

# Eurasia

## CERA Consulting & Advisory

# Alkylate Market & Technology investment appraisal in the Mediterranean region



## Issue

- Our client was evaluating the long-term commercial viability of a new alkylation unit at one of its refineries in the context of structural gasoline demand decline in Europe, rising EV penetration, and growing uncertainty around regional octane and alkylate demand beyond 2030.
- Senior management needed independent insight on export market access, price sustainability, feedstock economics (butane and olefins), competing supply additions, and technology-selection risks to support a robust final investment decision.



## Our Solution

- We delivered an end-to-end assessment of alkylate markets, pricing, and supply-risk, covering integrated gasoline, alkylate, and butane supply–demand–trade outlooks to 2050, with a focus on Mediterranean, Africa, Latin America, and US East Coast (USEC) export options.
- We built a netback-based pricing and margin framework, quantifying the alkylate–butane differential and testing project economics under multiple price scenarios; complemented by refinery- and country-level competitive mapping across the Mediterranean.
- We conducted technology due diligence on leading alkylation processes offered by licensors (UOP ISOALKY, KBR K-SAAT, STRATCO), applying a multi-criteria scoring framework covering safety, CAPEX/OPEX, operability, and maturity to support technology shortlisting.



## Impact

- The study work demonstrated the strategic fit and advantaged feedstock position of the client's refinery in the Mediterranean, positioning the asset as a low-cost marginal alkylate supplier. Further, the market, spread and margin outlooks confirmed the robustness of project economics.
- The client management team gained a deep understanding of regional and export market outlooks, and the commercially available technologies for the purpose of making an investment decision.

## Illustrative examples of deliverables

Criteria	KBR K-SAAT™	Honeywell UOP ISOALKY™	Essent STRATCO®
Process Safety & Environmental Risk	🟢	🟢	🟡
Product Quality & Yield	🟢	🟢	🟢
CAPEX & OPEX	🟢	🟡	🟡
Ease of Implementation	🟢	🟡	🟡
Technology Maturity & Track Record	🟡	🟡	🟢
CI Consulting Insight	🟡	🟡	🟢
<b>Total</b>	<b>72%</b>	<b>66%</b>	<b>66%</b>

