REACTION

Chemicals Magazine

Thirty-fifth edition

Articles include:

COP26: Implications for chemicals and performance technologies businesses

Women and leadership in the chemicals industry

A robust year for the global chemicals M&A market

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Introduction

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Welcome to the 35th edition of REACTION Magazine. While the global pandemic and the recent emergence of the Omicron COVID-19 variant are exerting continued pressure on the global economy, results around the industry continue to be overwhelmingly positive — notwithstanding ongoing disruptions from supply chain issues, which are impacting most producers. You can see our short supply chain video here.

I'm really excited about the current edition of REACTION, as we're starting a new series which focuses on diversity in the industry — something that needs much greater focus in the coming years across all aspects of diversity. In each forthcoming edition, we'll be interviewing a senior leader in the industry about what can be done to improve diversity. I'm delighted that we're joined for the inaugural interview by Kelly Reavis, Director of Strategic Initiatives at DuPont.

In addition, we cover two of the hottest topics in the industry right now. Our global chemicals and performance technologies M&A team reviews the ongoing wave of deal activity in the industry and considers what strategists can do to be successful on both the buy and sell side in one of the hottest deal markets in living memory. We also take a look back at COP26 and how the chemicals and performance technologies industry is going to be relied on more than ever before if organizations are going to reach the climate goals that will limit global warming to a manageable level.

As always, I'm keen to hear your feedback and if there are any issues you'd like us to cover in a future edition of REACTION, please don't hesitate to get in touch.

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COP26: Implications for chemicals and performance technologies businesses

By Paul Harnick, Mike Hayes, and Simon Virley

The world is at a critical point in the fight against climate change. How can businesses play their part?

The world is at a critical point in the fight against climate change, and COP26 was considered the most significant climate talk since the 2015 Paris Agreement. During the conference, there were notable successes and some setbacks — both have implications for businesses globally.

We reflect on the progress made during the climate change conference, discuss what this means for the global chemicals and materials industry moving forward and provide insights on how to help accelerate toward net zero together.

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Key takeaways

- COP26 made progress toward delivering on the Paris Agreement goals of limiting global warming to "well below" 2 degrees Celsius (C) on pre-industrial levels, but the world is definitely not on track to limit the increase to 1.5°C on the basis of plans submitted to date.
- In a scenario where all the climate pledges announced to date were met in full and on time, the International Energy Agency (IEA) estimates that global warming could be kept to 1.8°C. However, the lack of firm plans for 2030 means the actual increase could be 2.4°C.[1]
- These commitments must be delivered upon if these temperature goals are to be achieved. This still represents progress since Paris, where the world was heading for 3°C to 4°C of warming, and COP26 should be seen as part of that ongoing process that started nearly 30 years ago and now plans to continue indefinitely to tackle climate change.
- Over that period, there has been a marked shift from "top down" reliance on governments taking the lead to "bottom up" action by businesses, investors, non-governmental organizations (NGOs) and consumers.
- COP26 has energized a raft of initiatives, including:
    - The Glasgow Financial Alliance for Net Zero (GFANZ).
    - The Glasgow Breakthroughs on technology innovation.
    - The Powering Past Coal initiative and shifting to clean power.
    - Nearly 100 countries committing to cutting methane emissions.
    - A commitment to end and reverse deforestation by 2030.
    - H2Zero: A pledge to accelerate use of decarbonized hydrogen.
    - A new requirement for net-zero transition plans for listed companies in the UK.
    - Establishing a new International Sustainability Standards Board (ISSB) globally.
- Good progress was made on Article 6, the rulebook for carbon accounting.
    - But there were also a number of setbacks:
    - The US$100 billion per year climate finance target — due by 2020 — was delayed to 2023.
    - Many of the new net-zero targets announced have limited detail on near-term plans to help reduce emissions, which is essential if there is a chance at limiting global warming to 1.5°C.
    - Questions remain regarding the follow-through and implementation, with the final call to action requesting all parties to update their Nationally Determined Contributions (NDCs) ahead of the next COP in November 2022.
- It's becoming increasingly clear that the institutional investment world is starting to exercise real influence through investment policy and is starting to demand increased climate focus from investee companies. Importantly, these investors are focused on private companies as much as public companies.
- The shift to net zero is the next great industrial revolution and businesses that seize the opportunity are expected to thrive — those that don't, may not.

The chemicals and materials industry has long been a leader in sustainable initiatives — despite public perception to the contrary — but much more should be done in the next decades to support global climate goals. In particular, cracking the code on circularity, continuing to reduce the carbon intensity of operations and diversifying energy usage to renewable sources are expected to be critical factors.

[1] https://www.iea.org/commentaries/cop26-climate-pledges-could-help-limit-global-warming-to-1-8-c-but-implementing-them-will-be-the-key

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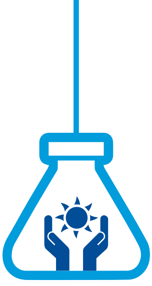

Reflections on COP26

In the run-up to Glasgow, UK Prime Minister Boris Johnson called for COP26 to be a "turning point for humanity" that could put the world on track to meet the goals set out in the 2015 Paris Agreement of limiting global warming to "well below" 2°C on pre-industrial levels — with an aspiration of keeping it to 1.5°C.

By contrast, Greta Thunberg predicted it would just be more "blah, blah, blah" with politicians not following through on their commitments and lacking real action.

So, which was it? KPMG's view is that it was somewhere in between, with progress made in a number of areas, but also some significant disappointments. Glasgow held on to the aspirations of the Paris Agreement of limiting global warming to 1.5°C, but, as things stand, we believe the world is definitely not on track to hit this target.

COP26 has delivered in creating increased momentum on the climate agenda and more parts of society are being mobilized to act. There are now a growing number of "bottom up" initiatives, like GFANZ, that are developing a momentum of their own — with the potential to make real change.

Glasgow should be seen as part of the ongoing process of global climate change negotiations that began at the Rio Earth Summit in 1992. The final "decision" document reflects this ongoing process by calling on all parties to submit updated or new NDCs ahead of COP27 in November 2022.

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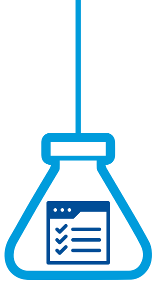

Notable successes

With new commitments made by India, Russia, Brazil, Saudi Arabia, Australia and others, at least 90 percent of the world's economy is now signed up to net-zero targets — that figure was less than 30 percent one year ago.[2]

Businesses are now far more engaged than ever before, taking initiative and not waiting for governments to act. This was demonstrated by the **Glasgow Financial Alliance for Net Zero (GFANZ), which has US$130 trillion of assets under its control.** Clean finance can now play a critical role in driving, or stopping, activity irrespective of changes in government policy — although some questions remain about how these assets expect to be mobilized in practice.

More generally, there has been a definite and perceptible **shift toward "bottom up" action** by companies, investors, consumers, individuals and cities, with a vast array of initiatives underway to help reduce greenhouse gas (GHG) emissions that will likely generate a momentum of their own, separate from the government-led COP gatherings.

Banks, insurers and capital markets are expected to drive action now to a far greater extent than ever before. The new requirements for all listed companies in the UK to produce net-zero transition plans by 2023 can only increase transparency and scrutiny of the companies that have credible plans and those that don't. This is likely to be replicated in other countries, including the US, where the Securities and Exchange Commission (SEC) is expected to issue reporting guidance in 2022.

COP26 has established a new ISSB to develop global reporting standards, building on and incorporating initiatives like the Task Force for Climate-related Disclosures (TCFD).

The **Glasgow Breakthroughs** establish innovation programs for clean power, zero emission road transport, clean steel, hydrogen and sustainable agriculture. There is considerable optimism around the world that the solutions to climate change can be found, with a big role for renewables, electric vehicles, low carbon hydrogen, batteries, carbon capture and storage, direct air capture, and other forms of long-duration energy storage.[3] The chemicals and materials industry has a massive role to play in all of these areas. Continued innovation and investment in research and development within the industry can provide the next generation of material inputs to downstream industries that are expected to be the key enabler of transition to a low carbon world.

Methane accounts for about 0.5°C of the 1.1C–1.2°C warming the world has seen to date, and the **Global Methane Pledge** signed by over 100 countries, will aim to cut methane emissions by 30 percent by 2030 — compared with 2020 levels.

Progress was made on reforestation, with the commitment signed by over 100 countries, including Brazil, Russia, Canada, Indonesia, the Democratic Republic of the Congo and China to **reverse and end deforestation by 2030.** This builds on the biodiversity commitments held at COP15 to a **30 by 30** target — a plan to conserve 30 percent of the world's land and sea by 2030.

On **coal,** the G20, including China, had already agreed to stop funding new coal-fired power stations abroad. Now, 65 countries have signed up to the **Powering Past Coal** initiative aimed at taking coal — the most polluting fuel — out of the energy mix, altogether.[4] In a dramatic last-minute twist, the final text of the Glasgow Climate Pact was amended to refer to the "phase-down of unabated coal", rather than "phase-out", following push back from some large coal-using countries.

There has also been a much greater focus on **green innovation** through the United Nations (UN) Climate Change **Global Innovation Hub** and on supporting emerging technologies through the announcement of the First Movers Coalition.

There was **significant progress made on Article 6,** the rule book for carbon accounting. This should bring greater transparency to how carbon markets work, helping to close a number of loopholes and reducing the scope for double counting of carbon reductions.

[2] PM: Glasgow Climate Pact keeps critical 1.5°C global warming goal alive - GOV.UK (www.gov.uk)

[3] https://www.gov.uk/government/news/world-leaders-join-uks-glasgow-breakthroughs-to-speed-up-affordable-clean-tech-worldwide

[4] PM: Glasgow Climate Pact keeps critical 1.5°C global warming goal alive - GOV.UK (www.gov.uk)

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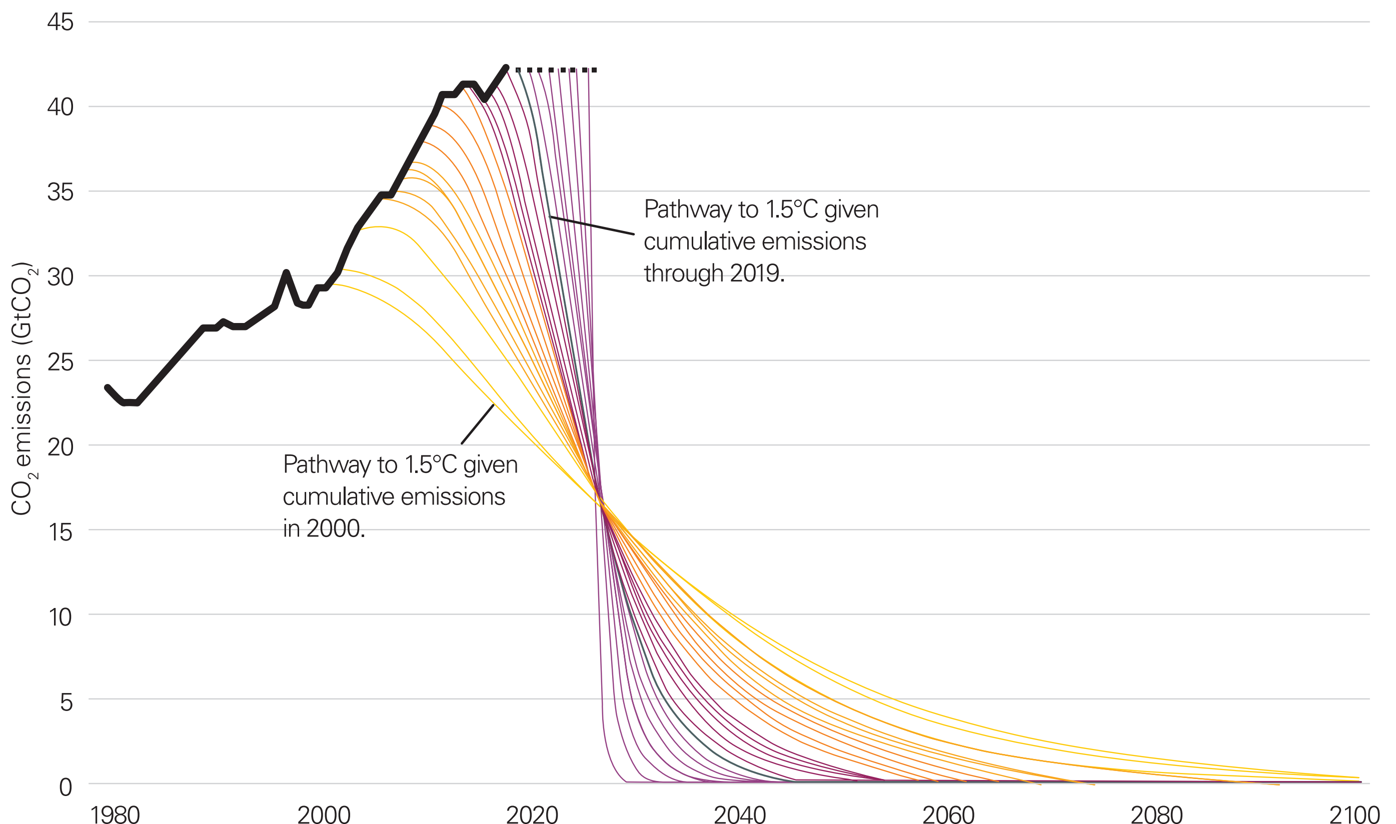
COP26 shortcomings

The climate finance target of US$100 billion per year for developing nations — first introduced in Copenhagen back in 2009 and due to be met by 2020 — can now not expect to be met before 2023.

While there have been new long-term commitments to net zero made by a number of countries in the run-up to COP26 — including energy-rich economies like Australia and Saudi Arabia — the shorter-term targets and plans for many countries for 2030 remain vague. There needs to be a steep drop in emissions this decade to limit global warming to 1.5°C (see graph below). The UN estimates that the goal of halving world emissions by 2030 — as needed for the Paris goal of 1.5°C emissions — is far way.

Referring to net zero and the Paris Agreement goals, John Kerry, the Special Presidential Envoy for Climate, summed it up by saying that "We can do this. The question now is whether we do it in time."

Limiting warming to 1.5°C is increasingly difficult without large-scale negative emissions



Credit : CarbonBrief[5]

[5] https://www.carbonbrief.org/unep-1-5c-climate-target-slipping-out-of-reach

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Stakeholder accountability

Global organizations are responding not just to regulatory developments, but also to increasingly intense scrutiny from institutional investors. Other stakeholders, such as employees and customers, are paying attention to how businesses are preforming on the net-zero agenda.

Given that most carbon emissions come from businesses, this is a welcomed development. Government policy and regulation will likely continue to be critical and the reality is that global corporations are now moving faster than governments in the race to net zero.

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Implications for businesses

COP26 was termed the "Business and Finance COP" because of the more prominent role the business and finance community took compared to previous conferences.

The scrutiny of plans on decarbonization is only going to grow from both investors and from consumers. This is especially true in the UK, which had already made climate risk disclosures mandatory for large companies from 2022, and for all companies by 2025. In addition, they've now added a new requirement for listed companies to produce net-zero transition plans by 2023.

Globally, the ISSB is now tasked with coming up with global reporting standards with a focus on carbon emissions.

Net zero is the next industrial revolution. And like other revolutions, those businesses who seize the opportunity can expect to thrive — those that don't, may not.

The reality? These changes are coming, and businesses should be prepared. If you already have a credible, quantified plan for emissions reductions, then great; if you don't, you should begin to consider one as soon as possible. As we stated earlier, most large companies in this industry have been reporting on sustainability metrics for many years, but there is huge variability in the breadth and depth of those reports and, more importantly, what environmental, social and governance (ESG) metrics mean for day-to-day operations at the business level within individual companies. The statistics below from Eversheds Sutherland and KPMG IMPACT's recent survey point to a continued gap between acceptance of the criticality of ESG to business success and the actual implementation of specific plans and actions to get it embedded in the business model. For the laggards, the ever-increasing focus from customers, finance providers, investors and regulators means the window of opportunity is closing to have a fully developed ESG strategy linked to robust KPIs, which are embedded in business operations, reported on a transparent basis and clearly linked to executive evaluation and compensation. Being an outlier is likely to become a very uncomfortable and uncompetitive place to be.

The latest survey report by Eversheds Sutherland and KPMG IMPACT explores how employees are factored into companies' decarbonization plan, with 1,095 global leaders surveyed, 110 of whom identified as leaders within the chemicals and materials industry.

99%

Have a strategy or plan to identify, qualify and report climate risk to the business, with 39% having a clearly defined decarbonization plan in place.

35%

Believe significant changes are needed to their business model such that what and how they do business is wholly changing

49%

Confirm that a climate change expert has been appointed to their board

94%

Strongly agree that their company currently has the knowledge, resources, skills, and expertise in place to develop and deliver on their company's future decarbonization plan within the next three years

*Source: Climate Change and the People Factor, Eversheds Sutherland and KPMG International, November 2021

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Short-term targets and action

Coming out of COP26, there's an absolute necessity for substantial progress to be made between now and 2030 — if the ultimate 2050 net-zero targets are to be achieved. This underscores the importance of developing net-zero and climate transition plans with both short-term targets and actions.

What does the short-term environment on the climate agenda look like for the business community?

There's an increased focus on reporting and disclosure — particularly as a result of the ISSB announcement. Governments are expected to continue to pursue policy initiatives to help drive the agenda, not just for reporting, but across the wider carbon space.

It's clear that institutional investors are taking this agenda incredibly seriously as they recognize it directly relates to the value of their investments. As a result, companies are likely to see much greater focus from the investment community. We believe making commitments will no longer be sufficient — the future is expected to be about developing meaningful and well thought out plans, followed by swift action. And companies should expect to report their progress on a yearly basis between now and 2030.

The climate agenda is not just about risk. In our view, it's critical the business community grasps the value in the opportunity associated with the global response to the climate crisis. Society is entering a phase where low carbon goods and services have increased value and this feature will likely continue to dominate the marketplace. Organizations who understand the value opportunity, as well as the risk, are most likely to be successful.

All countries have been asked to look again at their 2030 targets and come back next year with more ambitious reduction plans — like a "one-way rachet" ramping up levels of ambition.

In summary

Is 1.5°C still achievable? In our view, technically yes, but only just — and as things stand, they are not on track.

Glasgow is not the end of the story. This is an ongoing process, and a lot of progress has been made in six years since Paris, when the world was heading for 3°C-4°C of global warming. The world has made significant progress in bending the arc of that trajectory down "toward 2°C" as Alok Sharma, COP President, puts it.

Every degree, every tenth of one degree, really matters. Today, the world is already seeing the devastating effects of climate change at "only" 1.1°C–1.2°C of warming. At 1.5°C, 70 percent of the world's coral reefs die. At 2°C, they all die and more than 1 billion people globally could be affected by fatal heat and humidity, according to the UK Met Office, while many island states and low-lying areas will likely become uninhabitable.[6]

The world witnessed some progress made at Glasgow in tackling climate change. But there is much more to do, especially in terms of delivery of the commitments and initiatives announced at COP26 and on near-term targets for 2030.

Soon, the world's eyes will turn to COP27 in Egypt, which could no doubt be set against the backdrop of ever more extreme climatic events. As a heavy user of energy in its own right and as the primary supplier of products to all downstream industries, the onus is on the chemicals and materials industry more than ever before to lead the transformation to a low carbon economy.

[6] https://www.metoffice.gov.uk/

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How we are helping clients

KPMG firms can support businesses and organizations with the transformation needed to fight climate change through KPMG IMPACT — the accelerator for KPMG's global ESG strategy. For example, KPMG in the UK has developed the KPMG Climate IQ to assess the impacts of climate change under different scenarios. This tool supports the development of robust, credible plans and strategies for decarbonization and assistance with emissions reduction.

KPMG IMPACT professionals help clients develop responsible and sustainable strategies, business operating models, and investments.

Learn how KPMG firms leverage the latest research, skills, influence and resources to help build and deliver solutions for clients' unique business needs.

To learn more about how we are helping our clients globally, visit our IMPACT Stories for case studies, insights and more.

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Mike Hayes has been involved in the global renewables business for the past 20 years and over the last 8 years he has also been focusing on climate change and decarbonization for clients around the world. He leads KPMG's climate change and decarbonization business which includes the provision of services such as climate risk management, net zero pathways, corporate PPAs, carbon accounting, and green finance. Mike advises numerous international asset managers, developers, corporates and utilities. In addition, Mike is passionately committed to sustainable energy and climate innovation and leads a KPMG team collaborating with the World Economic Forum on this agenda. As part of this work Mike and the Forum have worked on some unique propositions on innovation financing.

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Simon Virley has over 20 years' experience advising on energy issues. Previously, he was the Director General for Energy at the UK Department of Energy and Climate Change (DECC) between 2009–15. In that role, he had responsibility for advice to Government on oil and gas, renewables, nuclear, Carbon Capture and Storage, retail markets, decentralized energy and energy security issues. He led the work on the Electricity Market Reform (EMR) Programme under the Coalition Government (2010–15) and was the Government expert witness to the Competition and Markets Authority (CMA) inquiry into the retail energy market at the end of 2014.

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Women and leadership in the chemicals industry

An interview with Kelly Reavis, Director of Strategic Initiatives at DuPont

In this edition of REACTION Magazine, we highlight the progress chemical companies have made to help close the gender gap. We are joined by Kelly Reavis, Director of Strategic Initiatives at DuPont, who discusses her own personal career journey within the chemicals industry, the importance of championing diversity at a leadership level and what DuPont is doing to support diversity and inclusion within its organization.

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Kelly, thank you for joining our conversation. Let us start off by asking how you got started in the industry. Can you tell us about your first job?

My first job was with Arthur Andersen in their audit division. I went to a state school in Pennsylvania that was not visited by the prestigious firms. I organized and held a panel for our accounting society to discuss careers in the industry. A classmate had a sister that worked for Arthur Andersen and once the other firms found out Arthur Andersen was going to be there, they all sent a representative. I had an interview and an offer from quite a few and chose Arthur Andersen.

What career accomplishments are you most proud of?

I have to say that being a working mom is a real career accomplishment that I am proud of. I work hard while also prioritizing the needs of my family. I try to set an example for others that it is possible to do a great job at both. Some days are better than others, but I look back and am proud of what I have accomplished in both of these worlds that are so important to me.

During your career journey, have you had a mentor or champion for your career growth?

I had a number of mentors, each of which I am tremendously thankful for. My most effective mentors helped me understand my value, encouraged me to speak up, and challenged me to challenge my growth and advancement.

What was the most valuable career advice you have received?

"Don't be anyone but you. And then be the best you that you can be."

That leads us to present day, where you are currently Director of Strategic Initiatives at DuPont. What would you say is the best part and the most challenging part of your role?

I am currently a leader in our SAP Central finance implementation and overall Finance Transformation at DuPont. The most challenging part of my role is moving people to coalesce around a common goal of improvement and accept that change is a necessity to move toward improvement. The best part of my role is my team. I lead an international team of highly motivated, very experienced and very talented individuals. Leading a high-performing team really brings everyone up to the top of their game and the contributions are just tremendous. I'm lucky to have them.

When you look around the global chemicals and materials industry, do you feel that there is enough representation of women and other diverse groups in senior leadership roles?

I have been so fortunate to be surrounded by successful women in leadership throughout my career at DuPont across all areas of the organization. I think this is a rarity in the industry. I am proud to be part of an organization that embraces us and recognizes the value of all people to have a seat at the table.

As a female leader yourself, do you feel greater responsibility for championing diversity? Are there specific things you are doing to support and mentor the next generation of female leaders at DuPont and in your community?

I've always been a relationship builder, valuing relationships as a mentor and a mentee. The key is to acknowledge that we all have unconscious bias and make sure that those you are building relationships with don't all look like you. I do feel a responsibility to champion diversity. To repay all of those women who came before me, turned around, looked back and took my hand to pull me forward and up.

What more could be done by both the industry and government to help improve diversity? For example, how could we encourage more women to follow science-based career paths?

Studies have shown that when we show kids examples of success in industries that look like them, kids understand that career path is an option. And this understanding starts young and extends into college. Showing people there are opportunities is the first step. Building a diverse culture where people know their perspectives and contributions are valued is the second step. First find them. Then keep them. We all have to walk the walk. The talk isn't good enough any longer. We have to prove it in our actions.

Can you tell us what DuPont is doing to support diversity and inclusion within the organization?

We can all do more. We have great programs that recognize that diversity adds value to decision making by bringing broad perspectives and ideas that you don't get with group think. However, I think the most important thing that DuPont is doing is: DuPont recognizes that more is always needed. DuPont isn't settling. DuPont is always looking for new ways to make sure we are doing our best.

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Before we conclude, is there anything else you think is important in terms of improving diversity in the industry?

Starting younger and younger will be the key. Not only looking around at our co-workers to understand what actions we can take to improve diversity and therefore bring value to DuPont and the industry today. But what can we do to get people thinking about careers in high school, so that we can bring value to the future as well. Going to high schools where children can see adults that look like them who are engineers, scientists, etc. This encourages kids to understand what is possible.

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A robust year for the global chemicals M&A market

By Gillian Morris, John Arp, and Marc Summers

M&A activity remains hot as private equity and global players drive deals in the global chemical industry

Merger and acquisition (M&A) activity in the global chemicals and performance technologies sector throughout 2021 has been remarkable and the ongoing wave of transactions continues to fuel one of the hottest deal markets ever witnessed in the sector.

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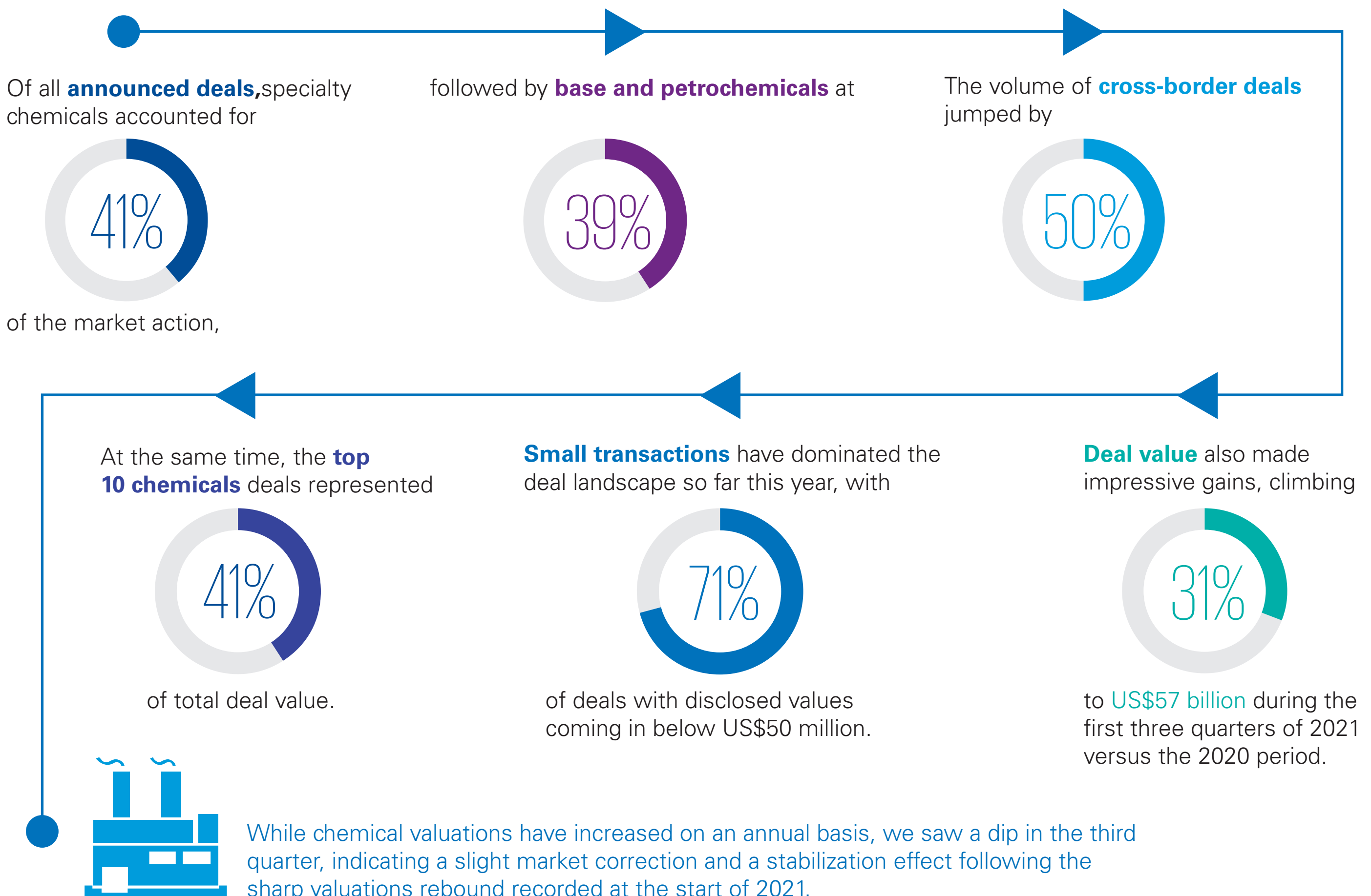
Divestments and consolidation. Inorganic growth strategies in surging and adjacent markets. Evolving supply chain strategies. The impact of global players. A growing focus on environmental, social and governance (ESG). These key trends are exerting a significant impact on M&A activity.

We can spotlight an array of factors driving today's hot transaction environment: the pursuit of growth via expansion or entry in surging specialty chemical markets; the need to solve global supply chain disruptions; abundant cheap debt; recovering valuations and investor confidence; burgeoning private equity interest; shedding of underperforming and non-core assets; and the ongoing recovery of end markets. Suffice it to say there is no shortage of marketplace drivers keeping M&A activity on the high side.

Private equity players continue to step up and play a significant role in the current market. A key change from previous hot deal markets is the fact that many players now view commodity chemicals assets and single product manufacturing sites as attractive – plus the belief that they can be successfully run for cash through the chemicals cycle. Private equity investors accounted for a healthy 47 percent of deal value through the third quarter. Private and family-owned companies holding abundant pools of money are assessing how best to invest amid strategic objectives that include enhancing brand presence, entering growth markets or minimizing exposure to cyclical downturns.

Looking at overall deal volume for the year to date through the third quarter reveals an impressive 27 percent year-over-year jump to 893 announced deals, which is good news for the sector following a steady decline in deal volume over the past four years. M&A activity this year through the third quarter has been led by continued strong momentum in the specialty chemicals subsector and the recovery of key end markets such as automotive, construction, coatings and manufacturing.



Source: Deal Capsule, Transactions in Chemicals — November 2021

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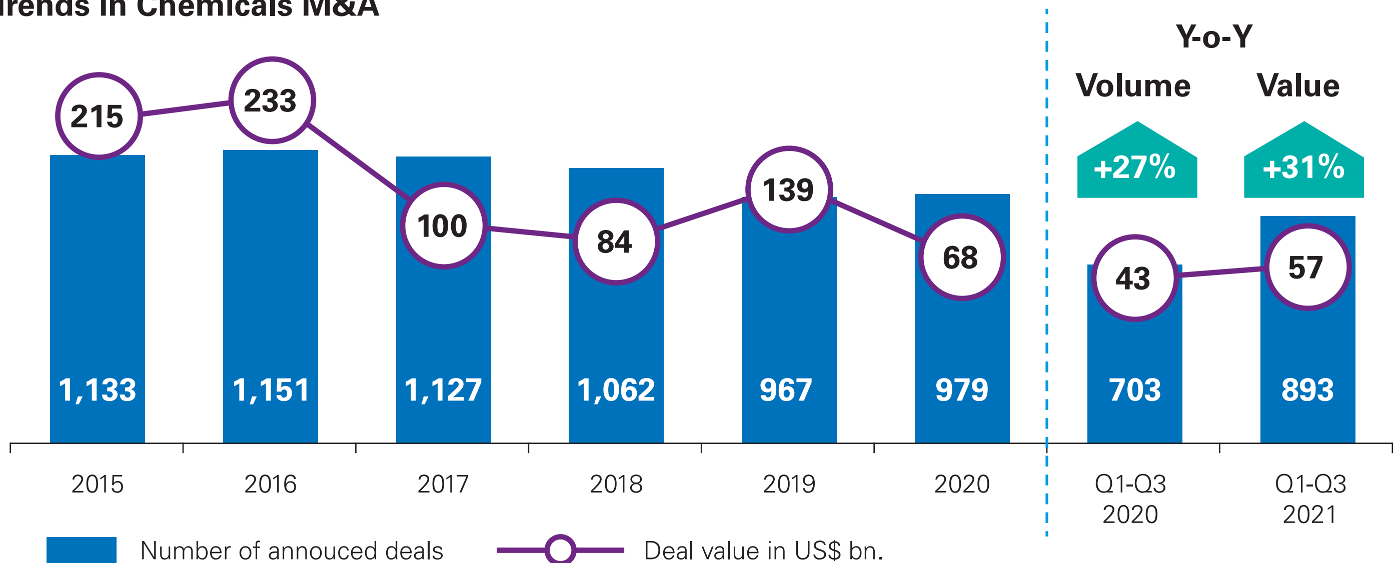
Looking ahead with cautious optimism

We cannot underestimate the impact of the global pandemic and inflationary pressures on chemical firm strategies, with many businesses reviewing portfolios to optimize them for future success, while also addressing today's supply chain localization trend.

While there is no 'one-size-fits-all' approach to driving innovation that will enhance growth and success prospects, there is an unmistakable recognition industry wide that the time to act is now and we anticipate the coming year to maintain the active M&A environment. Influencing deal activity and the desire to close deals without delay are mid-term US elections and potential changes that could impact the M&A market.

We expect M&A activity going forward to be driven by specialty chemicals amid robust growth in their end markets. Uncertain economic indicators, fluctuating raw materials prices and the rising cost of oil could create downward pressures, particularly in petrochemicals. At the same time, raised valuations across the industry mean strategic buyers, in particular, are spending more time on synergy case evaluation to compete with private equity buyers. We're also recommending far more robust integration processes than ever, helping to ensure value is genuinely captured to justify the higher prices companies are paying for assets.

Trends in Chemicals M&A



Source: Deal Capsule, Transactions in Chemicals – November 2021

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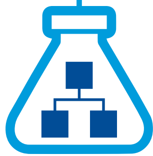

Diversification gives way to a new reality

To diversify or not to diversify? That's no longer a prevailing question for the sector. The order of the day is strategic-focused plays.

Businesses have come to realize that diversification is an outdated trend, and we've seen numerous examples to illustrate a new reality that is rendering diversification strategies obsolete among chemicals businesses.

DuPont is a good example as it sharpens its focus on its electronics and industrial business. Meanwhile, Trinseo has divested some assets as it looks to focus on more attractive business acquisitions and has acquired Arkema's PMMA/MMA business as part of its transformation to a specialty solutions provider. Trinseo also announced a deal to acquire Aristech Surfaces to strengthen Trinseo's strong position in acrylic solutions and drive expansion into wellness, niche leisure and architectural end markets in key geographies.[1]

We also saw Lanxess AG, a leading specialty chemicals company, complete the second-largest acquisition in its history with a US$1.04-billion deal for Emerald Kalama Chemical, a leading global manufacturer of specialty chemicals. The acquisition strengthens Lanxess's leading position in preservatives for consumer and industrial applications and also makes Lanxess one of the leading providers of products for flavors and fragrances — an area in which the specialty chemicals company anticipates sustained strong growth.

Historically, many of the biggest chemical companies have embraced diversification, typically through M&As, to better weather cyclicality and gain economies of scale. But during the past decade, game-changing pressures have unmistakably emerged to rewrite the rules, including the growing influence of activist investors voicing demands that sector businesses take action to restructure portfolios for better returns, focus on core businesses, and implement new ESG strategies.

As the market has demonstrated, companies that remained focused on the 'wrong' segments of the market have suffered the most during the current global health crisis. With key learnings from 2020 top of mind, businesses are charting a new path forward that marks an unmistakable shift away from diversification strategies and toward higher-growth specialty chemicals markets.

Firms are actively assessing whether they are under- or over-exposed to certain segments and looking to enhance operational performance via cost reductions, automation, digital innovation and new markets — while maintaining a sharp focus on core business efficiency and growth prospects.

Global players make their presence felt

The market action among global chemicals businesses continues to play a key role in driving overall deal activity. As noted, the volume of cross-border deals jumped by 50 percent, while the deal value of the top 10 global deals announced in the first to third quarter of 2021 amounted to US$23.6 billion.

In our view, forward-looking chemical businesses are increasingly looking to establish operations and attract new customers in emerging markets. They continue to review portfolios and demonstrate more active portfolio management, selling off less-valuable operations, localizing supply chains, accumulating cash, and using it to acquire assets offering diverse business profiles and higher returns. We continue to see a growing number of global buyers pursuing assets that include local holdings.

Among deals reflecting the trend toward portfolio management was the announced deal by specialty chemical company Clariant to divest its pigments business to a consortium of Heubach Group and SK Capital Partners. Clariant's CEO noted that the deal represents a final step in the company's multiyear divestment program and portfolio repositioning.

We also saw the US$26.2-billion megamerger between International Flavors & Fragrances (IFF) and DuPont Nutrition and Biosciences, a deal that solidifies IFF's place as one of the biggest players in the ingredients space. The merger brings together IFF's expertise in food flavors and fragrances with the former DuPont division's leading position in probiotics. IFF says the combined company has leadership positions in taste, texture, scent, nutrition, enzymes, cultures, soy proteins and probiotics.[3]

[1] https://investor.trinseo.com/home/news/default.aspx

[2] https://lanxess.com/en/Media/Press-Releases/2021/08/LANXESS-completes-acquisition-of-Emerald-Kalama-Chemical

[3] https://www.fooddive.com/news/iff-and-dupont-nutrition-biosciences-have-merged-whats-next/594445/

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Meanwhile, Hexion Holdings agreed to sell its epoxy resins and raw materials business to Westlake Chemical for US$1.2 billion.[4] That deal brings more specialty chemicals to Westlake's portfolio as it pursues sustainable, high-growth markets. The company had 2020 sales of US$7.5 billion, of which nearly 80 percent came from chlor-alkali, polyvinyl chloride, and related products. Westlake also purchased Boral's North American building products unit for US$2.15 billion.[5] The acquisition will nearly double Westlake's building products business by adding leading brands in the premium roofing, siding, trim, shutters and windows business within North America's fast-growing housing markets.

Highlights among other global deals announced to date through the third quarter include:

- Platinum Equity's pending US$5.3-billion deal to acquire Solenis International's water treatment solutions and chemicals business in the specialty chemicals subsector. Solenis is to be merged post-deal with Platinum's Segura Water to scale up Sigura's water-treatment products and food packaging/paper businesses.
- Bain Capital/Cinven Partners' pending US$4.7-billion deal for Swiss-based Lonza AG's hygiene and personal care business in the specialty chemicals subsector. Lonza Specialty Ingredients provides products that are critical in the production of disinfectants, preservatives and sanitizers.
- DL Holdings Co.'s pending US$2.5-billion deal for Kraton Corp.'s specialty polymers and bio-based chemicals operations in the petrochemicals subsector. DL is aiming to expand its portfolio and global reach in more than 70 countries.
- Prince International's pending US$2.1-billion deal for Ferro Corp.'s specialty subsector chemicals coating and color solution business.
- EverArc Holdings' pending US$2.0-billion deal for SK Invictus Intermediate's specialty subsector lubricant additives and firefighting products business.

Supply chains are going local

While supply chain strategies have not been a key focus among chemical businesses in recent years, responding to the disruptive economic impact of the global pandemic and its profound effect on supply chains now appears to be a priority for the industry.

Chemicals supply chains have become increasingly global throughout the years in order to optimize costs, tax requirements and just-in-time delivery. But the pandemic has unexpectedly provided a serious eye opener. Pandemic-related production shutdowns in China, for example, are prompting major US players to race for solutions that will help them improve logistics and fill ailing pipelines. We anticipate a continued shift away from offshore suppliers by many businesses.

In our view, enhanced resilience and sustained operations are the order of the day. Chemical sector organizations are unmistakably focused on protecting their businesses. That's translating into vertical integration and localization initiatives aimed at ensuring the efficiency and smooth operation of supply chains in today's disrupted global environment.

Not to be underestimated is the influence of institutional investors who are demanding action amid the disruption and pressuring sector business leaders to pursue supply chain strategies that offer greater stability and security.

Adding complexity to the supply chain innovation picture is the need to address the ongoing impact of raw material fluctuations, weather disasters across the globe, and chronic labor shortages in many economies. Also crucial is the need for businesses to balance rapid supply chain innovation with the constraints of limited resources, time and investments.

In response to ongoing supply chain headwinds, Sherwin-Williams announced two deals to expand its production capacity. In August 2021, it announced an agreement to acquire the European industrial coatings business of Sika AG, a transaction that is expected to close in early 2022. And in September, Sherwin-Williams announced an agreement to expand its internal resin manufacturing capabilities with the acquisition of Specialty Polymers Inc., a leading manufacturer of water-based polymers used in architectural and industrial coatings.[6]

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[4] https://ca.finance.yahoo.com/news/westlake-wlk-buy-hexions-epoxy-202908143.html

[5] https://www.businesswire.com/news/home/20210620005247/en/Westlake-Significantly-Expands-its-Presence-in-the-Growing-North-American-Home-Construction-Materials-Markets-by-Acquiring-Boral%E2%80%99s-North-American-Building-Products-Businesses

[6] https://investors.sherwin-williams.com/press-releases/press-release-details/2021/Despite-Strong-Demand-Sherwin-Williams-Lowers-Third-Quarter-and-Full-Year-2021-Sales-and-Earnings-Expectations-Amid-Escalating-Raw-Material-Availability-Challenges-and-Inflation-Headwinds/default.aspx

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A sharper focus on ESG pays off

Look for ESG factors to exert an increasing impact on M&A activity. We anticipate that ESG will be among the key drivers of deal activity in 2022 as more companies look to improve brands and public perceptions, minimize carbon footprints and enhance business value. The pursuit of modern digital technologies and capabilities that will drive progress on the ESG front and future proof businesses is also a priority. We're also seeing chemical companies put a much greater focus on ESG in the diligence phase of current deals, as they seek to avoid acquiring businesses that would lead to a downgrade of performance against their existing ESG metrics.

And make no mistake — there is little time to lose. Chemicals businesses are facing unprecedented pressure from activist investors, funders and today's environmentally aware public to reduce global carbon emissions. This includes pressures to split businesses, separating clean and renewable operations from traditional, less-sustainable businesses. Private equity players are among those voicing their intentions and looking more intensely for sustainable businesses within the sector.

In September, Engine No. 1, the San Francisco-based activist investor firm that forced a board shakeup at Exxon Mobil Corp. in order to accelerate its clean energy initiatives, unveiled its new ESG framework to assess investments. The money manager plans to integrate ESG data with conventional financial analysis in order to scrutinize companies more closely as it chooses investments.[7]

Look for more businesses to respond accordingly. For example, in June, Dow Inc. released its *Intersections* report, the first consolidated ESG report highlighting Dow's progress as it looks to fully integrate environmental stewardship across its entire operations and supply chain.[8]

Also noteworthy on the ESG front is Arkema's announced first-place ranking among 42 global chemicals businesses that were assessed by rating and research agency Vigeo Eiris, part of Moody's ESG Solutions business unit. The ranking acknowledges Arkema's progress on its new climate plan and key objective of reducing greenhouse gas emissions by 38 percent by 2030.[9]

While the chemical industry has demonstrated a commitment to ESG strategies, we believe there is more to be done as investors, regulators and consumers look for companies to become more accountable for their ESG impacts and solutions. Amid growing global demand for responsible investing, for example, we've seen large fund managers exit investments in climate-unconscious companies At the same time, consumers are publicly demanding that businesses take a stronger stand. In our view, C-suite executives are no doubt clearly feeling the pressure to enhance their progress against ESG targets.

Not to be underestimated is the fact that the chemical industry plays a vital role in unlocking powerful climate strategies across today's industrial manufacturing value chain. We believe sector businesses are ideally positioned to supply sustainably produced products into downstream industries and ultimately enhance competitive advantage for end-market players.

[7] https://www.bloomberg.com/news/articles/2021-09-13/engine-no-1-unveils-esg-framework-to-scrutinize-investments

[8] https://www.businesswire.com/news/home/20210624005646/en/Dow-further-enhances-transparency-on-ESG-priorities-and-progress-publishes-comprehensive-%E2%80%9CINtersections%E2%80%9D-ESG-report

[9] https://www.arkema.com/global/en/media/newslist/news/global/csr/2021/20210908-arkema-tops-spot-companies-chemical-sector-ve/

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In conclusion, while it is expected that the global pandemic will continue to create uncertainty in the global economy, we believe the chemicals M&A market will remain hot amid investor confidence, historically high transaction multiples, abundant cheap debt, continued private equity interest and divestments of non-core assets. As noted, we anticipate M&A activity going forward to be driven by specialty chemicals amid robust growth in their end markets. The race for progress on the ESG front amid investor and public pressures for change will also continue to play a significant role in deal strategies.

We cannot rule out the potential impact of supply chain bottlenecks, inflationary pressures, rising raw materials and oil prices, global labor force shortages and potential stock market volatility. But this year has so far provided ample evidence of resilience in the sector's M&A market and we remain optimistic about the sector's prospects for 2022.

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KPMG's Global Chemicals Institute

These are exciting times for the global chemical industry, and KPMG firms are proud to support such a vital part of modern life. Clients produce components in phones and tablets, the majority of non-metallic automotive parts, paints, coatings, personal care products, packaging, water treatment products, agrochemicals and a multitude of other products around the world. Equally as important, we are committed to helping the global chemical industry maintain its unwavering focus on sustainability and products designed to help improve lives and make the planet healthier.

We also recognize the challenges involved with running a global chemical organization today. A confluence of events continues to batter chemicals supply chains around the world. The industry is experiencing a very robust deals market. Chemicals organizations are seeking to expand their technical capabilities while also appropriately maintaining cyber security vigilance. ESG is becoming more mainstream due to intensifying investor, regulatory, and consumer pressure holding companies accountable for ESG impacts. Adding to this complexity is the uncertain global economy and geopolitical risk, which is presenting significant challenges for chemicals producers.

KPMG firms help chemical organizations to compete and thrive in this rapidly evolving business environment. Backed by a global organization of over **1,000** professionals, KPMG global chemical practices provide tax, audit and advisory services, as well as a range of information resources and thought leadership to help industry executives stay informed and up-to-date on recent developments in their sector. With KPMG, chemical organizations can develop new ways to create robust, sustainable and flexible strategies, teams and operating models that can quickly adapt in a dynamically unfolding future.

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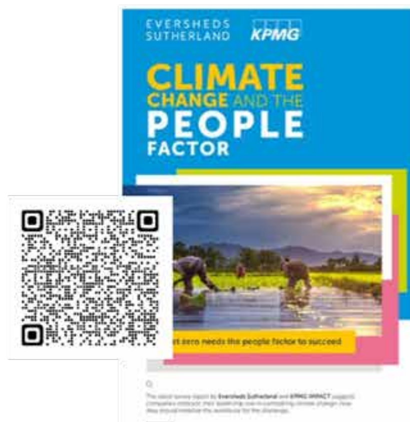

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