

The Role of Filtration and Separation in Sustainability

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Sustainability is a global effort to make our world better and lasting for ourselves and future generations. The scope is big, and challenges are tremendous so no one can do it alone. It is a global effort and requires the participation of all industries. In this presentation, we will specifically look at how Filtration and Separation can contribute to this grand effort and where are the challenges and opportunities.

Key sustainability efforts are in carbon reduction, renewable materials, circularity, water and more. In carbon deduction, either pre-combustion or post-combustion, amine filtration, membranes, and adsorbents play very important roles. For renewable materials, solid/liquid separation often are major challenges. For circularity, filtration and purification are often key technology and economic barriers. In the water arena, either raw water supply, wastewater treatment, or water reuse, filtration and separation have been playing a critical role and the demand for better technologies is increasing. In all sustainability efforts, filtration and separation are crucial to advance the required technologies and enable the sustainability goals