

CHEMICAL IP

CHEMISTRY / SYSTEMS / SCALE

CORE PRODUCT CATEGORIES / ENERGY CONVERSION

Mobile Energy Systems

Microrefining, methane monetization, and modular hydrocarbon processing.

Investigate smaller, transportable ways to capture value from stranded or distributed energy streams.

APPLICATION • PROOF • COMMERCIAL SCALE



01 / 04



MOBILE ENERGY SYSTEMS / 01

Process value closer to source

The engineering concept brings selected conversion and conditioning operations to the feed rather than moving every barrel or molecule to a distant site.

MICROREFINING

Modular processing concepts for crude-to-products at customer-specific throughput.

GAS MONETIZATION

Methane and associated-gas concepts matched to available gas, products, and utilities.

FRONT-END CONDITIONING

H₂S removal, desalting, water handling, and crude stabilization can prepare the feed.

CONTAINERIZED DELIVERY

Skids and modules are designed around transport, assembly, and operating constraints.

These are project-development concepts; commercial scope requires a feed assay and engineering basis.



MOBILE ENERGY SYSTEMS / 02

The size decision

Mobility, throughput, recovery, and installed cost trade against one another.

FEED AND PRODUCT SLATE

Characterize crude or gas and the demanded outputs.

PROCESS CONFIGURATION

Choose unit operations, utilities, heat integration, emissions control, and safety systems.

MODULE BOUNDARIES

Determine what can ship as skids or trailers and what requires field assembly.

ECONOMICS

Compare project capital, operating cost, product netback, logistics, and uptime.

The minimum viable configuration depends on the feed and product specifications.



MOBILE ENERGY SYSTEMS / 03

From concept to operating asset

A staged process prevents a promising diagram from being mistaken for a turnkey plant.

SCREEN

Build a feed and market case.

ENGINEER

Develop process flow, mass balance, equipment scope, and hazards basis.

PILOT

Validate key operations and product quality on representative feed.

DELIVER

Select EPC, lease, or contract-operation structure with project-specific responsibilities.

Modular assets can complement GelCore™ logistics and OFI chemical manufacturing where the business case supports integration.