

# Flow



PETRONAS



## REINVENTING

## RETAIL

Issue 3, 2017

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OF HARD LIFE



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## ON THE COVER

Driven by technology, consumers of today wield greater power over businesses than ever before, resulting in companies racing to find insights into needs and demands as well as creating novel experiences to retain loyalty.

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### Contributors

Sreerema Banoo • Jacqueline Pereira • Brigitte Rozario

# GREETINGS

**W**elcome to the third edition of Flow where we bring forth stories of change.

The cover story *Reinventing Retail* talks about how petrol stations are evolving to respond to the shifting landscape of consumer needs and demands. The station of tomorrow will be more than a place to refuel your car, perhaps also a sanctuary for the modern lifestyle.

The story on retail won't be complete without featuring voices of customers who have journeyed with our stations from day one and dreams of younger customers for future stations. You will find their stories and ideas featured throughout the magazine.

The changing consumer landscape has impacted both B2C and B2B businesses. Our story titled *The Art of Adaptation* is about PETRONAS Dagangan Berhad's (PDB) transformation from within to address need and demand shifts in the commercial business sector.

In the spirit of making energy accessible, PDB makes every effort to ensure that LPG is delivered to everyone who needs it even those living in the most remote rural areas. Do follow the journey of our LPG cylinders to areas like Pulau Brait on a boat and up Mount Kinabalu on the backs of mountain guides and porters.

On technology, we tell a story of a different journey in delivering efficient and high-performance fuel for both Formula One™ race cars and regular cars. The story *Fuel Right* also discusses how PETRONAS' involvement in F1® fuelled our breakthrough in fuel technology. Our Fluid Technology Solutions™ was instrumental for Mercedes-AMG PETRONAS Motorsport team's fourth consecutive win of the World Constructors' Championship since 2014.

Our feature on petrol station owner Shaidi Mohamad Zin, shows how a change in mindset truly shifts a person's fortune. The



former PETRONAS station attendant talks about his difficult childhood, struggles and journey to become the man he is today.

In this issue, we have also included a recap of all PETRONAS' significant events for 2017 that played a substantial role in strengthening the company and its brand presence.

Have a good read and we look forward to bringing you more stories in the next issue. Until then, I would like to urge readers to view change as a spring board to personal growth and greater good.

I would like to take this opportunity to wish our readers a happy and fruitful 2018. Do email us at [flow@petronas.com](mailto:flow@petronas.com) for feedback and queries. We'd love to hear from you.

Editor-in-Chief  
**Zahariah (Liza) Abdul Rahman**

# FIND INSIDE

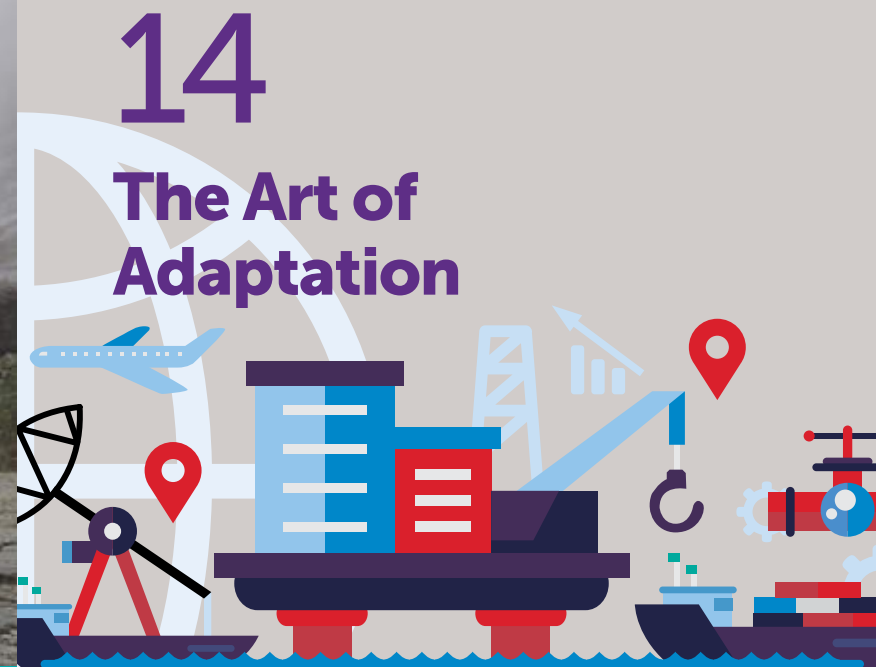
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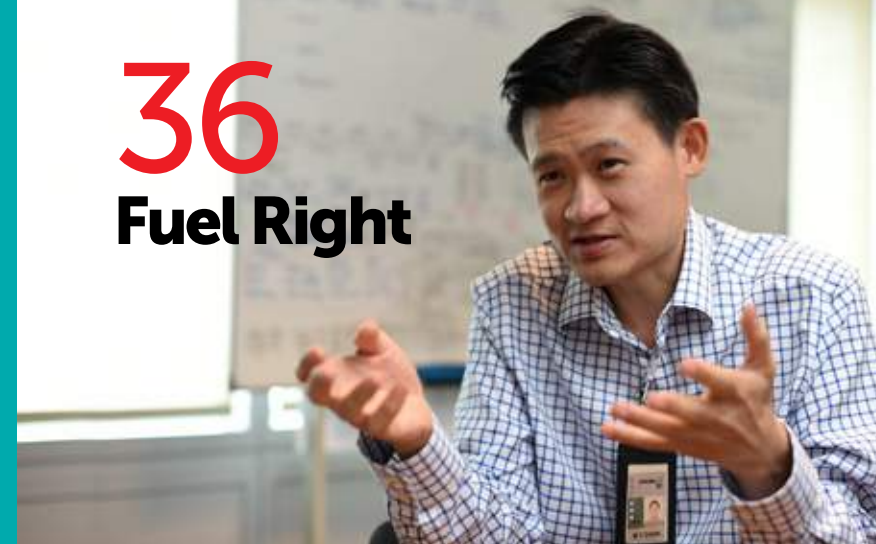
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# REINVENTING RETAIL

Tomorrow's service stations will be driven by the changing demands of today's customers.

by **Jacqueline Pereira**

Imagine. A place to escape, recharge and retreat. A conducive ground to work and play. A food haven and hangout joint, where you can sneak in some serious shopping. Doesn't sound like your typical petrol station? That future is not far away, thanks to the digital disruption that has disrupted almost every fibre of life today.

Consumer behaviour is largely governed by this disruption, according to trend marketing agency Futurist Faith Popcorn that predicts 'consutainment' - integration of ultra-convenience, consumption and entertainment. The trend of hyper-customised concierge and on-demand services will only escalate.

Just like other retailers, oil and gas companies are racing to adapt – in a future where renewable energy may reign; these companies are looking at repositioning their refuelling stations by creating an environment which adds value to today's scarcest commodity—time.



## Going personal

"When we first started, petrol stations were one-dimensional, product-based businesses," said Aadrin Azly, PETRONAS Dagangan Berhad's Head of Retail Business. Over time, in adapting to consumer demands, the commodity-based business has been layered with sophisticated aspects associated with premium brands and customised services.



"Ultimately, the future of retailing is about experience," added Aadrin. Convenience, brand and product are all rolled into an experience created to cater to the customer's needs.

In current climate customer loyalty is not to be taken for granted. Aadrin further finds that solely relying on customer's feedback is outmoded as it only generates obvious responses. Instead, he prefers to focus on their journey in life. "What are their needs, most importantly their unmet needs?" With the help of analytics, if they can figure this out, he is certain capricious customers' requirements will be satisfied. "I think it's so interesting now because we are at a stage where technology has allowed us to do things that we have only dreamt of before."

The future service station that Aadrin envisages is one where even space can be customised. "Modular is the way to go, where we can start small and fit-for-purpose." With dealers designing their stations to suit their customers, location and community needs.

Aadrin equates retail stations with theme parks, referring to Disneyland's slump 25 years ago. Theme parks today have reinvented themselves, he stresses, offering a magical experience by integrating the world of comic books and sci-fi fantasy films, in addition to roller-coaster rides.

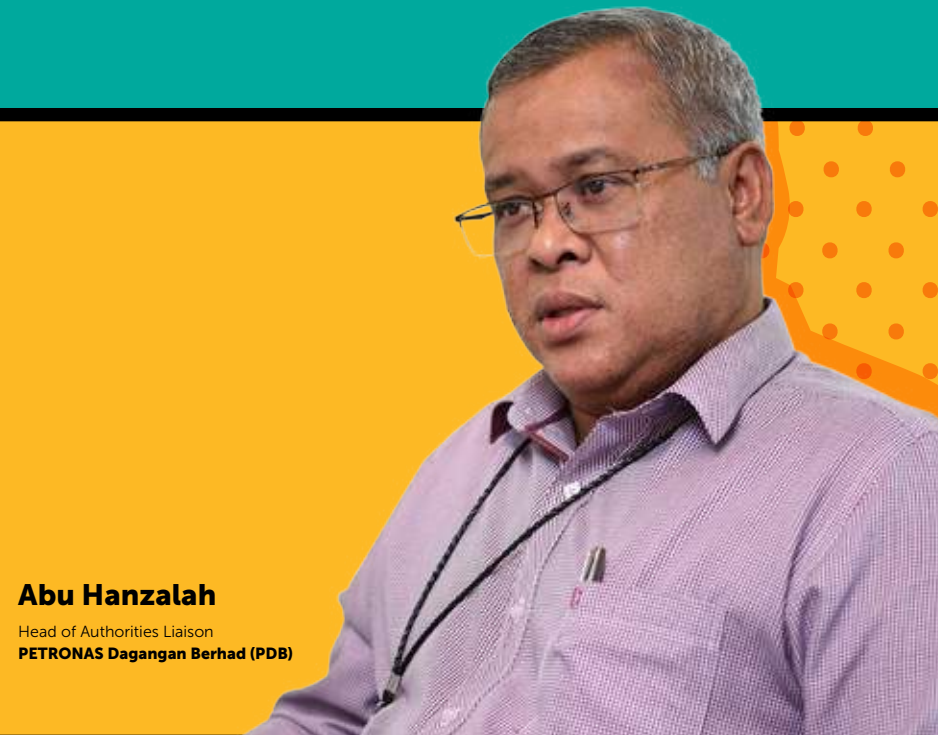
Similarly, he sees service stations offering an escape to harried customers trapped by the rigours of an increasingly complex world. "We need to tap into the sanctuary they seek, for them to feel relaxed in our space with all their needs taken care of. By turning retail stations into a destination where people will want to go to hang out."

The seeds of change have been planted. Coffee and cafes were just the beginning. Today PETRONAS service stations are in transition. With more than 1,100 petrol stations countrywide, the national oil company has the largest network of convenience stores at petrol stations, with over 760 Kedai Mesra outlets. The one-stop centres have been upgraded, facilities renewed and safety points established.

**Aadrin Azly**  
Head of Retail Business  
PETRONAS Dagangan Berhad (PDB)



**"I think it's so interesting now because we are at a stage where technology has allowed us to do things that we have only dreamt of before."**



**Abu Hanzalah**  
Head of Authorities Liaison  
PETRONAS Dagangan Berhad (PDB)



## A mere convenience store no more

The old 80s image of utilitarian skid-tank roadside rest-stops has been replaced by sleek, well-lit, convenient stations offering customers a host of products.

The Mesra Store we see today made its debut as an unbranded convenience store which piloted at the Bangsar and Sungai Perak stations in 1994.

PETRONAS' first Mesra branded convenience store was launched in 1996 at its Sri Hartamas station. It was also the year PETRONAS sought the expertise of the convenience store giant Dairy Mart for insights into enhancing customer experience.

That year PETRONAS partnered with Dunkin Donuts, which was made available at its flagship store at Sri Hartamas.

In meeting customers' evolving demands and taking note of developed countries' innovative practices, the one-stop *Kedai Mesra* transformed by refining customer experience.

Stores were kept clean, safe and simple. Products were strategically sourced and displayed to attract customers. Hot drinks and snacks replenished travellers, enticing them to unwind.

"We were also the first petrol station C-store to offer the convenience of an ATM machine," said Abu Hanzalah Abu Bakar, the current Head of Authorities Liaison for PETRONAS Dagangan Berhad (PDB). He was also instrumental in introducing the Mesra bottled water 18 years ago.

In taking customer service to another level, to cater to the middle and upper-middle class demographic in the newly founded Subang Jaya at that time, an A&W quick-serve restaurant was planned. A first for service stations and a co-branding partner that required on-site cooking, Abu Hanzalah recalled. To realise this target, he had to personally reassure the authorities that he would

**"In 1997 or 1998 we sent a cappuccino machine to a rural station and the dealer called me to ask, 'Aapa ini? Kopi Cina?'"**

take responsibility in case of any unfortunate mishap.

At that time, the challenge in introducing a relatively new business model like the convenience store was managing the different expectations. Initially there were some resistance to having convenience stores in stations. Abu Hanzalah recalled his trip to visit a dealer in Kulim. He had heard many stories about the person, who was known to be hot-headed, outspoken and aggressive. "They said he was very tough. While waiting for him to arrive, I sat down on the floor and started to rearrange the items on the shelves." Abu Hanzalah continued. "After finding out who I was, he asked me what I was doing. Then he sat down cross-legged like me and helped me. That's how I got his buy-in on our business model."

When dealing with the retailers back then, he admitted, it was more human than technology. "In 1997 or 1998 we sent a cappuccino machine to a rural station and the dealer called me to ask, 'Aapa ini? Kopi Cina?'" Abu Hanzalah, who oversaw merchandising and promotions at Malaysia's first service-station marts, conceded that early success was based on trial and error.

Today's younger, savvier and well-travelled dealers are more open to new ideas and innovation, but customers have at the same time become more discerning and demanding. Their high expectations, evolving with time, influence their spending habits, swayed by increasingly judicious tastes and ever-changing trends. Retailers have to work harder to attract customers in this era of digitally connected, on-demand economy.



## Zooming ahead

Last year saw the introduction of Multi-Product Dispensers accommodating up to six fuel products, providing swift and seamless convenience at the pump. Formula One™ fans of Mercedes-AMG PETRONAS can purchase team merchandise. Corporate fleet cards such as PETRONAS SmartPay and Samsung Pay enable customers to shop and pay with ease.

Almost organically, each service station has become centred on the community it engages, creating a sustainable eco-system. Station offerings vary, with products and services customised to suit local tastes and concerns, uninhibited by uniformity. Stations support the local economy by providing an avenue for entrepreneurs to market their products. They have also become a point of contact in times of crisis. In instances of accidents or break-ins, first-level aid and police assistance are offered to victims seeking help.

"Points collected on a loyalty card no longer measure a customer's fidelity. To retain customers, you need to know them", said Aadrin. "Nothing is more important than that people know you." Next year they hope to work on a loyalty programme where data is

collected, triangulated and entered into a dongle that talks to the system as soon as a vehicle pulls up at the pump. Simultaneously, the customers' top four product purchases will be alerted, "Super-personalised and, in the five minutes it takes to fill up on fuel, your items will be ready."

Another way to meet these distinctive demands is to work with specialised partners to co-share and co-create the space. Almost like the old kopitiam model, he explained, where the main tenant takes care of the beverages, and rents out space to food providers.

Just think. Your car is being charged. You grab a coffee and a hot snack. On a screen that lists your purchase pattern, you click on items. You key in your purchase and pick up your latest online delivery parcel. You go home, cook your one-meal ingredient dinner while watching a film on the channel redeemed by your Kad Mesra points.

At the heart of this new reality lies an analytic engine that captures customers' changing needs, catering to their constantly evolving appetites. That future is almost here.



**Spreading Joy:** Some stations serve free refreshments weekly to the delight of customers.

"My seniors actually had to go out and buy skid tanks, fill them with diesel and kerosene to sell by the roadside."



**Mohd Shobri A Bakar**  
Head of Supply & Distribution  
PETRONAS Dagangan Berhad (PDB)



## It Began with a Calling

In 1979, in the wake of the Iranian revolution, diesel shortage in Malaysia reached a critical stage. Lorries were stranded. Related diesel-reliant industries were crippled. Kerosene, the primary cooking fuel then, was fast depleting.

Called upon by the then Prime Minister, Tun Hussein Onn, PETRONAS, with no service station experience or marketing nous, stepped in. "My seniors actually had to go out and buy skid tanks, fill them with diesel and kerosene to sell by the roadside," recalled Mohd Shobri A Bakar,

the PDB's Head of Supply & Distribution.

Three skid-tank stations started operating in Klang Valley, growing rapidly to five, located at Taman Tun Dr Ismail, Kepong, Keramat, Kelana Jaya and Damansara.

Once they had stabilised the market, the company decided to venture into the retail business. A team then spent six months in Japan, sleeping in dormitories and learning the culture of operating service stations. Subsequently,

in July 1981 PETRONAS' first service station began operations in Taman Tun Dr Ismail on the site of one of their first skid-tank stations.

PDB began as a domestic marketing department, fondly referred to as 'Dagangan', a literal Malay translation of 'trade'. On 5 August 1982, PETRONAS Dagangan Berhad (PDB) was founded as PETRONAS' principal marketing arm, established itself as Malaysia's leading retailer and marketer of downstream oil and gas products.

## Customer Speaks My Journey with PETRONAS

*"As a KTM train driver, I used to carry PETRONAS oil from Port Dickson to Subang Airport. We had to go slow because of the cargo. When I had PETRONAS oil tanks, I was never worried because the tanks never had any leaks, unlike other cargo tanks. PETRONAS always had very good safety standards. But in those days there was no fencing along the tracks and the folks in Sungei Way and Kg Dato Harun always knew where the train would stop and they knew how to press the plunger to drain the oil. As drivers, we were conscious of this but we couldn't do anything. If we moved faster, the person taking the oil would fall. Eventually, proper fencing was installed along the tracks. These days, I use the PETRONAS oil and black oil. When I use the black oil, the movement of the pistons is very smooth. If you want to validate my claim, go on a lonely road and put your gear on neutral and go downhill. Observe and see; there is no sound! I think PETRONAS is special. Everybody walks on the road, but when PETRONAS walks by, everyone stops to look. PETRONAS has always been an icon of pride for Malaysia."*

**A. Shanmugam**  
67 years old  
Retired Locomotive Driver



**Zulaiqha Aisya Bidin**  
23 years old

*"Rest areas dedicated to motorists on long journeys would be good. The facilities can allow these motorists to take a break and freshen up before resuming their journey."*





# THE ART OF ADAPTATION

Price war and evolving demands have created buyers' market and PETRONAS Dagangan Berhad (PDB) is reshaping its commercial sector segment to serve the new landscape.

by **Jacqueline Pereira**



Driven by technology and evolving customer needs, businesses are forced to rethink traditional strategies. The fuel industry is just like other businesses, moving from being organisation-centred to customer-centred. For both commercial and retail sectors, customers now wield greater power over businesses than ever before, demanding insight-driven customised experience.

For Mahmad Zahri Mahzan, the Head of Commercial Business, PETRONAS Dagangan Berhad (PDB), the next five years would be an interesting market, with buyers having more influence on how the market will swing. He added that companies would need to transform from within to ride the tide.

"I look at everything as an opportunity. To me the most important thing when you are running a business is to look at the opportunities, even when you are down," explained Mahmad, who added it is crucial to look beyond just seizing on a set of circumstances to address this new wave of demand. "To survive in the future, you will have to create the market."

#### Addressing the power shift

The shift in power to customers means that companies would need to offer compelling new experiences, establish

innovative business models and find new ways to create value.

Today's consumers expect personalisation, speed, values, ethical practices and price transparency. Connected to multiple platforms, consumers, whether individuals or corporations, expect more from brands every day. It is no longer enough to blow one's own trumpet for having the highest-quality products, services or the lowest price. Customers are equipped to assess and decide for themselves.

According to Mahmad, the current economic climate has impacted the many facets of PDB's commercial businesses, covering a range of petroleum products from diesel to bitumen and a range of customers from the aviation industry to road vehicle users.

PDB business is divided into retail, commercial, LPG and lubricants and it operates largely in the domestic market, supported by a strong delivery network.

Each product in each category caters to a different demand segment, Mahmad stressed. And every segment displays different sets of behaviour and motivation, presenting the company with a matrix of challenges.

“**For both commercial and retail sectors, customers now wield greater power over businesses than ever before, demanding insight-driven customised experience.**”

**Mahmad Zahri Mahzan,**  
Head of Commercial Business  
**PETRONAS Dagangan Berhad (PDB)**



“**Today, consumers play a huge role in setting the standards of demand, hence, tailor-making solutions have become ‘that much’ challenging.**”



“We have to react and deal with each segment individually,” he asserted, taking the diesel market as an example. It has the most market segments in Malaysia, ranging from plantations to shipping. The economic impact on an individual segment requires a distinctive response.

“In the case of the aviation industry, the rise in the number of airline passengers should indicate better business for aviation fuel providers, but technological advances have enabled aircrafts to become more efficient.

“Their cost-consciousness is a challenge for us,” he affirmed, pointing to the fact that the airline market in Malaysia is modest in size. This has prompted PDB to look beyond Malaysian shores and last year the company has added offshore contracts to its portfolio.

While fuel price is a key consideration, Mahmad stressed that airline’s first priority is fuel quality, followed by operational performance and lastly the ability to fulfil ad hoc demands. All vital advantages, he stated, prevalent in PDB’s fully integrated system.



“We have to change the way we look at things, to genuinely understand customers’ needs,” he stated.

He picked bitumen as an example. A new government directive, effective from 1 May 2017, bars the use of bitumen with lower penetration grade of 80-100 in favour of bitumen of higher penetration grade of

grade 60-70. This is to reduce road damage and withstand high traffic for longer.

With only three months’ notice, PDB had to reconfigure their refineries to produce the desired grade. He added that, with the announcement of government projects, new players are emerging in the bitumen business.

#### Strengthening from within

Twenty years ago, noted Mohd Shobri A Bakar, Head of Supply & Distribution for PDB, they used demographic segmentation to target customers more accurately. But now, with customers playing a huge role in setting the standards of demand, tailor-making solutions have become ‘that much’ challenging. He added, “Service now is very broad-based. Trying to aim at only one group can be very limiting.”

Yet, according to Mohd Shobri, they will have to strive continuously, be patient and focus on becoming more efficient. “It is about efficiency, agility and hitting the nail on the head.”

Mohd Shobri succinctly described his work as delivering on the promises of the sales teams in ensuring that he delivers products on time, safely and cost effectively. He declared, “I make sure that the sales team does not give cost as a reason not to compete.”

working hours before this was adopted Groupwide.

Along with 38 terminals in Malaysia, including airports, ports and bottling plants, Mohd Shobri is also responsible for more than 600 staff. However, he also advocates for the move towards unmanned terminals, although automation requires significant capital investment.

**Last year PDB launched its first Unmanned Terminal at the Lumut Fuel Terminal. This consisted of fully automated road-tanker loading operations at Tank Truck Loading Rack, outsourced marine-vessel receiving operations, and Automatic Tank Gauging system for inventory monitoring.**

It included operations supervisory control from Control Room using a real-time data acquisition system. Prai, Kertih and Melaka Fuel Terminals later adopted the unmanned terminal strategy.

Another innovation was, instead of dealing with stacks of boxes of five-ply invoices and limited storage space, Mohd Shobri got his team to look into courier companies’ processes. Today, his division’s delivery and authorisation process is digital, with PETRONAS drivers conducting transactions on tablets. Once again, PDB is the first to do so in Malaysia.

Last year PDB was the Group’s largest contributor, recording an after-tax profit of RM946.5 million. This was its highest achievement in 34 years, marking a 19 per cent increase from 2015. Moreover, the company contributed 45 per cent to the Group’s retail business gross margin.

#### Pushing for agility

Venturing across rapidly unfolding terrains, fuel retailers must respond by adapting swiftly. In any change management exercise, cost is the initial entry point to ensuring agility.

In 2015, Mohd Shobri was entrusted to champion cost management, as part of the company’s continuous cost optimisation effort. Not only to reach targets through prudent spending, but also to consolidate contracts and expertise, as well as seeking alternatives to achieve more with less.

When one of PDB’s office tenancies was about to expire, he noticed that the offices were frequently unoccupied. His staff were usually out in the field, leaving him to question the necessity of establishing space. Initially, it was difficult getting buy-in, but a trial run smoothed the transition by accommodating to staff requests. Offices in Ipoh, Kota Bharu and Melaka shut down. Staff were on the move, constantly connected and meeting in rented spaces.

The same year also saw PDB as PETRONAS’ first to introduce flexible



**Mohd Shobri A Bakar**  
Head of Supply & Distribution  
PETRONAS Dagangan Berhad (PDB)

# STANDOUT PRODUCTS AND SERVICES



## 01

### PETRONAS Syntium 3000 SE

A high-quality engine oil blended exclusively for PROTON, launched in November 2016. This exclusive range of lubricants optimises a PROTON car engine performance with its specially formulated CoolTech™ technology, engineered to reduce excessive engine heat.



## 03

### PETRONAS Dynamic Diesel Euro 5 with Pro-Drive

The bio-diesel blend PETRONAS Dynamic Diesel Euro 5, meets the more stringent diesel fuel standards, reduces harmful emissions of polynuclear aromatic hydrocarbons from exhausts, when compared to conventional petroleum diesel. It is currently available at selected PETRONAS stations.

## 02

### PETRONAS Urania with ViscGuard™

The Commercial Vehicle Lubricant was relaunched with a new brand proposition, supported by the unique ViscGuard™ technology to effectively guard against engine deposit build-up. It has proven to be better at maintaining oil viscosity and controlling carbon build-up.



## 04

### Collaboration with HONDA Malaysia

In supplying HONDA Genuine Oil 5W30, a special-blend lubricant for factory fill at the HONDA Malaysia manufacturing plant in Melaka, PDB has become the first non-Japanese lubricant supplier certified by HONDA. The collaboration includes rental of lubricant bays for one year at eight PETRONAS stations nationwide as part of its Free Airbag Service programme.



## Customer Speaks My Journey with PETRONAS

*"In 1998, I had just finished my law degree and my bar in the UK, and came back home for my chambering. Then I saw an advertisement calling for station operators.*

*It was my late father's wish to operate a petrol station, so, I submitted my application. It was a year before PETRONAS finally called me for an interview. I was lucky to get the TTDI station despite not having an oil and gas background. It's their flagship station and the first PETRONAS station worldwide. Only after they gave me the offer letter did they impress upon me the huge responsibility involved. I took over this station on 31 August 2000. At that time I was not yet a PETRONAS customer but during the basic training, I realised I should support our Malaysian product and company and became a PETRONAS loyal customer. I had very good support from the area managers who taught me what I needed to do. I could see that the company would go a long way. PETRONAS is a good company with a bright future ahead."*

**Haslinda Haron Kamar**  
45 years old  
TTDI Station Manager/Dealer



**Estelle Eilish George**  
24 years old

*"I would like for it to have a diner, a proper one and not just fast food restaurants. These gas stations should probably place the toilets where the public can see it right away so that it's safer especially when it's late at night."*



# CHANGING THE WORLD, ONE CYLINDER AT A TIME

by **Nursyaza Nadiah Ahmad Marzuki**

**Imagine** a world where access to energy is limited. Where it can be packed and sent to areas you have never even heard of, or even knew of. Areas so remote that you didn't even think it was possible to reach.

For years, PETRONAS Dagangan Berhad (PDB) has been doing what many rarely attempt. "We have gone to places so far out to deliver supplies of Liquefied Petroleum Gas (LPG)," says the Head of PDB's LPG Business Division, Ramzulhakim Ramli. Ramzul, as he is fondly known amongst his peers and friends, oversees the distribution of LPG cylinders across the country to our four terminals in Peninsular Malaysia and another four in East Malaysia. These include six owned terminals and two joint-venture terminals.

"We learnt that through our vast network of dealers – the biggest in the country, PETRONAS has been able to meet the demand of energy in the rural areas in Malaysia. We were given the opportunity to make the lives of fellow Malaysians better, and we see it as our responsibility as the nation's homegrown organisation. Challenges are numerous, but PDB continues its quest to make LPG accessible - most times even absorbing the cost of delivering these cylinders to communities in remote areas."



**Ramzulhakim Ramli**  
Head, LPG Business Division,  
PETRONAS Dagangan Berhad



After loading LPG cylinders from the four terminals across Peninsular Malaysia, our dealers continue on their way to deliver the cylinders to customers all over Malaysia.



Delivery to Tanah Tinggi, Cameron Highlands.



A worker loads the cylinders onto the back of a lorry from a barge by Jabatan Laut Malaysia in Lumut, Perak.



Loading activities continue at the wharf after collection from the Primer Dealer. These cylinders are then transferred to a boat before continuing their journey to Daro, Sarawak, which takes around seven to nine hours.



## THROUGH THE PATHS LESS TRAVELLED

### Pulau Bruit, Sarawak

**IT'S A 300KM JOURNEY.** Once PETRONAS' LPG Primer Dealer has unloaded the cylinders from the LPG Bottling Plant in Bintulu, Sarawak to its store, they will then be ready for pickup by designated dealers for the areas.



LPG cylinders being loaded onto a smaller boat for delivery to villages on Pulau Bruit.

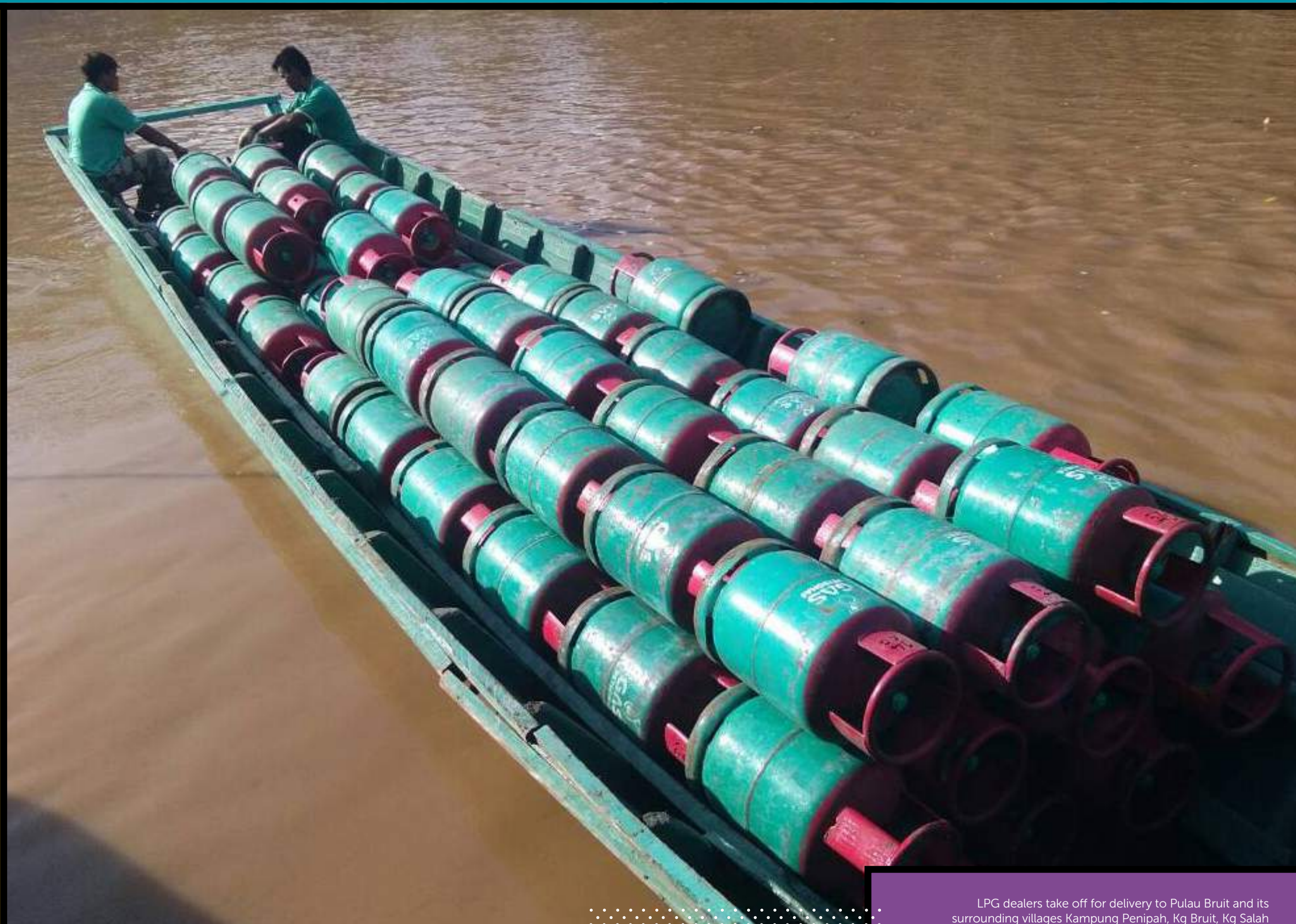
## AN ALMOST HERCULEAN TASK

As one of the LPG dealers to Pulau Bruit, Sarawak, Ling Lee Hua of Penipah Enterprise knows first hand of the challenges involved in ensuring the villages on the island are aptly supplied.

The island itself is connected to the mainland and towns by just two ferry points, which means the only way to reach there is by boat. The real challenge, says Lee Hua, arises come monsoon season, which usually lasts for about three months between November and January, where big waves up to two-metre high in the waters around Pulau Bruit pose a threat not just to the smooth delivery of the LPG, but also to the lives of Penipah's employees.

Having been a dealer for the areas for years, Lee Hua has witnessed himself the improvement in the livelihood of the villages. "About 15 years ago, basic necessities like water and electricity weren't even available. And today, I am very happy to see children from villages around the island having the opportunity to go to schools – some with hostels," he says.

He commends PETRONAS for constantly pushing dealers to out do themselves, and for providing them with necessary trainings to better develop their marketing and sales skills.



LPG dealers take off for delivery to Pulau Bruit and its surrounding villages Kampung Penipah, Kg Bruit, Kg Salah Kecil, Kg Semop, Kg Tekajong and Kg Sebako to name a few.





## LONG WAY TO THE TOP

A dealer in the area of Tambunan, Sabah braving the lonely drive up the hill to deliver LPG cylinders on a four-wheel truck.





## AIN'T NO MOUNTAIN HIGH ENOUGH

A porter lugging a cylinder up to Laban Rata which is about 3,272.7m above sea level. It is a place where most climbers stop for a break before continuing their climb to the peak of Mount Kinabalu.

## Customer Speaks My Journey with PETRONAS



*"It was in 2008 when I first switched to PETRONAS petrol. I was still working then. All my life I have been using other brands.*

*Subconsciously I had more confidence in foreign brands. One day, I had an empty tank and I saw the PETRONAS banner advertising more power and money savings.*

*Because I was curious, I drove in and filled up a full tank for my Myvi. I wanted to see how powerful it was for my small car. I found that for highway driving,*

*I could get more mileage. I couldn't believe it! So, I tried again and got almost the same result. I still couldn't believe it, so half-heartedly I kept trying, thinking I would get different results, but the results were good each time. I tried it for the fifth and sixth time until in the end I got used to PETRONAS.*

*Now, after nine years, I am still using PETRONAS. Sometimes it is hard for us to believe that local can be better. When we personally experience it, then we know it is true! Overall, the service is improving a lot too. I think it would be great if PETRONAS can give us more power and money savings."*

**Edward Pang**  
66 years old  
Retiree



**Joe Prakaash Visvanathan**  
21 years old

*"Autopay system at every petrol pump in a petrol station would be great, or if it's not feasible enough, a few isolated autopay stations should be set up in a petrol station. There are situations where cars will be queuing at petrol pumps to wait for their turns to fill in petrol. The waiting time can be reduced if there's an autopay system in each fuel pump instead of walking to the cashier to pay for the fuel."*



# FUEL RIGHT

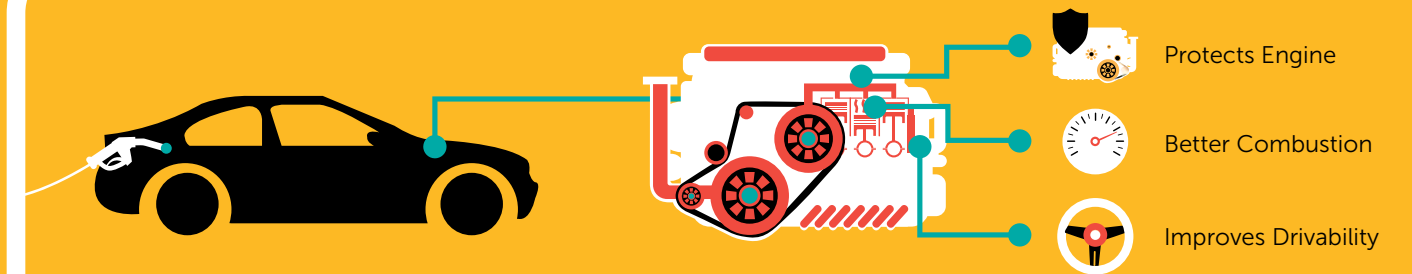
Fuel technology to deliver efficiency, performance and reliability

by **Sreerema Banoo**

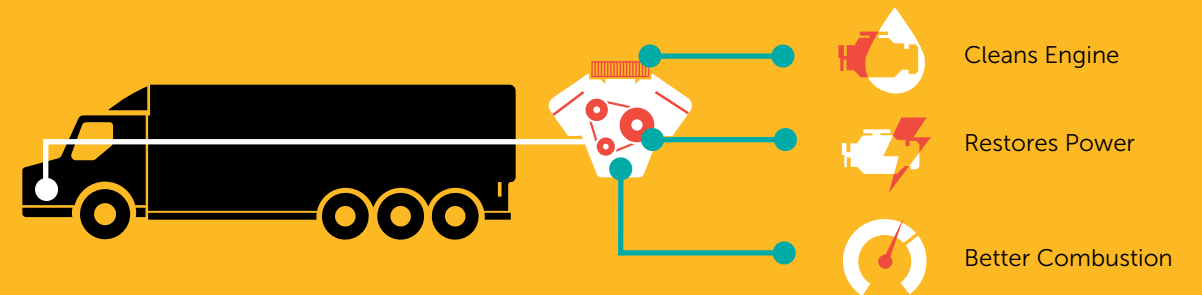
**A**re all fuels created equal? Are there differences in the fuels available in the market? Chan Ming Yau, Principal (Fuel Technology) at PETRONAS has a succinct and relatable answer to that: "Fuel is like food, think of fuel as *nasi lemak*. Are all *nasi lemak* created equal? Sure, the basic ingredients are the same – rice, peanuts, *ikan bilis*, *sambal* and egg – but they don't taste the same, do they?" Food for thought, indeed.

Fuel – be it petrol or diesel – may be much the same across all brands, so much so in some countries like the UK fuel is even sold by supermarket chains. All fuels that our vehicles drink begin life as base fuel from the refinery, and this base fuel may be the same for all brands especially for companies which do not own and operate refineries. It's what's added to the base fuel that further separates one brand from another. These so-called add-ons comprise chemistries and components that further improve the fuel – making it more efficient, reliable and offer better performance, says Chan.

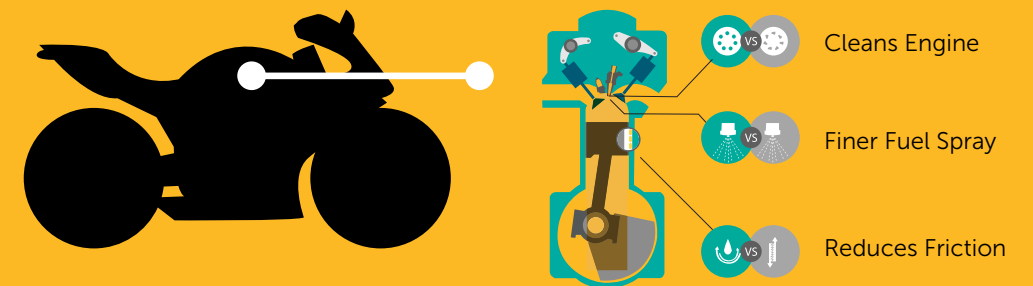
"We are delivering on details that matter to the customer, so we're looking at things that are important to the customer. What's a good fuel? What would drivers want? For PETRONAS, top of the list is fuel efficiency or fuel economy, then the idea of performance comes into play and some customers may not mind paying a little bit more for better drivability and acceleration. The third is reliability



**Primax 97: Superior Acceleration**



**Dynamic Diesel with Pro-Drive Drive: Drive Further, Drive Smoother**



**Primax 95: Superior Fuel Economy**

because the fuel must ensure that the vehicle is well protected," he continues, adding that this is especially the case for diesel customers in the logistics business.

Chan, a mechanical engineer by training who has been with PETRONAS for 16 years, stresses the importance of fuel technology for PETRONAS. "It matters to us because fuel, like lubricants, is a product that customers touch. It's the part of PETRONAS that customers experience – where we bring our innovation and technology to fruition for the customer."

The innovation and technology are aptly chronicled in the national oil

corporation's involvement in the pinnacle of motorsports and F1® motor racing. Indeed, PETRONAS' journey in fuel technology notched major breakthroughs since its involvement in F1.

Chan, who was there at the start of that F1 journey, says PETRONAS first started fuelling the races with its sponsorship of the Red Bull-Sauber PETRONAS F1 team, and later the BMW Sauber F1 team. "At the same time we also fuelled the Foggy PETRONAS Racing team for superbikes. These two experiences were crucial learning and building blocks, furthering our understanding of fuel for high performance engines," he says.

The big breakthrough however, came when PETRONAS joined forces with Mercedes. "For the first time we worked together for fluids as a whole (fuel, lubricants and functional fluids) and we were given a more free hand at developing fuel," he recalls. The first to be developed, he says was the lubricant and functional fluids, followed by the fuel.

"Over time we learnt how to develop fuels quicker," Chan reveals as he adds that although fuel products are not like mobile phones or laptops where a new one comes along every few months, timing and speed are nonetheless crucial.

# 01

## Designing Base Fluids

- Processing refinery streams
- Optimising base fuel
- Enhancing supply distribution



# 02

## Developing Chemistries

- Better protection, combustion, drivability
- Engine testing including Formula One™
- Vehicle testing including Dakar Rally

# 03

## Delivering Efficiency-Performance-Reliability

- **Dynamic Diesel with Pro-Drive:** Drive Further, Drive Smoother
- **Primax 97:** Superior Acceleration
- **Primax 95:** Superior Fuel Economy

DELIVERING  
THE WINNING  
FORMULA



"In the F1 arena, we have to work very quickly and it's that constant drive for improvement, that allows us to find new products to put into road cars every few years," he adds. Indeed it is that accelerated development from F1 and the chance to test a variety of fuel chemistries, and selecting from those the ones that can be best applied onto road vehicles in the future that have been the key facets of PETRONAS' F1 journey. After years of involvement in F1, PETRONAS now formulates every year an average of over 50 fuel, engine oil and functional fluid candidates for tests.

"We find the best chemistry to clean and protect the engine. We find the best way to improve combustion, and best chemistry to reduce friction for better drivability," he states. And that learning is not confined to fuel alone. With lubricants, for example, Chan says the team learnt to address the issue of heat in the engine and the need for the lubricant to cool the engine. "One of the fluids we supply to the F1 team is the ERS Cooling Fluid, which leads to cool batteries in the car," he says, adding that it is this idea and concept of cooling that led to the development of PETRONAS Syntium with "CoolTech™".

**From championships to consumers**  
The point to all the lessons learnt from the F1 experience, says Chan, is for them to be translated to products for the everyday driver. That process is given a boost too thanks to the changes and developments within F1. "In 2014, we entered a new era in F1 when the engines

were moved from 2.4 litre V8 engine to 1.6 litre V6 direct injection turbocharged engine, which is similar to the cars that we drive. So developing the fuel for this new era allows us to know how a fuel can be more efficient," he says. For the everyday driver, it came with the launch of the PETRONAS Primax with Advanced Energy Formula for better fuel economy.

Having addressed efficiency, the team, he says, then focused on improving performance, and its successes in this respect are demonstrated by the motorsport team winning consecutive championships. "Here we learnt to use chemistries to improve the acceleration of the vehicle, and we launched that as the PETRONAS Primax 97 for superior acceleration."

Chan says the test bed for new fuel technologies is also not confined to F1. In the Dakar Rally for instance, the PETRONAS Dynamic Diesel's chemistries ensure reliability of the vehicle. "The Dakar Rally goes through desert conditions, and the chemistries used improve the protection of the engine and improve combustion," he adds. What's more, the vehicles used in the rally are modern trucks that are also used on the road. Lessons derived from that foray, he adds, led to the launch of the Dynamic Diesel Euro 5. "So the lesson is translated to the road." Recently in November 2017, PETRONAS unveiled its latest offering, Dynamic Diesel Euro5 with Pro-Drive.

Nonetheless, Chan concedes that there are limitations. "The challenge is to take

everything we learn on the track to the road. We have to be selective in what we can use for the road. There are things that cannot be translated to road. For example, we cannot have the exact same fuel in F1 on the road, not that it's not possible from a regulatory perspective but due to the customers' price point," he says.

Even so, there are instances where the company can go the extra mile for the everyday consumer.

Although all fuels start as base fuels from the refinery, Chan says there have been instances where PETRONAS works with the refinery to come up with the desired base fuel. "We say at the onset to aim to include certain components and omit others to improve driveability, for example. And then on top of that we add the chemistries. We can do that because the majority of our fuel comes from our Melaka refinery." The result of this early intervention is PETRONAS Primax 97.

The key challenge, he adds, is to constantly improve. With the push towards hybrid technology, the fuel technology team is working on developing fuel that maximises efficiency not just for traditional internal combustion engines but also hybrid technologies.

Renewables as a source of fuel is also an issue Chan is cognisant of. But no matter the fuel source, he stresses that what remains unchanged is the desire for efficiency, performance and reliability. "Customer needs are the same, and that will be the driving force for all fuels."

## Continuous Innovation that Drives the Winning Formula

According to Chandramalar A V Muthiah, Principal at Analytical Technology, creating fuel that stands out is a challenging journey of matching and adding the right compounds into the fuel.



"Our ongoing research and development for process engineering, additives, novel additives even nanoparticles provide us crucial learnings that can be applied to fuel technology. As we have been working on both fuel and additives for years, we know there are limitations when it comes to base fuels; there is only so much one can do."

"So us chemists and mechanical engineers put our heads together to compose new components to be added into our fuel."

"Along the way we might find a chemistry that could work with our fuel yet it can be either too expensive or non-existent in the world."

"Using our expertise of synthesising – we can then create it or fine-tune it on our own. We are always on the lookout for ways to synthesise various blends and then produce them in bigger volumes to meet the requirement of F1 and subsequently, for vehicles on the road."

## Customer Speaks My Journey with PETRONAS



*"I was at university when I first encountered PETRONAS. I used it for my motorbike initially, and for my car once I started working. Those days, I went to whichever petrol station that was nearer. Then, as I got older I started using only PETRONAS because I wanted to support our local brand."*

*The Mesra card is a big attraction for me. I get points and at the end of the month, I redeem them for petrol. Previously, PETRONAS didn't have much international exposure and I thought it was inferior to other brands. But now I believe it is the best because it has won F1® four times."*

*My whole family uses PETRONAS because of the Mesra card. If we are on the highway, we know that the PETRONAS station has petrol, a toilet, food and a surau, too. The surau is very important for us Muslims. There have been a lot of good changes from the time I first started going to PETRONAS. I hope in future PETRONAS will give us more points for the petrol we use. That will keep us loyal to the brand."*

**Mazlan Mohamad**  
57 years old  
Safety Manager at PROTON Holdings Bhd



**Joel Thean SiYang**  
30 years old

*"It would be cool to have a section dedicated for games - the likes of virtual reality, etc. And also have a live band playing weekly for young aspiring singers to showcase their talents there."*





# THE GRADUATE OF HARD LIFE

By **Brigitte Rozario**

Shaidi Mohmad Zin sits behind his desk at the Pengkalan Utama PETRONAS petrol station near the Station 18 mall in Ipoh. He looks contented. He lives in a semi-detached house, and he has four cars. His wife works in a bank, their two elder children are in college while their youngest is in school. Shaidi is a respected member of the community, frequently invited to officiate events and conduct motivational talks for school students.

At the age of 49, he seems to have it all as a PETRONAS dealer and successful businessman. The comforts he enjoys today are the fruits of his labour that started from the time he was in primary school, helping out in his father's shop.

While other children were running around the *kampung*, playing in streams and watching movies in the cinema, Shaidi's childhood was filled with hardships.

Born in Batu Kurau, Perak, to a provision shop owner and a housewife, Shaidi was the third child in a family of four siblings. When he was very young, his parents divorced and his mother remarried. Shaidi ended up living with his mother's elder brother.

In secondary school, he started taking odd jobs in the afternoons to earn some money. He would come home, rest a while, then start his odd jobs. Homework would be done at night when he returned home from work.

Although his life was hard, he did occasionally manage to go for movies with friends. But, an outing with friends was something that needed to be planned and saved up for as it would include bus fare to the city, a movie ticket and a meal. "I had to save up about RM7 or RM8 for one outing," says Shaidi, admitting he did not do it often.

As his upkeep was taken care of by his uncle, Shaidi didn't dare express any intention to continue studying after his SPM (*Sijil Pelajaran Malaysia*) exam. So, at age 17, he joined cement company Perak-Harjoong Simen, where he was paid RM300 a month as a general worker.



### Learning the hard way

Then, in 1987, another *pakcik*, this time, his mother's cousin, invited him to go to Ipoh. This uncle was a businessman who had a hand in various industries, including construction and plantation.

On his first day at his uncle's company, Shaidi took two buses to get to the office. "My uncle scolded me and told me to fix the bicycle and use that instead of wasting money on bus fare. So, for three months I cycled to work. It took about an hour to get to the office from my uncle's house. I would leave the house before 8am and arrive at work sweaty. At the office, I did everything I was told to do. I was basically an office boy," relates Shaidi.

When he got his licence, his uncle upgraded him to a motorcycle.

Shaidi spent the next few years working at his uncle's plantation and construction companies. He learned to spray pesticide on the farm and use heavy machineries like excavators, bulldozers and backhoes.

"He wanted me to learn everything so that nobody could cheat me as I would know the ins and outs of the business," says Shaidi.

In 1992, the economy was down, so his uncle decided to apply for a PETRONAS dealership in Kampung Manjoi, Ipoh. It would be a year before he obtained it.



"I was not interested in the petrol station business then, but I didn't dare tell him. So, again I did as he asked me to. I started out as a petrol attendant earning just RM600," explains Shaidi.

As fate would have it, shortly after receiving the dealership, his uncle passed away, leaving the business in his children's hands.

It was then that Shaidi decided he needed to fend for himself. While he worked at the petrol station in Manjoi, he also kept applying for a PETRONAS dealership. It took four applications and 10 years before he got it. In that time, Shaidi had been promoted to manager. He never gave up because he believed that working with PETRONAS would provide him a good future.

### Building from scratch

In 2003, he left the Manjoi station and in 2004 he started his first dealership in Gunung Lang. Shaidi admits that in those early days, he was like a headless chicken. While he had experience and know-how, he lacked management skills. "I tried to do everything myself, from opening the station at 6am to working through *Hari Raya* every year.

**Shaidi is a firm believer in providing the right experience to create a difference.**



"Then, a friend advised me to study business. Although I already had my own business and didn't need to further my studies, I went anyway," says Shaidi.

He spent two years on the Business Administration degree, and another two years on his MBA (Master of Business Administration).

Studying business changed his perspective and the way he ran his business. It became more structured and he then employed supervisors and an accountant instead of trying to do everything himself. His business became more stable, and this gave Shaidi more time to focus on other things like marketing, branding and engaging with community.

He was at Gunung Lang until 2008, when he was offered an upgrade to the Pengkalan Utama petrol station.

In between, twice he was offered the option to be the caretaker of another petrol station. From 2007-2008, it was Ulu Bernam, and from 2009-2010, it was Padang Rengas. "For Ulu Bernam, the dealer passed away on a Friday and the petrol station had to be reopened on a Sunday. I had just one day to decide if I would take over as caretaker.

"I remember, I was in the car driving there with three of my workers and I said to them, 'I don't know if I have made the right decision or if I am crazy.' That night, while my staff worked at the Ulu Bernam station, I slept in the car. We had arrived late and there was no time to look for a hotel. My youngest was just three months old then, and I remember I had to travel back and forth between Gunung Lang and Ulu Bernam for a year," says Shaidi, emphasising that when he undertakes a task, he gives it his all as he doesn't believe in doing a slipshod job.

### Standing out

Today, he only has the Pengkalan Utama petrol station to run. He likes it this way as he can focus better on his customers and the community.

"The business I am in relies on the community so I have to build my brand within the area around me. That's why I make sure I spend time in the community, helping out in the schools, mosques, *surau* and shops."

As a community leader who believes in helping the youth, Shaidi works closely with schools, organising programmes such as "speed" UPSR (*Ujian Pencapaian Sekolah Rendah*) where motivational speakers are invited to assist students in

their exam preparations.

He has also arranged to take children from a special needs school in Perak to Kuala Lumpur to visit the Kuala Lumpur Convention Centre, Petrosains, Aquaria and the skybridge at PETRONAS Twin Towers.

Shaidi is a firm believer in providing the right experience to create a difference. "We must stand out from the competition by giving customers something extra and going out of our way to serve them," says Shaidi. This is an important business lesson that his years at PETRONAS had taught him.

Apart from that, this Perak entrepreneur also knows how important it is to seize opportunities. He relates an experience in the early 90s when a farmer lamented his *cempedak* fruits were too small to sell and offered them to him.

The innovative businessman took all the fruits, set up a stall, found someone to fry the *cempedak* at night and earned about RM10 a day.

"For every problem, there is an opportunity," says the man who hopes to one day own a petrol station on his own plot of land and even have a building to his name.

## Customer Speaks My Journey with PETRONAS

"I knew about PETRONAS a long time ago through news and ads in the papers and on TV. Then my niece became a PETRONAS scholar and joined the company as an engineer. Now, my son is studying engineering at Universiti Teknologi PETRONAS. Initially, we used all kinds of oil but we fully switched to PETRONAS when my niece joined the company. We felt we should support it, and more so now that my son is studying there. I'm happy with the petrol and happy that my niece is enjoying her work there and my son is doing well at the university. My niece used to give me grandstand tickets for F1®. I enjoyed a few hours there, sometimes alone or with my son or friends. It would be nice to see PETRONAS stations in other countries when we go for holidays. The only thing I've seen of PETRONAS overseas is the billboard. When I was in Monaco for a holiday, I saw the big F1® billboards with the PETRONAS branding. The feeling is extraordinary when you are overseas and see the PETRONAS name and logo. This is the one company which can promote Malaysia overseas."

**Perinparajah Chinniah**  
60 years old  
Retired Teacher



**Kashmeera Jayakumar**  
21 years old

"Petrol stations should add more security features for female customers and have a kiosk in the centre of the station to ease those who walk in and pay cash for their petrol. Also, people shop more online these days but having the goods delivered to their homes poses a challenge as they are usually caught up with work outside. A parcel collection point at the petrol station would solve this problem."





18  
JAN  
2017

## STEPS TO STRENGTH: 2017 IN REMINISCENCE

## DOUBLE SCOOP

PETRONAS won hands down for innovation when it bagged two awards - Asia Pacific National Oil Company of the Year and Asia Pacific Innovation of the Year at the 2017 Asia Pacific Oil & Gas Awards held in Singapore.



28  
FEB  
2017

## A SHARED BOND

PETRONAS signed a Share Purchase Agreement (SPA) with the Saudi Arabian Oil Company (Saudi Aramco) that allows Saudi Aramco's equity participation in PETRONAS' Refinery & Petrochemical Integrated Development (RAPID) project in Johor. The agreement was signed by President and CEO for Saudi Aramco Amin H Nasser and President and Group CEO for PETRONAS Tan Sri Wan Zulkiflee Wan Ariffin, with witnesses comprising His Majesty King Salman Bin Abdulaziz Al-Saud, King of Saudi Arabia and The Custodian of the Two Holy Mosques, the Prime Minister of Malaysia Dato' Sri Najib Tun Abdul Razak and Minister in the Prime Minister's Department Dato' Haji Abdul Rahman Dahlan.



02  
MAR  
2017

## AN EXCITING START

PETRONAS celebrated new partnership with Hokkaido Electric Power Company (Hokkaido Electric), with the signing of LNG Sale and Purchase Agreement (SPA) for the supply of liquefied natural gas (LNG) between Malaysia LNG Sdn Bhd (MLNG) and Hokkaido Electric. The 10-year agreement will commence 1 April 2018.



10  
MAR  
2017

## GOING ONCE, TWICE, SOLD

PETRONAS signed the License Contracts for deepwater Block 4 and Block 5 located in the Gulf of Mexico's Salina Basin. The blocks were awarded to PETRONAS and its consortium partners following Mexico's first ever auction of its deep water exploration areas, held in December 2016.



16  
AUG  
2017



## STRONGER TOGETHER

PETRONAS launched its National Day and Malaysia Day 2017 campaign to celebrate the nation's progress since independence. The campaign included web film titled *Piala Taman Thomas* which featured badminton legends Rashid Sidek and Foo Kok Keong, and a special exhibition at GALERI PETRONAS called JULANG. The exhibition showcased PETRONAS' 43-year journey in developing and adding value to Malaysia's oil and gas resources, and its role in contributing towards the country's progress and the wellbeing of Malaysians.

25  
AUG  
2017

## SIGNED AND SEALED

Dr Ryu Yul, the President of Corporate Strategy & Services from S-Oil Corporation and Ahmad Adly Alias, Vice President of LNG Marketing & Trading, PETRONAS and Chairman, PETRONAS LNG Ltd after signing the documents sealing a 15-year deal between the two companies.



## SMOOTH SAILING

Malaysia LNG celebrated its 10,000th cargo milestone late September 2017 - marking over 35 years of uninterrupted LNG supply.



29  
AUG  
2017

SEPT  
2017

## GREENING EFFORT

In an effort to conserve river bio-diversity, 300 mangrove seedlings were planted along Paka River by PETRONAS Gas Berhad (PGB), as part of its *Sayangi Sungai Paka* campaign.



11  
SEPT  
2017



## ONE FOR THE NATION

Six laureates with significant roles in ensuring the holistic growth of Malaysia were celebrated at the 2017 Merdeka Award Announcement and Presentation Ceremony. They received their award from the Sultan of Perak and the Royal Patron of the Merdeka Award Trust His Royal Highness Sultan Nazrin Muizzuddin Shah, accompanied by Chairman of PETRONAS Tan Sri Mohd Sidek Hassan, and Founding Members of the Merdeka Award, President and Group CEO of PETRONAS Tan Sri Wan Zulkiflee Wan Ariffin, President of ExxonMobil Exploration and Production Malaysia Inc and Chairman of the ExxonMobil Subsidiaries in Malaysia Edward E Graham, and Chairman of Shell Malaysia Datuk Iain Lo. The outstanding individuals were:

- Education and Community:** YBhg Dato' Dr Abdul Halim Ismail
- Environment:** YM Dato' Seri Tengku Dr Zainal Adlin Tengku Mahamood
- Health, Science and Technology:** Professor Dr Balbir Singh Mohan Singh (Joint Recipients)
- Health, Science and Technology:** Dr Timothy William (Joint Recipients)
- Outstanding Scholastic Achievement:** Professor Ir Dr Masjuki Haji Hassan
- Outstanding Contribution to the People of Malaysia:** Professor Dr Anthony Crothers Milner

01  
OCT  
2017

## THE FINAL BOW

The PETRONAS Malaysia Grand Prix closed its Malaysian chapter this year as the country held its final Formula One™ race at the Sepang International Circuit from 29 September to 1 October 2017. The bittersweet event saw Lewis Hamilton of the Mercedes-AMG PETRONAS motorsport team securing second place behind Red Bull's Max Verstappen and ahead of Daniel Ricciardo. Latest addition to the Mercedes-AMG PETRONAS motorsport team, Valtteri Bottas finished fifth.



24  
OCT  
2017

## A STEP INTO THE FUTURE

Two key associated facilities within the Pengerang Integrated Complex (PIC) – the Pengerang Co-generation Plant (PCP) and Regasification Terminal 2 (RGT2) – were officiated this year by the Menteri Besar of Johor, Dato' Mohamed Khaled Nordin, accompanied by Kota Tinggi District Officer Dr Badrul Hisham Kassim, Chairman of PETRONAS Tan Sri Mohd Sidek Hassan and PETRONAS' President and Group Chief Executive Officer Tan Sri Wan Zulkiflee Wan Ariffin.



30  
OCT  
2017

## #4THETEAM

Lewis Hamilton brought it home for his team at Mercedes-AMG PETRONAS Formula One™ motorsport when he clinched his fourth World Champion title by winning the Mexican Grand Prix on 30 October 2017.



26  
OCT  
2017

## LEADERS IN THE MAKING

The construction of the MARA Junior Science Colleges (MRSM) in Ranau, Sabah and Bintulu, Sarawak are part of the total commitment by PETRONAS towards education and human capital development in East Malaysia for a five-year period from 2014. Both initiatives are collaborative efforts with the Sabah State Government, Majlis Amanah Rakyat (MARA) in Sabah, Yayasan Sarawak and MARA in Sarawak.

16  
NOV  
2017

## CREAM OF THE CROP

SMK Tinggi Melaka proved that they are a force to be reckoned with when they emerged as the winner of the PETRONAS All About Youth 2017, defeating 49 other schools nationwide to bag the grand prize worth RM50,000.



## Customer Speaks My Journey with PETRONAS

*"As a contractor more than 30 years ago, I used to travel through Kelantan and Terengganu, where I was born. The first PETRONAS icon that I remember is the Kertih refinery that I used to drive past. Those days, I used all brands of petrol. But, as time passed, I started using only PETRONAS because I realised this is our national company. Now, I don't travel much so I only go to the PETRONAS station near my house. In fact, after the morning prayers at the surau, a group of us usually go there to buy nasi lemak, bread and milk. It's easy for us as everything is there and the workers know us. They are like family to us. PETRONAS is global now and you can see a lot of differences from before. We can see the brand in F1®, engine oil and other products. The company also gives back to the community and society through scholarship and sponsorship. As a Malaysian, I am very proud of PETRONAS. We can see they don't only promote their company but also Malaysia. My only wish is that they forge a closer bond with the community by coming to see us. I hope in future, the relationship with the community will be even closer."*

**Tuan Haji Abd Rahim**  
80 years old  
Imam



**Nadhira Aqilah Mahmood**  
23 years old

*"I have always imagined that gas stations in the future would have a built-in, comfortable and totally safe nap pods set up at nearby petrol stations, and this way we can reduce the number of accidents caused by drowsiness of the drivers. Advanced countries almost always create beautiful architectures for the sake of art and in the end, these are things that become the attraction of the place itself."*



# PETRONAS AT A GLANCE

Petroleum Nasional Berhad (PETRONAS) is one of the few national oil companies in the world that has transformed itself into being a leading oil and gas multinational of choice and is now ranked amongst the largest corporations on FORTUNE Global 500®.

Since our establishment in 1974, we have not stopped pursuing new solutions and pushing boundaries across the entire oil and gas value chain. We continue to strengthen our portfolio through technological advancements, operational excellence and by being a responsible corporate citizen wherever we are.

Unlocking potentials and adding value to oil and gas resources are what our diverse, resilient and competent workforce strives to deliver each day.

This is because we continue to be inspired to meet the world's growing energy needs.

## UPSTREAM

TOTAL LNG SALES VOLUME OF **30.11** MILLION METRIC TONNES

**420 BCE LNG LOADABLE**

DELIVERED FROM PETRONAS LNG COMPLEX IN BINTULU

AVERAGE PRODUCTION

**2,363** kboe/d

**4** EXPLORATION DISCOVERIES

## DOWNSTREAM

**86.3%** Downstream Plant Utilisation

**95.2%** Overall Equipment Effectiveness (OEE)

**98.2%** Downstream Reliability

**60%** Pengerang Integrated Complex Completion

ENGEN RECORDED HIGHEST REPLACEMENT PROFIT AFTER TAX (PAT) OF ZAR **3.1** BILLION

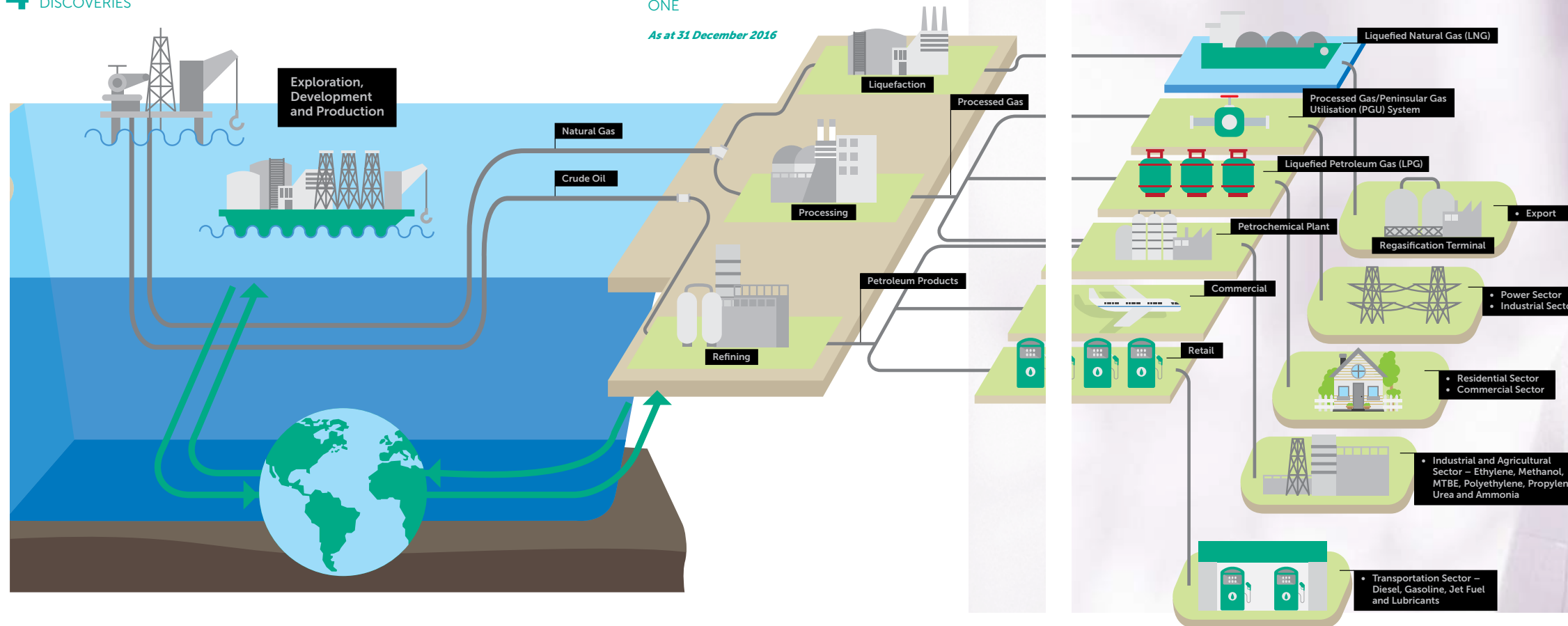
PETRONAS DAGANGAN BERHAD RECORDED HIGHEST RETAIL VOLUME FOR PETROL OF 15.2 BILLION LITRES AND PROFIT BEFORE TAX (PBT) OF RM1.2 BILLION

EXPANDED AVAILABILITY OF THE NEW PETRONAS DYNAMIC DIESEL EURO 5 ACROSS PENINSULAR MALAYSIA

SABAH AMMONIA UREA (SAMUR) SUCCESSFULLY PRODUCED ON-SPECIFICATION UREA AND IN THE PROCESS OF RAMPING UP FOR FULL COMMERCIAL OPERATIONS IN 2017

3-TIME CONSECUTIVE WORLD CONSTRUCTORS' CHAMPION IN FORMULA ONE

As at 31 December 2016



## OUR VISION

**A Leading Oil and Gas Multinational of Choice**



## OUR MISSION

We are a business entity  
Oil and Gas is our core business  
We add value to this resource  
We contribute to the wellbeing of society



## SHARED VALUES

**PROFESSIONALISM** - Strive for excellence  
**LOYALTY** - Loyal to corporation  
**INTEGRITY** - Honest and upright  
**COHESIVENESS** - United, trust and respect for each other







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