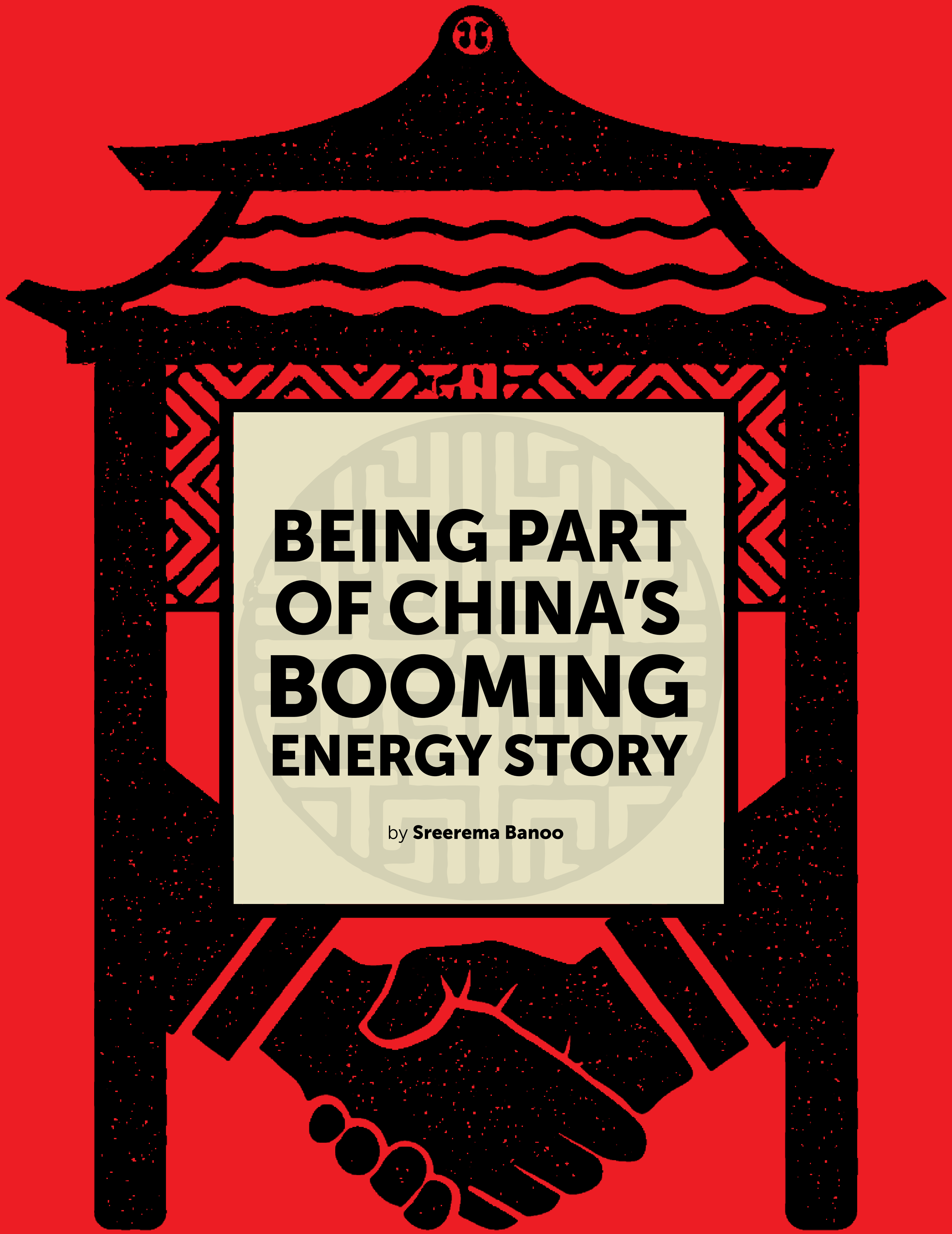


BEING PART OF CHINA'S BOOMING ENERGY STORY

by **Sreerema Banoo**

PETRONAS' strong relationship with China's national oil companies in the upstream segment and its strategic, flexible and creative solutions for the LNG, petrochemical and lubricant segments allow it to fulfil China's growing and diverse needs.

IF anyone thinks that the China juggernaut is running out of steam, some experts certainly beg to differ.

"The next two decades will be even more exciting than the last 20. China is on the verge of a second wave of growth and the biggest transformation is its energy sector. We will see China's economy overtaking the US," says Mark Gau, Country Head for PETRONAS in China.

China is set to experience greater urbanisation, growth in renewable and clean energies, advances in high technology and big data, and biotechnology and bioengineering industries.

These trends, Gau says, bring significant changes to its energy sector. For oil and gas players, these changes translate into opportunities – in natural gas, chemicals and lubricants.

PETRONAS might not be a major player in China's overall energy industry – compared with some of the global oil majors – but it is nonetheless poised to reap the rewards of China's growth and transformation, thanks to its track record.

In just under two decades of doing business in the Middle Kingdom, PETRONAS has built on the relationships nurtured in the upstream sector with China's national oil companies (NOCs). From a modest start, it has strengthened its position in China's chemicals, LNG and lubricants business.

PETRONAS has earned a reputation as a reliable and dependable partner willing to go to great lengths to meet the needs of its customers. The group also has the competitive edge over others as it offers an integrated and seamless business ecosystem, which allows it to provide solutions across the oil and gas spectrum.

Taking heed of the transformation and trends in China's economy, plans are under way to strengthen PETRONAS' presence in China. The group recently hammered out the first country plan for its business in China, which currently stands at about USD2.6 billion in revenue.

LNG is the largest contributor, followed by crude oil and petroleum products, chemicals, and lubricants.

Explaining the country plan, Gau says each of these businesses has its own strengths and has been operating independently over the years.

PETRONAS Head of LNG Marketing & Trading in China, Loi Su Han concurs, adding, "We definitely see China as the centrepiece of our own growth story and right now, we are probably in episode two or three of that 10-

"PETRONAS' plan for China is a reflection of its seamless and integrated business ethos."

episode growth story. It's a totally exciting time to be in China."

Loi, who was also at the planning session, says: "Over time, the businesses have become somewhat segregated, so we came together to see how we could consolidate the activities and leverage on the strengths of the different segments."

PETRONAS' plan for China is also a reflection of its seamless and integrated business ethos. By moving away from segregated operations, the company is in a better position to leverage on the strengths of the different segments.

In June this year, the company established a dedicated LNG office in Guangzhou headed by 17-year veteran, David Tung.

"The opening of the LNG office will help facilitate greater engagement with the China market and like the upcoming visit from our President and Group CEO, sends a signal to Chinese buyers that we are serious about doing business in China," Tung says.

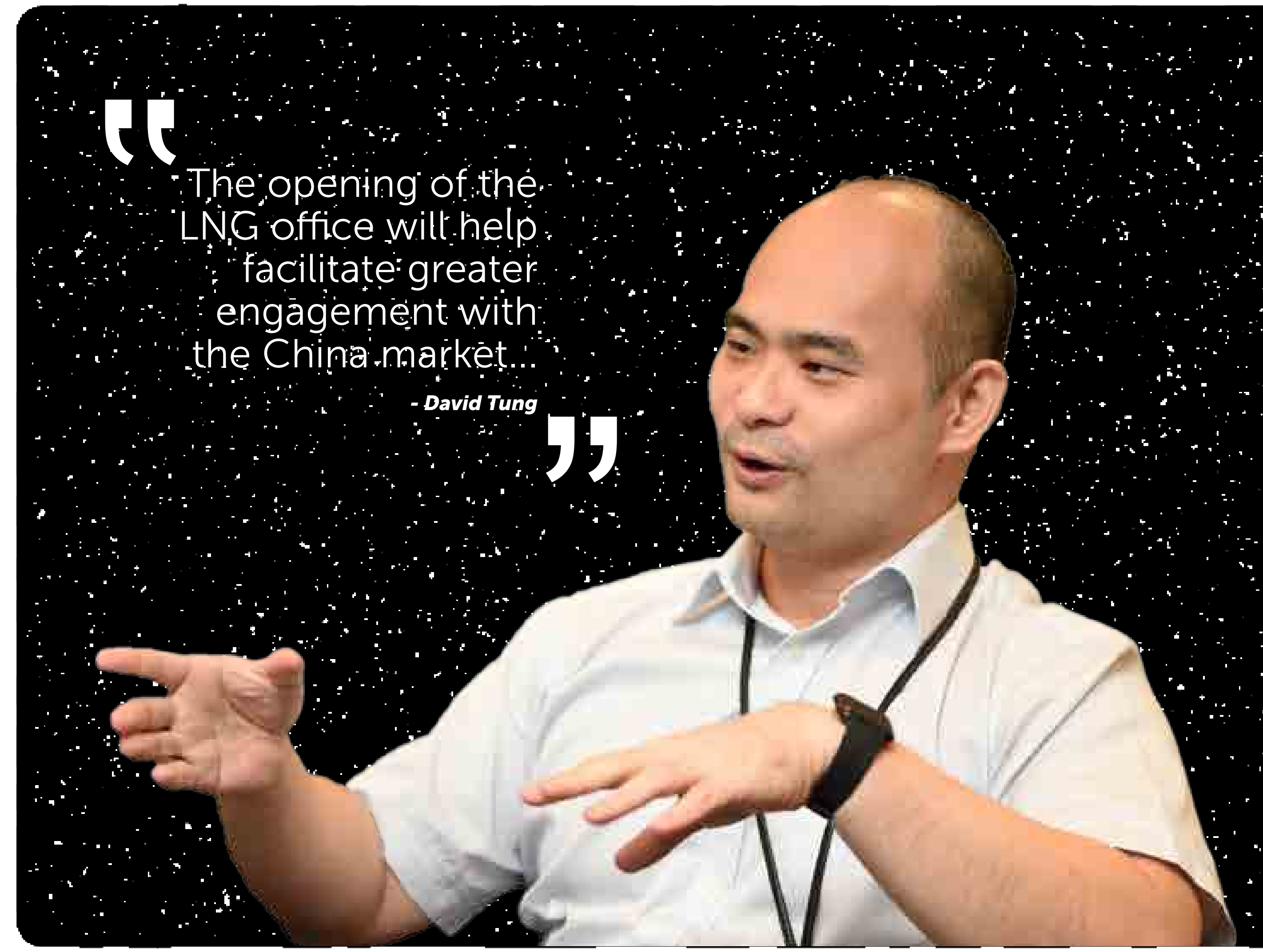
This approach is timely, as China undergoes several game-changing trends in its energy sector.

Urbanisation, clean energy

China's population of more than 1.3 billion, rising rate of urbanisation and increasing consumer demand are among the factors influencing China's energy reform.

"Urbanisation is a key driver. It has been China's biggest goal. In 1990, 26 per cent of the population lived in urban areas. This has risen to 60 per cent today and is targeted to hit 70 per cent in 2025," says Gau.

For oil and gas players, this spells opportunities in the second- and third-tier cities, which benefit from the continuous inflow of talent, capital and foreign investment, he says.



In China, the tier system classifies the 660 cities on criteria, such as GDP, political administration and population. Traditionally Beijing, Shanghai, Guangzhou and Shenzhen are considered first-tier cities. Provincial capitals and special administrative cities, such as Chongqing, Hangzhou and Tianjin, are usually categorised as second-tier and prefecture-level capitals, such as Lanzhou, Guizhou and Sanya, are generally classed as third-tier.

But even in a first-tier city like Shenzhen, Gau points out that there are three million households still using LPG.

"With the building of pipelines, this means that all these three million residential users will eventually become natural gas users. Urbanisation also brings investments in schools and hospitals and this then drives the construction and infrastructure industry and consequently, demand for energy.

"Urbanisation also has the potential to drive up the income of households and, as a result, they buy better cars, better lubricants and better products. The latter, in turn, will drive our chemical business because of the demand for higher-end textiles, polymers and compounds," he adds.

China's push towards clean energy is another key trend. The government's environmental regulations and stricter emission standards, for instance, are driving product upgrades in the lubricant business, says Gau.

"Customers are also demanding better products and services, such as high-end lubricants and better car care products."

Gau adds that China's move towards clean energy addresses its energy diversification priorities. "At the moment, its energy ecosystem is coal-heavy and coal is highly polluting, so China is seeking to strike a better balance."

China's target is to increase the share of natural gas in the energy mix to 10 per cent by 2020. Currently, only 6 per cent of China's overall energy needs are being met by natural gas compared with OECD countries of around 25-30 per cent.

LNG is also a "balancer" for China's energy needs in winter. "There is a huge heating requirement in winter and gas supplied from the pipelines is insufficient, so more LNG is imported," he says.

LNG also addresses security of supply concerns. "Currently, industrial users have two sources of supply – pipelines connected to the grid and the LNG input system."

For most gas users in China, gas from domestic pipelines is usually the first choice as it is cheaper. Loi says: "But when there is a need for more energy, imported LNG is an option. Transported via LNG trucks, it also circumvents much of the connectivity and accessibility issues. So for locations inaccessible by pipelines, LNG is the answer."

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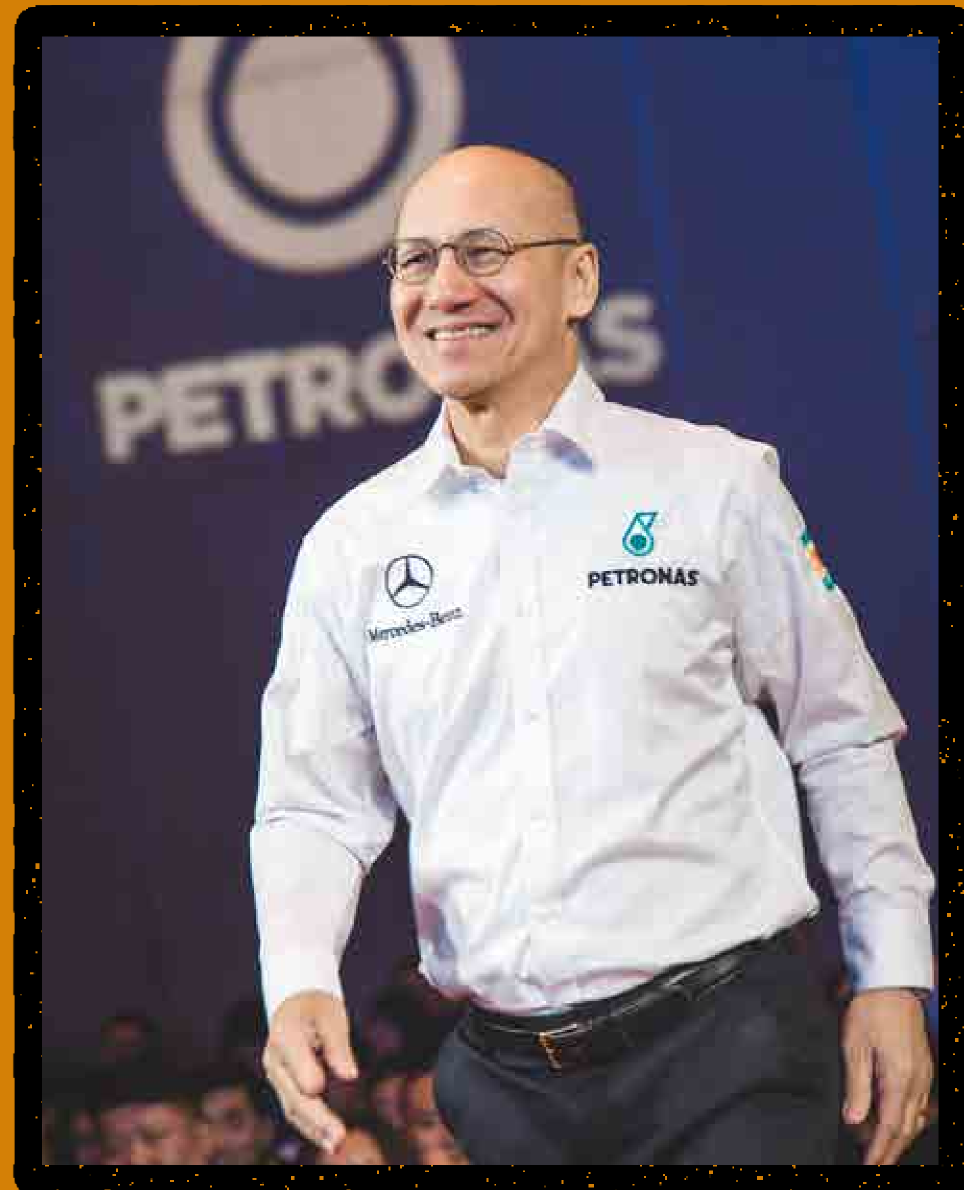
> ***- Mark Gau***



Deregulation and reforms

On the supply side, market and structural reforms are also big influencers in China's energy game.

"China is moving to deregulate some of the gas prices, by removing the subsidy on residential gas prices, for example. This reform will drive gas demand and infrastructure investment," Gau says.

"The restrictions on imports of crude have also been lifted – in the past, you could only buy crude from the three NOCs but now, so long as you can apply for a quota, you can import crude. So we're seeing an uptake in refinery activity.

"There are also important market reforms that offer opportunities, for example, in the past, if you wanted to open more than 20 petrol stations, you would need government approval but that requirement has since been lifted," he says.

Oil majors are already responding to this development. BP, for example, which has more than 700 stations in China, plans to open another 1,000 stations in the next five years and Shell also plans to triple its nationwide network to 3,500 by 2025.

"Now anyone can get into the retail sector. So what does this mean for us? Is this an area we want to get into? If we want to, we can," says Gau.

The 63-year-old, who was coaxed out of retirement to head up the PETRONAS' operations in China, is intimately familiar with China. Born and raised in Taiwan, Gau was at BP for two decades – exclusively in the China lubricant business.

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>
> ***- Loi Su Han***

This experience, coupled with his stint in Sara Lee Corp, where he negotiated the American consumer goods company's first joint venture in China, has also afforded him an understanding of the uniqueness and nuances of doing business in China.

In the chemical business, Gau says, government policies, such as the closure of small refineries, development of large, integrated petrochemical complexes and China's target of 60 per cent of self-sufficiency for high-end chemicals, have significant business implications.

"In line with a priority towards cleaner, greener energy, China is going for better pollution and environment control, so they are shutting down chemical plants or refineries that don't meet the stricter environmental standards," he says, adding that these reforms present opportunities for PETRONAS.

"China still imports a huge amount of chemical products, especially high-end chemicals and downstream derivatives. For example, China can only supply 52 per cent of engineered plastics domestically and 39 per cent of high-end polyolefin plastic materials – all of which are driven by GDP growth and a push for high value-added products," Gau adds.

Growth and more growth

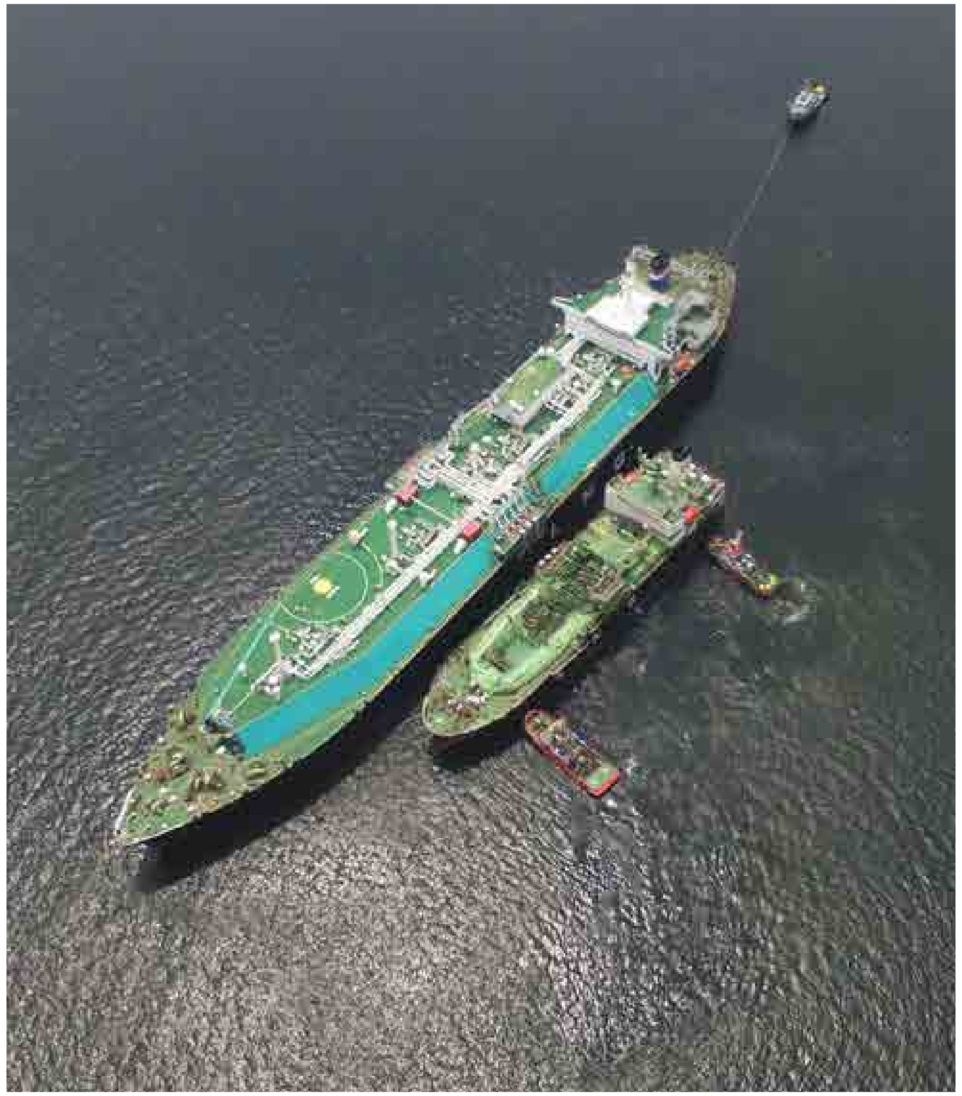
Whether it's in the chemicals, lubricants or LNG business, a key selling point for PETRONAS is its track record.

"In the case of LNG, we have been in the LNG business for 35 years. We have an established customer base with about 500 cargoes produced annually, which means it is easier for us to perform any delivery adjustments/swaps. This operational flexibility is something that our LNG buyers appreciate," says Loi.

Another aspect of PETRONAS' operational flexibility is its innovation in LNG delivery. One recent example is the breakthrough of PETRONAS LNG, in conducting its first LNG ship-to-ship break-bulking operation in Labuan Bay as a delivery-solution to serve our LNG term buyer Hainan Shennan Energy Co Ltd CNPC. In these instances, conventional size cargo is break-bulked into smaller parcels and shipped using small vessels to cater for the peculiarity of certain LNG receiving terminals in China.

"Unlike Japan, Korea and Taiwan where LNG is primarily delivered in conventional parcels of about 60,000-65,000 metric tonnes, in China, because of the constraints of certain LNG receiving terminals – such as tidal limitations or government approval restrictions – the acceptable LNG vessels vary. And we are able to cater to that required operational flexibility thanks to our PETRONAS LNG Complex in Bintulu, which was strategically designed to meet these requirements.

> "Building and nurturing of partnerships is one of PETRONAS' strength.
> *- Mark Gau*"



"We also have the geographical advantage. We are closer to China compared with many other countries, so if winter hits early or there is a cold snap and our customers need a cargo, we are just five days away," adds Loi.

The introduction of unconventional delivery modes via LNG ISO tanks which support small-scale distribution to remote areas, and LNG bunkering operation are other new frontiers that PETRONAS LNG is looking into seriously.

Across the different business segments, a key theme is the importance of relationship building and nurturing of partnerships. Gau believes that this is one of PETRONAS' strengths.

"Our chemical team has been very consistent building long-term relationships and customer engagement. The lubricant team is also very adept at looking at customer intimacy and leveraging on F1 to promote our brand. The LNG team also is savvy in leveraging on the good relationship we have with its NOCs."

What puts PETRONAS in good stead as China's preferred energy partner is also the Pengerang Integrated Complex (PIC) in Johor, a self-sufficient petrochemical playground, which will be ready in 2019, to meet growing petrochemical demands.

Taking it a step further, PETRONAS has also moved into greening petrochemical solutions by creating high purity bio-based chemicals for sustainable plastics and automotive applications.

Above all, as an energy partner, PETRONAS is a capable partner with an integrated and seamless business ecosystem that provides an array of solutions across the oil and gas spectrum, from exploration, pipelines and LNG to the marketing of products and lubricants.

Malaysia LNG plant in Bintulu, Sarawak.

Navigating the future

These comparative advantages aside, Gau does not discount the challenges ahead.

"China is always challenging," he says, citing competition as one area that requires attention. In the chemical business, for example, it has to contend with global players like Saudi Aramco.

"For lubricants, we're seeing a rise in the electrification of buses, cars and trucks, which may eliminate the need for lubricants altogether. Better performance lubricants also mean less consumption of lubricants (reducing oil changes per year by some 40-60 per cent)," he adds.

In the case of LNG, although the outlook is generally positive, Loi does not dismiss the supply side downside risks, chief of which is Russian gas giant, Gazprom's Power of Siberia gas pipeline that's expected to begin supplying natural gas to China by the end of 2019.

Mitigating these risks means ensuring that it has its eyes and ears attuned to the market, says Loi, pointing out that this is one of the key priorities of its China LNG representative office. Tung concurs, adding that one of his tasks is to identify areas where PETRONAS LNG can value-add and to customise its offerings to ensure attractiveness and competitiveness.

Specialty chemicals, for example, are a promising segment.

Tung also adds that China's implementation and the direction of its policies changes can be swift.

"So when this happens, the ones who adopt the fastest tend to have an advantage. As a player, we are certainly at an exciting time in China. I believe that if we put our minds together and be creative, China can be a significant part of our portfolio."

Loi concurs, adding that "we definitely see China as the centrepiece of our own growth story and right now, we are probably in episode two or three of that 10-episode growth story".

PETRONAS in China Through the Years

We celebrate two decades of fruitful partnerships and endless possibilities

Storage tanks at LPG JV project in Hailing Island

PETRONAS' foray into China began with a 20 per cent stake in an LPG processing and distribution project in the province of Jiangsu in 1997 and in the following year, a 30 per cent stake in an LPG JV project in Hailing Island, Yangjiang, Guangdong Province.

Our relationship with China can also be traced to the upstream sector – in particular, partnerships with its national oil companies (NOCs), such as Sinopec and China National Petroleum Corp (CNPC), in Sudan, Iraq and Canada. This was followed by the lubricant and chemical segments.

In 2004, the MITCO Shanghai Representative Office was set up to support the marketing and sales activities of chemicals, followed by the incorporation of the liaison office in Guangzhou a year later to support chemical sales in southern China.

In the same year, PETRONAS Marketing (China) Co Ltd was formed in Shenzhen to start the national oil corporation's lubricants trading business in China. This began mainly with the export of Syntium and Urania brand products to China.

PETRONAS' maiden foray into China's LNG market can be traced to 2006 when it secured a 25-year government-to-government linked 3 million tonnes per annum (mtpa) sales and purchase agreement (SPA) with Shanghai LNG Co.

Mark Gau, Country Head for PETRONAS in China, says that although its chemical and lubricant businesses are growing above GDP, they are relatively small.

"The chemical market share in China is less than one per cent and lubricant about two to three per cent. Though we are a small player, what's important is our value-share in the targeted segments."

In the chemical business, for instance, PETRONAS has a reputation as a consistent player in keeping its promises on delivery.

"We are known for consistently high-quality products and for our brand," Gau says, adding that key customers include Sinopec, BP Asia, Sinochem, Sheng Hong and King Fa.

"Our products serve a wide range of industries, such as plastics, textiles, electronics and automotive."

Brand building based on relationship and trustworthiness has also made an impact on its lubricant business, specifically its presence in Formula One.

"Through F1, we have been able to showcase our technology, an area we have been successful in globally, and it's an area we continue to do well in China," adds Gau.

As for the LNG business, PETRONAS is today the third largest LNG supplier. "In all, we are delivering almost six mtpa this year, on the back of five SPAs and a significantly higher spot volume, and this is an expansion of our journey which began a decade ago with Shanghai LNG Co Ltd," says PETRONAS Head of LNG Marketing & Trading in China, Loi Su Han.

Since the signing of that deal in 2006, PETRONAS has added two more key customers on long-term contracts – JOVO in Guangzhou and Hainan Shennan Energy Co Ltd CNPC (a wholly-owned subsidiary of CNPC Kunlun Energy), as well as various spot buyers.

"We are a key player in LNG in Shanghai, we supply more than half of the city's natural gas needs," says Gau.