

Dow CEO Fitterling tops global ranking

With a sharp focus on ESG, Jim Fitterling is leading Dow in a new direction through capital disciplined growth combined with sustainability. Zero carbon is the future

Joseph Chang New York

Leading the storied US-based chemical company through challenging times with a strategy focused on capital discipline, Dow chairman and CEO Jim Fitterling is now further shifting the company's direction towards sustainability with exciting initiatives in plastics recycling and "zero carbon crackers".

"The pandemic has given us an opportunity to recalibrate - to put out big goals, listen to stakeholders and re-prioritise and focus investments that will catalyse greater innovation across value chains," said Fitterling.

Specifically two areas will make the chemical industry stronger in the long run - commitment to ESG (environmental, social and governance), and digitisation, he noted.

On the ESG side, "there is demand from customers for products that are recyclable and that help them combat climate change", said Fitterling, providing chemical companies the opportunity to provide "true leadership".

Under Fitterling, Dow is accelerating its own goals, aiming to take out around 5m tonnes/year of CO2 emissions from its 2020 baseline by 2030 - a 15% reduction - and getting to carbon neutral by 2050.

By 2030, Dow aims to enable 1m tonnes of plastic to be collected, recycled or reused through direct actions and partnerships, and by 2035 have 100% of its packaging products be recyclable or reusable.

"The entire industry can really provide strong innovations and extend the growth of the sector for decades to come," said Fitterling.

Dow's development of a new family post-consumer recycled (PCR) resins is one of the first of its kind, tackling the hard-to-recycle film market on a global scale.

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1 CHAIRMAN AND CEO DOW Jim Fitterling



In November, Dow announced the launch of its PCR polyethylene (PE) resin in North America. The PCR-based low-density PE resin, is designed for retail and logistic shrink film applications and contains up to 70% PCR content.

At Fitterling's direction, Dow in January 2019 became a founding member of the Alliance to End Plastic Waste (AEPW), which is undertaking a number of projects around the world to eliminate plastic waste from the environment - the rivers and oceans in particular.

'Zero carbon crackers'

Dow is also aiming to build zero carbon crackers in the future as it works on developing a set of process technologies to make that happen. "There is a lot of pressure on the industry right now to get carbon reductions and get CO2 emissions down. So as you continue to bring on new capacity, people are going to look at that new capacity and look at your carbon footprint," said Fitterling.

"That is one of the reasons we are working on about four technologies on the process technology side in the ethylene and propylene production area that are all geared towards being able to build future plants that could po-

tentially be zero carbon crackers, and also being able to retrofit existing plants to get a 20-40% reduction in CO2 footprint," he added.

Dow is exploring how to reduce carbon emissions from its crackers by using fluidised catalytic dehydrogenation (FCDh) technology. It is retrofitting one of its mixed feed crackers in Plaquemine, Louisiana, by the end of 2021, to produce over 100,000 tonnes/year of on-purpose propylene. "This would deliver a 20% reduction in CO2 emissions, and the same technology can be applied to ethane to ethylene with a 40% reduction," said Fitterling.

"We have a line of sight to crackers that are much more efficient," he noted, adding that a "zero carbon cracker" would likely have some form of carbon capture and sequestration (CCS). Dow is also targeting up to 750 megawatts (MW) of alternative energy - wind and solar - to power its plant operations while reducing carbon footprint.

While working on groundbreaking technologies to reduce carbon emissions, the CEO is a realist, calling for government policies to foster the adoption of technologies to dramatically reduce or eliminate carbon emissions from crackers, as "all this is not as affordable as what we do today", he noted.

Disciplined capex

When Fitterling took the reins at Dow in July 2018, he instilled a culture of capital discipline. The "new Dow" would not build mega projects as the company had in the past, but focus on incremental capacity expansions and debt repayment.

That focus allowed Dow to survive and prosper through the coronavirus pandemic as its strong balance sheet served as a buffer from extremely challenging business conditions. The company responded quickly to the challenges by cutting its 2020 capital spending (capex) budget to \$1.25bn versus \$1.5bn at the beginning of the year.

"For Dow, growth capital will be further downstream and more discreet - less of the mega project type," said Fitterling. ■

Additional reporting by Hyejin Kim

2 PRESIDENT AND CEO ARAMCO Amin Nasser



The winner of the 2020 Kavalier Award, Amin Nasser, is targeting chemicals investments in India and China as part of Saudi Aramco's global oil-to-downstream chemicals strategy. Nasser received the award on 3 December following a vote among his senior executive peers in the ICIS Top 40 Power Players.

As the CEO of the world's largest oil company, he expects about half of the growth in oil demand over the next decade to come from chemicals. Thus, he is targeting major growth in chemicals, aiming to convert a larger portion of the oil barrel - 70% or more - into downstream chemicals through crude oil-to-chemicals (COTC) technology.

In India, Aramco is in the process of acquiring a 20% stake in Reliance Industries' oil-to-chemicals (O2C) business for \$15bn, and also continues to work with ADNOC and a consortium of Indian oil companies on a

plan to build a 1.2m bbl/day integrated refining and petrochemical complex in Raigad, on the west coast.

Aramco's \$69bn acquisition of SABIC in June 2020 was a watershed deal, bringing it further downstream in chemicals and specialty polymers.

"We see SABIC as transformational for us and a key enabler to deliver on Aramco's chemical strategy. SABIC has the global footprint, marketing presence and assets in numerous countries, which will allow us to capitalise on opportunities," said Nasser.

"If you combine our upstream strength and refining capacity of more than 5m bbl/day with SABIC's chemicals asset base and global presence, it has made us one of the top global chemical players," he added. Aramco and SABIC together had about 90m tonnes/year of petrochemicals production in 2019.

3 CEO SOLVAY Ilham Kadri



Solvay CEO Ilham Kadri has made a solid ascent up the power player rankings in the chemicals industry. Kadri was faced with challenges - lower crude prices and weakness in end markets - but this does not paint the whole picture. Although the aviation industry suffered, Solvay's focus on the defence sector meant more resilient demand for its composites.

Third quarter earnings rose after bottoming out mid-year, and free cash flow rose to €801m in the first nine months of 2020 - more than double the prior-year period. Kadri has implemented a cost-saving programme to improve free cash flow, and has succeeded in returning more to shareholders, despite the coronavirus pandemic. The company expects to save €300m from core production this year, with €150m from structural cost reduction. The Solvay One Planet agenda launched in February, outlining 10 sustainability goals to

be achieved over the next decade. These targets are centred on helping the climate, preserving natural resources, and creating a better life for Solvay employees.

In response to the pandemic, Kadri launched the Solvay Solidarity Fund to help colleagues or dependants suffering hardship due to the coronavirus. Instead of insisting on a return to offices, Solvay promoted a "work from anywhere" policy to allow flexibility in remote working. The focus on keeping a talented workforce, coupled with big business ambitions, such as being a market leader in green hydrogen production, indicate Kadri's vision.

On the lack of female leaders in chemicals, Kadri told ICIS: "I wish that because you have a woman at the top of the company that the problem is resolved. No, it is not resolved, we are still anecdotes out there, especially in the chemicals industry."

4 CEO LYONDELLBASELL Bob Patel



Patel has pulled off a rare feat in chemicals M&A with the acquisition of a 50% stake in Sasol's new Louisiana cracker and downstream polyethylene (PE) units for \$2bn, and a 50% stake in Bora's cracker and downstream PE and polypropylene (PP) project in China which is starting up.

This essentially creates a "synthetic" world-scale cracker at an attractive cost with zero project execution risk in two key areas in the world - one where the growth is (China) and the other in one of the most feedstock advantaged regions (US).

The two-time Kavalier Award winner (2019, 2018) is also at the forefront of plastics sustainability, announcing a target for LyondellBasell of producing 2m tonnes/year of recycled and renewable plastics by 2030.

LyondellBasell started up its molecular recycling pilot plant in Italy in September using

its proprietary technology and could be ready to build a commercial plant by mid-decade.

In December, its Quality Circular Polymers (QCP) JV with SUEZ in Europe acquired recycled pellet producer TIVACO, boosting production capacity of recycled polymers to 55,000 tonnes/year.

The US plastics recycling market requires higher prices and better collection and sorting capabilities to catch up to Europe and become viable for polyolefins, Patel maintains.

"The challenge is that the economics of landfill is far better than recycling in the US, so the value of recycled polymers must increase," said Patel.

LyondellBasell under Patel continues to be active as a founding member of the Alliance to End Plastic Waste (AEPW), and is committed to zero plastic pellet leakage from production plants.

5 CHAIRMAN INEOS Jim Ratcliffe



Billionaire Jim Ratcliffe continues to build INEOS aggressively. In June he signed a huge \$5bn deal to acquire BP's aromatics and acetyls assets. INEOS will take ownership of 15 sites across the world - eight are located in Asia, five in the US and two in Europe - as well as BP's participation in 10 joint ventures. Ratcliffe has always been opportunistic and seized the moment after BP announced a \$15bn divestiture programme. Despite a time of economic downturn, this is

the second largest acquisition INEOS has ever made - only topped by the \$9bn acquisition of Innovene in 2005 - also from BP. Ratcliffe chose a site in France over his original choice of Wales to build the new Grenadier off-road vehicle.

6 CEO BASF Martin Brudermüller



BASF's Brudermüller brought into the German chemicals major a more dynamic way of exercising power and a focus on technology, digital and green. He understands those are the only ways for a chemicals company in its current form to survive the upcoming hurricane of EU's regulations to decarbonise the economy by 2050. That contrasts with his predecessor Kurt Bock, who only three years ago said electric vehicles were not a thing for BASF to worry about. Instead, Brudermüller is speeding up investments in battery technologies. His strategy seems to be paying off with investors - who at times struggle to understand a chemicals giant like BASF - and the company's performance has been rather resilient in a 2020 plagued with woes.

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7 CEO SIBUR Dimitry Konov



In August, Sibur broke ground on the enormous Amur cracker project in eastern Russia which will be transformational, doubling the company's polymer capacities and making it one of the biggest producers in Europe. It also ties in perfectly both with China's Belt and Road initiative and Russia's desire to diversify its economy and boost exports. The 2.3m tonnes/year polyethylene (PE) and 400,000 tonnes/year polypropylene (PP) project is located in the far east of Russia,

near the border with China. The project, due onstream in 2024/2025, will use ethane from Gazprom's Amur Gas Processing Plant as it ramps up over the same time frame. Under the leadership of Dimitry Konov, Sibur has grown aggressively over the past few years.

8 CEO PLASTIC ENERGY Carlos Monreal



Under the leadership of Carlos Monreal, Plastic Energy has grown quickly to become one of the most successful chemical recyclers in Europe, if not the world. The group is a leader in this technology, with two commercial scale chemical recycling facilities already operating in Spain. This year it has partnered with some petrochemical players as they try to expand their recycling strategies. These include Nestle (studying UK recycling project), Total (15,000 tonnes/year plant

in France with targetted start-up of 2023), US group Sealed Air (group invested in Plastic Energy to collaborate on new technology) and INEOS (for a plant to be located near an INEOS cracker). In February, the group said it plans to build 20 plants by 2025.

9 PRESIDENT, REFINING & CHEMICALS TOTAL Bernard Pinatel



Total's transition towards sustainability continues with Bernard Pinatel at the helm of the supermajor's chemicals division. This was reinforced by Total's mid-year announcement to sell its 5.4m tonnes/year refinery in Lincolnshire, UK, to focus on its core assets. This was followed by an announcement to convert its crude Grandpuits, France, refinery to make polyactic acid (PLA) and biofuels from sugar. At this year's virtual EPCA event, Pinatel shared Total's plans to

use electricity via pipeline from solar farms in Spain. This will reduce emissions by almost 2m tonnes/year, in line with Total's ambition to become carbon neutral by 2050, in the near-term to produce 30% of plastics will recycled material.

10 CHAIRMAN, PRESIDENT AND CEO HUNTSMAN Peter Huntsman



Huntsman is transforming the firm from a diversified chemicals company, to one more focused on specialties through two major divestitures and several acquisitions, all while maintaining a solid balance sheet. It closed the sale of its intermediates and surfactants business to Indorama for \$2bn in February, and then announced the sale of its 49% stake in TiO2 producer Venator to SK Capital for \$100m in August. This will largely mark Huntsman's exit from commodities

as it focuses on specialty polyurethanes and epoxy resins. Huntsman has made acquisitions in polyurethane spray foams, as well as in adhesives, coatings and composite materials. In December, it announced the \$250m acquisition of Gabriel Performance Products.

11 CEO AGILYX Tim Stedman



Tim Stedman recently became the head of Agilyx, which started off building a plant that converts waste polystyrene (PS) into a styrene oil that can be repolymerised. It is now pursuing partnerships to expand. That first recycling plant is now operated by Regenyx, a JV with AmSty.

Agilyx and Lucite are developing a way to chemically recycle polymethyl methacrylate. In December, Agilyx and ExxonMobil formed the Cyclyx JV to develop ways to aggregate and process waste plastic for recycling. Agilyx and A.Eon Holdings are also evaluating a plant that will convert waste plastic into a synthetic crude for power generation. To top it off, Agilyx successfully listed its shares on the Merkur Market of the Oslo Stock Exchange in Norway.

12 CHAIRMAN SINOPEC GROUP Zhang Yuzhuo



Zhang was appointed as Chairman of Sinopec, China's biggest refiner and leading chemical producer, in January 2020. In his first year in Sinopec and the petrochemical industry, the company started up the integrated refining and petrochemical complex called Zhongke Refining and Petrochemical at Zhanjiang in Guangdong province in June 2020. It has a 200,000 bbl/day refining capacity and 800,000 tonnes/year of ethylene in first phase. The second phase is expected to have 300,000 bbl/day of refinery and 1m tonne/year of ethylene capacity.

Zhang started his career in 1985 and worked 32 years in a coal-related research institute, then another three years' service in the Tianjin government until late 2019.

13 HEAD OF PETROCHEMICALS RELIANCE Nikhil Meswani



Reliance's petrochemical business has weathered a challenging 2020, which has had a deep impact on the Indian economy.

Reliance continues to be in discussions with Aramco to sell a 20% stake for about \$15bn in its petroleum and petrochemical operations to the Saudi giant, which is aiming to expand its oil-to-chemicals (O2C) business. This includes Reliance's refining and petrochemicals assets which Reliance is planning to spin off into a

separate entity to facilitate the stake sale. Reliance is targeting a \$9.8bn expansion of its Jamnagar site, involving COTC (crude oil-to-chemicals) with its multizone catalytic cracking and Aramco's fluid catalytic cracking technologies.

14 PRESIDENT EXXONMOBIL CHEMICAL Karen McKee



After taking over at ExxonMobil Chemical in April 2019, Karen McKee was tasked with bringing a new US cracker online as part of its joint venture with Saudi Arabia-based SABIC. Just over a year later, the project is on track to start up ahead of schedule. The complex in San Patricio county in Texas, which will produce ethylene, linear low density polyethylene (LLDPE), ethylene oxide (EO) and monoethylene glycol (MEG), is expected to start up in Q4 2021. McKee also led

ExxonMobil Chemical to ramp up production of critical products needed to help stop the spread of the coronavirus. It increased production of raw materials for much-needed medical masks, gowns and hand sanitizers.

15 CEO INDORAMA VENTURES Aloke Lohia



As the head of Thailand-based Indorama Ventures, a world leader in polyethylene terephthalate (PET) and fibres, Lohia has made strides in sustainability and broadened the company's portfolio with its \$2bn acquisition of Huntsman's intermediates and surfactants business. The company announced a goal of recycling 10bn/year of post-consumer PET bottles in Europe by 2023 through its newly acquired site in France, and expansions of two facilities in Poland.

Indorama plans to increase its PET recycling capacity to 750,000 tonnes/year by 2025. It was recently awarded a \$300m Blue Loan to boost its recycling capacity in Asia and South America with, a specific focus on tackling ocean-bound plastic waste.

16 PRESIDENT AND CEO CELANESE Lori Ryerkerk



As the head of US-based Celanese, a global producer of acetyls, nylon and polypropylene (PP) compounds and polybutylene terephthalate (PBT), Ryerkerk has positioned the company to take advantage of the greater need for engineered plastics in electric vehicles (EVs) and specialty resins for 5G cellular networks. She said she has a short, but well-defined, list of targets for mergers and acquisitions for 2021, including deals that could easily bolt on to existing businesses as well as

larger, more transformational ones. Celanese sold its 45% stake in Japanese engineered plastic company Polyplastics for \$1.6bn. Ryerkerk announced in April that construction of the new acetic acid plant at its Clear Lake site in Texas would be delayed by 18 months.

17 PRESIDENT AND CEO CHEVRON PHILLIPS CHEMICAL Mark Lashier



Under Lashier, the company in October produced its first tonnes of chemically recycled polyethylene (PE) from mixed plastics and announced plans to produce 454,000 tonnes/year of chemically recycled PE by 2030 - the largest chemical recycling capacity so far announced. As a founding member of the Alliance to End Plastic Waste (AEPW), Chevron Phillips Chemical is working to develop easier-to-recycle materials and processes, infrastructure solutions and provide education.

"We are tackling it head on," said Lashier. "There is an incredible amount of intellect and brainpower that will allow the industry to transcend attempts to ban plastics or turn to alternatives that don't serve people well or leave a larger environmental footprint."

18 CEO AND CHAIRMAN WANHUA CHEMICAL Liao Zengtai



As chairman of Wanhua Chemical, Liao heads the Chinese chemical giant in further expanding its product portfolio to a far wider range of products. It commissioned its 1m tonne/year cracker at Yantai in November and downstream plants are gradually coming on stream. The company is also participating in a mega refining and petrochemical complex at Yantai. This grassroots project will have a first phase refining capacity of 400,000 bbl/day and two crackers each at 1.5m

tonnes/year, investment estimated at CNY388bn (\$60bn). The ultimate target of this complex is a refining capacity of 1.2m bbl/day. Investors are quite optimistic on the company's performance and future potential. Its stock prices at Shanghai gained over 50% this year.

19 PRESIDENT AND CEO TRINSEO Frank Bozich



The president and CEO of US styrenics producer Trinseo in December announced a transformational deal - the purchase of France-based Arkema's polymethyl methacrylate (PMMA) business for about €1.14bn.

"This acquisition will be a catalyst for portfolio transformation toward becoming a higher margin, less cyclical solutions provider," said Bozich, who will also explore a sale of Trinseo's synthetic rubber business. The CEO is also advancing polystyrene (PS) recycling projects.

Trinseo's AmSty joint venture with Chevron Phillips Chemical launched a JV with Agilyx called Regenyx to fully recycle post-consumer PS. Trinseo also partnered with INEOS Styrolution on a PS recycling project in Wingle, France, scheduled to start up in 2023.

20 PRESIDENT AND CEO CHEMOURS Mark Vergnano



Heading up the world's largest TiO₂ company, Vergnano is revolutionising the market with the company's 'Value Stabilization' program - one aspect of which provides security of supply along with price stability with no set volume commitments, and the other an online portal where customers can buy volumes at a specified price. He has taken quick actions to guide Chemours through the pandemic. Vergnano emphasises the company's commitment to sustainability with

goals of reducing emissions of fluorinated organic chemicals by 99% or more, and to become 'carbon positive' by 2050. He is also chairman of the American Chemistry Council (ACC) board of directors and co-chair of the ACC's Sustainability Committee.

21 CEO SHERWIN-WILLIAMS John Morikis



John Morikis has led Sherwin Williams through a period of particularly strong financial performance, and through the disruption caused by the coronavirus pandemic.

The US-headquartered paints maker gained the ICIS Company of the Year Award - for its financial performance in 2019. A strong year for the company was driven by record sales for the ninth consecutive year and record cash from operations for the fifth consecutive year. Morikis has

been with Sherwin Williams for more than 30 years. A recognised team player, he was chief operating officer of the company before becoming CEO. Sherwin Williams' sales have continued to grow through the pandemic.

22 CEO BOREALIS Alfred Stern



Borealis' private ownership changed hands this year, from Abu Dhabi to Vienna, after Austrian major OMV acquired a majority stake in a deal from Mubadala.

This allows Alfred Stern the calm which other CEOs of publicly listed companies cannot afford, pressed by the quarterly results.

While the fundamentals are right, Borealis has taken a hit this year from the global recession as well as from an accident at its Swedish facilities.

Although there were no injuries, the event was a stain for a company that prides itself on safety records. It affected Borealis' sales in the packaging sector booming at the time as Europeans were locked up at home.

23 **CEO COVESTRO** Markus Steilemann



Steilemann stepped into the CEO role at Covestro in mid-2018 as the company's trajectory shifted toward the downward part of its cycle. Despite worries about the impact of the pandemic after earnings halved the previous year, Steilemann looks to be delivering results practically on track with 2019, with the momentum expected to carry into 2021. He has refocused the company's mission firmly on the sustainability goals, drawing down a €1.5bn credit facility linked to environ-

ment, social, governance (ESG) performance, and securing European Investment Bank funding for green research. The price paid for DSM's resins and functional materials business raised eyebrows, but will substantially expand its coatings and adhesives presence.

24 **CEO VERSALIS** Daniele Ferrari



Daniele Ferrari stepped down as president of European chemicals trade federation Cefic this year, having held the position since 2018. The Versalis CEO had been the face of the industry as the EU introduced its Green Deal and at the peak of the lockdowns that disrupted European economies in the early months of the coronavirus pandemic. Ferrari has continued to guide Versalis towards a stronger, more sustainable future. Already producing chemicals from bio-based raw materi-

als, it is now pushing into bio-based products for agriculture. It has been developing a green chemistry hub at Porto Marghera in northwest Italy for a number of years. Versalis reacted quickly to the pandemic and in July started producing a bioethanol-based sanitizer.

25 **PRESIDENT AND CEO WESTLAKE CHEMICAL** Albert Chao



Keeping a steady hand at the helm of the US-based vinyls and olefins producer, Chao is keeping to the strategy of being disciplined and opportunistic. The company's strong balance sheet has served it well during the pandemic, allowing it to refinance debt at attractive rates. After increasing its stake in the US joint venture cracker with Lotte to 22.8% and undertaking incremental expansions in polyvinyl chloride (PVC), vinyl chloride monomer (VCM) and chlor-alkali

capacity last year, the company was well positioned to harvest upside amid the recovery from the pandemic lows this year. While no major deals have been announced in 2020, the company is expected to be on the lookout, in line with its opportunistic nature.

26 **EXECUTIVE VICE PRESIDENT SHELL CHEMICALS** Thomas Casparie



Oil and gas firms are facing the challenges of dealing with protracted low oil pricing, pushing downstream and adapting to the sustainability agenda, which means that many firms are looming larger in the chemicals landscape just as chemicals are looming larger on the horizons of the crude giants. Casparie takes up the global chemicals chief mantle this year from Graham Van't Hoff at a time when that business is growing rapidly, from traditional oil company plays like a

worldscale cracker complex in the US, to more nuanced chemicals sector plays such as expansion into the Asian polycarbonates sector. The green agenda also remains, with plans for more efficient furnaces at Moerdijk and research on electric cracking technology.

27 **CEO ASCEND PERFORMANCE MATERIALS** Phil McDivitt



Leading US-based Ascend Performance Materials, McDivitt has made a series of global acquisitions, the latest being NCM (Changshu) Co Ltd, and Tehe Engineering Plastic (Suzhou) Co Ltd, located in China. The deal further expands Ascend's geographic presence, following the acquisition of European compounding and masterbatch businesses Poliblend and Esseti Plast. Ascend plans to use its China compounding acquisition as a base to further grow its local manufactur-

ing and technical presence in Asia. "This is part of our strategy to expand our footprint globally with the intention of getting closer to customers in each location," said McDivitt. Ascend plans to expand the capacity at the China site and to build a global R&D centre there.

28 **CHAIRMAN AND CEO ARKEMA** Thierry Le Henaff



Ever since the acquisition of Bostik in 2014, Arkema has pursued a slow, steady growth strategy that has continually paid off, targeting small acquisitions in the fragmented adhesives space and gradually expanding a successful and profitable business. Le Henaff took a bolder move this year, setting out plans to grow the proportion of revenues from specialty chemicals from a targeted 80% by 2023 to 100% by 2024, requiring substantial reforms in its methacrylates, fluoro-

gases and Asian acrylates operations. There is a substantial difference to operating with 80% specialties and 100% specialties, but Le Henaff's methodical approach to developing the company seems well suited to the challenge.

29 **CEO LANXESS** Matthias Zachert



Matthias Zachert continued to drive change at LANXESS and has led the push towards greater sustainability for the company. 2020 has proved to be a difficult year, with sales and earnings hit hard by the coronavirus pandemic. However, with customer industries improving, LANXESS is looking stronger. Zachert and his management team have acknowledged the exceptional role played by employees during pandemic lockdowns and beyond.

LANXESS said in November that it would be paying a special bonus for the extraordinary commitment of its employees during the coronavirus pandemic.

"In particular, our colleagues at the plants played a crucial role in keeping our business running during the crisis," said Zachert.

30 **CHAIRMAN ZHEJIANG PETROCHEMICAL** Li Shuirong



As Chairman of Zhejiang Petrochemical Co (ZPC), Li leads the company in another milestone by speeding up construction of the second phase of its Zhoushan-based refining and petrochemical complex. The second phase, same as the first, is equipped with a 400,000 bbl/day refinery, 5.2m tonnes/year of aromatics capacity and a 1.4m tonne/year cracker. The refinery came on stream in late October, while the petrochemical capacity is expected to start operation in the

first half of 2021. The facility will provide paraxylene feedstock for Rongsheng Petrochemical, ZPC's parent, in PTA production, bringing the company cost advantages. ZPC will depend on exports to digest gasoline and other fuels, as the domestic market is oversupplied.

31 **CEO SASOL** Fleetwood Grobler



Sasol's new CEO took over the company in November 2019, following the resignation of the previous two co-CEOs. Sasol had seen a series of cost over-runs and delays at its Lake Charles, US, cracker and downstream units project. This year, Grobler sold a 50% stake in the cracker and polymer plants to LyondellBasell. Sasol is faced with financial challenges as the pandemic and oil price collapse hit revenues and cashflow.

However, Grobler is determined to turn the company around. He negotiated better terms on debt covenants, and implemented Sasol 2.0 – a plan which aims to improve profitability and swing the company towards use of natural gas and renewables, plus a focus on specialty chemicals.

32 **PRESIDENT AND CEO SIAM CEMENT GROUP (SCG)** Roongrote Rangsiyopash



SCG under Rangsiyopash has embarked on a string of acquisitions to grow its packaging business, which was spun off as a separate company that launched its IPO on 22 October 2020. The IPO proceeds were meant to fund further expansions in the ASEAN region, with acquisitions and projects under way in Vietnam, Indonesia, the Philippines and Thailand. Due for completion in 2020-2021 are projects worth Thai baht (Bt) 8.2bn.

The packaging business benefits from southeast Asia's consumer spending growth, which proved to be resilient against the economic recession. SCG Packaging aims to double its revenues over five years from Bt89.1bn in 2019 and cement its status as ASEAN's largest packaging solutions provider.

33 **CEO BRENTAG** Christian Kohlpaintner



When Christian Kohlpaintner took over from Steve Holland as CEO of Brenntag in January 2020, he was quite open about his dissatisfaction with the company's profitability. He spoke about Project Brenntag, which would aim to improve financial performance. Then the pandemic hit, making business conditions tougher for the world's largest chemical distributor. In October 2020, Brenntag unveiled a cost-saving programme which saw a reduction of its work-

force and the closure of 100 sites globally. It aims to post €220m higher earnings by 2023 as a result of Project Brenntag. From January 2021, the company will be structured under two global divisions: Brenntag Essentials and Brenntag Specialties.

34 **CHAIRMAN AND CEO DUPONT** Ed Breen



Retaking the helm of DuPont in February to revitalise growth, Breen is planning to spend the proceeds from its pending deal with International Flavors & Fragrances (IFF) on debt repayments, share buybacks and mergers and acquisitions (M&A). DuPont will merge its nutrition & biosciences business with IFF in a deal expected to close in Q1 2021. DuPont expects to receive \$7.3bn from the sale, of which around \$5bn will be used to pay debt. Any acquisitions in

2021 will likely be companies that DuPont can bolt on to existing businesses, Breen said.

Some businesses and products mentioned by Breen include water treatment, electronics and materials used in 5G.

35 CHAIRMAN, PRESIDENT AND CEO HEXION

Craig Rogerson



Rogerson has been leading Hexion through the sale of three businesses, including its Phenolic Specialty Resins, Hexamine and the European-based Forest Products Resins to investment firms Black Diamond and Investindustrial for \$425m. The transaction includes 11 manufacturing facilities globally. Hexion is expected to close the deal in the first quarter of 2021. The company is restructuring its portfolio and shifting away from the cyclical nature of the business as it

looks for opportunities to expand the business. Hexion also announced new sustainability goals this year, including a commitment to produce products with sustainable attributes by 2030 and a plan to reduce spill mass and releases by 80% by 2025.

36 CEO PETRONAS CHEMICALS GROUP

Sazali Hamzah



Despite setbacks arising from the pandemic, CEO and managing director of PETRONAS Chemicals Group (PCG) Sazali Hamzah kept the company on track to complete its slate of new projects in Malaysia, while still pursuing specialty chemical projects. Plants at the Pengerang Integrated Complex (PIC) are now 99.9% complete and are preparing for start-up in early 2021. PCG's operations have largely remained uninterrupted in the first nine months of 2020, with plants operating

above 90% capacity, despite sales and overall margins impacted by weak demand. The company is looking for new ways to bolster its specialty portfolio, including converting waste plastic to crude naphtha and alternative feedstocks for chemicals, such as biomass.

37 CHAIRWOMAN HENGLI PETROCHEMICAL

Fan Hongwei



Hengli continued its ambitious expansion in 2020 and moving upstream remains a key direction. In January 2020, it signed an agreement with the Shaanxi local government on an investment of a CNY150bn (\$23bn) coal-based chemical project at Yulin. The proposed coal-to-methanol capacity is initially set at 12m tonnes/year. Methanol will be further converted to olefins and downstream fine chemicals, polyesters and fibres. That followed its start-up of a 400,000 bbl/day

refining and petrochemical complex at Changxing Island in Dalian in 2019. This project mainly provides feedstock para-xylene for its purified terephthalic acid and polyester production. In the 2020 Fortune Global 500, Hengli Group was ranked 107, up from 181 in 2019.

38 CEO PURECYCLE TECHNOLOGIES

Mike Otworth



Otworth leads the US-based polypropylene (PP) recycling technology company PureCycle which is set to go public in Q1 2021 in a transaction with an equity value of \$1.2bn and gross cash proceeds of about \$700m. PureCycle holds an exclusive global license to commercialise a patented solvent-based purification recycling technology, developed by P&G, for restoring waste PP into virgin-like resin. Going public will help PureCycle accelerate the rollout, "addressing

the immense global problem" associated with PP waste, said Otworth. The company is building its first commercial-scale plant in Ironton, Ohio, which is expected to have nameplate capacity of about 107m lb/year when completed in late 2022.

39 CEO GENOMATICA

Christophe Schilling



As the co-founder and CEO of Genomatica, Schilling has made strides in sustainability this year with the development of a pilot plant for 100% renewable nylon 6 in Slovenia, in partnership with Italian nylon producer Aquafil. The demonstration plant is expected to create 50 tonnes of bio-nylon for pre-commercial use to make renewably sourced apparel products. This is the company's third renewable process technology. Genomatica previously commercialised renewable

butanediol (BDO) that can be used as a solvent or to produce polyurethane, and butylene glycol for use in personal care and cosmetic products, which the company produces by fermenting sugars with microorganisms with no intermediate steps.

40 EXECUTIVE DIRECTOR GRUPO POCHTECA

Eugenio Manzano



The head of Mexico-based chemicals distributor Grupo Pochteca is sharpening the company's focus on digitalisation as the coronavirus pandemic accelerates the need to better connect with customers and suppliers remotely and via online platforms. "Covid-19 has certainly changed the way people work and customers and suppliers interact in our industry. Remote work and the low-touch economy are here to stay," said Manzano. On the e-commerce front, Pochteca

is learning more about customer behaviour through its Conjunto Lar de Mexico personal care and cosmetics division's e-commerce marketplace which launched in 2019. The company is in the process of rolling out e-commerce marketplaces for its other businesses.

Power Players - Ones to Watch

We pick out a few of the new leaders of the chemical industry, executives who will be facing challenging times in the sector over the next few years

CEO BRASKEM

Roberto Simoes



Since becoming Braskem's CEO in 2020, Roberto Simoes has led the company through the pandemic demand crash as well as the subsequent recovery. The company started up a new polypropylene (PP) plant in the US in 2020. Braskem is continuing its sustainability programme covering mechanical and chemical recycling. Challenges remain. Braskem continues to face costs from subsidence associated with its salt mines in northeastern Brazil. Mexico has also cut off natural gas supplies to the Braskem Idesa JV, prompting it to shut down.

CEO GRUPO IDESA

Patricio Gutierrez



Patricio Gutierrez became the CEO of Grupo Idesa after the retirement of Jose Uriegas. Idesa will be grappling with Ethylene XXI, the polyethylene (PE) complex in Mexico that is owned by the Braskem Idesa joint venture. Idesa owns a 25% stake in the company. The Mexican government has cut off natural-gas supplies to the complex, escalating its dispute over a contract that supplies ethane to the site. The government alleges the contract is

too expensive. Braskem Idesa and its partners have repeatedly defended the contract.

PRESIDENT AND CEO NOVA CHEMICALS

Luis Sierra



Sierra joined Canada-based NOVA Chemicals in August as president and CEO after a distinguished 30-year career at BP, where most recently he was CEO of BP's aromatic chemicals business, leading a business with operations in the US, China, Belgium, Indonesia and Taiwan. In October, NOVA announced the sale of its expandable styrenics business to Mexico's Alpek. The deal will strengthen NOVA's balance sheet and allow the company to focus on its olefins

and polyethylene (PE) business. Those plans include finishing its PE project in Ontario, Canada, and investing in plastics recycling.

CHAIRMAN HELM

Stephan Schnabel



Stephan Schnabel took over as chairman of the executive board of family-owned HELM in April 2020. He is the third generation of the Schnabel family to run the business. He has been with the HELM Group for over 20 years. After his apprenticeship in foreign trade, he held positions in Dusseldorf, Germany, and Istanbul, Turkey, before being appointed to the executive board in 2012. HELM markets fertilizers and bulk chemicals such as monoethylene glycol

(MEG), methanol and propylene as well as intermediates. It is also a manufacturer of crop protection products.

CEO CLARIANT

Conrad Keijzer



Starting in the new year, Keijzer takes the reins at Clariant at a time of flux for the Switzerland-based major.

After the scrapping of a merger of parts of Clariant's operations with shareholder and Aramco subsidiary SABIC, the company successfully closed the sale of its masterbatches division on time despite the pandemic, and has revived its paused pigments division sale.

Keijzer will need to help the company weather the pandemic, as well as to realise plans to grow its presence in Asia.

