability in the Bio-Based Chemical Industry

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by Kathryn Sheridan, CEO, Sustainability Consult



In recent years, the bio-based chemical industry has experienced steady growth and interest in the 'bioeconomy', an economy based on the consumption and production of materials from renewable sources. Companies and consumers alike are looking for solutions that are more environmentally-conscious and contribute to a sustainable future.

The chemical industry is offering ever more sophisticated and sustainable solutions with a lower carbon footprint. As sustainability communicators, we believe that for the bio-based industry to deliver on its considerable promise, it must communicate with customers and stakeholders in a clear and credible way.

We work across the bioeconomy, including on bio-based chemicals and bioplastics. To contribute to the debate on credible communications, we have developed five principles for organizations to guide their communications.

Five Principles for Credible Communications

1. Current consumption patterns are unsustainable, but this doesn't need to be the case. The chemical industry can be a linchpin for sustainable consumption by bringing competitive bio-based solutions to the market and encouraging reduced consumption, e.g. by building in recyclability.
2. We need to be honest about what 'bio' really means. 'Bio-based' doesn't automatically mean a material is sustainable, nor more environmentally-friendly. To avoid backlash, claims need to be communicated responsibly. Taking a lifecycle approach is best, because this clearly communicates how

much land, water and energy is used within a product's lifetime and allows comparison with petroleum-based alternatives.

3. Data is crucial to help back up sustainability claims. Lifecycle analysis (LCA) measures the energy used through the production, use and end-of-life phases. Measuring carbon reduction in bio-based chemicals will be important as technology continues to improve.
4. Quantify sources of waste as early as possible. The next generation of bio-based chemicals may be made from waste and biomass, but sources of waste are increasingly in demand. A cost-effective and low-carbon solution requires a continuous, local supply of waste.
5. Be transparent when it comes to GMOs. The bioeconomy is inherently focused on decarbonizing the economy, yet the catalysts used for fermentation are created for optimum performance in a lab and more often than not are genetically-modified. This isn't always obvious to stakeholders, so being transparent and straightforward is the best approach to avoid potential backlash from policymakers and consumers.

The chemical industry has a major role to play in moving society towards a more sustainable economy. The bioeconomy is part of that goal as it supports the environmental objectives sought by policymakers, consumers and NGOs alike. Maintaining stakeholder support is essential if we are to gain consumer acceptance of new technologies. Credible communications mark the first step to ensure the right messages are being distributed.

Sustainability Consult is a Brussels-based sustainability communications and public relations consultancy, specialized in the bioeconomy, clean tech and renewable sectors. Kathryn Sheridan is a 1% for the Planet Ambassador.

E-mail: ks@sustainabilityconsult.com

Website: www.sustainabilityconsult.com

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