

The Future of Plastics is REnewable and REcycled

More than 90% of the carbon in plastics and chemicals is based on fossil resources. To mitigate climate change and abiotic resource depletion, we must defossilize the chemical industry and replace fossil carbon with renewable and recycled carbon from the biosphere, technosphere or atmosphere. The challenge is that many sustainable carbon sources are not commercially viable as they're not available in industrial quantities and/or introducing them may require sizable investments.

This presentation discusses sustainable feedstocks for steam crackers, which can be used as a drop-in replacement for fossil resources in existing assets and infrastructure with no or low investments. The renewable component is made from biogenic waste and residues, and the recycled component is based on chemically recycled post-consumer waste plastics. There is no need to compromise in production efficiency, end product quality or product safety. End product plastics and chemicals are of virgin quality, and can be used without restrictions in any end use application to reduce the environmental impact.