

Driving Sustainability in the API Early Development Space

Trung Cao

Chemical process R&D

Johnson & Johnson, Hochstrasse 201, 8200 Schaffhausen, Switzerland

In the pharmaceutical industry, the chemical process development function is pivotal at the nexus of drug discovery and active pharmaceutical ingredient (API) manufacturing. Its primary goal is to enable rapid, sustainable, safe, and cost-efficient access to chemical modalities, whether in clinical trials or market-ready, as part of comprehensive life cycle management. Core objectives include minimizing resource utilization and waste production while eliminating the use of hazardous substances and improving process safety. Today, sustainability has emerged as a critical "license to operate" requirement, demanding additional efforts even during early-stage portfolio development, which goes beyond cost reduction. This presentation will highlight initiatives focused on promoting sustainability in API synthesis at the early stages of portfolio development.