2019 Global chemical industry mergers and acquisitions outlook

Navigating headwinds

Contents

Introduction	3
2018 Rewind	4
Mergers and acquisitions activity by chemical sector	6
Mergers and acquisitions activity by geography	8
Summary outlook for 2019 mergers and acquisitions activity	11
Endnotes	12
Contacts	16

Introduction

Last year, the Deloitte *2018 Global chemical industry mergers and acquisitions (M&A) outlook* discussed potential significant deals that, at the time, could have taken place in 2018. More specifically, potential deals among the following companies:

- Axalta, Akzo Nobel, and Nippon Paint;
- SinoChem and ChemChina;
- LyondellBasell and Braskem; and
- Private equity bidders and AkzoNobel's specialty chemicals business.[1]

Only one of these deals was realized, when private equity firm Carlyle Group teamed up with the sovereign wealth fund GIC to acquire AkzoNobel's specialty chemicals business for US$12.5 billion. It was the largest deal of the year.[2] The various coatings deals with Axalta never materialized. Reports in June suggested that LyondellBasell was in exclusive discussions with Odebrecht to purchase its controlling interest in Braskem. However, no deal has been signed to date.[3]

In last year's report, we also questioned whether the Belt and Road initiative in China might drive M&A activity as companies scrambled to gain a piece of the action. This does not appear to have developed into meaningful M&A activity in 2018. One reason was the significant involvement of state-owned enterprises (SOEs) in China. Nevertheless, the chemical industry likely benefitted from Belt and Road through the various materials supplied for construction and development activities even if the initiative did not contribute to M&A in a direct and measurable manner.

A slow first quarter was part of the reason global M&A volume declined by 5 percent in 2018 compared to 2017 (see figure 1). After the sluggish first three months, deal volume grew in each successive quarter, a notably positive trend heading into 2019. Billion-dollar deals increased in both quantity and value, reaching amounts eclipsed only by the boom years of 2015 and 2016. The mega-deal values of those two years are unlikely to be surpassed in the near future.

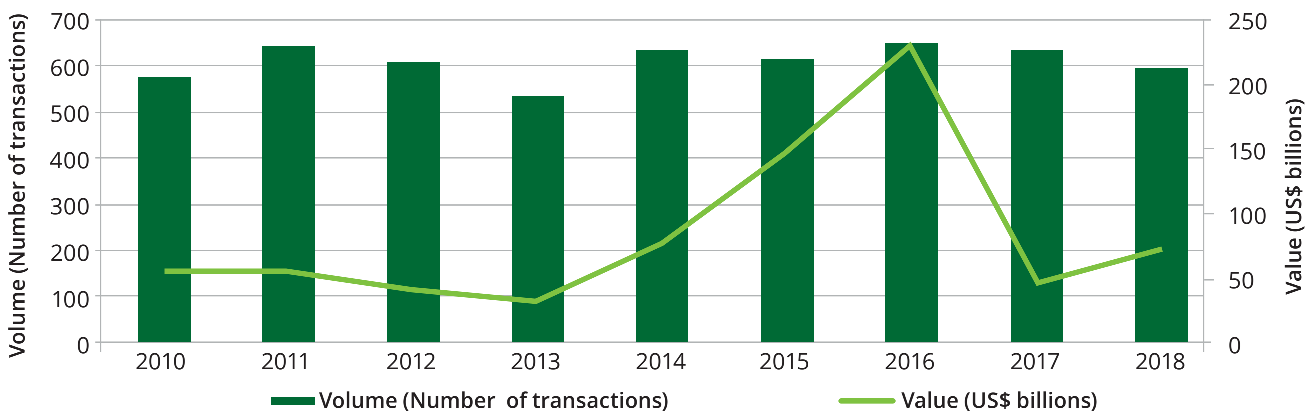
Following a pattern established in recent years, divestitures from mega-deals provided additional M&A activity. This includes the various regulatory divestitures from the Linde / Praxair merger. Most notable among these was the US$5.8 billion divestiture of the majority of Praxair's businesses in Europe to Taiyo Nippon Sanso Corporation.[4] Praxair's new partner, Linde, was also active in dispositions. It agreed to sell a package of assets in the Americas to a German consortium comprising of Messer Group and CVC Capital Partners Fund VII for US$3.3 billion.[5]

Shareholder activists remained keenly interested in the industry. Trian Partners invested in PPG and they have discussed their perspectives with management on creating shareholder value.[6] Cruiser Capital Master Fund LP took a stake in Ashland and sought seats on its board.[7] RPM International announced it had reached an agreement with Elliott Management on ways the company can drive additional shareholder value.[8]

Will the trends we saw in 2017 and 2018 continue to drive M&A in 2019? What chemical sectors will drive M&A this year? Will continuing trade tensions impact deal activity in certain geographies? Will gathering headwinds of slowing economic growth, rising interest rates and trade tensions be too difficult to overcome?

This report explores and discusses these and other questions.

Figure 1. Global chemical merger and acquisitions activity (2010 to 2018)



Total activity (2010 to 2018)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Volume (# of transactions)	579	646	609	537	635	612	650	637	600
Value (US$ billions)	55.6	55.1	41.8	31.8	77.8	145.8	231.1	46.4	72.4

Source: Deloitte Touche Tohmatsu Limited analysis of data from S&P Capital IQ, January 2018. Data is from 1 January 2010 to 31 December 2018.

2018 Rewind

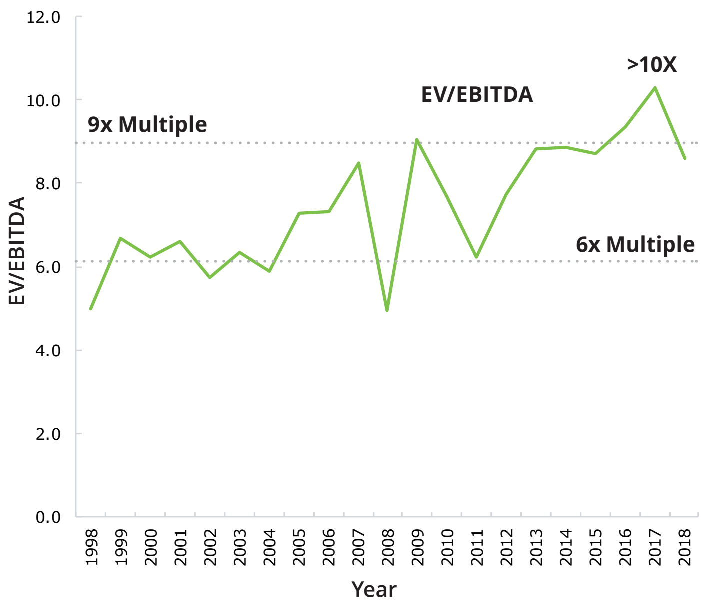
As we begin 2019, many of the same trends that drove the chemical M&A market in 2018 appear poised to continue. While US interest rates have been climbing and trade tensions have created uncertainties, other factors remain consistent. Reserves among would-be buyers are high as profitability has only provided more cash for their coffers. Private equity firms are similarly positioned with abundant financial reserves. Credit remains relatively cheap for both private equity and strategic buyers. Finally, organic growth continues to fall short in providing the return on investment that investors desire.

As highlighted in figure 2, high valuations weighed negatively on M&A activity in 2018. Public equity market valuations were especially high, which could have dampened the appetite for portfolio divestitures. The valuations also made it difficult for private equity firms to takeover publicly traded companies and take them private. That said, final-quarter declines in equity markets[9] may make deal valuations more palatable in 2019.

Mega-deals: Poised for another solid year of activity in 2019?

As shown in figure 3, 2018 saw a year-over-year increase in overall value and in the number of transactions exceeding US$1 billion. In 2018, the largest deal was the acquisition of the specialty chemicals business of AkzoNobel, now named Nouryon.[10] Two regulatory-driven divestitures, Linde in the Americas[11] and Praxair in Europe,[12] totaled another US$9 billion. Rumors of a merger between state-owned SinoChem and state-owned ChemChina continue.[13] Industry observers also speculated on LyondellBasell acquiring Odebrecht's stake in Braskem.[14] This remains a potential 2019 deal. If it moves forward, Aramco's acquisition of SABIC could be the largest deal in years.[15] In January 2019, SABIC's market cap stood in excess of US$90 billion.[16]

Figure 2. Global chemical industry valuations



Source: Capital IQ data captured for enterprise value as of end of 2018 and EBITDA LTM, September 2018.

State-owned enterprises: Expected to remain players in the market

SOEs continued to make their presence felt in the M&A market in 2018. In January, SABIC acquired White Tale's 24.9 percent interest in Clariant AG. Since then, SABIC has announced a memorandum of understanding (MOU) for collaboration with Clariant to create the High Performance Materials venture.[17]

Other SOEs in the Middle East have also made investments, including Sipchem, which spent US$2.3 billion to acquire Sahara Petrochemicals Company.[18] Saudi Aramco purchased LANXESS' stake in ARLANXEO, their joint venture, for US$1.7 billion.

Figure 3. Activity over US$1 billion (2010 to 2018)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Volume (number of transactions)	10	11	11	8	13	16	12	13	16
Value (US$ billions)	39.2	36.7	23.8	13.6	52.6	126.3	205.7	29.2	58.8

Source: Deloitte Touche Tohmatsu Limited analysis of data from S&P Capital IQ, January 2018. Data is from 1 January 2010 to 31 December 2018.

Mubadala-backed Borealis announced the acquisitions of both DYM Solution Co.[19] and Ecoplast Kunstoff recycling.[20] Sinochem announced the acquisition of ELIX Polymers[21] in the fourth quarter of 2018.

Several other large, state-owned integrated oil or energy companies that have not yet made significant investments into this industry may do so in the coming year in order to integrate refining assets with petrochemical assets. It is expected that these well-funded SOEs will continue to invest in the chemical industry in 2019 and beyond as they look to diversify from oil and gas or to move further downstream into specialty products.

Private equity: Teaming to win

The 2018 outlook highlighted lower volumes by private equity investors in 2017 compared with the 2015-2016 period. While this volume continued to decline in 2018 (see figure 4), the value of these transactions increased significantly due to the Nouryon deal.

Last year's outlook noted that high valuations could keep some private equity buyers on the sidelines. During 2018, private equity buyers looked to address the valuation issue by teaming with other bidders. Carlyle and GIC, for example, partnered on the Nouryon deal. Others have teamed with strategic bidders to generate synergies with existing operations. Examples include CVC partnering with Messer group to buy certain Linde assets in the Americas; and TPG partnering with ADIA and India's United Phosphorus (UPL) to acquire Arysta Life Science.[22]

Other private equity buyers also looked to benefit from synergies by acquiring bolt-on businesses for existing platforms. Examples include SK Capital's acquisition of SI Group to combine with its Addivant business,[23] and Arsenal Capital Partners' latest foray into the fragmented adhesives sub-sector where they acquired four separate businesses during 2018 under the Meridian Adhesives Group platform.[24]

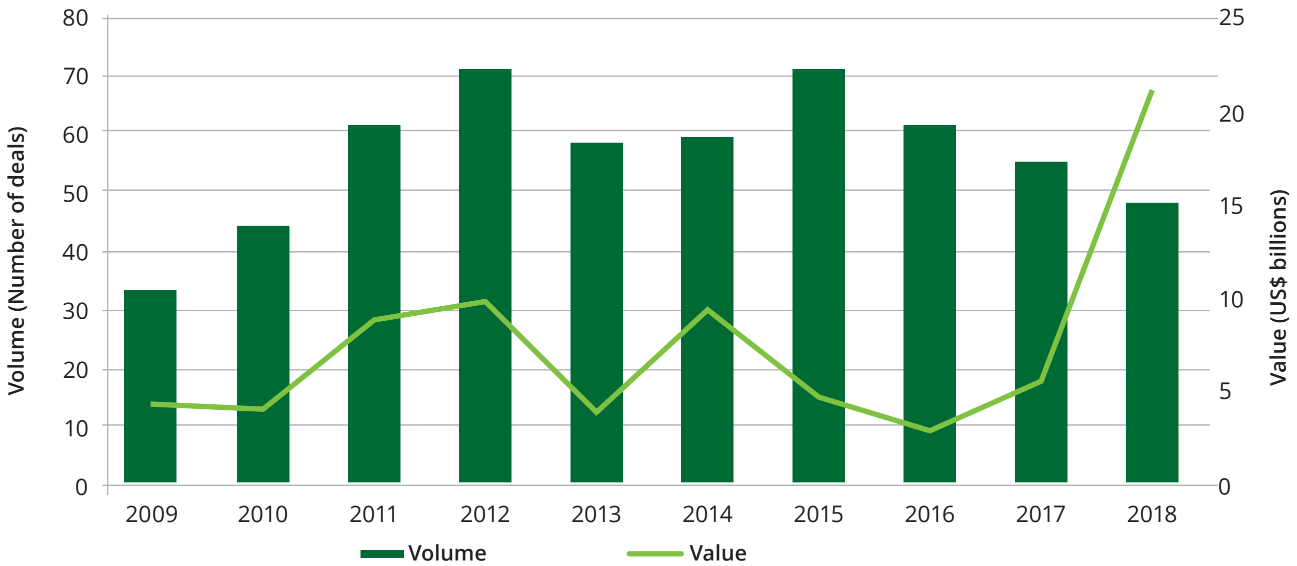
It is expected that private equity will continue to play a role in the M&A market in 2019. If valuations remain high, private equity will continue to team with other bidders, perform roll-ups, or make bolt-on acquisitions.

Activist investors: Investments may signal more divestitures in 2019

In a recurring theme over the course of the past few years, activist investors continued to impact M&A activity in the chemical industry in 2018. After witnessing this impact when it was pursuing AkzoNobel in 2017,[25] PPG is now dealing with its own activist investor, Trian Funds,[26] which proposed separation of PPG into two separate public companies.[27] Another activist investor, Elliott Management, has continued to influence the coatings sub-sector with its investment in RPM International.[28] Elliot also came to an agreement with RPM on board appointments and the removal of a "poison pill." Ashland Global Holdings has been in discussions with Cruiser Capital for much of 2018 regarding its strategic direction. Ashland has announced an agreement with Cruiser regarding nominees to its board of directors.[29]

While none of these agreements necessarily indicate that M&A activity is imminent, recent history would suggest a strong possibility that transactions involving these companies could be on the horizon for 2019. With no shortage of publicly listed chemical companies across the globe, activists could continue to impact the industry for years to come.

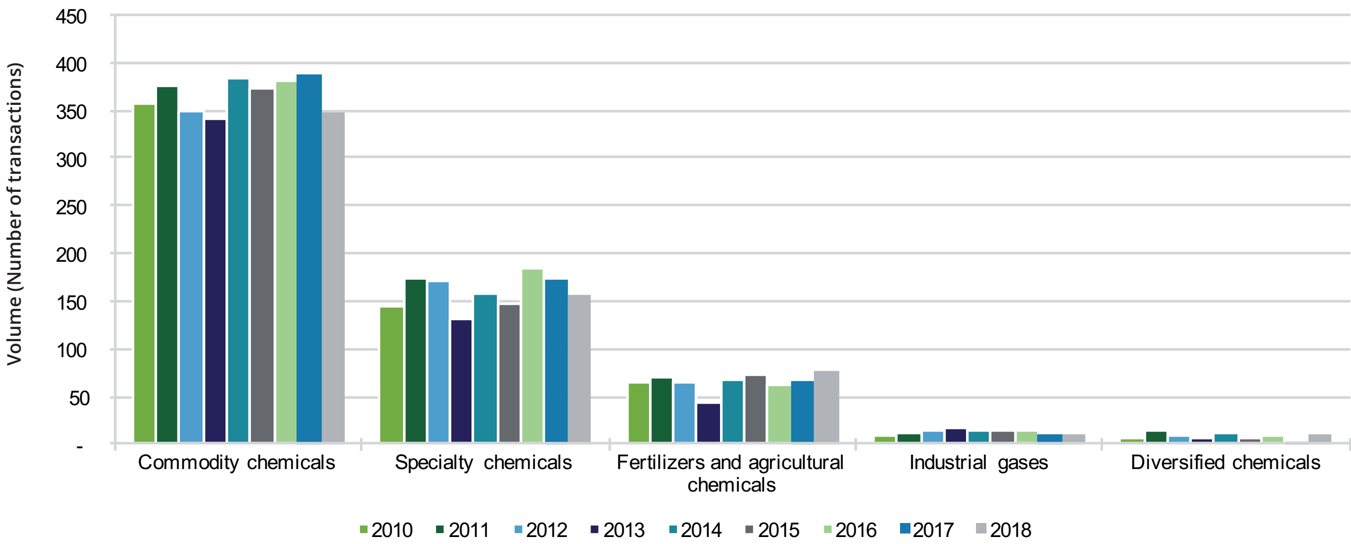
Figure 4. Global chemical M&A activity—Private equity buyers



Source: Deloitte Touche Tohmatsu Limited analysis of data from S&P Capital IQ, January 2018. Data is from 1 January 2010 to 31 December 2018.

Mergers and acquisitions activity by chemicals sector

Figure 5. Global chemical merger and acquisitions—by target sector (1020 to 2018)



Total activity—by target segment (2010 to 2018)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Commodity chemicals	356	376	350	340	383	372	382	387	348
Specialty chemicals	145	174	171	132	159	147	185	172	157
Fertilizers and agricultural chemicals	64	69	66	43	67	72	61	65	77
Industrial gases	9	12	14	16	15	14	13	10	9
Diversified chemicals	5	15	8	6	11	7	9	3	9
Total	**579**	**646**	**609**	**537**	**635**	**612**	**650**	**637**	**600**

Source: Deloitte Touche Tohmatsu Limited analysis of data from S&P Capital IQ, January 2018. Data is from 1 January 2010 to 31 December 2018.

Commodity chemicals: Greenfielding investments to reduce takeovers

As measured by volume, deal activity in the commodity chemical segment dropped 10 percent in 2018 from 2017, when volumes had reached their highest level since 2010 (see figure 5). Chinese buyers were much less active in commodity chemicals in 2018, with the volume of deals down nearly 14 percent. This could be a consequence of the slowing Chinese economy.[30] Government-imposed restrictions on outbound capital in China was also a likely factor.[31]

One bright spot in the commodity chemical sector M&A was continued interest among SOEs in going downstream. As predicted in our 2018 outlook, this interest drove many of the larger commodity chemical deals in 2018, including Sipchem's US$2.2 billion acquisition of Sahara Petrochemical Company[32] and Saudi Aramco's purchase of the remaining 50 percent interest in ARLANXEO from LANXESS.

With the International Energy Agency's forecast that petrochemicals will be the largest force in global oil demand growth,[33] many oil and gas focused SOEs continue to direct their investments to downstream chemical opportunities. However, increased downstream focus does not always translate into M&A activity. For example, Saudi Aramco and Total SA announced an agreement to co-invest US$9 billion to build a petrochemical complex in Saudi Arabia.[34] With technological advancements in highly engineered materials and growth in demand for their petrochemical building blocks, one could expect to see many traditional oil and gas companies and SOEs integrate downstream through M&A activity.

Demand for basic chemicals could shrink in 2019, as forecasts suggest a slowed global economic growth.[35] However, some commodity chemical companies might take the opportunity to use their cash flow for M&A as they seek growth in adjacent products and end markets. Alternatively, commodity chemical companies could spend much of 2019 focused on driving efficiencies from recent capacity expansions.

Intermediates and specialty materials: Margin volatility slowing pace of M&A

M&A deal volumes for intermediates and specialty material companies declined for the second year in a row. Despite the decrease in deal volumes, deal value in the sector increased to levels not seen since 2014. This, thanks in part, to five transactions exceeding US$1 billion in value, including Carlyle Group and GIC's US$12.5-billion acquisition of AkzoNobel's specialty chemicals business,[36] Nouryon, and IFF's US$7.1 billion acquisition of Frutarom Industries.[37] As predicted in the 2018 outlook, the adhesives and sealants sub-sector was among the few to see strong activity in 2018.[38]

Rising oil prices during the first three quarters of the year meant that many intermediates and specialty chemical companies grappled with higher feedstock and raw material costs in 2018.[39] Many pulled the pricing lever to deal with the rising costs. However, margins still shrank as the higher costs preceded higher selling prices. This margin volatility may also have affected the timing of some transactions or created valuation gaps between buyers and sellers, which made it harder to get deals across the finish line.

Fertilizers and agricultural chemicals: Trade disputes likely to continue driving deal activity toward smaller portfolio rebalancing

Global M&A deal volumes for fertilizers and agricultural chemical companies reached their highest levels since 2010. However, deal value declined to a five-year low. UPL Corporation's US$4.2 billion acquisition of Arysta Lifescience was the only announced transaction during year that exceeded US$1 billion. As predicted in our 2018 outlook, M&A activity in the sector was driven largely by the portfolio reshuffling as a result of the mega-deals of previous years. This meant smaller, more precise moves, such as product line divestitures

Trade disputes, particularly between the US and China, have had a negative impact on agricultural commodity prices. Farmers continue to be budget-conscious buyers when they deal with agricultural chemical companies.[40] As a result of the ongoing disputes, forecasting short-term demand has been a challenge. This has proven an impediment to getting deals done.

With these challenges facing the sector, M&A activity in 2019 will likely continue to target smaller, more focused portfolio rebalancing. Mega-deals of the size we saw in 2015 and 2016 are unlikely. Activity in 2019 and beyond may skew toward fertilizers rather than agricultural chemicals, where significant rebalancing and consolidation is approaching the endgame.

Industrial gases: With regulatory-driven divestitures largely completed, 2019 looks like a quiet year for M&A

As forecast in our 2018 outlook, M&A during the year was fairly quiet in the industrial gas sector, with the exception of two larger deals coming out of the Praxair/Linde merger. These included: Praxair's agreement to sell the majority of its businesses in Europe to Taiyo Nippon Sanso Corporation for US$5.7 billion,[41] and Messer and CVC Capital Partners' US$3.3 billion acquisition of much of Linde's North American gas business and certain business activities in South America.[42]

With the sector largely consolidated following significant M&A transactions and regulatory-driven divestitures, 2019 looks to be a subdued year for M&A activity.

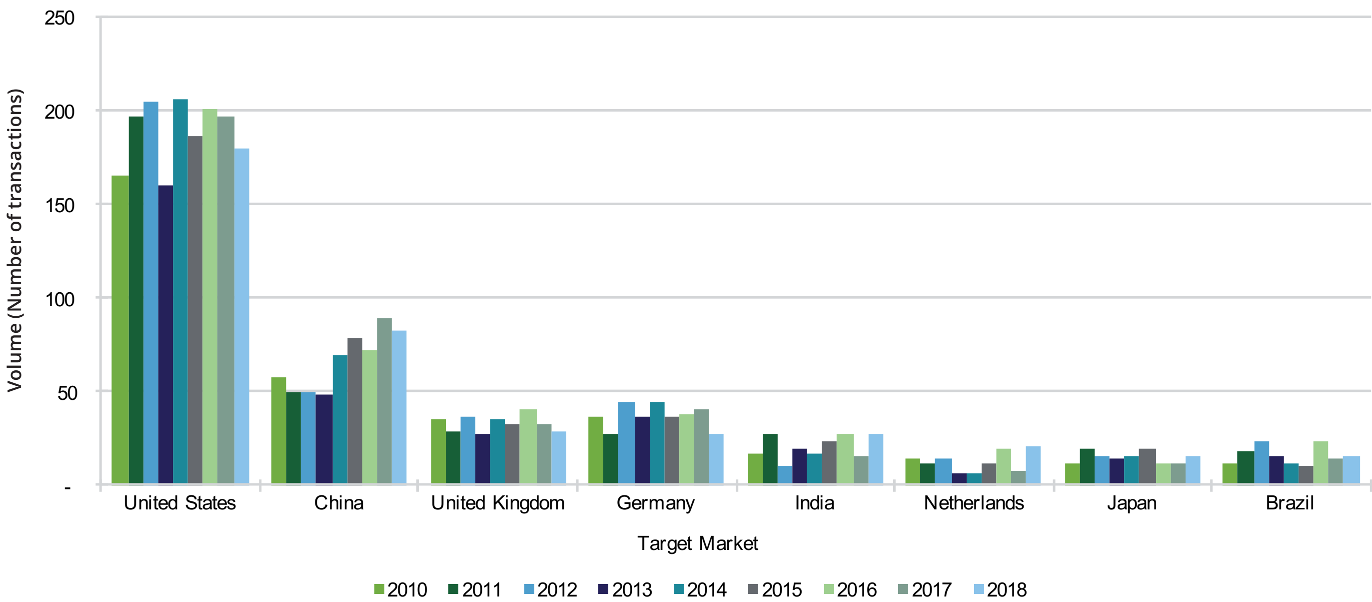
Diversified: Likely to remain on the sidelines in 2019

In our 2018 outlook, we suggested that the diversified sector was unlikely to notch a significant deal in 2018. We noted that 2017 ended with no real clarity on where Clariant might head after shareholder activists helped scuttle a proposed merger with Huntsman. Shortly after 2018 began, SABIC bought a 25 percent stake in Clariant. Still, further M&A activity involving Clariant is possible in 2019.[43] With few true diversified chemical companies remaining, the diversifieds will likely be M&A spectators in 2019.

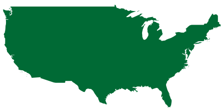
Mergers and acquisitions activity by geography

M&A activity remained strong in 2018 but pulled back slightly in many key markets (see figure 6). Decreases in the four biggest markets – the US, China, the UK, and Germany – were partially offset by increases in traditionally smaller markets such as India, the Netherlands, Japan, and Brazil.

Figure 6. Global chemical merger and acquistions activity—by target market (2010 to 2018)



Source: Deloitte Development LLC analysis of data from A&D Capital IQ, December 2018. Data is from January 1, 2010 to December 31, 2018.



US: Structural feedstock advantages will help overcome trade tensions

Chemicals M&A activity in the US remained healthy in 2018 although volumes were down slightly. The decline was driven in part due to increasing caution in the face of rising interest rates, stock market volatility, and ongoing trade tensions. Deal volume decreased despite tax reforms that many believed would spur a significant increase in domestic activity.

The largest deal involving a US chemical target during the year was the sale of Platform Specialty Products' Arysta business unit to UPL. The deal highlights another trend in US chemicals M&A – the growing importance of overseas buyers that see the US as an attractive investment destination. In 2018, international buyers accounted for 28 percent of acquirers of US chemical companies, compared to a range of 13 percent to 26 percent from 2010 to 2017.

Financial investors, both private equity firms and activists, continued to make their presence felt. Private equity groups were particularly active in, firstly, supporting their existing portfolio companies with large-scale acquisitions (e.g., the acquisition of SI Group by SK Capital's Addivant portfolio company). Secondly, partnering with other investors to facilitate deals (e.g., TPG and The Abu Dhabi Investment Authority are supporting UPL's acquisition of Arysta. CVC teamed up with Messer Group to acquire Linde's North American gas assets), and finally, exiting long-held investments (e.g., Apollo's sale of Momentive to a Korean consortium[44]). Activist investors continued to focus on the sector and launched campaigns targeting marquee names such as RPM International[45], Ashland[46], and PPG Industries.[47]

US M&A activity in 2019 has started on a more cautious note given the headwinds mentioned above. Two other factors that emerged toward the end of 2018 that could also impact 2019 deal making are that the acquisition financing market slowed during the fourth quarter and concerns that ongoing uncertainty around Brexit may dampen European outbound/US inbound activity. That said, the

US remains a fundamentally strong region, and barring any major shocks, 2019 volumes should be broadly in line with the past two years.

China: Domestic deals will continue to dominate the market in 2019

Following the pattern of the past several years, 2018 M&A activity in the Chinese chemicals industry was driven by domestic deals. The total deal value of published transactions amounted to US$14.3 billion versus US$8.5 billion in 2017. The most notable transaction was Wanhua Chemical Group buying Yantai Wanhua Chemical Co., Ltd. for US$8.6 billion.[48] Of the total published value of US$14.3 billion, just US$0.2 billion related to inbound acquisitions by foreign investors. Outbound deals in China remained limited due to capital controls on outbound investment and a domestic focus.

Foreign buyers will find the Chinese chemical market challenging terrain in 2019 for two main reasons. First, SOEs dominate many sectors and are either not for sale, or will only offer minority shares, and not control, to a foreign party. The second reason is high asking prices for privately owned businesses, which means that buyers uncovering major issues, such as expenditures needed to meet regulatory standards or downward adjustments to projected profits often led to terminated deals. With demand for processed food rising, a growing number of foreign-led M&A deals could occur in the food additives, animal nutrition, and active pharmaceutical ingredient (API) sectors that operate in China's rapidly growing food and beverage industry.

Regulators in the European Union are applying more scrutiny on Chinese outbound transactions as a means of preventing certain proprietary technologies from being acquired by these buyers.[49] The U.S. always had the Committee on Foreign Investment (CIFUS) as a tool to approve or reject Chinese acquisitions. Given current US-China trade and investments relations, Chinese acquisitions in the US are expected to decline. As a result, Chinese outbound deals could divert to other regions such as South America, South-East Asia, and the Middle East.

In 2019, Chinese M&A activity is expected to be characterized by increasing domestic consolidation in the commodity chemical, petrochemical and agrochemical sectors. One factor driving consolidation is the increasing government scrutiny on environmental and work safety standards. Another, is increasing operating expenses and intensifying domestic competition. Both are squeezing profits, and small and mid-sized producers are struggling to make investments in relocations and safety upgrades.

UK: Sterling weakness sustains interest from foreign buyers

Although UK M&A volumes pulled back slightly in 2018, continued sterling weakness helped sustain interest in the industry among foreign buyers. Companies from continental Europe were particularly active in the UK market in 2018, with buyers from Belgium, Germany, Italy, Sweden, and Switzerland acquiring roughly one-third of the UK chemicals companies that were purchased during the year.

US based companies were responsible for the majority of corporate inbound deals in 2017, but were more subdued in 2018. Nevertheless, significant financing capabilities, strong debt markets, and a broadly positive market outlook continued to generate high levels of activity from private equity.

Strategic investors from the UK and abroad used M&A to expand their geographic presence, enhance their technological expertise, and extend their product offering across several sub-sectors, particularly in the specialty space where transaction activity remains high.

The UK is due to leave the European Union at the end of March 2019, but recent debate has cast doubt on whether Brexit will happen as scheduled and if a favorable exit deal can be struck. While, this uncertainty may soften activity in the short term, the UK and its chemical sector continue to display robust and attractive long-term fundamentals. In addition, as 2019 progresses, clarity on the UK's future relationship with the European Union (the countries of which collectively represent its largest trading partner), can be expected to unlock transaction activity.

Germany: Competitive positioning drives strong M&A activity

M&A activity declined slightly in 2018 in terms of both volume and value. Nevertheless, the economic outlook remains positive while companies continue to benefit from high surplus cash levels and access to cheap credit.

Acquisitions by domestic chemical companies have mostly been driven by a push to improve competitive positioning through acquisitions of technologies, value chain-segments, or market share. The focus of acquisitions by German industry players remained on differentiated, higher-margin businesses, which is consistent with their general strategic direction.

German chemical companies have also continued with business portfolio management. With the exception of some larger, more structural deals, divestitures have primarily occurred among smaller business parts that face increasing commoditization threats (or are already commoditized). In many cases, private equity investors have been most interested in these assets.

Last year ended with many key industry players reporting declining financial results and with more cautious outlooks for 2019. At the same time, low-cost debt is expected to remain easily available. Domestic strategic buyers predominately see this development as an opportunity. They expect valuations to decline from 2018 levels. Meanwhile, they will still have access to funds when the time comes to execute a transaction.

India: Anticipated vibrant economic growth will drive chemical M&A activity to a higher level

The Indian economy has grown by over 6 percent since 2014. The IMF estimates growth will average 7.7 percent annually through 2023.[50] With supportive macroeconomic indicators, 2018 saw a significant increase in chemicals industry M&A activity in terms of both value and volume.

Deal volume increased from 15 in 2017 to 28 in 2018. Landmark reforms and government initiatives have propelled the growth of the chemicals industry and augmented investments. Reforms like the Goods and Service Tax Act, Insolvency and Bankruptcy Code, and Real Estate (Regulation and Development) Act, coupled with initiatives such as the Petrochemical and Plastic industrial zones, smart cities mission, and Make-in-India program, have given momentum to the chemicals industry and led to increased M&A. During the first six months of 2018, Foreign Direct Investment (FDI) equity inflow to the chemicals industry amounted to US$786 million compared to US$1.3 billion for the full year 2017.[51] India also leaped ahead in its ease-of-doing-business ranking, from 100 in 2017 to 77 in 2018.[52]

In India, 2019 is an election year which can create uncertainty in M&A markets. However, reforms and government initiatives are expected to help the chemicals industry to see increased M&A activity. Growth will be led by base chemicals, agro-chemical, and construction chemicals.

The consumption story, with the doubling of per-capita income in the past 10 years[53] will, among other things, drive growth of base chemicals. Significant investments in smart cities are expected to expedite growth of construction chemicals. A proposal to increase the minimum selling price for farmers will benefit the agro-chemical sector. The Indian economy, a net importer of oil, will benefit from expected lower average crude prices as the price of feedstocks will also drop.

With its strong business culture, anticipated long-term growth, changing consumption patterns, technological advancements, and improving business climate (including liberalized FDI), the chemicals industry M&A outlook for 2019 in India appears vibrant. Volume and value numbers for 2019 could easily beat 2018 results.

The Netherlands: Bright prospects but there are challenges to address

The year 2018 was a record breaker for chemicals M&A in the Netherlands. The value of all transactions reached US$14.7 billion, the highest level in more than 10 years. The results were largely driven by two multibillion-dollar deals. First, the acquisition of the specialty chemical division of AkzoNobel by Carlyle Group, and second, Saudi Aramco's purchase of the remaining 50 percent stake in LANXESS's ARLANXEO. The number of transactions were at the highest level since 2010.

The environment for M&A remains quite positive. The economy is still strong, debt is still relatively inexpensive, and many companies have achieved strong earnings in recent years and have cash on hand to spend. There could be deals in the near term. The AkzoNobel (now called Nouryon) megadeal may trigger some divestitures. In addition, DSM Chemicalinvest (a joint venture between DSM and CVC[54]) has recently announced its intent to sell its acrylonitrile business[55].

However, there are also some challenges. The uncertainty around Brexit is affecting the investment climate in Europe and might also have an impact on consumer confidence. Also, the Netherlands have enjoyed a relatively strong feedstock position, but gas output is decreasing (it is regulated by the government) and more gas needs to be imported. This may impact competitiveness of gas-based chemicals in the long term.

Japan: High appetite for M&A despite the increased economic uncertainty

Though some major chemical manufacturers experienced decreased earnings due to scheduled maintenance, the Japanese chemicals sector performed well in 2018. Many major chemical manufacturers reported record earnings. With strong financial performance, M&A appetite was high. From 2017, the number of deals increased from 11 to 15. What's more, Japanese chemical manufacturers have invested in or acquired start-up companies to help develop next-generation technologies.

Although momentum is likely to continue in 2019, uncertainty in the business environment is increasing. Companies may become more cautious with M&A. One concern is the loss of balance between the supply and demand of commodities. This was driven by two factors, first, the full-scale importing of ethylene produced from shale gas and second, the decline of exports to China as a result of trade friction between China and the US. Commodities were responsible for a large part of the strong performance of Japanese companies. Japanese companies may become cautious on large investments that include major M&A activity in 2019.

Brazil: The economy and M&A outlook are optimistic as a result of the recent elections

The current scenario for the Brazilian economy points to increased confidence due to election of Jair Bolsonaro in October 2018. Financial markets reacted favorably to the news because Bolsonaro, a free-market proponent, has promised to deliver broad economic reforms, fight corruption, and work to reshape Brazil through a pro-business agenda. Inflation has decreased since the election, which may delay the raising of interest rates.[56]

In addition, officials have attended the first round of negotiations to reduce the import tariffs to 2 percent within Mercosur on 64 chemical inputs used by the manufacturing industry. This decision will increase competitiveness and reduce costs for companies.[57]

Economic growth will drive demand for base chemicals needed for construction and infrastructure which should drive profitability within Brazilian chemical firms. Additional reforms, such as tax reform, could result in further benefits to these firms and make investment more attractive. While the acquisition of Braskem would likely be the largest transaction of 2019 if it were to happen, these factors suggest that M&A activity could continue to be strong in Brazil in 2019 even without that transaction.[58]

Summary outlook for 2019 mergers and acquisitions activity

Despite the recent modest dips in M&A volumes over these past two years, no one could argue that M&A activity has been anything but robust the past several years. Predictions are, by nature, perilous. However, it is clear that when it comes to M&A, the industry is facing challenges in 2019.

Growth in industrial production, a major driver of chemical demand, has been under pressure in many economies. Global economic growth rate expectations have been tempered as the IMF cut its forecasts for global economic growth to 3.5 percent in 2019, its second downward revision since in July, when growth was forecast at 3.9 percent.[59] Furthermore, China, the world's second-largest economy, grew at its slowest pace in almost three decades in 2018.[60] Many believe that the US is in a late-cycle economy. In July, the US will officially be in its longest period of economic expansion in history.[61] This economic uncertainty may have some executives questioning how aggressive they want to be in capital deployment in 2019, including when they consider larger transformational M&A deals.

Global trade tension is another key factor. Protectionism is on the rise in many developed economies. Despite the replacement of NAFTA with the United States-Mexico-Canada Agreement (USMCA), additional trade disputes and tariffs between the US and China are creating uncertainty and challenges due to supply-chain disruptions.[62] A looming "No deal" Brexit poses risks to the eurozone economy. Global trade tensions and protectionism are giving many executives pause for thought when considering cross-border M&A activity. Capital controls put in place by China in recent years may continue to limit the ability of Chinese investors to use foreign M&A as a tactic for escaping US tariffs on Chinese goods.

There has been much discussion in the industry about the "circular economy" to address plastic waste in the oceans. In early 2019, significant action was taken as the Alliance to End Plastic Waste (AEPW) was created, attracting US$1 billion in commitments from 26 companies in the plastic and consumer goods sectors. The goal is to create programs and solutions that can be applied globally, especially in areas with "high plastic leakage". Other activities relating to the circular economy include supporting an incubator to foster creation of technologies, business models, and entrepreneurs to tackle the issue. Renew Oceans, which the AEPW supports, works to create local engagement and investment, to encourage diversion of plastic waste before it enters the ocean. The group is targeting 10 rivers that have been identified as the biggest plastic waste contributors.[63]

While the circular economy may not have driven M&A activity in the past, efforts such as these may be a starting point for chemical companies to invest in additional technologies or acquire technologies through M&A that will contribute to these efforts.

The digitization movement is being embraced by the chemical industry. Digital innovation has the potential to transform the global chemical industry. While highly diversified companies are already leveraging digital technologies across many functions, companies must strive to "strike a balance between over-enthused investments in digital, versus viewing digital initiatives as a low-key affair."[64]

It is possible that this kind of innovation, whether by individual companies or through partnerships, will create additional M&A activity in 2019 as other companies seek to become more innovative, digital, and environmentally-focused.

With the backdrop of rising interest rates, global trade tension, and slowing economic growth, 2019 chemical M&A volumes could pull back slightly from levels we have seen in recent years. However, we can still expect a robust market for M&A in the global chemical industry. The past demonstrates that M&A in the chemical industry can flourish, even in uncertain times.

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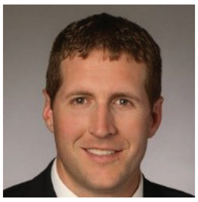

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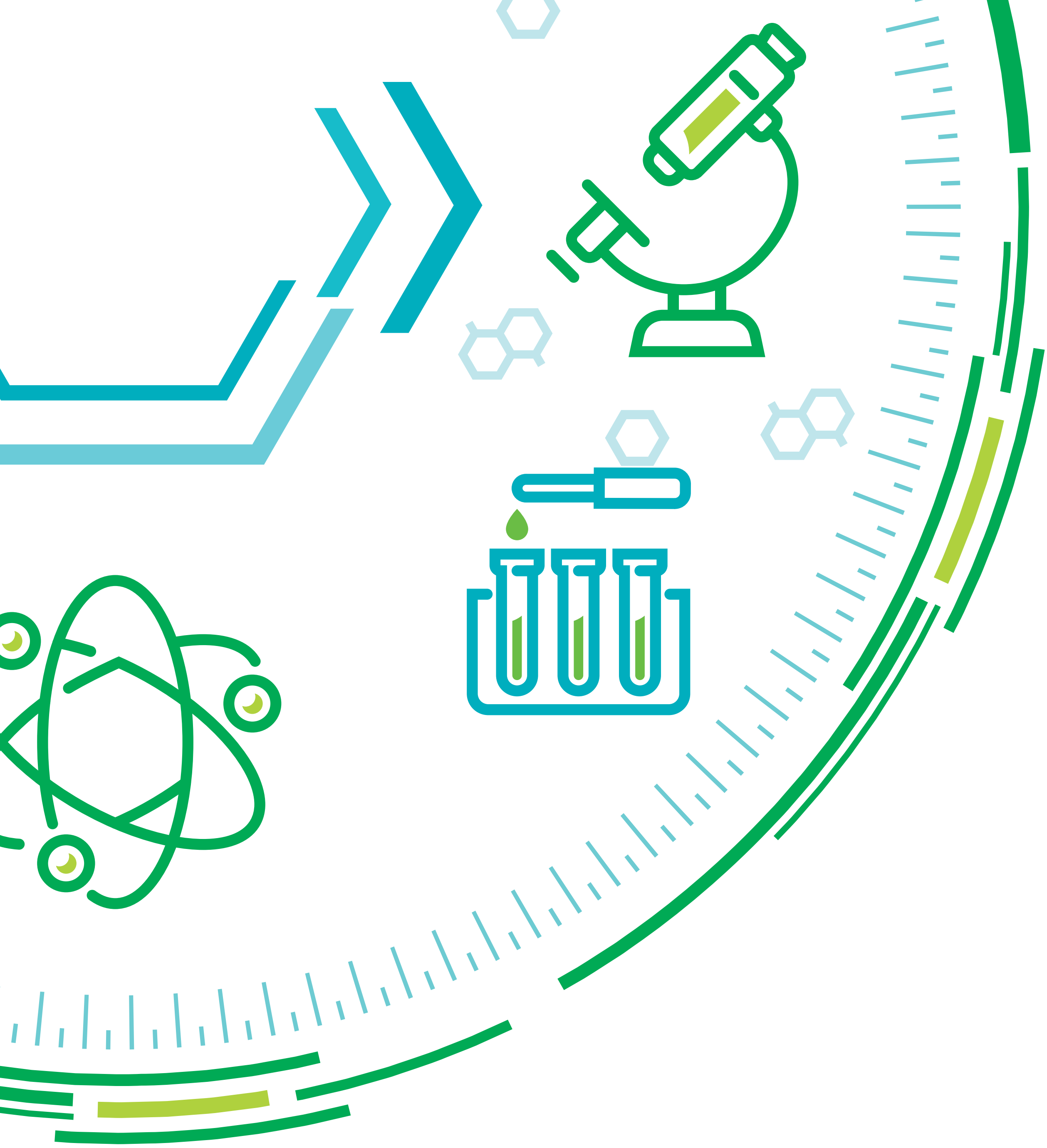

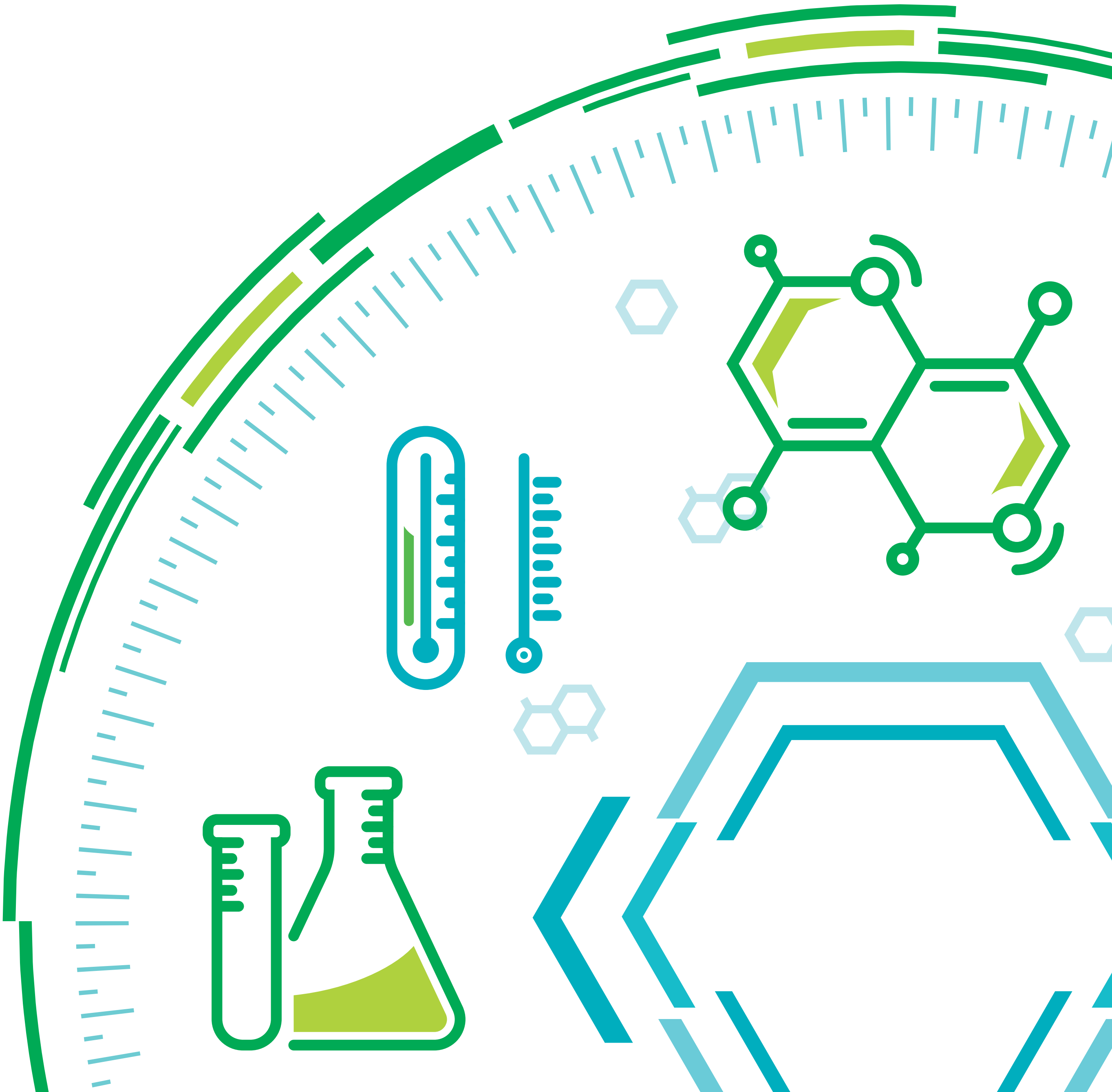

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