SPECIAL REPORT ON MEXICO

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Mexico's chemical industry

This report has been produced by Global Business Reports. Research conducted by Ben Cherrington, Mariolga Guyon and Jason Spizer. For more information, please visit gbreports.com, or contact info@gbreports.com. Main cover photo courtesy of Unigel. Other photos courtesy of Evonik, Reacciones Químicas and Pochteca.

INTRODUCTION

Mexico's chemical industry can help its economy rebound in 2021, but structural issues need to be addressed.

Economic turmoil in Mexico mirrored personal tragedy in 2020, as GDP in Latin America's second-biggest economy fell by 8.5% in seasonally adjusted terms, according to the estimate issued by national statistics agency INEGI. This was the sharpest annual contraction in Mexico since the Great Depression in 1932, and compounded the misery for a country mourning over 190,000 official Covid-19 deaths by March 2021.

In reality, Mexico's Covid body count is even more sobering, as deaths in the country from March 2020 to January 2021 were 52% higher than the average in the four previous years, equating to a rate of excess deaths during the pandemic well above the only two countries with more recorded fatalities – the US and Brazil. Furthermore, the financial burden lockdown restrictions have placed on a 58% informal workforce (per INEGI estimate) has curtailed consumer spending.

Despite the somber backdrop, certain segments of Mexico's economy offer rays of hope for a country in dire need of a rebound. Its chemical industry, deemed essential by the government because it supplies raw materials to over 30 different sectors, will play a fundamental role in Mexico's economic growth in 2021, estimated by the World Bank to be in region of 3.7%. "Chemical supply to the pharmaceutical industry, sanitization products and raw materials for healthcare, agricultural products and packaging for the food industry have all remained strong. In fact, each of these sub-sectors have achieved close to or above double-digit growth in 2020," revealed Miguel Benedetto, director general of chemical industry association ANIQ.

The Q4 rebound of sectors that suffered in 2020, such as construction, infrastructure and the auto industry, in addition to the success of vaccine rollouts in countries such as the UK and Israel, signify light at the end of the tunnel, and a roadmap for reopening economies in 2021.

Mexico's growing role as an international manufacturing hub, its strategic position as the gateway between North and Latin America, and its large domestic market with room for middle-class expansion, offer its chemical industry ample opportunity for significant growth. However, to fulfil its potential, the country will have to address a number of structural issues that go beyond Covid.

Miguel Benedetto, director general of chemical industry association ANIQ

Benedetto suggested that Mexico's chemical industry could achieve pre-pandemic levels of production by the end of 2021, but 2019 was also a challenging year. Low petrochemical prices have put pressure on margins, and a lack of feedstock, a persistent problem in Mexico, has forced some producers including Braskem Idesa to rely on imports to maintain their projected levels of output.

The issues surrounding Petróleos Mexicanos (Pemex) are emblematic of the challenges facing Mexico and its chemical sector, with the industry unable to go beyond a 70% utilization rate due to the limitations of its heavily indebted state oil company. A shortage of natural gas, methane and ethane resulted in Mexico importing US$32 billion in petrochemicals to feed the chemical industry value chain in 2019, as well as an additional 7 billion cubic feet per day of natural gas. This has negatively impacted the competitiveness of Mexico's chemical industry and many downstream industrial segments. The country's ability to address the issue will be key to its progress in the years ahead. ■

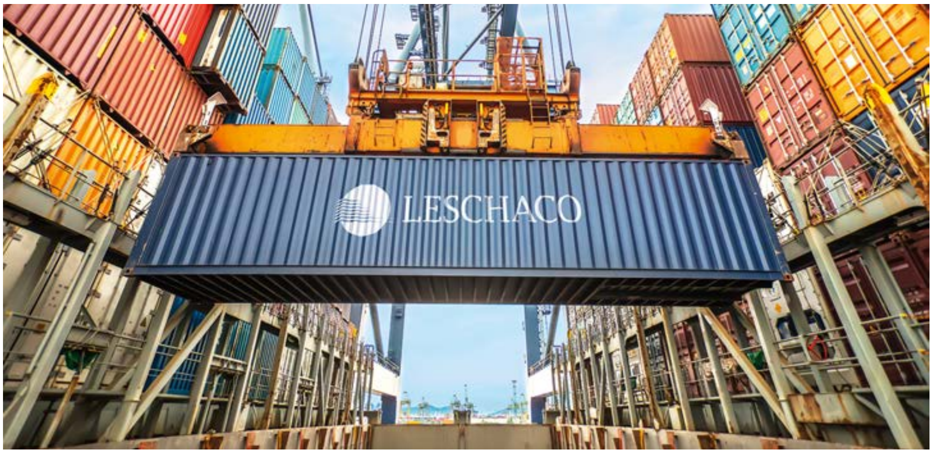

Photo courtesy of Leschaco.





A GLOBAL MANUFACTURING HUB

"So far from God, so close to the USA." The famous quote attributed to former Mexican president, Porfirio Díaz, is a rueful reflection on proximity to a powerful, expansionist neighbor. However, this proximity also has its benefits. The USCMA (United States–Mexico–Canada Agreement), often referred to as the "New NAFTA", came into effect on July 2nd, 2020, and adds continuity to a trade deal that has transformed Mexico into an international hub for manufacturing and exportation. Although the country's domestic market has suffered in recent years, its chemical exports have risen incrementally. "The implementation of the USMCA certainly helps us from an export point of view," reflected Miguel Benedetto, who mentioned that during discussions to create the agreement there were three main factors ANIQ focused on, all of which have been implemented. Firstly, there are now more ways to fulfil the requirements of rules of origin; secondly, there is a level playing field for legislation; and finally, an investment chapter has been incorporated into the agreement to recognize private sector investment by American and Canadian companies in Mexico – "A point that was excluded in the 1994 NAFTA because the energy sector was restricted to Pemex (this was opened up in 2013, and has been included in the USMCA)," added Benedetto.

Martin Toscano, managing director of Evonik Industries Mexico

Abraham Klip Moshinsky, director general of Plastiglas (Unigel Mexico)

"Mexico is becoming more of a powerhouse for global exports platforms," stated Martin Toscano, managing director of Evonik Industries' Mexican division, citing an open business mindset and free trade agreements that allow the country access to over 60% to 70% of global GDP. Toscano went on to explain that the automotive industry was the frontrunner in this respect, but in recent years, other sectors have followed the same strategy of establishing global manufacturing facilities in Mexico due to its logistics network throughout the Americas, proximity to North America, cheap labor and running costs, and a favorable regulatory framework for foreign trade.

An example of Mexico's growing presence as an international manufacturer is Apotex, a private pharmaceutical company with products present in 115 countries. Apotex has three manufacturing sites in Mexico, two for APIs in Toluca and Cuernavaca, and one for finesse dosages in Mexico City. Américo García, managing director of Apotex's Latam operations, mentioned that, despite healthcare sales to the government decreasing in 2020, from a long-term perspective, Mexico offers opportunity for growth for multinationals, due to the size of the country and its population, as well as its strategic position between the US and Latin America.

Abraham Klip Moshinsky, general director of Plastiglas, the Mexican subsidiary of Unigel, cited the company's export business of acrylic sheets as being one of the key drivers which contributed to a record breaking year in terms of volume sold. In Q4 2020, Unigel finished building a new US$8 million plant in Mexico to produce extruded sheets, to complement Plastiglas' production of cell cast acrylic sheets, according to Moshinsky, and production started in December. "As the market for this is small in Mexico, it is a product we are looking to export. The demand for acrylics for schools, offices and the health sector in the US in increasing, and we believe this is a growth area in the coming years." ■

PETROCHEMICALS: THE PEMEX CONUNDRUM

On February 19th, 2021, the Mexican government granted new fiscal support worth 73.28 billion pesos (US$3.54 billion) to Pemex, to help alleviate the firm's finances. The stimulus is the latest in a long line of tax breaks made in an effort to reignite the failing national champion, a top priority for the AMLO administration.

In addition to tax breaks, the government has planned to modernize Pemex's refineries and infrastructure, announcing a number of important projects where private industry will be investing or co-investing, revealed Eugenio Manzano, executive director of chemical distributor, Pochteca. "Chemical plants in southeastern Mexico are running at low operating rates and with higher costs than their counterparts in other countries, which has generated many inefficiencies downstream and a large commercial deficit of more than US$25 billion per year," observed Manzano.

However, Manzano also felt confident the investments being made to improve the competitiveness of Mexico's chemical industry will bear fruit in the coming years. "We need a strong and efficient Pemex, where key raw materials originate, as well as public policy that fosters investment by the private sector in the energy and petrochemical industries."

Miguel Benedetto commented that ANIQ has been working between industry and government to develop joint projects that would

Photo courtesy of Unigel/Plastiglas.

ensure a more reliable source of feedstock coming from Pemex. “We would like industry to be able to invest in Pemex facilities, either to make inputs and create infrastructure, or to invest into Pemex assets that have been left idle due to a lack of government resources,” he said, explaining that these projects include infrastructure works, such as the creation of highways where a lot of chemical products are incorporated in construction.

“Availability of raw materials is everything in the chemical industry, and you have to build your plants as close to the source as possible,” reflected Abraham Klip Moshinsky, noting that Mexico has the potential capacity, but the industry must find a way to cooperate with Pemex. “If this issue is not resolved, companies will have to keep importing feedstock, and more companies will continue investing in the US rather than Mexico.”

Indeed, Unigel used to have an agreement with Pemex to produce propylene, from which Plastiglas obtained a co-product used to produce methyl methacrylate for acrylic sheets. However, this stopped in 2017 due to a lack of raw materials from Pemex and ever since, Unigel has had to import feedstock from Brazil.

Jesús García Saíd, director general of IQUISA, a Mexican producer of chloride, caustic soda (sodium hydroxide), sodium hypochlorite and hydrochloric acid, mirrored the sentiment that a lack of feedstock was the biggest challenge facing Mexico’s chemical sector: “The country should look to encourage domestic ethanol production and domestic methane gas production to boost the Mexican petrochemicals industry.”

Perhaps the standout example of Mexico’s lack of feedstock revolves around a dispute between Pemex and Braskem Idesa, the joint venture between Braskem and Grupo Idesa. In December 2020, Mexico’s natural gas control center Cenagas refused to renew a contract to transport natural gas supplied by Pemex to Braskem Idesa’s Etileno XXI polyethylene complex in Veracruz state. An apparent refusal by Braskem Idesa to change the terms of a 2010 agreement with Pemex, under which Pemex would sell 66,000 b/d of ethane to Braskem Idesa at a discounted price, is at the crux of the issue for AMLO, who believes the deal was shrouded in corruption and unfair on Pemex.

Since the deal was struck, Pemex's ethane production has steadily declined, so that Mexico's state oil company has failed to meet the supply commitment in recent months. In January 2021, Braskem Idesa partially resumed production at its Etileno XXI complex, applying an "experimental business model" to get the plant up and running, although it did not state the utilization level of the unit under the new scheme.

Although the ongoing dispute between Pemex and Braskem Idesa continues to negatively impact the country's chemical industry as a whole, it has benefitted some of Braskem Idesa's competitors. Raúl Baz, director general of Grupo Petroquímico Beta (GPB), elaborated: "Although the ethylene oxide market has been tough, the government decision to make available ethane for the production of Ethylene Oxide has benefited GPB substantially."

Baz is referring to a new bidding process in place that has granted GPB access to be the first bidders on excess ethylene oxide, allowing for stability with clients. However, he mentioned that other solutions which the government has decided not to take, such as making use of ships which liquify ethane, have created a large deficit of ethylene oxide in the country. ■

SPECIALTY CHEMICALS

HEALTHCARE AND PERSONAL CARE

As margins for commodity chemicals shrunk over the years, companies have increasingly turned to specialty chemicals as a solution to the challenging quest for profitability. From multinationals to domestic producers and distributors, the market for specialties has grown on the back of increasingly specialized and complex industrial sectors.

Healthcare and personal care were two of the sectors to achieve growth in 2020, despite the challenging macro conditions. Rafael Méndez, regional director – Latam Northern Tier for British specialty chemicals company Croda International, commented that healthcare was one of the segments the company had been investing most in, including the acquisition of a US-based company called Avanti Polar Lipids, which complements Croda's excipients business for vaccines. "We have been participating in a lot of vaccine projects globally, including with Pfizer to supply specialty chemicals for the final formula," said Méndez, adding that Croda had also been working on R&D projects with other companies, such as Oxford-AstraZeneca.

This past year was also particularly notable for Órgano Síntesis (OSSA). The company was acquired by US based Pilot Chemical in early 2020, as part of its strategy to expand into new technologies and increase manufacturing capabilities. OSSA proceeded to perform very well throughout the year, given its focus on biocide production, which, as a result of the pandemic, saw demand increase drastically in a short time. According to OSSA general director Federico Soto: "In a few months, demand had doubled or increased fourfold with respects to regular levels. The challenge was not just on the production side. It was difficult to obtain enough raw materials from different countries to meet demand in our plant. We are competing with manufacturers all over the world for the same raw materials and demand in Europe and America has been very high."

Federico Soto, director general of Órgano Síntesis (OSSA)

Within their biocide catalogue, benzethonium chloride is of distinct strength. It is a cGMP product, produced in accordance with FDA and PMDA regulations.

Consequently, the company is increasing its plant capacity aggressively as it expects to grow production by around 88% in 2021, and by 30% in subsequent years.

If there is a theme that links both healthcare and personal care, particularly since the start of the pandemic, it has been the increasing importance of sanitary diligence and rigorous use of cleaning products. For companies such as Key Química, which focus on the janitorial side of specialty chemicals, this has presented a lot of opportunity. Today, Key Química has a network 76 distribution centers in 53 cities throughout Mexico, with a specialty chemical manufacturing business, CYAN, which exports to 17 countries across the Americas.

Jaime Herrera, Key's director general, believes that strict sanitary protocols will continue even after Covid is under control: "Even before the pandemic, the main cause of infections spread in hospitals came from lack of hand cleaning, accounting for 50%," he said, adding that hand cleaning is one of Key's principal R&D areas. "If Covid-19 has taught us anything, it is that cleanliness and hygiene is a necessity and should be a priority for all businesses," he added.

Perhaps one of the lesser-known applications for gasses in healthcare is the important role they play in oxygen delivery. Grupo INFRA, a subsidiary of the 100 year old Infra Group, oversees the medical market for the company. Jesús Cabrera, vice president of Grupo INFRA proclaimed: "Oxygen is now the principal medicine around the world being used to combat COVID. As a result, our hospital and homecare businesses have grown rapidly in 2020, as they played an important role in conquering the COVID pandemic… We worked 24/7 to produce and deliver oxygen on time. It is a theme across the world and, because of all the hard work we put in throughout the pandemic, Grupo INFRA is now very well positioned to help hospitals meet their supply requirements well into the future."

Dieter Femfert, commercial director at Grupo INFRA's sister company Cryoinfra, pointed out that the company is making a big bet on Mexico despite the challenging conditions: "In 2020 we opened two plants in Mexicali, and in February 2021, we inaugurated a new argon, nitrogen, and oxygen plant in Ciudad Juárez for the northern part of Mexico. In March 2021, we will open another plant in Aguascalientes, and in September, another one in San Luis Potosí, located strategically to supply oxygen, nitrogen and argon via oxygen ducts and nitrogen ducts."

COVID'S IMPACT ON THE AUTO INDUSTRY

The automotive industry, a key component of Mexico's economy, was one of the worst affected sectors in 2020, as the pandemic and work-from-home orders grounded transport to a halt. Global sales of automobiles fell to 64 million units in 2020, down from a peak of almost 80 million units in 2017. However, a rebound in Q4 2020, fueled in part by many commuters looking to avoid public transport, has painted a slightly brighter picture for 2021.

"The state of the automobile sector can be measured by the sales of new vehicles. These figures suffered a 64% drop in Q2 – a historic record. It rebounded in Q3 and Q4, but is still 25 to 30% down from 2019 figures," related José Luis Guzmán, direc-

Jesús Cabrera, vice president of Grupo INFRA

tor general of Castrol México, which is involved in the market for lubricants for cars, trucks, motorcycles, airplanes and industrial applications. Guzmán went on to say that the indicators for 2021 and 2022 forecast a challenging landscape because there will be a vacuum of cars that would have otherwise been in circulation.

Despite the challenging context, Guzmán mentioned that Castrol's sales in Mexico were back to 95% of pre-pandemic levels by the end of 2020, and the company is forecasting business to rebound and grow 30% in 2021, in comparison to 2020. Guzmán cited Castrol Fleet technology, launched in September 2020, which encompasses a full array of products for big and medium sized trucks, as a key growth driver.

Meanwhile, multinational company Lubrizol noticed a large decrease in demand at the beginning of the pandemic, but this gradually picked up as more cars returned to the streets. The multinational company makes additives for lubricants, of which the vast majority goes to vehicles. Wagner Sa, Lubrizol's vice president for Latin America, explained why Mexico remained an important market for Lubrizol: "Although Mexico currently has a lower production of cars, there are still a lot of old vehicles running, and this played to our advantage. There is a greater demand for lubricants for old cars which have old technology engines compared to newly manufactured cars."

The automotive industry has also been an instrumental driver for Cologne based Lanxess. Pedro Bojacá, director general of Lanxess, pointed to the signing of the USMCA as being a key factor influencing the uptick in business. "We are part of the supply chain of automotive companies in Europe and Asia and, being in the new USMCA market, we have promising growth prospects in producing plastics and specialty products for the rubber industry, which is linked to the automotive industry," Bojacá explained.

CONSTRUCTION & INFRASTRUCTURE

Although construction was deemed an essential industry in Mexico, many large projects were put on hold during the pandemic, and the economic recession stunted the development of new properties and infrastructure. However, with governments looking to revive economies in the wake of the pandemic, infrastructure projects will represent significant opportunity for specialty chemicals producers and distributors.

EUCLID, the specialty chemicals arm of the RPM Group, sees Latin American infrastructure projects as a key growth area, according to its VP Latin America, Marcela Ruge: "In this segment, chemical additives for concrete are one of our most important products, and we are also able to tailor products to our clients' needs. We are currently experiencing high demand for products such as coatings and anti-bacterial floor cleaners due to the pandemic."

Daniel Dueñas, CEO of EUCOMEX, EUCLID's Mexican subsidiary, noted that the company has been participating in some of the most important infrastructure projects for the Mexican government, including working at the Dos Bocas Refinery, the Santa Lucía airport and the construction of the Maya train.

Infrastructure projects are not the only positive after-effect of Covid, as Gabriel Londoño, managing director of Omya Mexico, explained how an increase in domestic construction impacted the chemical market from Q3 2020 onwards: "The main positive factor was renewed interest in home improvements. Because Mexicans were ordered to stay at home, the market for house renovations grew, which was good for the sales of paint and coating." ■

AGROCHEMICALS

Mexico is privileged when it comes to food, and this goes beyond its wonderful cuisine. It is the 11th largest food producer in the world and one of the leading food exporters globally. According to Cristian García, executive director of association PROCCYT (Protección de Cultivos, Ciencia y Tecnología): "Mexico has 12 free trade agreements with 46 countries, representing a potential market of 1.4 billion people. This encourages the search for new opportunities and better conditions for the sale of agricultural products from Mexico."

The factors contributing to Mexico's advantageous agricultural setting are primarily weather conditions and geography. In the north, Mexico has cold conditions, while the south has a tropical climate. This weather variability allows Mexico to produce a wide diversity of crops.

UMFFAAC, the Mexican Union of Agrochemical Manufacturers and Formulators, revealed that by November 2020, Mexico's agricultural sector had recorded a US$11.4 billion surplus, or a 43.2% growth year on year. "Our slogan has been 'the field cannot stop', and indeed it has not stopped for a single minute," stated Luis Eduardo González, UMFFAAC's president, who noted growth across a variety of products, including avocados, peppers, tomatoes and berries, beer and tequila, with exports up by nearly 5%.

Mexico's largest domestic agrochemical producer, Agricultura Nacional, part of the Dragón Group, has been in operation for over 85 years. The company has two plants, in Puebla and Lerma, and offers solutions for crop protection, such as fungicides, insecti-

Cristian García, executive director of PROCCYT

Luis Eduardo González, president of UMFFAAC

cides, and products for plant physiology. Martín Fueyo, general director of Agricultura Nacional, explained that the company follows a set of principles during its vertically integrated product design processes, which can take between five to seven years before commercialization. "In the first place, we look to reduce the product's chemical demand and maximize the advantages it offers the crop producer. This means reducing environmental impact and improving control," said Fueyo, who added that the company's product development is guided by a search for efficiency and based on the challenges faced by its partners.

Mexico's agricultural GDP is growing and contributed US$10 billion in 2020. Nevertheless, there are a multitude of challenges facing growers throughout Mexico. Soil health, drought, pest resistance issues and greater pressure to use greener solutions are all forces impacting the industry. This means crop protection and technological adoption are essential if Mexico is to maintain its status as a leading food producer.

THE CHALLENGE OF MODERNIZATION

The agrochemical industry plays a fundamental role in supporting agriculture in order to increase production. One of the issues however, is that certain areas of the country are far behind in their adoption of new agricultural technologies. Javier Valdés, territory head Latam North at Syngenta, explained: "There is a big opportunity for Mexico to increase technification across the country. Particularly in the center and south, where farmers tend to be less advanced in their production techniques. We have demonstrated success in the southern part of Mexico many times, helping our tropical fruit producing partners increase their profitability."

Santiago Vera, general director at Grupo Versa, a company specialized in formulating products for crop protection, expressed a similar view, noting: "The agricultural market is supported by resource-poor farmers who need training and a healthy environment. We want people in field development, continually promoting and developing our products."

Field development has been more difficult during the pandemic, but fortunately, thanks to technologies such as Zoom, companies were able to still communicate with

Javier Valdés, head of Latam North at Syngenta

clients, despite not being able to meet in person. "This is not a technified sector and it remains very traditional, where people prefer in-person communication," observed Gad Ben Joseph, managing director of Koor Intercomercial S.A.

Jorge Casas, director general of commercialization and marketing at Agri Star México, commented that distributors can play a role by facilitating and leading technology transfers, but warned that there are steep challenges to technology dissemination due to demographics, such as rurality and poor schooling. "We need to elevate the profile of food producers in Mexico and ensure farmers provide an added value," said Casas, adding that Mexico needs an agricultural policy that recognizes the sector's strategic importance to the country, such as was done many years ago in Brazil with great success.

CONSOLIDATION AND SUSTAINABILITY DRIVE EVOLUTION IN CROP PROTECTION

The opportunity is clear; there are 292 crops that are dependent on agrochemicals throughout Mexico, making the crop protection industry worth US$1.3 billion. Companies see the area as awash with growth possibilities, thus making it primed for deal flow. AMVAC México approaches the market by acquiring, developing and manufacturing a group of agricultural products, specialty non-crop products and application technologies that enhance agricultural productivity. The company has grown its presence in Mexico from three new projects in 2018 to 36 new concepts in 2020, and on the back of this strategy, AMVAC's Mexican revenue grew from US$17 million in 2017 to US$33 million in 2020.

The company's latest push is into the biologics space with its acquisition of Agrinos. Speaking about the impetus for the deal, Marco Salcedo, director of AMVAC México,

Marco Salcedo, director of AMVAC México

highlighted: "The market is growing because the technology is getting better. Agrinos invested US$200 million in the biological space over the last 10 years and the technology is excellent. As technology for biological solutions increases, it then becomes increasingly more competitive with chemicals."

The second factor driving the deal was that it positions AMVAC as a leading provider of soil regeneration solutions. In combination with its SIMPAS technology, Agrinos products enable the grower to build biomass in the soil while also measuring, validating and documenting it. The process is analogous to boosting human health with vitamins.

FMC, one of the global leaders in crop protection, has also undergone a large transformation over the last five years to grow its participation in the Mexican and Latam markets, according to Carlos Jurado, FMC's Latin American North business director. This includes a number of acquisitions, such as Cheminova – which expanded FMC's stake in the fungicide and insecticide markets, and the 2018 acquisition of a share of Dupont's portfolio. "This array of products amounts to over US$30 million in revenue and sets FMC as industry leaders in the Mexican crop protection segment," explained Jurado.

FMC's outlook is to grow from its current market size of US$4.7 billion to US$5.5 billion by 2023, related Jurado, noting that this growth will be achieved mainly through the company's new portfolio of sustainable products (two new bio-fungicides, a new insecticide and a new herbicide).

J. Robert González, partner at AM-AG (which stands for American Agriculture), comes from a farming background and related how, for many years, people focused on farming as much as possible without paying proper attention to the soil as a living organism. Now, AM-AG is focusing on "helping the soil help us back." In 2018, AM-AG merged with US-based Sigma Agriscience and operates as their marketing arm in Mexico. González elaborated on Sigma Biosphere technology and how it helps conventional growers improve soil health and increase their existing yield and profitability: "Sigma Biosphere products make use of a range of soil and crop appropriate combinations of magnesium, calcium, sulfur and micronutrients in season-long form to augment NPK blends to maximise crop production across a variety of growing environments and crop rotations."

An important factor in the evolution of crop protection is not just how to increase productivity, but how to look after the land in a sustainable way. An interesting case in this respect is Acadian Plant Health, as 100% of its products are based on organic seaweed from Nova Scotia in northeast Canada. "To put it simply, if this seaweed disappears, our business disappears," stated Sergio Aburto, Acadian's Latin America Director, who mentioned that the company has a team of scientists to make seaweed sustainability better every year, to the extent that the volume of this seaweed has been increasing in Canada.

Mexico represents the biggest market for Acadian in Latin America, and the company is focused on providing bio-stimulation solutions for plant growth in the four main areas of stress that impact a plant – water, temperature, salinity and phytotoxicty. Aburto expanded on how Acadian's products give the plants their maximum potential to achieve greater yield: "We have the ability to turn on certain genes within the plant at different stages to make processes more productive. For example, for blooming, a plant requires a certain amount of hormones and micro elements, depending on the crop. Every crop has different requirements, and Acadian's products are designed to make the plant produce them and enhance the transportation of the right nutrients for each situation." ■

PAINTS & COATINGS

With the global paints and coatings market forecast to grow at 6.3% CAGR; from US$154 billion to US$250 billion in 2027, opportunities abound for players in the Mexican market. Some factors set to drive this growth are low interest rates around the world, making the cost of borrowing cheap for those looking to renovate and build new homes or purchase new vehicles. Despite the broader economy experiencing its sharpest contraction since the Great Depression of the 1930s, companies have learned to stay flexible and adaptable with regard to the segments of the paints and coatings market that present the most opportunity.

POCKETS OF PROSPERITY

One such company that has illustrated a capacity for adaptation is Charlotte Chemical, that managed to open a new ISO 9000 distribution center in Mexico City during the pandemic. The company is continuing expansion plans with a second facility in Monterrey and a third one in the west. Maggie Gómez Rábago, general director of Charlotte Chemical, reflected: "Even though a slowdown from some of our regular customers decreased our sales, we found new opportunities to offset them."

One of these new opportunity areas has been related to producing more environmentally friendly chemicals due to Mexico's volatile organic compound (VOC) regulations for architectural coatings. These regulations will be finalized in 2021. "There is higher demand for green products that meet the new standards. Consequently, we are helping our customers develop greener plasticizers, coalescents, and other additives," affirmed Rábago.

Similarly, Patricio Cueva, general director of Reacciones Químicas, which offers a range of products for the coatings and composites industry, noted the impact new VOC regulations will have on the industry. "We have been working for several years to develop products that comply and exceed these new regulatory requirements," said Cueva.

When questioned on the extent of the burden these new regulations pose, Cueva is optimistic that the regulations will benefit Mexican companies in the long run. "The legislation is more about placing Mexico's regulatory requirements on par with other parts of the world. It is an opportunity because developing higher quality products pushes our R&D team and generates more knowledge that helps prepare us for the future."

Maggie Gómez Rábago, director general of Charlotte Chemical

Patricio Cueva, director general of Reacciones Químicas

HEDGING ON HOUSING

Another key area to watch in 2021 will be the strength of the housing market and construction around new infrastructure projects. Jorge David Saldaña, chief strategy officer of WYN de México, a company involved in the commercialization of emulsion polymers produced in batch reactors, sees reason for caution in assessing the growth of construction in Mexico. He asserts that construction projects initiated during pre-Covid times have been accelerated, however, there are worries that this source of business will dry up due to the economic contraction. "Our concern, along with many of our customers in the coatings and housing industry, is that there is a lack of new projects. There are no new developments nor big plans in the pipeline," Saldaña observed.

The approach Reacciones Químicas is taking to ensure protection against any slowdown in construction investment is to stay well diversified across a variety of markets, the hope being that a pullback affecting architecture related sales will be assuaged by continued growth in the industrial and car refinishing areas of the business. "We see that the housing market could be affected because of the current economic conditions, but other markets have shown strength in the last months and look well for the foreseeable future," Cueva remarked.

Francisco Rubio, managing director of Mexican chemical distributor, Kemikals, mentioned that the coatings industry was not as affected by the pandemic as he had feared, and by June 2020 orders even exceeded pre-pandemic levels. "This was because lockdown brought renewed interest to matters of home improvement. In general, our distribution strategy during 2020 had to be constantly monitored and updated," he related. ■

SUSTAINABILITY

There was a school of thought that considered, in the wake of the financial destruction brought on by Covid-19, sustainable initiatives would take a back seat as governments look to reignite broken economies through cheap fossil fuel energy. In fact, the opposite has happened, as what is being called 'the great reset' has seen government policy shaped by environmental concerns. "Biden's economic agenda is his climate agenda; his climate agenda is his economic agenda," commented Sam Ricketts, co-founder of the climate policy group Evergreen.

In Mexico's chemical industry, ANIQ has set ambitious targets for recycling in 2020, 2030 and 2040. The 2020 objective was that producers, transformers, distributors and transportation companies should waste zero pellets, outlined ANIQ's director general, Miguel Benedetto, who added that the association is also working with the government to incorporate the management plans companies are making to achieve their recycling goals. "Looking further ahead, by 2030 the industry's packaging must be 80% recycled, and by 2040, 100% of all plastics and packaging should be recycled."

José Magalhães Fernandes, vice president for the Latin America region at Honeywell Performance Materials & Technologies (PMT), affirmed that sustainability is the step change in the strategy of the company's PMT division. He gave the example of Honeywell UOP's Ecofining technology, which is developed to hydrotreat vegetable oil, animal fat or cooking oil and transform it into 100% 'green diesel' or 'green jet fuel'. He elaborated: "This is a drop-in type of product, meaning you can substitute the fossil fuel diesel for 100% green diesel, and the engine will work exactly the same."

Furthermore, Honeywell's Solstice product line of reduced and low global-warming-products has resulted in the reduction of more than 210 million metric tons of greenhouse gases to date, detailed Fernandes.

Sergio Paredes, CEO of Resirene, spoke of how the pandemic has highlighted the importance of plastics for its sanitary benefits, but acknowledged the industry faced challenges from a waste disposal standpoint. To counter this, Resirene has launched Biorene, a product line of biodegradable packaging

José Magalhães Fernandes, VP Latin America, Honeywell PMT

that allows clients to benefit from a component of thermoplastic starch with polystyrene or propylene. "This helps balance environmental impact and can substitute polystyrene in some processes. Consumer habits have evolved and the market is looking for recycled products," explained Paredes.

For multinational corporation Linde, which merged with Praxair in 2018, environmental commitments extend across jurisdictions and go beyond what is required by regulatory frameworks, according to Salvador Urbina, VP business development and marketing for Linde's Latam North division. "One such target is producing nitrogen through clean methods from clean energy sources such as wind and solar instead of fossil fuels. This green nitrogen is important for mobility and for the production of other gases such as methanol," he said, adding that the company has invested heavily in infrastructure for the construction of solid oxide electrolyzer cells and filling stations. ■

TECHNOLOGY

The need for efficiency and competitiveness has done nothing but accelerate during the Covid-19 pandemic, however, a lack of feedstock in Mexico and complex logistics have driven up costs for chemical producers and distributors. To counter these challenges, the role of technology to modernize processes and boost productivity has become paramount.

Mexico and the Latin American market in general lags behind North America, Europe and Asia when it comes to technology adoption, but this represents opportunity for providers of innovation to gain market share in the coming years.

Yokogawa is an automation-focused Japanese multinational and was the first company to introduce the Distributed Control System (DCS) into the market in the 1970s. Yokogawa Mexico was established 15 years ago, and today the chemical and petrochemical industries represent its biggest client base. "We have two main divisions in Mexico; one is dedicated to the provision of automation solutions that include computers, controllers, fire and gas shutdown solutions; and the other handles field instruments, which have greater penetration in the Mexican market," explained Gabriel Sánchez, director general of Yokogawa's Mexican office.

Another multinational from Asia, Chinese company Haitian, started operations in Mexico in Querétaro in 1999 to service the automotive, packaging, electronics, toys and medical industries. Haitian is the world's largest manufacturer of plastic injection machines, producing over 30,000 units annually and exporting to over 130 countries, related José Antonio Barroso, deputy general manager of Haitian Mexico. Barroso spoke of how the adoption of fully electric machines has evolved in recent years: "The multinational companies located near the US border were the early adopters of this technology, when approximately 5% of our sales came from fully electric machines. Today, this figure has risen to 30%, as the wider market understands the value of these products and how they can help companies remain competitive."

David Rodrigo Muñoz Barrera, president of Wittmann Battenfeld's Mexico office, commented that the Austrian company opened it eighth global manufacturing facility in Mexico, producing a full range of auxiliaries and molding machines for the plastic industry. Barrera mentioned that hybrid machines are popular in the transition away from traditional equipment, but the transition to fully electric will not happen overnight. "Mexican customers are concerned with power consumption, which is reduced with a fully electric machine, and also maintenance can be performed more easily than on a hydraulic machine," he said, highlighting that the company is focused on training customers to get the most out of its machines, as they have a different operational method to traditional equipment. ■

DISTRIBUTION & LOGISTICS

DISTRIBUTION

Before the pandemic, the chemical distribution market in Mexico had been growing at twice the rate of GDP for over 15 years, representing annual growth of around 5% per year. Although the impact of Covid-19 disturbed the market considerably due to factors such as longer lead times on imported products, the outlook for one of the global chemical industry's growth segments remains robust. In Mexico, a net deficit of domestic chemical production means the role of the distributor is particularly pronounced. "Distributors continue to grow their share in the supply chain from chemical manufacturers to more than 40 industrial segments that use chemicals and raw materials," said Eugenio Manzano, executive director of Pochteca, who explained that this trend is because distributors add value and offer lower costs for manufacturers and reduce total cost of ownership for customers.

Eugenio Manzano, executive director of Pochteca

The distribution space has expanded to include value added services including specialized logistics, packaging, blending, inventory management systems, technical support and training, product application development, waste management and efficient small-order processing, as customers look for a one-stop-shop service rather than a traditional sales agent and distributor.

Another of the key trends in the distribution sector is digitalization, with Manzano affirmed is here to stay in all its forms. He emphasized that Pochteca is constantly adding new software and tools, as well as developing new features to its existing ones: "We introduced more functional web pages where access to valuable information is just a few clicks away, on line stores and B2B portals, CRM, supplier portal, WMS and barcoding, routing systems to lower emissions and reduce cost to serve, analytics and big data analysis and process automation programs."

Francisco Rubio, president of Mexican distributor Kemikals, also underlined the importance of technological solutions to add value for clients. Commenting that his company is among the few distributors to have its own laboratories as well as in-house employees to support providers and customers domestically directly, Rubio added: "Distributors with international scopes can be slow in responding to clients. Having technical and local support capacities allows Kemikals to go beyond being just a broker."

Francisco Rubio, managing director of Kemikals

Indeed, local support has been especially pertinent during the pandemic, with travel restrictions meaning distributors of international products had to be assertive in dealing with domestic clients that were experiencing delayed delivery. "Our lead times stretched to as long as four months and we were having to make decisions in Mexico with clients as quickly as within 24 hours," explained Rubio, who revealed that customers were calling to reduce their purchases from months to weeks given the uncertainty that they might be ordered to lock-down.

CONSOLIDATION AND DIVERSIFICATION

Continuing the trend of the past five years, consolidation continues to play a crucial role in shaping the industry value chain. Alfredo Ison, executive president of Química Delta, explained: "There has been intense M&A activity in the distribution segment, with purchases of national players by transnational companies. This has caused the market to stabilize, with six or seven large, and other medium-sized players."

Alfredo Ison, executive president of Química Delta

Nexeo Plastics is emblematic of this trend. Prior to 2018 the business was a segment of Nexeo Solutions until Univar acquired it. About two years later, in 2020, the plastics distribution business (Nexeo Plastics) was sold to One Rock Capital Partners, a private equity firm based in New York. Now, Nexeo Plastics is an independent, privately owned company. "One of the advantages of this change is we now have a singular focus: to grow our plastics business. Compared to our previous corporate makeup where we shared resources with several business units, today, all investments, campaigns and training focus on our core business," said Arturo Hoyo, managing director of Nexeo Plastics.

Hoyo continued by highlighting that distribution in Mexico is a highly fragmented market space. In his view, there is still more room for consolidation in the industry and significant opportunity to continue to add value to supplier partners and his company's highly fragmented customer base.

Beyond M&A, 2020 exaggerated the need for diversification amongst distributors. Química Delta, for example, observed wildly disparate outcomes with some markets dropping 20% while others saw demand skyrocket 600%. "The ability to react and adapt quickly to the new market conditions was essential," Ison asserted.

Similarly, Ricardo Méndez, director general of PromaPlast, observed: "Being a diversified business helped us to weather the storm. As much as we suffered from our footwear segment this year, we continue to be strong in packaging and consumer, which were segments that were not as badly impacted."

Alonzo Autrey, managing director of DVA Mexicana, added: "We have increased focus on products that support COVID-19 treatment, like rocuronium bromide, which is used as an anesthetic for patients that need to be put in ventilator. This segment tripled in size this year."

LOGISTICS

Mexico, like the rest of Latin America, suffers from a considerable logistics deficit. However, out of chaos comes opportunity, and the value of logistics providers is heightened in a challenging context. From a logistics point of view, 2020 represented the biggest challenge to international trade in living memory, as border closures and travel restrictions disrupted the globalized economy. "During the fourth quarter, freight prices increased dramatically, especially from Asia. At an average cost of US$8,000 per freight, prices are 6.5 times more than what they were a year ago. This is a concern for all of us because Asia is the main supplier in the commodities and specialty segments; the market prices in Mexico are suffering dramatically," observed Gabriel Londoño, managing director of Omya Mexico.

Martin Sack, regional head of the Americas for Leschaco

Francisco Galvez, managing director of Leschaco

Martin Sack, regional head of the Americas for Leschaco, reflected that, because of Covid-19, logistics providers need to do something else to add value, and really take care of every single container. "Staying in closer contact with customers to tackle freight and space issues to make sure cargo is delivered and received on time requires a lot of fine tuning and personalized engagement in 2020."

Specifically to Mexico, Sack cited the cross border business with the US as a key area for Leschaco, and in 2020, the company focused on developing products which need further growth, such as air freight, contract logistics and 4PL (fourth-party logistics) solutions. "The new USMCA agreement should increase trade between Mexico, the US and Canada, and due to the sheer size of the country, there is always room for us to grow within Mexico by doing things better than the competition," he added.

MITIGATING RISKS

One of the biggest challenges for logistics providers in Mexico is the tenuous security situation along supply routes. According to Jaime Merlos, executive manager at Accel: "The entire logistics industry is greatly affected by this problem as it makes logistics more expensive. The cost of insurance of the goods is raised, and it has become necessary to travel with custodians since you cannot travel at certain times."

Meanwhile, companies are becoming increasingly diligent about taking the necessary precautions to minimize the risk. One risk mitigation tactic that has evolved in recent years is visibility and traceability. Santiago Carús, CEO or Euromex Logistics, explained: "You cannot just move a product from point A to point B any longer. Now customers want to access information in an app or online."

Another development in risk mitigation has been the increased security in the trucks in use. Quality standards have risen significantly, and truck drivers have to meet more stringent requirements. "The Mexican Government modified the driving hours to increase the health of drivers and assure security on the roads. Following these rules and adopting a GPS tracking system for all of our trucks 24/7, we have decreased trucking accidents and delays," Carús confirmed. ■