

The need for harmonized policies for biofuels and biomaterials

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Abstract

Despite all the efforts made by the European Union (EU) to produce science-based policies, there are still some unfortunate distortions – not an easy fix when it comes to the complex functioning of European institutions. Biofuels were scaled up during the first decade of this century, driven by the development of Flex Fuel technology and legislative support to adoption and scale up. With the creation of the Renewable Energy Directive¹, the EU established a captive market for biofuels and avoided the emission of millions of tons of CO₂. However, technologies to convert biomass into materials, particularly polymers, have been developing and maturing as well. These materials can be reused, then recycled and ultimately converted to waste-based biofuels at the end of their lifecycle, a setup that is fully aligned with the cascading principle of biomass use. Nowadays, legislation incentivizes producers to directly sell biofuels, shortening the temporary benefit of storing biogenic carbon in the pool of products in the economy. This paper proposes a harmonized policy pathway that incentivizes the switch from crop-based fuels to waste-biomass based fuels, while allowing crop-based biomass to be used as feedstock in the chemical industry for plastics production. This would help plastics to de-fossilize without creating pressure on ecosystems and helping the EU to accelerate its transition to a net zero plastics circular economy.

Biography

Mr. Martin Clemesha graduated as a materials science engineer at the Polytechnic School of São Paulo University in 2001 and has a post-graduation degree in Packaging Engineering.

Throughout his career, he has provided technical support to Braskem's clients in several market segments in Brazil, South America and Europe. Living in Europe since 2014, he has worked in technical sales for 6 years and as the product manager of Braskem's I'm Green™ polyethylene portfolio for almost 3 years. Currently he is dedicated to technical advocacy, exchanging with relevant stakeholders (including policy makers, think tanks and trade associations), Braskem's views on complex topics such as responsible sourcing, life cycle thinking and circular economy.

¹ https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en