



— KTALYSTKLUES™ | SYNAPTIC SHIFT

Global Chemical Capital Is Moving Toward Defensible Margins

Tracing the investment clues — where capacity is closing, and where capital is going next. A verified read of the 2025–2027 shutdown wave and the reinvestment it funds.

An evidence-spined briefing by **Dr. Anju Sharma** · KtalytstInsights™

Shutdowns are not exits from chemicals.

They are exits from uncompetitive chemistry.



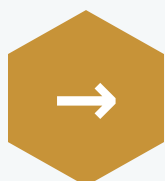
What is shutting

High-cost, older base-chemistry assets — crackers, chlor-alkali, styrenics, adipic acid, maleic anhydride, caprolactam — concentrated in Europe.



Why now

Energy-cost competitiveness is the primary rationale in **49%** of closures, then weak demand (19%), overcapacity (9%) and regulation (8%).



Where capital moves

North America (ethane), China (Verbund scale), the Middle East (crude-to-chemicals), and circular, low-carbon and specialty platforms.

A structural contraction, not a cyclical dip

37 Mt

European capacity closed since 2022 — about **9%** of production capacity

20,000

direct chemical jobs lost; **89,000** indirect jobs at risk

▼ **74.6%**

EU27 capacity utilisation (Q3 2025) vs an **81.3%** long-run average

€20.1bn

H1 2025 chemicals trade surplus — down **17%** from €24.4bn

€7.6 → 1.5bn

Confirmed new-capacity capex collapsed **fivefold**, 2022 to 2025 YTD

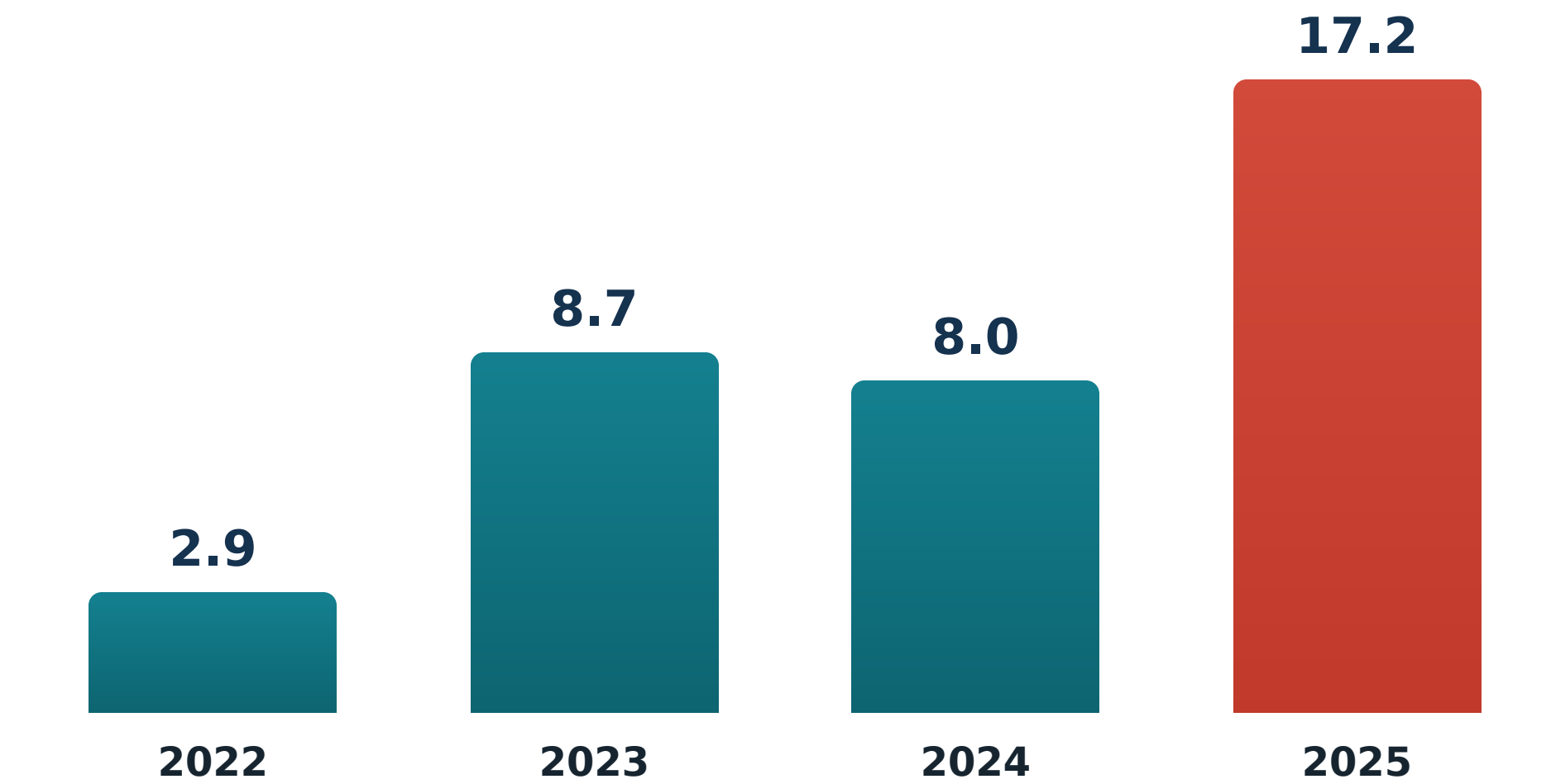
~2%

Global chemical production growth forecast for 2026 (Deloitte), down from 3.5% hoped



— CLUE NO. 1 — ACCELERATION

European closures rose sixfold in three years



Chemical capacity closed per year, Europe (Mt). Petrochemicals account for **48%** of all closures; nine steam crackers alone equal a **16% net cut** in European steam-cracking capacity.

Germany carries **25%** of closures · Netherlands **20%** · UK **12%** · France **10%**

CLUE NO. 2 — THE SHUTDOWN MAP

15 public closures, 2025-2027 — part one

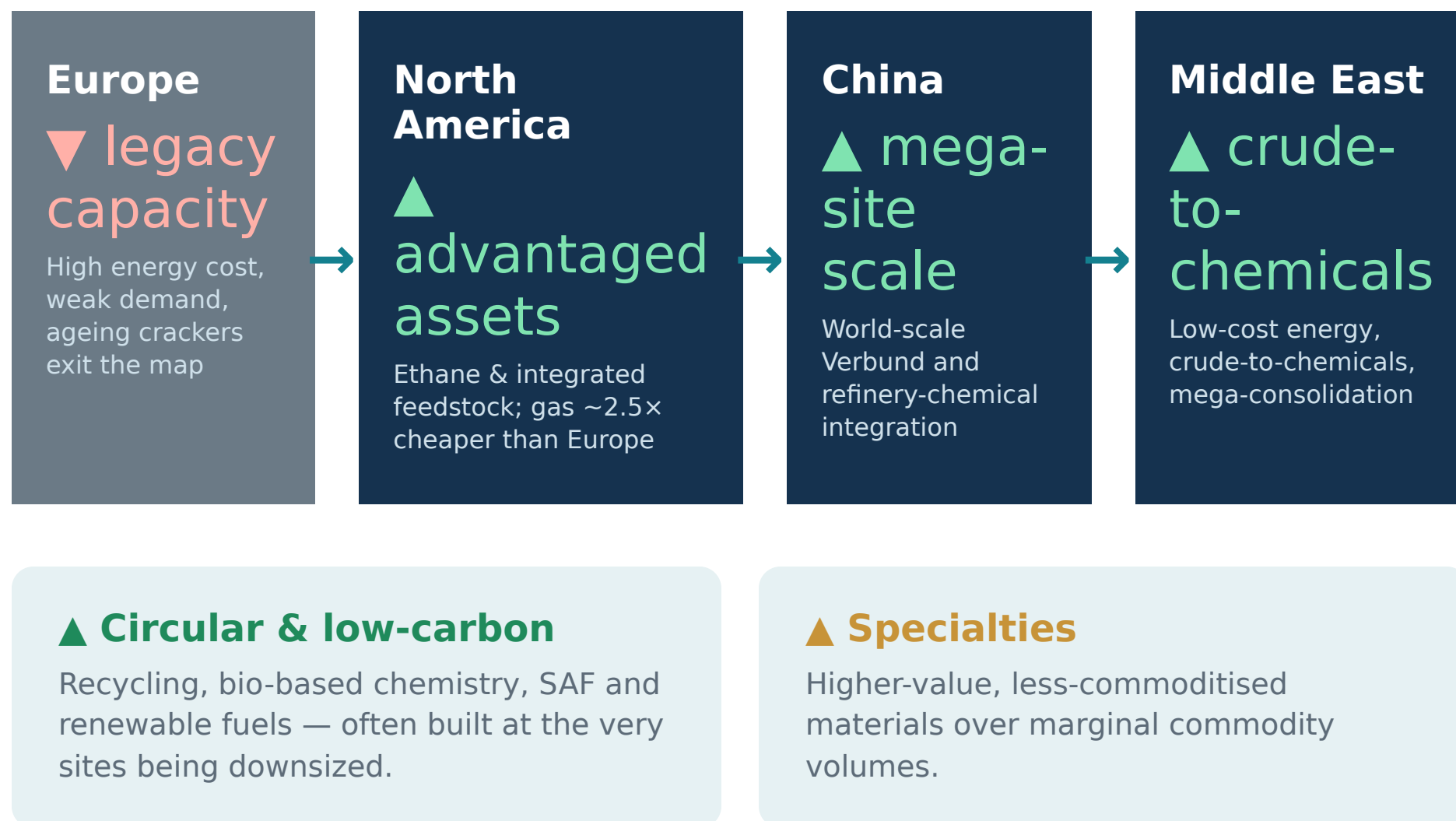
COMPANY	COUNTRY	PLANT / ASSET	CHEMISTRY	CAPACITY	REASON	STRATEGIC SHIFT
Dow	Germany	Böhlen cracker	Ethylene / propylene	540 + 285 kt/y	Weak demand, high cost	NA Path2Zero; circular plastics
Dow	Germany	Schkopau chlor-alkali & vinyl	Chlor-alkali / VCM	250 + 740 kt/y	High-cost EU chain	Low-cost integrated assets
Dow	UK	Barry siloxanes	Siloxanes	~150 kt/y	Portfolio restructuring	Higher-margin downstream
ExxonMobil	UK	Fife / Mossmorran corrected	Ethylene	830 kt/y	High cost, weak market, policy	Huizhou China complex
ExxonMobil	France	Gravenchon cracker	Ethylene / propylene	425 + 290 kt/y	Sustained losses, high EU cost	Integrated refining-chemical
TotalEnergies	Belgium	Antwerp oldest cracker corrected	Ethylene	570 + 255 kt/y	Ethylene surplus, contract loss	Antwerp SAF, renewable fuels
LyondellBasell / Covestro	Netherlands	Maasvlakte PO11 POSM unverified	PO / styrene	not disclosed	Overcapacity, Asian imports	Recycling; specialty polymers
Eni / Versalis	Italy	Brindisi cracker corrected	Ethylene / propylene	410-490 kt/y	Weak economics	Circular, bio-based, batteries

CLUE NO. 2 — THE SHUTDOWN MAP

15 public closures — part two & verification notes

COMPANY	COUNTRY	PLANT / ASSET	CHEMISTRY	CAPACITY	REASON	STRATEGIC SHIFT
Eni / Versalis	Italy	Priolo cracker corrected	Ethylene / propylene	490 + 275 kt/y	Overcapacity, restructuring	Priolo biorefinery, recycling
SABIC	Netherlands	Geleen Olefins 3 corrected	Ethylene	550 kt/y	Old naphtha asset, weak economics	ME / China scale; SPEAR recycling
BASF	Germany	Ludwigshafen adipic / CDon-CPon	Intermediates	residual line	Competitiveness program	Zhanjiang China Verbund
BASF	South Korea	Ulsan PolyTHF	PolyTHF	not disclosed	Overcapacity	Consolidate into Caojing, China
BASF	South Korea	Ulsan EPS	EPS	85 kt/y	Portfolio optimization	Higher-value materials
Huntsman	Germany	Moers	Maleic anhydride	105 kt/y	Loss-making operations	Pensacola & Geismar (NA)
Fibrant / HSCC	Netherlands	Chemelot CPL unverified	Caprolactam	~135 kt/y	High cost, Asian competition	Integrated nylon chain, China

Where the profit footprint is being repriced



The capital is sanctioned — just not in Europe

North America

\$6.5bn

Dow Fort Saskatchewan **Path2Zero** — +2 Mt/y polyethylene, net-zero cracker, ~\$1bn/yr EBITDA target. (Phasing now 2029–30.)

China

~€8.7bn

BASF Zhanjiang Verbund — 1 Mt/y cracker, 18 plants, inaugurated March 2026, built below budget. BASF's 3rd-largest site.

Middle East

\$16.5bn

ADNOC/OMV merge **Borouge + Borealis**; Aramco controls SABIC; Yanbu crude-to-chemicals (~9 Mt). Scale = the defensible position.

Circular platforms

×2 to 4.7 Mt

Global bio-based plastics capacity set to roughly double by 2030. SAF, pyrolysis and advanced recycling anchor the reinvestment.



— THE PROOF — SAME FIRMS, NEW MAP

Every exit funds a higher-return entry

CLOSES

Dow Böhlen + Schkopau

Germany base chemistry



INVESTS

Fort Saskatchewan Path2Zero

Ethane-advantaged Canada

CLOSES

BASF Ludwigshafen + Ulsan

Adipic acid, PolyTHF, EPS



INVESTS

Zhanjiang + Caojing, China

World-scale Verbund

CLOSES

ExxonMobil Fife + Gravenchon

UK & France crackers



INVESTS

Huizhou integrated complex

China downstream depth

CLOSES

Huntsman Moers

German maleic anhydride



INVESTS

Pensacola & Geismar, USA

NA consolidation

CLOSES

Eni / Versalis Brindisi + Priolo

Italian crackers



INVESTS

Biorefinery, recycling, batteries

~€2bn transformation



— THE NEW DIRECTION OF CAPITALISM

The investment language has changed

~~Capacity addition~~ → capacity qualification

~~Volume pride~~ → return resilience

~~Plant ownership~~ → cost-of-capital survival

CAPITAL NOW ASKS SHARPER QUESTIONS

? Can this plant earn above its cost of capital

? Can this feedstock absorb volatility

? Can this chemistry survive a carbon cost

? Can this portfolio protect ROIC through the cycle

Returns, not footprint, now set the value

~3 ppt

Annual chemical-sector outperformance vs markets, 2000–2019 (McKinsey) — **now reversed**

▼ 5 yrs

The sector has **lagged** the broader market over the past five years as capex and weak margins dilute returns

1 : 1

Across ~450 chemical firms, a **1-point ROIC advantage maps to a 1-point TSR advantage**

Bottom

Deloitte: the industry is **near the bottom of a capital cycle** — overcapacity, soft demand, disciplined cash

In low-ROIC industries, value is created by **improving capital efficiency and margins** — not by chasing volume.

Not a shutdown story — a margin-custody opportunity

■ The exposure

- ↓ ~45% import dependence on petrochemical intermediates
- ↓ Heavy LPG / naphtha feedstock reliance and propylene tightness
- ↓ Low-cost Asian import pressure on commodity grades
- ↓ Supply fragility — June 2025 West Asia tensions forced temporary plant stoppages

■ The opportunity

- ↑ Integrated refinery-petrochemical platforms with derivative depth
- ↑ Disciplined capex aimed at export-competitive chemistry
- ↑ Flagships: HRRL Rajasthan (9 Mt/y), Nayara Vadinar, BPCL Kochi
- ↑ IOCL tripling petrochemical capacity by 2030

>\$87bn

petrochemical investment
pipeline, next decade

~\$45bn

projects already underway

46 Mt

petchem capacity target by 2030



“

The next winners will not own the largest footprint.

They will hold the strongest **profit custody** — over feedstock, cost, carbon, chemistry and capital.

Because the next cycle will not ask *“how much capacity do you own?”*
It will ask: **“how much of it can still defend margin?”**

— Dr. Anju Sharma, **#MrsSustainability**

Verify-first — the KtalystProofStack™ protocol

- **Cefic / Roland Berger** — European Chemical Closures & Investments Radar 2022–2025 (Jan 2026); Chemical Trends Reports Q2 & Q4 2025.
- **Company disclosures** — Dow, BASF, ExxonMobil, TotalEnergies, LyondellBasell, Eni/Versalis, SABIC, Huntsman, Fibrant press & investor releases.
- **Trade press** — ICIS, C&EN, Argus, Oil & Gas Journal, S&P Global Commodity Insights, Reuters.
- **McKinsey & Deloitte** — chemical-sector TSR/ROIC analysis and the 2026 industry outlook.
India — MoPNG / India Chem statements.

Verification notes. Six rows were capacity-corrected against primary sources (notably SABIC Geleen, restated to 550 kt/y from a mis-attributed 865 kt). Two rows (PO11 PO/styrene split; Chemelot caprolactam nameplate) remain unverified and are flagged. Figures are period-specific — utilisation is Q3 2025; the trade surplus is H1 2025. Forward claims (Path2Zero EBITDA, India pipeline, bio-plastics doubling) are projections, not realised results.