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DC Discusses: Sustainability,  
geopolitics and AI combine  
to drive M&A activity in the  
global Chemicals &  
Materials sector

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# DC Discusses: Sustainability, geopolitics and AI combine to drive M&A activity in the global Chemicals & Materials sector

The Chemicals & Materials sector ranks among the largest industries worldwide<sup>i</sup> and is essential for sustaining the global economy, having pioneered solutions to some of the most critical global issues, including climate change and food security. It is currently being impacted by a number of economic, technological, and geopolitical factors that we believe will be significant drivers of future growth and M&A activity.

DC Advisory's global team explore the themes and trends impacting the Chemicals & Materials sector, and what they mean for future deal flow, including:

- The energy transition and circular economy
- Geopolitical dynamics and supply chain adjustments
- New technologies and AI
- Market dynamics and competition
- Constantly evolving industry set for increased M&A activity in 2024

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## Energy transition and circular economy driving growth

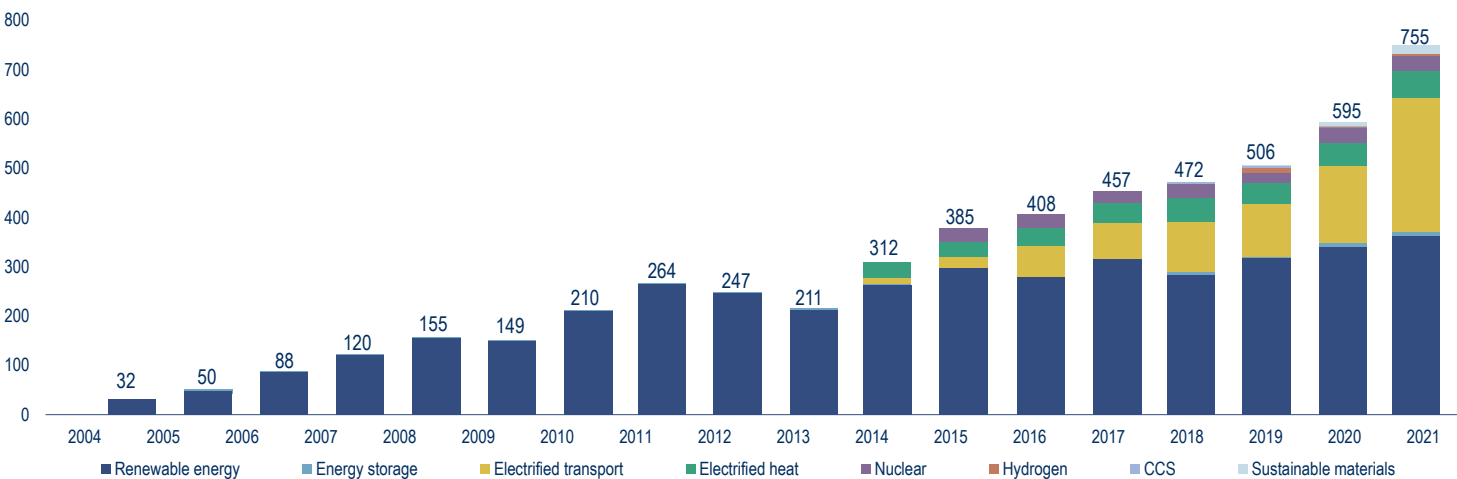
The push towards energy transition is accelerating a surge in manufacturing activities reliant on advanced materials and chemicals<sup>ii</sup>. The shift from traditional energy sources to renewable alternatives is spurring demand for innovative chemical solutions that can support new technologies, energy generation and energy storage systems. Within energy generation, the global market value of specialty materials used in manufacturing wind turbines surpassed \$3.93 billion in 2021, whilst the average annual growth rate for the segment is projected to be 6.5% from 2022 to 2027<sup>iii</sup>. Chemical companies making major investments into new technologies supporting the energy transition include Dow's \$ 6.5 billion net zero ethylene and polythene carbon cracker<sup>iv</sup>.

In February 2024, DC Advisory advised CBPE Capital, on its sale of SAFECHM, a provider of services and products for the safe and sustainable use of solvents for cleaning heavily machined metal components<sup>v</sup>. The acquirer, Itelyum, a leading European circular economy player specialized in the treatment and recycling of hazardous waste and is controlled by Stirling Square Capital Partners. SAFECHM is one such company providing innovative

solutions enabling circular economy concepts and is directly driving sustainability in the chemicals sector. In 2022, we advised Evonik Industries, one of the world's leading specialty chemicals companies, on the sale of its US betaine business to Kensing, owned by One Rock Capital Partners with the divestiture representing a key step for Evonik to increase its emphasis on sustainability as a central driver of innovation<sup>vi</sup>. We believe chemicals and materials companies that do not incorporate sustainability into their business models will not find buyers and may even struggle to survive, whilst those driving the change to a cleaner future will be in high demand from both private equity and strategic buyers.

There is a growing realization among chemical leaders about the benefits of adopting circular economy principles<sup>vii</sup>. We believe pressure from consumers and regulators to reduce carbon emissions and enhance sustainability will grow and push companies to explore new ways to incorporate circular economy principles into their business models. For example, using recycling and bio-based materials in production processes or investing in technologies enabling low-carbon fuels and chemicals production from waste. This shift is not only a response to environmental concerns but can also be seen as a strategic move to differentiate brands and build consumer trust through increased transparency and collaboration.

### Global investment in the energy transition by sector



Source: <https://about.bnef.com/blog/global-investment-in-low-carbon-energy-transition-hit-755-billion-in-2021/>

# Geopolitical dynamics and supply chain adjustments

In recent years, the competitive landscape in the chemicals and materials industry has seen the relocation of manufacturing supply chains closer to consumer markets, particularly away from China towards regions including the U.S., helped by policy interventions such as the Inflation Reduction Act (IRA), CHIPS Act, and Bipartisan Infrastructure Law<sup>viii</sup>. We believe these major shifts are part of a broader strategy to enhance manufacturing resilience and reduce dependency on geopolitically sensitive regions.

Geopolitical tensions, particularly involving major players like China, the U.S., and the EU, can be a risk to the chemicals industry, impacting everything from raw material access to market stability, whilst ongoing conflicts and their disruptive impact on supply chains can add to further uncertainty. Reshoring, near shoring and friendshoring of manufacturing and procurement is a trend we are seeing across industries<sup>ix</sup> in response to increasing geopolitical tensions globally. This represents an area that can spur M&A activity in the chemicals industry for companies looking to reposition their manufacturing closer to home or to diversify their supply chains.

Indian chemical companies have emerged as prominent acquirers of global assets, including UPL's acquisition of Arysta for over \$4 billion in 2019<sup>x</sup>. In 2022, we advised Aurelius on its sale of Briar Chemicals, the UK's largest agrochemical CDMO solutions provider, to Safex, the Indian headquartered agrochemical multinational company<sup>xi</sup>. Large global funds such as CVC through its investment in Sajjan,<sup>xii</sup> and Bain with its investment in Porus Labs, both leading Indian chemicals manufacturers, have created speciality chemicals platforms with an Indian company as the anchor asset from which they can acquire global businesses. We also believe the China Plus One Strategy, set up to minimize supply chain dependencies on China by diversifying the countries they source from, will drive growth in the Indian chemicals industry and prompt further M&A in the sector. With the Indian public markets recently valuing the speciality chemicals sector at a lifetime peak<sup>xiii</sup>, we expect Indian companies in the sector will be eager to utilize available cash and if required raise further equity to do global acquisitions.

In May 2024, we advised Guzman Minerals, a subsidiary of Spain's Guzman Global, a global supplier of industrial

raw materials with operations in 53 countries, on its acquisition of Zircosil Malaysia, a producer of zircon raw materials<sup>xiv</sup>. The acquisition provides Guzman, which operates in an important ceramic cluster worldwide from Spain, with a production plant in South-East Asia. As the clients of chemicals and materials companies globalize, they can increasingly require services local to the regions in which they operate. We believe companies repositioning manufacturing closer to the consumer will continue to drive M&A activity in 2024 and beyond.

## New technologies and AI

The integration of digital technologies and artificial intelligence (AI) is becoming increasingly crucial in the chemicals sector. AI and big data are enhancing operational efficiencies and becoming central to innovation. Chemical companies are now utilizing data analytics to optimize processes and develop new products, effectively turning data into a critical input for innovation, with the potential to address a growing demand for new materials and sustainable practices. In 2023, Mitsui Chemicals and IBM announced they had joined forces to improve agility and accuracy in discovering new applications using machine learning and generative AI<sup>xv</sup>. For instance, SandboxAQ, a spin-off from Alphabet, acquired the quantum chemistry simulation firm Good Chemistry in January 2024, to add computational chemistry and AI simulation capabilities for drug discovery and materials design<sup>xvi</sup>. Both of these transactions further highlight AI as a significant driver of M&A in the chemicals and materials industry.



# Increased competition from other industry sectors and China

As pressure from stakeholders and government policies drive investment in the energy transition and circular economy, we believe it is also causing increased competition in the chemicals and materials sector due to the integration of industries involved in the shift. Some oil and gas companies are branching into critical minerals mining, agriculture, and chemicals to bolster their clean energy supply chains, whilst some mining companies are acquiring recycling businesses to help procure recycled materials. In August 2022, we were exclusively engaged by JX Nippon Mining & Metals Corporation (JX), a global metals company, to advise on their acquisition of eCycle Solutions, a Canadian electronic waste recycling solutions provider<sup>xvii</sup>. The transaction enabled JX to collect and process more recyclable materials, in support of its sustainable global economic development mission, whilst providing procurement of recycled materials in North America over the long-term. This would allow JX to support the circular economy and strengthen its relationships with manufacturers of electronic devices in utilizing recycled materials.

We believe that whilst new opportunities are emerging for chemical companies, they can also face increasing competition from other sectors. Aramco and other oil and gas companies are shifting their focus from using crude oil primarily for fuels to a shift into chemicals production

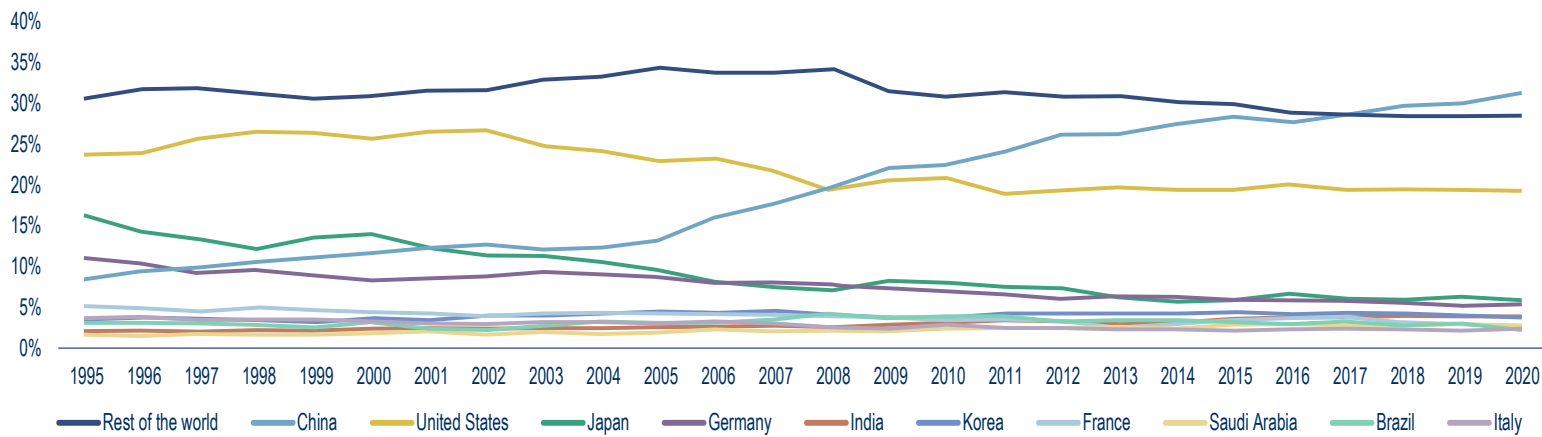
(Crude Oil To Chemicals, also known as COTC), with Aramco publicly stating their goal to transform up to 70-80% of each oil barrel into chemical products.<sup>xviii</sup>

The increase in capacity by Chinese enterprises can add further competitive tension. In 2020, China led the world with regards to sector output, producing 29.1% of global value-added output, up from 3.8% in 1995<sup>xix</sup>.

In 2019, Zhejiang Petroleum and Chemical (ZPC) inaugurated a facility on Dayushan Island, situated near the Chinese ports of Shanghai and Ningbo<sup>xx</sup>. This complex had the capability to refine 20 million metric tons of oil annually<sup>xxi</sup>. ZPC managed to double its output within just 3 years, elevating the refinery to one of the largest in the world.<sup>xxii</sup>

Japanese chemical companies exporting petrochemical products to China and have been greatly affected by this impact, in our view, leading to a decline in facility utilization rates. Just under a third of Japan's petrochemical product output is sold internationally, with China accounting for about half of all exports in 2022<sup>xxiii</sup>. Japanese production of ethylene has dropped to its lowest in 35 years, due to China's fast-growing capacity.<sup>xxiv</sup> As a result, Japanese diversified chemical companies such as Mitsubishi Chemical, Mitsui Chemicals and Resonac Holdings have recently announced strategies to restructure their petrochemical businesses, such as divesting<sup>xxv</sup>, collaborating with other companies and considering pursuing an IPO.<sup>xxvi</sup>

Top 10 producers' historical shares of global value-added output in chemicals



Source: <https://itif.org/publications/2024/04/15/how-innovative-is-china-in-the-chemicals-industry/>

# Constantly evolving industry set for increased M&A activity in 2024

Following a history of outperforming, the chemicals sector has underperformed the global stock market index for the past two years.<sup>xxvii</sup> Chemical industry M&A has been hit even harder by the challenges that have depressed global deal activity: persistent inflation, high interest rates, historically high valuations and geopolitical tensions, resulting in a 30% lower deal value in both 2022 and 2023 than the average during the eight years prior<sup>xxviii</sup>. In 2023, M&A deal activity was also impacted by low levels of revenue growth and earnings performance experienced by a large proportion of the industry<sup>xxix</sup>. In 2024, we are seeing increased levels of M&A activity as companies reevaluate their portfolios and seek strategic opportunities to drive growth, whilst navigating a constantly evolving landscape that is currently marked by technological advancements, shifting geopolitical alliances, and an increasing emphasis on sustainability. We expect the portfolio re-evaluation of Japanese chemical companies to accelerate and continue to spur future M&A activity. Earlier in 2024, we advised Shin-Etsu Chemical Co. on its tender offer for Mimasu Semiconductor Industry,<sup>xxx</sup> and in 2023 we represented Sumitomo Bakelite on its acquisition of Asahi Kasei Pax’s film business<sup>xxxi</sup>. We believe that such trends will continue

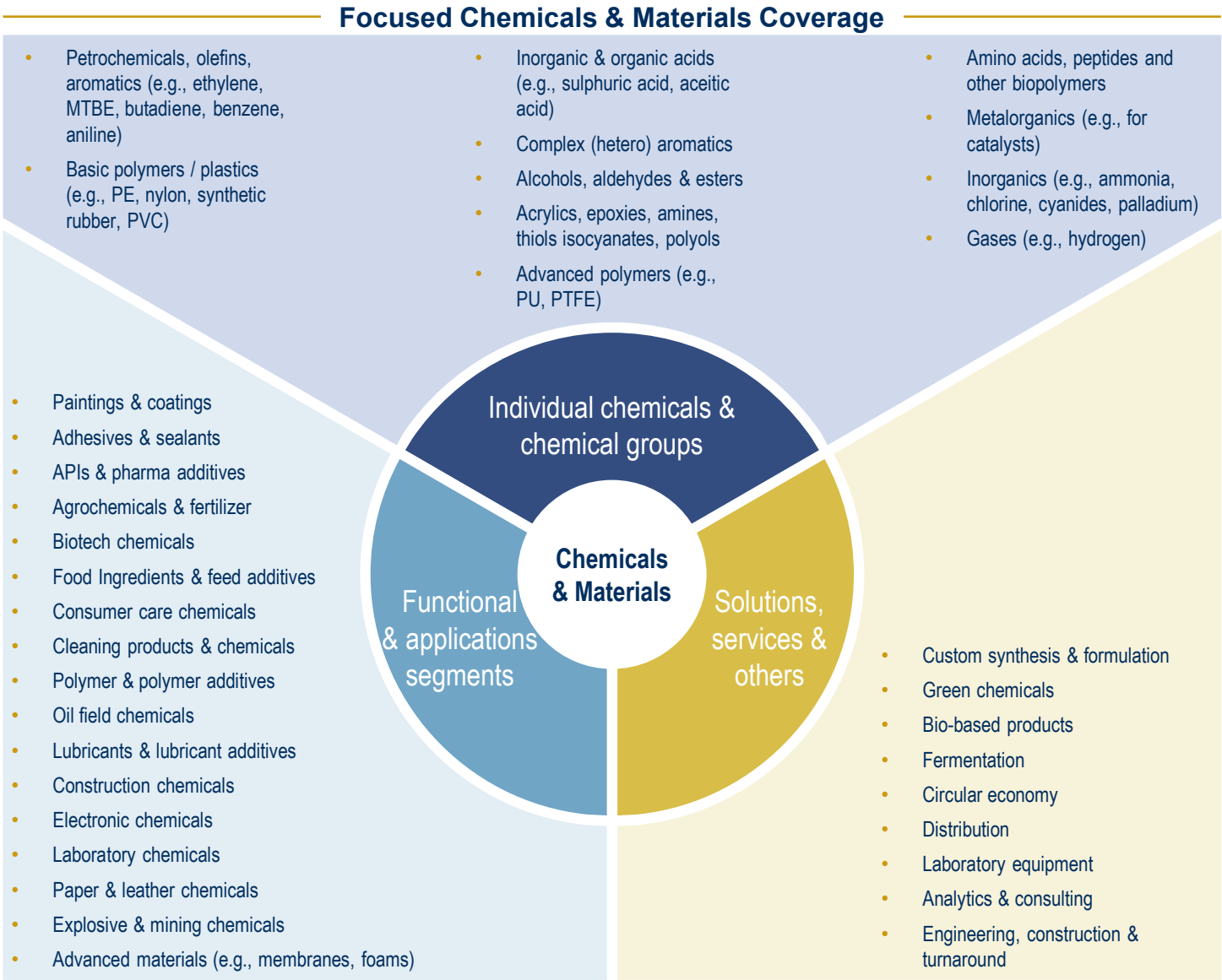
- to accelerate in the future. We believe further drivers of global M&A activity include:
- Chemicals and materials companies have, in our view, increased visibility on earnings for 2024 and beyond
  - Many companies are streamlining their portfolios away from large, diversified portfolios towards smaller, growing subsectors where they can build leadership positions and improve profitability
  - Consolidation trends in selected segments like adhesives, agricultural chemicals, pigments and coatings and flavors and fragrance ingredients
  - Continuing interest by private equity groups as they can understand that materials deals are able to be part of the drive for sustainability, rather than environmentally harmful
  - Growing importance of Indian buyers in the sector, as industry revenues have risen by over 6% year-on-year since 2012,<sup>xxxii</sup> and are being further driven by supply chain diversification, solidifying the Indian chemical industry’s influence on the global market. We believe Indian buyers will be consolidators for global assets in agrochemicals, active pharmaceutical ingredients, and speciality chemicals CDMO segments
- In addition, the anticipated easing of monetary policies by major central banks<sup>xxxiii</sup> could further accelerate M&A activity by improving the lending environment and enhancing capital market access.



# DC Advisory’s Chemicals & Materials Practice

## Overview & Areas of Focus

- We are a globally recognized strategic advisor to chemical and materials companies
- Unparalleled breadth and depth of industry knowledge, relationships and execution experience
- Our expertise encompasses the convergence of chemicals, materials, digital technology, innovations, green chemicals and circular economy
- Collaborative effort across disciplines and geographies with multi-local teams
- Broad coverage ranging from individual chemicals and chemical groups to functional and applications segments to solutions, services and distribution, among others
- Provide M&A, restructuring and financing advisory services worldwide to clients ranging from multi-national, large-capitalization corporations to private equity-owned and family-owned companies



# References

i. <https://www.businessresearchinsights.com/chemicals-and-materials-market-research>

ii. <https://www.spglobal.com/commodityinsights/en/ci/research-analysis/specialty-chemicals-essential-in-energy-transition.html>

iii. <https://www.spglobal.com/commodityinsights/en/ci/research-analysis/specialty-chemicals-essential-in-energy-transition.html>

iv. <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/chemicals/112823-dow-moving-ahead-with-65-billion-net-zero-ethylene-polyethylene-project-in-canada>

v. <https://www.dcadvisory.com/news-deals-insights/deal-announcements/dc-advisory-advises-cbpe-capital-on-the-sale-of-safechem-to-itylum/>

vi. <https://www.dcadvisory.com/news-deals-insights/deal-announcements/dc-advisory-advised-evonik-on-the-sale-of-its-us-betaine-business-to-kensing/>

vii. <https://www.deloitte.com/be/en/Industries/energy/perspectives/global-chemical-mergers-acquisition-outlook.html>

viii. <https://cleantechnica.com/2023/11/22/inflation-reduction-act-drives-92-billion-investment-in-ev-production-84000-jobs-in-usa/>

ix. <https://www.bbc.co.uk/news/business-68500499>

x. [https://www.upl-ltd.com/financial\\_result\\_and\\_report\\_pdfs/3BAOB4vM57psIB8ycn11f9ppi73J4tTVtD9qQcAR/InvestorPresentation-\(July-\).pdf](https://www.upl-ltd.com/financial_result_and_report_pdfs/3BAOB4vM57psIB8ycn11f9ppi73J4tTVtD9qQcAR/InvestorPresentation-(July-).pdf)

xi. <https://www.dcadvisory.com/news-deals-insights/deal-announcements/dc-advisory-advised-aurelius-on-the-eur-83m-sale-of-briar-chemicals-to-safex/>

xii. <https://www.cvc.com/portfolio/our-portfolio/?strategy=all&country=all&industries=all&cardName=Sajjan%20India>

xiii. [https://www.ey.com/en\\_in/chemicals/indian-specialty-chemicals-industry-ready-for-a-quantum-leap#:~:text=It%20is%20valued%20at%20US,earnings%20growth%20over%20FY19%2D22.](https://www.ey.com/en_in/chemicals/indian-specialty-chemicals-industry-ready-for-a-quantum-leap#:~:text=It%20is%20valued%20at%20US,earnings%20growth%20over%20FY19%2D22.)

xiv. <https://www.dcadvisory.com/news-deals-insights/deal-announcements/dc-advisory-advises-guzman-minerals-on-its-acquisition-of-zircosil-malaysia-from-matrix-chemicals-holdings-ltd/>

xv. <https://newsroom.ibm.com/2023-05-25-Combining-Generative-AI-with-IBM-Watson,-Mitsui-Chemicals-Starts-Verifying-New-Application-Discovery-for-Agility-and-Accuracy>

xvi. <https://www.sandboxaq.com/press/sandboxaq-acquires-good-chemistry-to-accelerate-ai-simulation-platform-for-drug-discovery-and-material-science>

xvii. <https://www.dcadvisory.com/news-deals-insights/deal-announcements/dc-advisory-advised-jx-nippon-mining-metals-on-its-acquisition-of-ecycle-solutions/>

xviii. <https://europe.aramco.com/en/sustainability/climate-change/supporting-the-energy-transition/crude-to-chemicals>

xix. <https://itif.org/publications/2024/04/15/how-innovative-is-china-in-the-chemicals-industry/>

xx. <https://cen.acs.org/business/petrochemicals/China-aromatics-building-boom-rattles-the-petrochemical-industry/102/>

xxi. [https://cen.acs.org/business/petrochemicals/China-aromatics-building-boom-rattles-the-petrochemical-industry/102/i8#:~:text=The%20global%20center%20of%20mass,t\)%20of%20oil%20per%20year.](https://cen.acs.org/business/petrochemicals/China-aromatics-building-boom-rattles-the-petrochemical-industry/102/i8#:~:text=The%20global%20center%20of%20mass,t)%20of%20oil%20per%20year.)

xxii. <https://cen.acs.org/business/petrochemicals/China-aromatics-building-boom-rattles-the-petrochemical-industry/102/i8>

xxiii. <https://asia.nikkei.com/Business/Materials/Japan-s-ethylene-output-hits-35-year-low-with-China-capacity-set-to-soar>

xxiv. <https://asia.nikkei.com/Business/Materials/Japan-s-ethylene-output-hits-35-year-low-with-China-capacity-set-to-soar>

xxv. <http://plasticsandrubberasia.com/dec2021/company/mitsubishi-chemical-to-exit-petchem-business-carve-off-in-ipo-or-sale.html>

xxvi. <https://cen.acs.org/business/petrochemicals/Mitsubishi-seeks-petrochemical-consolidation-Japan/99/web/2021/12>

xxvii. <https://www.mckinsey.com/capabilities/m-and-a/our-insights/chemicals-success-through-timely-tailored-action>

xxviii. <https://www.mckinsey.com/capabilities/m-and-a/our-insights/chemicals-success-through-timely-tailored-action>

xxix. <https://www.deloitte.com/global/en/Industries/energy/perspectives/global-chemical-mergers-acquisition-outlook.html>

xxx. [mimasu-semiconductor-industry-co-ltd-securities-code-8155/

xxxi. \[https://www.sumibe.co.jp/english/topics/2023/film-sheets/1005\\\_01/index.html\]\(https://www.sumibe.co.jp/english/topics/2023/film-sheets/1005\_01/index.html\)

xxxii. <https://www.bcg.com/publications/2023/resilience-chemicals-industry>

xxxiii. <https://www.reuters.com/markets/rates-bonds/swiss-national-bank-surprises-with-interest-rate-cut-2024-03-21/>](https://www.shinetsu.co.jp/en/news/news-release/notice-regarding-planned-commencement-of-tender-offer-for-shares-of-</a></p></div><div data-bbox=)

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