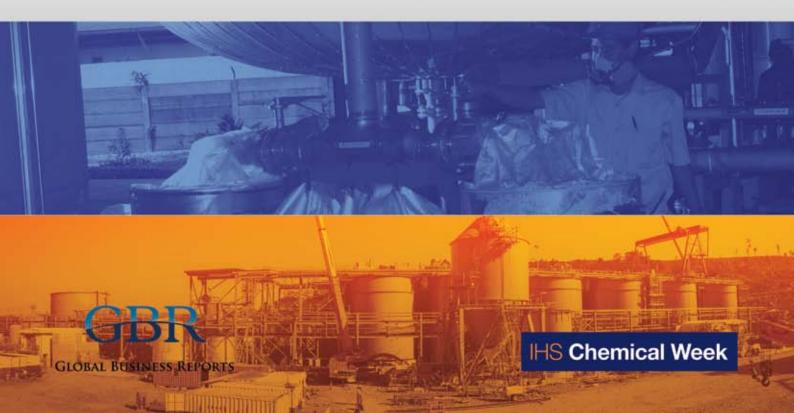


A Global Business Reports publication, presented with IHS Chemical Week



# **Indonesian Chemicals**

This research has been conducted by Vanessa Acuna and JP Stevenson of Global Business Reports. For more information, contact info@gbreports.com or follow us on Twitter: @GBReports

# A FOURTH ERA OF THE INDONESIAN ECONOMY

# Placing a Hedged Bet on the Country's Development

Landing in Jakarta, one is immediately struck by the dissymmetry of the city. Roads snake together, connecting an amalgam of both derelict and renovated colonial structures that are pitted against the high-rise urban developments and significantly poorer kampongs, or redbrick, red-roof shacks which sprawl across metropolitan Jakarta. These structures have arisen out of the cracks of old Batavia, as Jakarta was known to the Dutch; the legacies of Sokarno, who laid the foundation for the Western-style democracy in place today; and Suharto who ruled the country for over 30 years as dictator. Emerging in the midst of this, the central business district of the city has grown out of a struggle between these forces, and so has the present structure of Indonesia's economy.

Indonesia has built its future around sector-specific developments across six major regions (fig 1). Comprised of over 17,500 islands stretching 3,000 km, the Masterplan for Development: 2011-2025 (MP3EI), of the Ministry of Industry identified six economic corridors; from west to east: (1) Sumatra. (2) Java. (3) Kalimantan, (4) Sulawesi, (5) Bali-Nusa Tenggara, and (6) Papua - Kepulauan Maluka (fig 2). Of these six, three are most relevant to the domestic chemicals industry: Sumatra, which will become the country's center of production and processing of natural resources and, through it, the palm oil and oleo chemicals industries; Java, and within it the Cilegon Basin, which has historically possessed most of the nation's chemical production sites: and Kalimantan, which will become the country's center of production and processing for mining and energy reserves. The Indonesian government speculates that the collective development of these six economic corridors will lift the

country to the status of one of the 10 most advanced economies by 2025.

Foreign investment capital continues to be critical to achieving the country's growth objectives. It is estimated that to achieve the goals listed in MP3EI, Indonesia must attract over \$500 billion in investment capital. Contributions to this, at least so far, have been dominated by foreign direct investment: according to Indonesia's Investment Coordinating Board, from January to June 2012, for every \$1 of domestic capital invested \$2.65 of foreign capital was invested. This represents a 30% uptick in the percentage of foreign capital from the same period in the previous year and is a reflection on Indonesia's improved investment ratings. In the past year, both Moody's and Fitch upgraded their ratings of Indonesia to investment grade. Also stemming from this improved economic forecast, last year, Indonesia has experienced broadened investments from a paucity of industries oriented towards the development of natural resources to a set of secondary and tertiary sectors including the domestic chemicals and pharmaceu-





# Fig 2: Quantum of Estimated Investments in Each Corridor

Source: Indonesian Masterplan for Economic Development 2011-2025

ticals industries, which realized \$995.2 million in foreign investment capital in the second quarter of 2012: second only to Indonesia's mining industry, which realized slightly over \$20 million more with \$1.015 billion invested.

# **POLITICAL ENVIRONMENT**

#### Commitments to Private Sector Development

Recession has triggered interest in the Indonesian economy, which has remained relatively isolated from the fallout of both the 2008 financial crisis and the Eurozone sovereign-debt crisis. Mr. Rod Blackwell, managing director of McConnell Dowell Indonesia, a major engineering, construction, building, and maintenance contractor with a strong focus on marine construction and process plants within Indonesia, states "Now, much of McConnell Dowell's business has been generated by companies located either in the United States or Europe that have, as a result of the economic downturn, turned to the East to refocus their business." This trend has not been limited to the West, however. Mr. Blackwell continues, "The laggard pace of economic recovery in other areas of Asia, like Thailand, has also stimulated interest in Indonesia." Liberalized ownership laws within certain sectors have also generated interest.



Panggah Susanto, Director General of Basic Manufacturing Industries for the Indonesian government

While resource nationalism has shaped some industries, such as mining where foreign businesses are limited to 49% ownership, in many other areas, including chemicals, foreign businesses are allowed to operate a wholly-owned sub-

Yet while governmental policy has evolved so as to attract investment to particular sectors, Indonesia's economy does face several barriers to future development. Infrastructure gaps across all six of Indonesia's economic corridors, barring Western Java, limit a business's ability to transport products. In more developed areas, such as Greater Jakarta, congestion plagues cities also resulting in delays. Jeff Moore, vice president of developing markets and performance materials for DKSH, the leading market expansions service group with a focus on Asia, explains: "While it would be extremely difficult to quantify the economic loss generated as a result of traffic

congestion in the Jakarta metropolitan area, it is significant."

Indonesia also has not historically been a hub for technological innovation, a factor of particular importance for chemicals. Technical production within the country is nascent with reliance on foreign development commonplace.

The government is actively committed to remedying this, providing a point of entry for businesses that will build the country's infrastructure or possess technological expertise. Panggah Susanto, director of basic manufacturing industries for the Indonesian government, explains: "The Indonesian government has made an active commitment to connecting gaps within domestic industry. Foreign businesses have been granted unprecedented opportunities to aid us in this process. We believe that the best way of developing Indonesia is by taking a collaborative approach that utilizes the strengths of both foreign and domestic businesses to benefit the country."

To further this objective, businesses now receive additional incentives by the government to encourage their expansion in targeted areas. Incentives include tax benefits for businesses operating in remote areas; developing infrastructure; transferring technology to domestic businesses; and establishing research and development facilities. Additional incentives exist which guarantee a corporate tax holiday for five and up to ten years for companies operating in pioneer industries. Of particular interest to petrochemical and oleochemical manufacturers: the tax holiday includes the organic



# PEC LTD. RELIABLE, RESILIENT, RESOLUTE





PEC Ltd. a Singapore-based company has carved a reputation for being a reliable and trusted provider of single source full turnkey Engineering, Procurement, Construction (EPC), Construction Management and Maintenance services to the process industries. Incorporated in 1982, our clients include major MNC's in the oil & gas, petrochemical, pharmaceutical and oil & chemical terminal industries.

Asia

Europe

I Middle-East

21 Shipyard Road Singapore 628144
T: +65 6268 9788 F: +65 6268 9488 E: info@peceng.com www.peceng.com

base chemical industry if a business's feedstock is derived from national oil and gas.

Many businesses in the chemicals industry, both domestic and foreign, have gained hugely from the country's development. Empires have been built - and not necessarily in sectors directly tied to the country's strengths. Promising opportunities exist in many sectors including agrochemicals as over 50% of the workforce is employed in agriculture, yet this remains an area largely controlled by the government's five state-owned fertilizer businesses and small, informal producers. The cost efficiencies generated by these businesses have historically placed the segment out of reach of most foreign businesses. Conversely, the oleochemical segment boasts rich foreign participation. Petrochemicals as a segment has experienced strong growth, but until recently has been fragmented with product imports filling industry gaps.

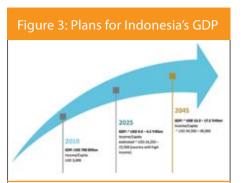
Ambitious although the country might be, whether Indonesia's goals can be quickly translated into a private sector that is self-supporting – a break from the country's dependence on imports – and which flourishes in the production and processing of the country's natural resources remains to be seen. For this reason, investments in segments that will support the growth of downstream consumption remain the surest bet.

#### **MARKET ENTRANCE**

#### The cost of macroeconomic potential

Indonesia is at an economic turning point. Forecast to become the world's seventh largest economy by 2030, the Indonesia of today shows promise. With an estimated future growth rate of 6% year-on-year (fig 3), companies that are able to establish a strong presence in the country will benefit.

As the government's role in the market has changed, opportunities to enter the country have increased and become less restrictive. Having played a large role in the development of Indonesia and its natural resources, Pertamina and the Indonesian government's suite of Persero



Source: Indonesian Masterplan for Economic Development 2011-2025

companies occupy a space of the market today that is economically different from that of the past. Husein Latief, commercial and business development director of Indonesia Port Corporation III (Persero), owner and operator of Indonesia's ports ranging from Central Java to East Timor and East Kalimantan, said: "We are now held to the same legal standards as any business operating in Indonesia."

A second reformation has also ensured that Persero companies no longer



Husein Latief, Commercial and Business Development Director of Pelindo III (Persero)

have priority access to the country's natural resources. Forced into semi-privatization, many of these businesses must now vie for business development opportunities. This has, on occasion, pitted one against another. A palpable sense of anxiety regarding the relevance of these companies to the country's future has emerged. This has, and will continue to, create openings within the domestic market – a market that will boast impressive consumer-led growth.

Be this as it may, in the eyes of many, the problems commonly associated with the country's business environment, such as labor and land issues and underdeveloped infrastructure, are more visible and tangible than the country's prospects. Corruption, while actively fought, still resulted in \$238.6 million disappearing from the economy in 2011.

This is not to say that the country lacks hope. The strength of Indonesia lays in its macroeconomic environment rather than its business environment.

Indonesia's attraction is its population. A large domestic market has kept the country relatively isolated from the fallout of both the 2008 financial crisis and the Eurozone sovereign-debt crisis. An under-developed industry combined with a growing middle class has left opportunities open. As Xu Yan, president director of Air Liquide Indonesia, explains: "The economy here has a domestic consumption rate of about 80%; combined with resource wealth, a large and rising young and middle class popula-



#### HEAD OFFICE: Kawasan Industri MM 2100 Jl. Sulawesi Blok I No. 1-2,

Cikarang Barat 17520 Tel. : (62-21) 8980071 Fax. : (62-21) 8980072-73

#### FACTORY:

Kawasan Industri KIEC Jl. Australia II Kav. M1, Cilegon - Banten

Tel. : (62-54) 393358 Fax. : (62-54) 393359

#### BRANCH OFFICE:

Komplek Pergudangan Tanrise Southgate Blok B-26, Jl. Nangka, Seruni, Buduran, Sidoarjo, Jawa Timur

Tel. : (62-31) 8013086 Fax. : (62-31) 8014496

#### Website E-mail

: www.id.airliquide.com : info.indonesia@airliquide.com













Floating Storage Receiving Unit for LNG Pertamina

tion, Indonesia has all the driving forces for industrial growth."

The emergence of the country's middle class has created end-markets for many businesses, as well as provided a valuable testing environment for consumer products. Rahul Kale, head of oleo chemicals and biodiesel for Wilmar International, a market leader in vegetable oil, proteins and oleo chemicals, said: "The Indonesian opportunity is that you have consumers. One can develop things and build globally-minded products that also focus on the needs of domestic markets. Downstream chemicals, infrastructure, consumer products, and technological innovation all require the presence of the end customer. Innovation demands immediate consumer feedback. For Wilmar International, Indonesia possesses the unique ecosystem shared by global hubs of innovation; it is a place where

one can receive immediate feedback on products. This is what drives state of the art design."

## **PETROCHEMICALS**

#### Rebuilding polymers

Growth within Indonesia's petrochemicals sector has focused on the creation of polymers, especially related to plastic production. In 2011, plastic consumption in Indonesia climbed to 2.8 million tons; 70% of which was driven by polypropylene (PP) and polyethelyne (PE) products, and the remaining 30% residing in polyvinyl chloride and polyethylene terephthalate.

While the market for these products has grown consistently, at approximately 6% per annum in spite of global fluctuations in disposable income the industry is heavily tied to the consumer products market - companies have been unable to satisfy market demand through domestic chemical supplies. Imports of petrochemical products historically have stood at nearly 50% on average, with most of this focused on imports of feedstock. With the country's ethylene crackers running at between 90% to 100% of operating capacity, supplying 620,000 mt/y of ethylene, the base feedstock for polymerization, and demand for plastics is speculated to increase by 7.5% in the coming years, the country's petrochemicals sector, at least for the short term, will continue to depend on foreign imports. This dynamic is posed to change with the entry of Korean Honan Petrochemical Corporation.

Entering into the market in 2010 through its acquisition of regional strong man Titan Chemicals, Honam has signed a memorandum of understanding with Krakatau Steel (Persero) in a venture that will entail a USD \$5 billion investment in the construction of a naphtha ethylene cracker capable of producing 1 million mt/y of the product. In a move to challenge several of the sector's strongest players, including fellow state run company Pertamina, Krakatau Steel will help Honam extend downstream into the production of propylene, PE, PP, monoethylene glycol, and butadiene, of which it



# Chemistry for a Blue Planet

Create a safe, secure, comfortable and environmentally friendly world with chemical technology.

Asahimas Chemical's integrated Chlor Alkali-Vinyl Chloride plants in Cilegon, Banten, Indonesia produce basic chemicals for many downstream industries.



will produce 550,000, 600,000, 600,000, 700,000 and 140,000 mt/y, respectively. The project is projected to be complete by 2016.

Of the companies potentially affected by this move, PT Barito Pacific, and its joint venture subsidiary, Chandra Asri Petrochemicals, are perhaps the most visible. With assets totaling Rp 20.36 trillion and a net profit in the first three quarters of 2011 of Rp266.14 billion, the group reported a loss of Rp817.16 billion in the same period for 2012: a decline that has not been taken idly. In 2013, Chandra Asri estimates capital expenditures of over US \$90 million in financing the expansion of its polypropylene plant, increasing its capacity from 360,000 mt/y to 480,000 mt/y. Additionally, the company anticipates an additional round of expenditures in preparation for a joint venture being made with Pertamina - assuredly, not a reactionary move - in a project expected to span through 2015, totaling USD \$200 million in the creation of an additional polypropylene factory. This facility will add an additional 250,000 mt/y of plant capacity.

In 2013, three other major industry players have plant construction projects underway. Indorama, a family-run Indian venture which has emerged as the world's largest manufacturer of polyester and PET and one of the world's largest PTA producers, will open a polyester chip plant. PVC producer Asahimas

Chemical, a Japanese-Indonesian joint venture, is expanding its caustic soda manufacturing plant to 500,000 mt/y, a 30% increase. Pertamina, while expanding beyond its historical focus of developing the country's wealth of oil and gas resources, will open a propylene facility with capacity of 178,000 mt/y. Pertamina has also announced plans to develop its own naphtha cracker.

While the current deficit in ethanol production has become a source of opportunity for Honam, and, consequently, one of anxiety for the industry's long-time players, the case of Honam is unique. It is less certain whether companies that are unable to form a partnership with a stateowned entity, such as Honam has accomplished, will benefit from market entry. Issues related to land-acquisition and labor disputes may be too problematic for any company, barring those companies capable of partnering with a Persero affiliated business, to develop large-scale production facilities easily. Those that have claimed a space in the market, consolidated although they might be, did so at a time when corporations could more easily navigate the political intricacies associated with establishment.

Companies intent on establishing production facilities in the country, in particular within the polymer sector, may wish to consider building smaller-scale, and ultimately leaner organizations, downstream from where

major investments are currently taking place. Infighting amongst players like Pertamina and Honam may act as a boon to their development by increasing base feedstock for the industry: at least immediately, lessening interaction with ambiguous import laws that have been subject to change depending upon the political interests of the administration. A model for these businesses is seen in the country's resins producers.

#### RESINS

#### Strength through Specialization

As a sub-segment, resins have long held importance in trade. Used in times dating as far back as Ancient Greece, Rome, and Egypt, where plant resins such as frankincense, myrrh and amber where prized for their aromatic qualities, only in modern times have resins come to connote a range of products made through chemical synthesis. Perhaps a reflection on the more varied uses of resins today, which include applications in the production of paints and coatings, adhesives and plasticizers, resins have become a success story for Indonesia's economy.

The Indonesian resins sector arose from foreign involvement. First entering the market in the late 1960s, Union Carbide – among several other international petrochemical companies, like BASF



## PARTNER IN POLYMER TECHNOLOGY

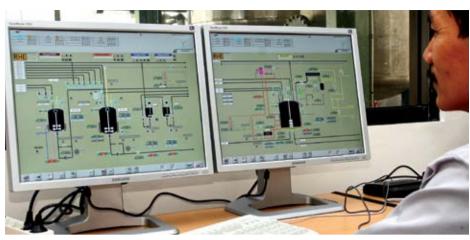
Customer Satisfaction through Quality and Innovation

PT. ALKINDO MITRARAYA Jl. Gatot Subroto Km. 8, Desa Kadu Jaya, Tangerang 15810. INDONESIA
Tel: + 62-21-5930-2250 Fax: + 62-21-5930-2251 Email: alkindo@alkindo.net website: www.alkindo.net

- gave birth to the domestic resins sector through their Indonesian workforce: a workforce that would later leave their employers to establish their own businesses. While expanding domestically, these companies have risen to challenge their former Western employers.

Today the resins sector is one of Indonesia's few net-exporting sectors. Captive demand for resins in Indonesia is estimated at 300-325,000 mt/y with production capacity of 425,000 mt/y.

The most integrated of the industry's businesses is PT Royal Chemie, a private company established in 2003 as a holding company for several businesses involved in the production of solvent-based, alkyd, and amino resins. In an answer to the industry's feedstock problems, several years ago Royal Chemie strategically acquired PT Petrowidada, whose products are largely used for internal resins production. Through integrating, Royal Chemie has created a business with an annual turnover of over \$700 million, and \$80-\$90 million in reported profit.



Computer controlled process, photo courtesy of Alkindo Mitraraya

Companies unable to integrate domestically have either succeeded within the domestic market as a trading unit or because of their smaller scale and narrowed focus. Second to Royal Chemie within the industry is DoveChem, a chemical distribution company that has grown its business through trading solvents and leveraging its international presence to stabilize its feedstock supplies.

With manufacturing facilities in Merak, the company produces 97,110 mt/y, in addition to producing 101,000 mt/y of formalin, a chemical used in resins production.

Smaller businesses within resins production have been able to claim space in the market through specialization. Tunas Resins, with a production capacity of 40,000 mt/y, is a strong example



# PT McConnell Dowell Indonesia

Multi-discipline mechanical construction is our core business. Helping clients to build their projects in Indonesia for more than 30 years. Our experienced work force ensures your project is completed on time, to the highest quality and safety standards in a cost effective manner.



PT McConnell Dowell Indonesia Tlp: +6221 725 3051 Fax: +6221 725 3054 Email: indo@macdow.com.au www.macdow.com.au of this, having differentiated itself from competition businesses in two ways: first, in product selection, and second, in market selection.

Tunas Resins has carved out space in the market by focusing nearly exclusively on water- and solvent-based resins. With wide-applications in personal care, Tunas Resins is currently recognized as the industry's second largest producer. This decision has spilled over into product development. Haryadi Satyadinata, managing director of Tunas Resins explains: "One area where we see much opportunity for further development is in environmental products. We are currently in the process of developing several green products; we understand the importance of green products to the environment, and are committed to growing this product line in spite of the high cost of research and development."

Internalization of support services has also played a role in shaping the position of their business. The marketing division of the company handles all product distribution. Unsurprisingly, this organizational structure has provided the business to have better control over its export markets. 13% of revenue is generated through export sales. As a result of the synergies captured through pairing the company's marketing department with product distribution, Tunas Resin's has been able to stake out a place in key markets, including the Indian subcontinent. The company exports an average of 15% of its product.



Another leader within small-tier resins production is Alkindo Mitraraya, a company whose investments in technical innovation have allowed the business to claim a large space in foreign markets. Development of this strategy has involved melding the strengths of Indonesia's natural resources with the structure of the international resins industry. Sugianto Effendi, former director of Alkindo Mitrarava, explains: "Indonesia is a particularly strong market for wood coatings. Woodworking has driven the economy, and because of this tradition Indonesia has evolved into a regional stronghold for the industry. Resin, a product that is derived from oleochemical materials such as glycerin, fatty acids, and coconut oil, is a natural fit with the Indonesian economy which provides a strong end market for our business. The challenge that I faced in building Alkindo Mitraraya, however, was adapting the global market for resin production to match product availability and demand in Indonesia. The outcome of this proved to be a competitive advantage: indigenous species of trees could be used for resins production at a better price point than could be found on the global market. The product also possessed different intrinsic qualities that contributed to this advantage; the aesthetics of our product range are highly appealing."

The Indonesian resins sector has been able to develop profitably in part because smaller-scale producers have specialized, thereby allowing these companies to avoid competing with the industry's larger players strictly on price. Even larger-scale, global companies have learnt this, like Evonik, one of the world's leading specialty chemicals companies and a business that has built its Indonesian operations around innovating products tailored to the needs of the domestic market. A similar opportunity may exist for those looking to expand downstream from polymer production, where an increase in base-feedstock for the industry will translate into lower production costs as a whole for the industry. By and large, however, petrochemicals will remain a difficult segment to approach for outsiders.

#### **OLEOCHEMICALS**

#### The price of success

Indonesia's ability to produce leading international businesses has not been limited to petrochemicals. Like the domestic petrochemical's industry, those companies involved in oleochemical production are not numerous. Existing participants include a hand-full of companies, both domestic and foreign, who have been able to claim a piece of a market where price and reach are critical determinants of a business's success or failure.

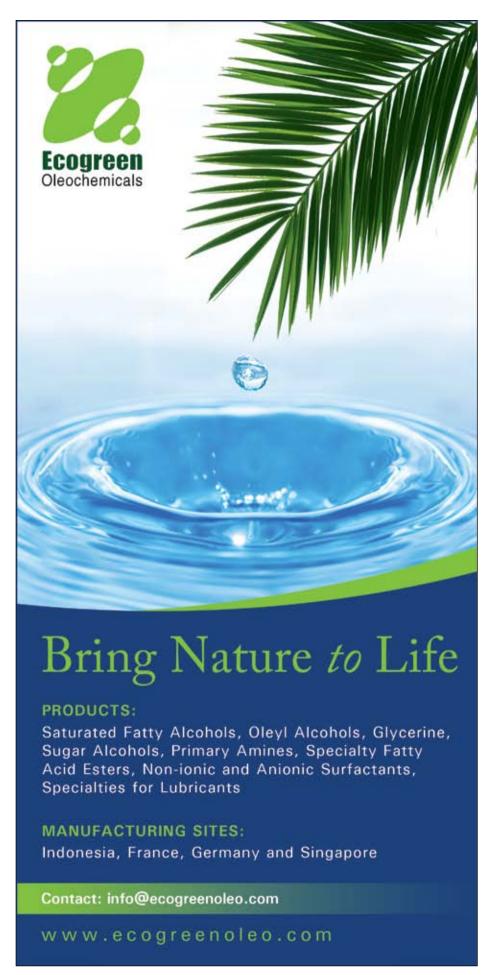
Among these businesses, four stand out for their size: Musim Mas, Wilmar International, Soci Mas, and PT Ecogreen Oleochemicals. Privately-held Musim Mas is the most domestically focused of the industry's players. The company's reach extends from palm oil cultivation to soap production. Wilmar International, headquartered in Singapore, has had the most meteoric rise of the four businesses. Founded in 1991, the company has evolved from a palm oil trading company to become

one of the largest companies in terms of market capitalization listed on the Singapore exchange. Soci Mas has far richer roots: Sinar Mas Group, its parent company, is among the country's largest conglomerates. PT Ecogreen Oleochemicals shares a profile and a heritage with Soci Mas. The company was originally a joint-venture between Sinar Mas Group and Salim Group, an equally well-funded conglomerate.

Rising on the back of the country's palm oil industry – Indonesia is now the world's largest producer of crude palm oil (CPO) – Indonesian oleochemical companies have been part of Southeast Asia's victory over long-established Western companies like Henkel, Unilever, and AkzoNobel in production. Their emergence has in fact forced a restructuring of the global oleochemical industry.

The Indonesian oleochemical industry has its roots in the early 1980s. Dr. Alexius Darmadi, president director of Sumi Asih Oleochemicals, a manufacturer of downstream oleochemical products explains: "At the time of Sumi Asih's entrance into the market in the early 1980s, the domestic market was led by international companies such as Henkel, Unilever, Procter and Gamble and Kao: essentially nine large multinationals controlled the market through their presence in downstream oleochemicals. They entered into the domestic market in the late 1970s through having an operational presence in Malaysia. At the time, their production of oleochemical products was based off of the use of tallow, or animal fat. Nothing had been developed using solely crude palm oil (CPO), the current industry standard, as feedstock, but these companies wished to have access to the Southeast Asian market."

Southeast Asia, in particular Malaysia, invested heavily in widening the applications of CPO. For it, CPO has become the base feedstock for the industry and Southeast Asian businesses became able to outcompete the set of larger and longer-established Western businesses on the basis of price. Henkel and Unilever have since refocused their business on more profitable segments of the market, selling their assets related to





# Ensuring a Sustainable Future

PT. Cisadane Raya Chemicals (CRC) established in 1975 was the pioneering firm in the use of palm oil as raw material for the oleochemical industry. The factory currently has an annual capacity of 180,000 MT and 120,000 MT for edible oil and oleochemicals respectively. Our oleochemicals market covers the five continents with representative office around the world to allow more personalized service to each customer, underlining the importance of local knowledge.

In order to have an integrated supply chain to ensure smooth production and risk minimization, PT. CRC has joint ventures with palm oil mills and plantation in Sumatra.

PT.Cisadane Raya Chemicals aims to be an integrated player in the oleochemicals industry and its downstream consumer products:

Stearic Acid, Fractionated Fatty Acid, Refined Glycerine, Soap Noodle, Soap Bars, Soap Powder, Edible Oil

Jl. Imam Bonjol No.88 Karawaci, Tangerang 15115 Indonesia Tel: (62-21) 5520522 Fax: (62-21)5525676 www.cisadane.co.id

oleochemical production to focus on retail activities related to consumer goods.

The success of these businesses, however, has not come without cost. As a result of its wide applications, CPO has become commoditized, exposing businesses downstream from its production to a greater amount of risk. Margaret Tihang, president director of Cisadane Raya Chemicals, a smaller, family-run business involved in oleochemical production, notes: "Commoditization of crude palm oil has given rise to price volatility. When a product becomes tradable, an externality to the historic market dynamic is introduced. This alters the price of the product according to speculation. For downstream industries, this has translated into an unpredictable cost structure, one that has forced many business to change their focus, be it by heading into what they believe may be a more profitable segment of the industry or leaving the market entirely."

Similar to other commodity-related industries, successful businesses have undertaken risk management through several strategies: either by investing in a hedging unit; vertically integrating so as to internalize CPO production; or building their business around minimal interaction with the product.

PT Ecogreen Oleochemicals, led by president director Teddy Tanzil, a financier become oleochemicals guru, embarked on a strategy of expanding production capacity while creating an organization built around use of palm kernel oil rather than palm oil. Employing palm kernel oil rather than palm oil offered several benefits. First, palm ker-



Teddy Tanzil, President Director Ecogreen Oleochemicals

nel oil had yet to become commoditized with product pricing less likely to fluctuate as a result of market speculation. Secondly, palm kernel oil was readily available within the domestic market; by using it as feedstock, the company avoided the volatility associated with CPO production.

PT Ecogreen began in 1994 a series of expansions and debottlenecking operations which have continued through today. By 2014, PT Ecogreen estimates it will have a production capacity of 360,000 mt/y, a production level comparable to BASF and Kao, the global market leaders in fatty alcohol production. From its roots in Indonesia, PT Ecogreen has built a global empire in fatty natural alcohol that extends from its facilities in Medan and Batam. Indonesia, to its headquarters in Singapore, to its downstream production facilities in Germany and France. Today, the company estimates product sales of \$500 million, annually.

Cisadane Raya Chemicals, with annual revenue of \$160 million, is a smaller business, yet occupies a no less unique space in the market. Structured solely around the production and sale of glycerin, soap noodles, fatty acids, soap powders and soap bars, Cisadane Raya Chemicals has found their limited product offering to be advantageous. Margaret Tihang, president director of Cisadane Raya Chemicals, explained: "Unlike most of our competitors, we are not interested in expanding further into production of consumer products. Rather, we believe that the best way to preserve Cisadane Raya's profitability is by specializing in product areas in which already produce and expanding our distribution network."

Growth within oleochemicals in Southeast Asia has been uneven, with certain regions reaping a larger share of profit. Until 2006, Malaysia was the world's largest producer of crude palm oil. In 2009, Indonesia assumed this title, pitting the two countries against one another in a battle for regional dominance. This competition has resulted in a set of thinly disguised polices, which, although aimed at stoking domestic demand, seek to supplant Malaysia as a downstream hub of industry development. Tjhang

elaborates: "In recent years, an export tax has been imposed on palm oil so as to encourage greater use domestically as well as further downstream development. These policies have been shaped as much by public interest, however, as they have been by a regional power struggle over industry development."

This competition has begun to ebb and through it a new dynamic has emerged: Indonesia is poised to become the center of the region's palm oil production while Malaysia will retain its status as the heart of development for technical applications of CPO. What fate this will spell for the industry's domestically-focused oleochemical producers remains unclear.

# **INDUSTRIAL ESTATES**

Jurong 2.0?

Attempts at industrial integration are not just a priority of the private sector. Indonesia's industrial estates embody the government's commitment to connect upstream and downstream markets. Scattered across Indonesia's economic corridors, these establishments facilitate investment in industries related to Indonesia's natural resources. One example of this can be found in the case of Kaltim Industrial Estate, located in Bontang, East Kalimantan. Established in 1990, Kaltim Industrial Estate was founded for the purpose of centralizing access to the area's resources. Mr. Qomaruzzaman, president director of Kaltim Industrial Estate explains: "Kaltim Industrial Estate was built to capture the rich potential that East Kalimantan offers, especially for industries based off of natural gas."

The business operates by handling all aspects of operational management on the ground, including the management of facilities, warehousing, utilities, such as water, nitrogen and steam, support for the estate's jetties and water treatment as well as land acquisition and plant maintenance. "Our integrated business structure offers a one-stop solution for businesses looking to establish or expand their presence in Indonesia," continues Oomaruzzaman.



Mr. Qomaruzzaman, president director of Kaltim Industrial Estate

This has yielded strong results for their stakeholders. Pupuk Kaltim, a subsidiary of Pupuk Indonesia (Persero) and the world's largest consolidated producer of urea- and ammonia-based fertilizers has been a partial shareholder since Kaltim Industrial Estate's founding. Pupuk Kaltim chose to invest in Kaltim Industrial Estate largely because of the estate's strategic location. According to Qomaruzzaman: "One of the advantages of basing a company's operations in Kaltim Industrial Estate is that the estate is built on the sea. Our facilities offer a jetty for general cargo with a capacity of 20,000 deadweight tonnage (DWT), as well as a jetty for ammonia and urea shipements that offers a capacity of 30,000 DWT... However, this is not the sole benefit derived from our strategic location. We also have the premier location for companies looking to tap into Indonesia's natural gas reserves. We are less than 100 km away from one of the world's largest consolidated deposits of natural gas. Other natural-gas oriented estates can be up to 1,000 km from the gas extraction site."

The facility now houses the operations of a number of the region's largest producers of products that are off-shoots of the domestic natural gas industry, such as methanol, melamine, ammonium nitrate, and ammonia; among these Sojitz's methanol JV, Kaltim Methanol Industri.

Industrial estates provide a solution to many of the problems that a business may face upon entering the country. "Most business problems associated with the local market arise from the way in which a business decides to establish itself. For entering into the market, investing in an industrial estate is one of

#### Interview with Mr. Hari Karyuliarto,

PT Pertamina (Persero), Gas Director

# Please provide an overview of Pertamina's business lines in Indonesia and globally?

In June last year Pertamina made an exciting transformation; we are now no longer an oil and gas company, but rather an energy company. Several months ago we revised our articles of association to reflect this change and broaden the scope of our operations, to touch on new business lines including renewable energy and power. In addition to handling the commercial aspects of our gas business, I am now in charge of these two new areas.

Liquefied natural gas (LNG) will remain the bread and butter of our business. We hold nearly 10% of the world's LNG supply, with key markets for our LNG projects including Japan, Korea, and Taiwan. Consumption within our export markets is driven primarily by demand for electricity and city gas. The market strategy for our business has changed from recent years; we are seeing exports decline as domestic consumption grows.

While entering into new areas of business is always a learning process, we are confident that Pertamina will be able to provide high quality service across the board.

# Could you expand on the recent announcement of your trans-Sumatra-Java LNG pipeline?

The largest challenge posed by switching the focus of our business to better meet the changing needs of domestic consumers arises out of Indonesia's under-developed infrastructure: huge investments will be required so as to make domestic consumers more reachable. Pertamina has actively pursued such investments: at present we are working on developing both a trans-Sumatra and trans-Java gas pipeline. At a later stage this will allow for us to better supply the domestic petrochemicals industry; however, at present, our first concern is meeting the needs of businesses involved in electricity generation and public transportation, as well as those of our own refineries.

Pertamina firmly believes that the gas business will replace some portion of the oil business in Indonesia. We need a way to replace the energy generated by oil with an alternate solution. Gas will be a piece of this solution and because of this an integrated gas network is necessary to make transportation of gas as well as LNG feasible.

Our domestic gas pipeline will first connect Arun with Belawan, Belawan with Dumai, Dumai with West Java, Cirebon to Semarang, and Semarang to Gresik, in total comprising an investment of over \$800 million. While acquiring the necessary human capital to construct such a project can be arduous, land acquisition remains the tougher task. Land acquisition of any



scale in Indonesia can be challenging, but especially of such a size. We will require the government's support in this endeavor. Be this as it may, we plan to commence operations of the network by the second semester of 2014.

# Outside of expanding domestic LNG distribution, what other investments is Pertamina considering?

We would like to strengthen our facilities in Arun and Bontang, which are presently quite limited. Revitalizing our facilities in

Arun will allow for us to strengthen our network of LNG storage facilities. We would like to convert it to a terminal for enabling anticipated LNG trading activities. However, for the near future we would like to improve regasification capabilities within the area. In the case of Bontang, we view the region as a strategic location, especially for our export markets. Investing in our assets in the area, specifically by expanding LNG production capacity will continue to allow for us to ensure sufficient base load quantities of LNG so as to then be able to monetize our LNG supplies by better meeting exporter's seasonal demand in Korea, Japan, and Taiwan, which typically peaks during winter months.

So as to help increase the electrification ratio in eastern Indonesia and lessen the region's dependence on subsidized diesel fuel which is currently used to support the region's base power load generation system, we also would like to explore the possibility of transporting natural gas to otherwise scattered and isolated power plants within the region. Considering existing gas liquefaction facilities and the geographical condition of Eastern Indonesia, small-scale LNG transportation and further development of regasification facilities are two strong potential project options. Accordingly, this would come as an extension of our plans to create a national gas grid and improve LNG infrastructure, bringing with it of course the attendant benefits to the region's economy. If executed, this would mark an important milestone in the development of both industry and city gas applications in Eastern Indonesia.

#### What role do you believe foreign capital should play in the development of Indonesia?

Foreign capital will play an important role in the development of Indonesia. It is one of the most important variables in securing our country's future. Pertamina will use some of its own equity to finance these projects; this being said, outside financiers will also play an important role in the development of our business.

the easiest ways to achieve operational stability in a relatively short period of time. Participating in industrial estates preempts problems with land acquisition and utilities development," notes Tamba Hutapea, deputy chairman for investment planning for the Indonesian Investment Coordinating Board.

Rod Blackwell, of McConnell Dowell Indonesia explains:: "While planned facilities have not proliferated in Indonesia as of yet, one area that must be mentioned is Cilegon basin, which has developed without planning and is by fact a large-scale integrated chemical complex."

Cilegon Basin is estimated to house 75% of the country's domestic chemical production sites. "Be this as it may," Blackwell continues, "a lack of central planning has resulted in tremendous strain being placed on the roads as well as delays in transport from Merak, the port to which it is closest. Infrastructure has not grown up around the project."

While not nearly as established as well-known chemical complexes such as Jurong Island in Singapore or Map Ta Phut in Thailand, the ambitions of Indonesia's industrial estates are large. Qomaruzzaman says: "In terms of our services contribution to the value chain, we seek to change what has been the mode of operation for gas companies within Indonesia since the industry's beginning, export-driven growth." Under their new industrial complex, more of the country's



Urea Fertilizer Complex of PT. Pupuk Kalimantan Timur

gas would be used to support domestic industries, including chemicals.

As the closure of these gaps becomes closer to a reality, space has filled up. Built off of an initial 200-hectare parcel, Kaltim Industrial Estate is currently looking to expand by acquiring additional land, as only 45 hectares of industrial space remain unused.

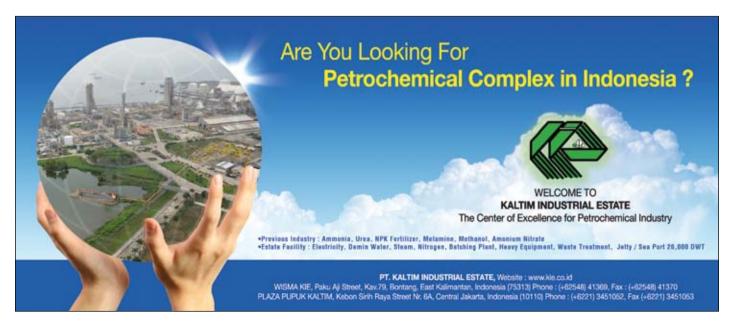
Although industrial estates have yet to become as common an economic building block as in other areas in South East Asia, privately structured investments in industrial planning have played a large role in economic development. There is no better example of this than PT Pertamina's (Persero) recent set of investments. Established in 1968 through a merger of two state-owned enterprises, Pertamina is the world's largest integrated manufacturer and exporter of liquefied natural gas. Additionally, as illustrated by its recent investments in a trans-Indonesian

natural gas pipeline, it is also one of the country's single largest contributors to infrastructure development.

## SUPPORT BUSINESSES

# Private sector growth through public sector development

The growth story of Indonesia's economy will focus on the development of domestic businesses. Foreign businesses will be involved, but domestic corporations will be the catalysts of the country's growth. Paramount to entering the country as a foreign business will be an ability to provide a unique service to the country and in doing so prove the necessity of the company's services. This can be observed in private-sector initiatives that have built the country's infrastructure.



## SUPPORT SERVICES

#### Linking in with Public Development

Discussions about the challenges of the Indonesian economy focus nearly entirely on obstacles created as a result of the country's difficult political atmosphere and infrastructure under development, ignoring perhaps the premier factor that sets Indonesia apart from all other developing markets: the country's geography. Darren Webster, president director of Linde Indonesia, one of four large industrial gas companies operating in Indonesia, and a company with over 40 years in the market, notes: "Indonesia's fragmented market with five main islands and around 17,000 islands in total provides significant challenges around connectivity. As such, product accessibility and production capability in each of the geographical markets is an important factor for success."

Investments made by Persero companies have created a structure that foreign businesses can use to enter into new spaces of the domestic market. For Linde Indonesia, one of the four large industrial gas companies in the country, collaboration with Persero companies has allowed for their business to solidify its position in both traditional and new markets. Having established operations in Indonesia over 40 years ago, Linde had long seen the potential of the domestic market; yet it was only recently that the company be-



Bulk liquid chemical cargo discharging process at Polychemlindo's 20,000 DWT Jetty

gan an aggressive growth campaign. Darren Webster, president director of Linde Indonesia, explains: "Over the past 12 months we have commenced executing a geographical expansion plan, opening a sales office and production facility in Kalimantan and will look to further expand to several new markets in the next 12 to 18 months."

As part of this, the company will be commissioning the largest air separation plant in Indonesia in partnership with PT Krakatau Posco within the year. PT Krakatau Posco is a joint venture between Krakatau Steel (Persero), the largest producer of steel in Indonesia, and POSCO Steel of Korea. Capable of moving over 2,000 mt of industrial gas per day, Linde's partnership will significantly aid the company in both fortifying their position in the market spaces within which they currently operate as well as opening up new customer groups.

At its core a technological services provider, Linde's work with Persero companies expands beyond its partnership with Krakatau Posco; the business has also worked closely with Pertamina. Globally a leading technology provider in the small and medium LNG sector, Linde saw opportunity in Pertamina's advances into Indonesia's frontier regions. In 2011, Linde and Pertamina entered into discussions regarding the potential development of a mid-sized LNG plant for the Salawati gas field off of West Papua, a venture that would employ Linde's strength in offshore gas technology to grant the surrounding communities access to an alternative to diesel, which has become increasingly expensive.

These investments in infrastructure reflect the benefits that can be gained from taking a stake in Indonesia's development. This is illustrated by the case of Indonesia Port Corporation III. In the past three years, Indonesia Port Corporation III has invested between \$1 and \$1.5 billion in developing the port system of East Java. For the next year, the company has budgeted \$6.1 billion for this same purpose. These investments have translated into a regional competitive advantage. Husein Latif, commercial and business development director of Indonesia Port Corporation III, explains: "One example



Darren Webster, President Director of Linde Indonesia

of this can be seen in the case of a client of ours. PT Petro Oxo Nusantara, a business that sources all of its materials from southern China and Thailand and whose end markets are in southern China. This business has chosen to use Indonesia Port Corporation III to transport its raw materials to Indonesia, where its products are manufactured, and then to return the finished product to their markets on the Chinese mainland. Their reason: we, Indonesia and Indonesia Port Corporation III, offer a cost-advantage. It was cheaper to ship their goods to Indonesia and have them manufactured domestically and then returned to their end markets than it was for them to ship their goods to northern China, where the hub for manufacturing for that particular industry is located, and then return those goods to southern China."

Investments in both infrastructure and internal support units to a business are not based on some vague calculation of Indonesia's future potential, they are a reflection on profitability. In the case of Air Liquide, translating growth potential into market-share has involved heavy investments in a pipeline network. Collectively, the company's pipeline network spans over 100 km, allowing for the business to supply all major chemical companies located within Cilegon Basin with oxygen. nitrogen, and hydrogen. "Almost 80% of the petrochemical industry is located in Cilegon and we supply them all via our pipeline network."

A strong market for infrastructure chemicals has developed. PT Asahimas Chemical supplies base chemicals to this market. Currently undergoing their fifth wave of expansion, PT Asahimas has grown aggressively. Jun Miyazaki, president director of PT Asahimas, explains: "

At PT Asahimas we believe that the use of our products is an integral part of constructing and expanding infrastructure. Base chemicals and their resulting products are fundamental to industrial growth, so the use and manufacture of our products here are our contribution to the growth of the industry."

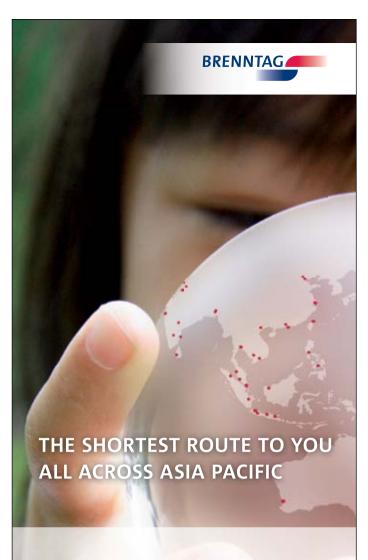
If there is any certainty in the domestic chemicals industry it is that infrastructure must grow.

The profitability of geographical expansion underscores a larger trend within the domestic chemicals industry: an underdeveloped support segment has meant that businesses that either establish themselves in support processes to the domestic market or are able to internalize third-party services will gain big. In the case of one company, Indochemical Citra Kimia, success in the domestic market has been built on both.

Nicolaas S.M, general manager of Polychem Lindo, a terminal tanking business, explains: "At the time of establishment of Polychem Lindo, Indochemical Citra Kimia, our parent company, was importing solvents in large quantities. The decision to acquire Polychem Lindo resulted from a close evaluation of our cost structure, specifically with regard to chemical tanking expenses. As the market leader in imported chemical solvents, with an estimated 55 to 60% of the domestic market share currently, renting had become no longer a feasible solution. To remedy this, we acquired PT Polychem Lindo in the early 2000s. Prior to our acquisition of the company, Polychem Lindo was a polystyrene manufacturing business. While we continued this line of production for several years, in 2004 we decided to develop the company's best asset: its proximity to the sea. Located in Merak, one of Indonesia's major port cities, tanking was a natural fit for both Polychem Lindo and the needs of Indochemical Citra Kimia."

Due to the success of this model, since its acquisition in 2004, Indochemical Citra Kimia has continued to expand the storage capacity of Polychem Lindo,





Brenntag is the global market leader in full-line chemical distribution. Linking chemical manufacturers and chemical users, Brenntag provides business-to-business distribution solutions for industrial and specialty chemicals globally.

With over 10,000 products and a vast supplier base, Brenntag offers one-stop-shop solutions to more than 160,000 customers.

Brenntag entered the Asia Pacific market in 2008 and is now operating in Australia, Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Malaysia, New Zealand, Philippines, Singapore, Sri Lanka, Taiwan, Thailand, UAE and Vietnam.

Our operations in Indonesia has a nationwide coverage with offices in Jakarta, Surabaya, Semarang, Bandung, Medan, Palembang and Makassar.

With our market knowledge, technical application expertise, wide geographic coverage, and extensive product portfolios, we provide value-added services to customers in markets such as coatings, food & beverage, personal care, pharmaceuticals, plastics & polymers, rubber and more.

#### PT. Brenntag

Graha Pratama Building, 17th Floor Jl. M.T. Haryono Kav. 15, Jakarta Selatan 12810, Indonesia Phone: +62 21 8379 0755, Fax: +62 21 8379 0760 info-indonesia@brenntag-asia.com

www.brenntag-asia.com

increasing its volumes from 21,500 kiloliters of storage space, to 46,750, where it stands today.

Robert Dompeling, group CEO of PEC, a Singapore-based engineering company and plant and terminal engineering specialist with a key interest in the Indonesian market, said: "One trend that we are seeing within global operations is a movement within trading companies to internalize facilities that they would otherwise outsource. For example, we just finished one state-of-the-art terminal in Rotterdam that was commissioned by a trading company; so far it has outperformed many competing facilities."

Although PEC generates 30% of its global income from maintenance projects and 70% from project works, the group is more than an engineering company. PEC acquired Audex, a tanking terminal business in Indonesia, in 2004, a departure from the group's engineering services but a move that the CEO has yet to regret.

PEC sees its priorities within the domestic market as follows: "In Indonesia we would like to expand our presence in the terminal business. We have seen several of these large projects commissioned in Batam, including one 2,500,000 cubic meter terminal by Sinopech that will soon open. This is an interesting area of business for us, as is the petrochemical sector. A third area of business that we are very interested in is agricultural-related projects. Coupled with power projects, these last two areas we consider to be especially exciting. We have worked on agriculture-related projects before in Malaysia and in Kalimantan; we have done several power projects: these are normal areas of business for PEC," said Dompeling.

## **TRADING**

#### A Hedged Bet

Of all sectors of Indonesia's chemical industry, the trading segment may be the most alluring to investors. A bet on trading businesses in Indonesia is a bet, in fact, that the country will at least initially fail in connecting its upstream and downstream markets and continue to depend on the presence of foreign companies for value-added processes. Current industry participants have discovered this, and the segment is amongst the most profitable in the chemicals industry.

Prior to its expansion into terminal tanking, Indochemical Citra Kimia had long been a leading business in this market. "Although we began small, due to the strength of our value proposition our volumes quickly grew to the level at which they stand today; we import and distribute 25,000 mt of chemical per month," explains Edwin Gunawan, director of Indochemical Citra Kimia.

Built around filling the wide-ranging gaps in Indonesian chemical production that have been made increasingly obvious by rapidly rising middle-class income, a number of multinational companies have set their eyes on the trading space of the domestic market. Jeff Moore of DKSH provides a regional perspective: "Indonesia's middle class is expected to have

one of the highest annual growth rates in South East Asia of 11% until 2020. With this rapidly rising middle class, Indonesia is becoming an increasingly promising domestic consumer market with growing demand. That demand is leading to a rise in the need for Western materials and technologies in order to build local infrastructures and production capacities in the specialty chemicals, food and beverage, pharmaceutical and personal care industries so as to manufacture products locally."

Focused on supplying performance materials to the domestic market, DKSH has grown its market share rapidly since establishing itself less than four years ago, winning contracts from over 250 companies.

Alternatively, one can supply consumers directly, as Brenntag is now doing as a result of its acquisition of EAC Indonesia in 1995. Tony Susanto, managing director of PT Brenntag, said: "PT. Brenntag purchases large-scale quantities of chemicals from global suppliers and repackages them into smaller amounts to provide less-than-truckload quantities for our customers."

Like many businesses considering the domestic market, Brenntag sees strong potential in income-related industries, such as the food and beverage industry, coatings, and personal care. Yet outside of their strategy for approaching the domestic market,



Tony Susanto, Managing Director of PT Brenntag

Brenntag differs from traditional trading businesses domestically in a second way: they are diversified both in the location of their markets as well as the services they offer. Susanto continues: "Many companies mostly focus on Jakarta and the Java area. We, on the other hand, provide business-to-business solutions all across the country. We are able to do this as we have established distribution networks in Jakarta, Bandung, Semarang, Surabaya, Medan, Palembang and Makassar. Furthermore, we add value by providing timely service, mixing, blending, formulations, repackaging and refilling, inventory management and technical services. We truly are a full-service company. In order to provide the strongest marketing and logistical support to cover all of the Indonesian markets and industries, all our branches have a full office setup like that of our headquarters in Jakarta."

#### **CONCLUSION**

Indonesia is a country of opportunities. Strong consumer growth has provided ample impetus for many businesses to establish themselves in the country, and this has been enhanced by the political and economic support to which the government has now committed.

Access to the domestic market requires adapting to match the rules of engagement for the country that have been set by those that already participate in domestic chemicals industry. For those that lack the capital to finance a large-scale infrastructure building initiative, partnering with a Persero will provide opportunities. While their role as agents of state development has shifted, their clout and ability to fast-track projects has not diminished: the importance of this cannot be understated in surmounting problems related to the country's business environment.

Indonesia is at an economic turning point, and as the country and its businesses hold their breath for the 2014 presidential elections, a hedged bet on the country's development is perhaps the most effective way of capitalizing off of the country's strong macroeconomic growth without being mired in larger problems.





#### Success requires the right formula

DKSH is the world's leading Market Expansion Services Group: growing our partners' businesses by providing a package of comprehensive services along the entire value chain. As an independent solution provider we source, develop, market, and distribute a wide range

of specialty chemicals and food ingredients to business partners in the food and beverage, personal care and cosmetics, pharmaceutical, and specialty chemical industries.

Visit us at

www.dksh.com/chemicaldistribution

Think Asia. Think DKSH.