

# Process Safety & Risk Management Application in Renewable Fuel Processing

Enabling safe, sustainable, and capital efficient transformation to a renewable energy future

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## Industry Problem/Challenge Statement

An effective Process Safety management framework is essential for Hydrogen, Ethanol, and Biofuel processing facilities to operate safely and reliably amidst incessant change. Change, not properly managed, can introduce safety hazards and risks into an operation that can lead to catastrophic consequences affecting people, assets, the environment, and overall business continuity. In the transition to a renewable energy future, the changing demand on existing renewable fuel processing facilities and the need for new facilities will require operators to continue to employ a robust process safety and risk management framework across the production, transportation, storage, and consumption renewable value chain to ensure a safe, sustainable, and reliable operation.

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## Siemens Energy Solutions

Siemens Energy offers consulting on the design and implementation of a process safety management framework as well as subject matter expertise and software solutions in the following domain:

- Risk-Based Process Safety Management
- Process Hazard Analysis
- Asset Integrity Management
- Pressure Relief and Flare Systems Analysis
- Change Management
- Performance Management and Monitoring

## Value to Customer

This framework enables clients and customers to achieve:

- Regulatory compliance
- Emissions reduction
- Maintenance cost reduction
- Visibility into asset performance
- Maintenance cost reduction
- Effective process safety management

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