Natrium Capital Limited

European Cracking in Crisis

Closures endangering European chemicals

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European cracker closures accelerated in the first half of 2025. Announcements in this period alone represent the loss of more than 10% of European ethylene capacity (Natrium Capital estimates). At this rate of closures, European chemicals face one of the most serious structural crises in decades. The only bright spot in the industry is the investment by Ineos in Project One, in Antwerp. These upstream shutdowns are reshaping downstream production and the availability of supply. Potential investors must recognise this trend and select advisors with proven expertise.

INTRODUCTION

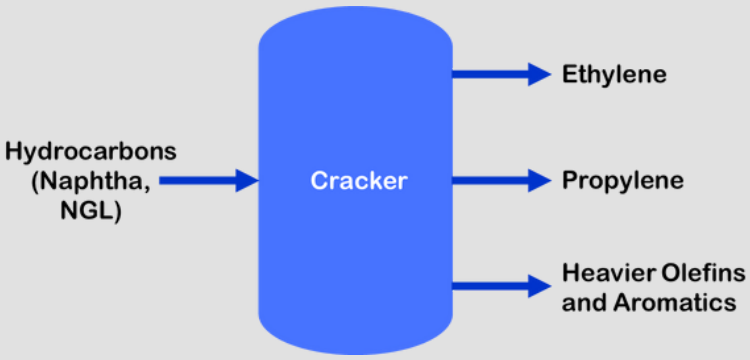
Global overcapacity and elevated European energy prices have driven a wave of petrochemical plant closures. In 2024, ExxonMobil, SABIC, and Versalis announced closures totalling 1.8 million tonnes per annum (mtpa) of ethylene capacity — more than 7% of the European total. In 2025, the trend has only intensified, with a further four cracker closures amounting to more than 2.5 million tonnes – 10% of European capacity!

With Versalis now reduced to a single cracker in Dunkirk (France) and LyondellBasell negotiating to divest nearly all of its European crackers except Wesseling (Germany), the message is clear: European chemicals are in a worsening structural crisis.

In this article, Natrium Capital examines the recent closures, their impact on downstream supply chains, and the consequences for European chemical Mergers and Acquisitions (M&A).

WHAT IS A CRACKER?

Steam crackers are large plants that convert hydrocarbons into basic molecules for use in the downstream chemical industries.



Here's how it works: unreactive hydrocarbons (the molecules found in oil and gas) are mixed with steam and passed through furnaces that reach temperatures as high as 900°C. This intense heat causes the hydrocarbons to break apart (crack), producing smaller reactive molecules like ethylene, propylene, and other olefins. These molecules are then separated and used to create a wide range of downstream products.

Ethylene (the smallest olefin) is considered the most important cracker product and steam crackers are often called ethylene crackers. Cracker capacity is usually given in terms of ethylene and propylene (the next smallest olefin) capacity. Global ethylene capacity exceeds 200 million tonnes per annum (mtpa).

2025: YEAR OF THE CRACKER CLOSURES

In the early 2020s, several ethylene cracker closures were announced. This year, the trend has accelerated with high-profile closure decisions from SABIC, Dow, and TotalEnergies:

- **SABIC (Teesside, UK):** The UK's largest cracker, Olefins 6, is being shut down. It supplied polyethylene production on-site, derivatives plants across the UK, and exports via North Tees. SABIC cited high European operating costs, particularly energy prices, as the decisive factor for this decision.

- **Dow (Böhlen, GER; Terneuzen, NL):** Dow announced the closure and mothballing of two crackers representing more than one million tonnes of capacity. The Böhlen site, with 540 kilotonnes of capacity, had long been a centrepiece of a German chemical network including polyethylene, VCM, EDC, and polypropylene. Dow described the closure as part of its strategy to eliminate "higher-cost, energy-intensive" assets. The decision to mothball part of Terneuzen on the other hand followed the closure of two major customers' downstream units, Trinseo's ethylbenzene-styrene and Olin's cumene plants, undermining local demand.

- **TotalEnergies (Antwerp, BEL):** In April 2025, TotalEnergies announced the closure of one of the Antwerp crackers, following the expiry of a major third-party supply contract. Its remaining Antwerp unit will continue operations, focused on supplying the company's downstream plants in Antwerp and Feluy.

The reasons to close each of these crackers are certainly not solely high energy costs. Each had issues with long periods of underinvestment and recently also reduced demand. High energy costs then provided the tipping point and these closures demonstrate that both cost pressures and shifting demand are reshaping Europe's chemical base more quickly than in the past.

THE FOUNDATION OF THE CHEMICAL INDUSTRY

Ethylene crackers are not standalone assets; they are the foundation of the chemical industry. Their closure reverberates across both product chains and supply logistics.

Product chain perspective: Roughly two-thirds of European ethylene is used for polyethylene (LDPE, LLDPE, HDPE), essential to automotive, consumer goods, and packaging. Ethylene oxide (12%) supports PET films, textiles, and detergents. Ethylene dichloride (12%) is the precursor to vinyl chloride monomer (VCM), the feedstock for polyvinyl chloride (PVC). Other cracker products such as propylene and benzene underpin diverse markets including pharmaceuticals, personal care, and agrochemicals.

This shows that ethylene production is central to a vast array of downstream industries.

Supply logistics perspective: Cracker products are often consumed directly by adjacent downstream units. When crackers close, feedstocks must be imported from distant sources, often requiring liquefaction, shipping, and specialised terminals. This adds significant cost and reduces supply certainty.

The recent developments in the Italian petrochemical sector illustrate these dynamics in a clear manner.

In 2024, Versalis announced the closure of its last Italian crackers in Priolo (Sicily) and Brindisi (Adriatic coast).

- Priolo, with over 400 kilotonnes of ethylene capacity, supplied a nearby polyethylene plant in Ragusa by pipeline. With Priolo shut, the Ragusa unit lost its main feedstock source and is now being phased out.

- In Brindisi, Versalis' exit has put at risk the third-party LyondellBasell polypropylene plant, which relied on local ethylene supply. Alternatives such as liquefied ethylene imports bring substantial additional costs, with transport requiring liquefaction, shipping by specialised carriers, and large import terminals.

These cases highlight how upstream closures cascade through downstream industries.

POTENTIAL INVESTORS BEWARE

The most direct impact of these closures for European chemicals Mergers and Acquisitions (M&A) is the heightened importance of assessing upstream supply security. Due diligence must focus on two questions:

1. How likely is an upstream closure? Beyond announced plans, investors must examine operator strategies. Versalis, for example, is deliberately shifting away from base chemicals toward higher-value downstream activities. Supplier vulnerability to regulatory change, loss of customers, or further closures must also be factored in.

A case in point: LyondellBasell's Tarragona site, purchased by AEQUITA, sources feedstock from third-party crackers operated by Dow and Repsol. As part of the largest chemical hub in Southern Europe, this site is less exposed to the closure of individual customers, but remains vulnerable to wider regulatory or strategic shifts.

2. How would a closure affect the target? To answer this questions, detailed assessment of supply alternatives is necessary:

a) Is the site connected to a multi-cracker pipeline network, such as ARG in Northern Europe or the UK ethylene system? Such connection allowed SABIC's polyethylene plant in Teesside to continue operations despite its own cracker shutting down.

b) If not, does it have access to terminals able to receive large liquefied gas carriers? Dow's Schkopau polyethylene plant, for example, will pivot from Böhlen supply to ethylene shipped via Stade (Northern Germany).

c) If alternative supply is possible, how does it affect the target's business plan? Advisors may need to model valuations under scenarios both with and without existing suppliers.

In this context, specialised M&A advice with deep sector knowledge is indispensable for accurate assessment and valuation.

CONCLUSION

The pace of cracker closures in Europe has accelerated dramatically, with announcements in the first half of 2025 alone removing more than 10% of total capacity. Because crackers underpin the operations in a wide range of downstream industries, further closures will intensify pressure on Europe's competitiveness and supply security. For investors, feedstock resilience is now central to due diligence. Natrium Capital believes this environment demands heightened scrutiny in acquisitions and the application of deep, sector-specific expertise to navigate risks and opportunities.

ABOUT NATRIUM CAPITAL

Natrium Capital Limited is the specialist Chemicals M&A boutique which sets a new standard in M&A advice. Led by Alasdair Nisbet and staffed by bankers, all of whom are also scientists, Natrium Capital provides strategic and M&A transaction services focused on the chemical industry, covering, amongst others: plastics, fine and specialty chemicals, personal care ingredients, food ingredients, chemical distribution, engineering materials, paints and coatings, inks, adhesives, biotechnology and clean technologies.

Headquartered in London (UK), Natrium Capital advises on both sell-side and buy-side transactions, including carve-outs and complex global cross-border deals. The team has advised on transactions with a combined value of over $100bn.

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