Flow

PETRONAS

Issue 1, 2019

CANADA: A NEW GAS HEARTLAND

RAY OF HOPE

/

IN CONVERSATION WITH: DR MAGARET SIVAPRAGASAM

/

YAYASAN PETRONAS: WHERE GOOD FLOURISHES

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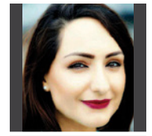

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Editor's Note

We present to you the rst issue of FLOW for 2019, a new chapter with a series of stories that echoes who we are and who we aspire to be.

Kicking it o from upstream, our cover story on Canada talks about our plan to monetise the North Montney gas resource and creating an integrated business for PETRONAS' future growth as a global energy player. Both Executive Vice President and CEO of Upstream Datuk M Anuar Taib and the President and CEO of PETRONAS Energy Canada Mark Fitzgerald discuss at length on why Canada has been positioned as the cornerstone of PETRONAS' future business.

This rst quarter of the year also witnessed the birth of PETRONAS' very own foundation for Corporate Social Responsibility (CSR) initiatives – Yayasan PETRONAS. Though some may raise the question of 'why now?', it is worth to note that CSR is not something new to the Company. In fact, CSR is something that is close to our heart and it has been in our 'blood' for decades. In our story on Yayasan PETRONAS, its Acting CEO Lita Osman speaks about PETRONAS' evolving sustainable strategies and the centralisation of its philanthropic projects in delivering a broader impact. Do also read the inspiring stories of bene ciaries whose lives have been signi cantly transformed, thanks to the assistance extended to them.

In the last issue, we introduced the entire team of the newly set up New Energy unit mandated to champion PETRONAS' move to embrace new energy sources. In this issue, we dig deeper into solar energy and what the future holds for the renewable energy segment. To get a comprehensive view on solar energy, we reached out to Syed Malek Faisal Syed Mohamad, New Energy's Head of Business Development and Professor Dr Norani Muti Mohamed of Universiti Teknologi PETRONAS (UTP).

In this issue, we are also honoured to feature Dr Magaret Sivapragasam, a Malaysian scientist and a post doctorate student from UTP who recently made it to the International Periodic Table of Younger Chemists. We interviewed Dr Magaret on what it takes to get to the top of her eld and on women's contribution in science.

We look forward to bringing more exciting stories in the coming issues. So, please stay tuned. Till then, I strongly believe that you will nd the stories in this issue both enlightening and inspiring.

We would also love to connect with our readers, so do send any feedback or suggestions to ow@petronas.com.

Happy reading!

Editor-in-Chief
Zahariah (Liza)
Abdul Rahman

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The First Malaysian
Scientist to Receive
IUPAC Honour

CANADA: A NEW GAS HEARTLAND

PETRONAS' venture in the LNG Canada project, a critical move in monetising its North Montney gas resource, will further strengthen its role as a major energy player.

By Sreerema Banoo.

In October last year, PETRONAS and four global joint venture participants reached a final investment decision to build a liquefied natural gas (LNG) export facility in Kitimat, British Columbia. The multi-billion dollar LNG Canada project, initially comprising two LNG liquefaction processing units, or trains, for a total of 14 million tonnes per annum (mtpa), with the potential to expand to four trains in the future, marks a significant milestone for the energy industry in Canada.

It's been reported that the project is expected to create 10,000 jobs at the height of construction, leading to billions of dollars in direct government revenues, including hundreds of millions of dollars in construction contracts for indigenous businesses. The project will pave the way for the export of Canadian natural gas, giving Canada the opportunity to be a global leader in the supply of cleaner energy around the world.

For PETRONAS, which has a 25 per cent participating interest through its wholly owned entity North Montney LNG Limited Partnership, the LNG Canada project represents a critical step towards monetising its considerable Canadian natural gas assets in the LNG sector, and complementing an integrated business that will ensure the company's future sustainability as a global energy player.

PETRONAS Energy Canada upstream operations in Fort St John, BC.

The other joint venture participants of the LNG Canada project are

- Royal Dutch Shell plc, through its wholly owned subsidiary Shell Canada Energy- 40 per cent
- Mitsubishi Corporation, through its wholly owned subsidiary Diamond LNG Canada Ltd - 15 per cent
- PetroChina Canada Ltd through its wholly owned subsidiary PetroChina Kitimat LNG Partnership - 15 per cent; and
- Korea Gas Company, through its wholly owned subsidiary Kogas Canada LNG Ltd - 5 per cent.

PETRONAS' commitment to Canada also points to the group's big bet on gas, which represents 70 per cent of its portfolio. PETRONAS views gas as a fuel solution that will stay for a long time. As the cleaner fossil fuel, it can go beyond being a mere transitionary fuel to a co-solution with renewables in mitigating the impact of climate change.

How Canada ts in

To see how Canada ts into PETRONAS' future growth story, it's worth looking at where the company stands today as the third largest LNG seller in the world with positions in Australia, Egypt and Sarawak. "With the portfolio of supply in Sarawak and Australia, we are now a signi cant supplier of LNG to Japan, Korea, Taiwan and China, and we are also market leaders in some of these markets," says Executive Vice President and CEO of Upstream Datuk Mohd Anuar Taib, adding that in recent years the company has also expanded its customer positions in Thailand and India.

The PETRONAS LNG Complex in Bintulu, Sarawak is one of the largest LNG production facilities in the world with nine trains, producing 29.3 million tonnes per annum (mtpa). PETRONAS is also the rst Floating LNG owner-operator in the world, with the construction of a second vessel already underway and sailaway planned in rst quarter of 2020.

PETRONAS is however cognisant of potential resource issues that it will need to address in the future of this depleting resource at home base. "Resources will start to get more di cult to be

> "PETRONAS' ambition by 2025 is to have about 45 mtpa of LNG to be traded in the market, so we have to nd the next place that will give us a long, sustainable business for the future. That's where Canada comes in."
>
> - Datuk Mohd Anuar Taib
> Executive Vice President and CEO of Upstream

developed and processed due to high levels of carbon dioxide (CO_2) and hydrogen sul de (H_2S) or sour gas. The volume of reserves that we have discovered is not as large as what we used to discover. So we know that although we easily have another 20 to 30 years to go, the production volume will start reducing," says Anuar.

In Canada, PETRONAS capitalises on the proven available resources and easy access to North Asian customers.

At the same time the LNG market will continue to grow. “By 2025, our ambition is to have about 45 mtpa of LNG to be traded in the market, so we have to nd a place that will give us a long, sustainable business for the future. Here is where Canada comes in,” he adds.

PETRONAS’ foray into Canada began in 2011 when it entered into a partnership with Progress Energy Canada Ltd. to form the North Montney Joint Venture. In the following year, it acquired Progress Energy as a wholly owned subsidiary of PETRONAS, later renamed PETRONAS Energy Canada Ltd. As a result, PETRONAS became the owner of about 3,600 square km of mineral rights, approximately twice the size of Melaka and initially hit the appraisal goal of 15 trillion cubic feet (tcf) of gas reserves. The condition at that time presented an ideal scenario for the company to embark on the Paci c Northwest LNG project – capitalising not only on the proven available resources but also the LNG project’s location on the western side of Canada that a orded easy access to its North Asian customers.

But shifting market conditions – with LNG prices falling by half and challenging costs and

Considering the scale and quality of the natural gas resources in Canada held by PETRONAS and its partners, nding di erent avenues to monetise this resource is critical.

environmental conditions - precluded the development of the Paci c Northwest LNG project. In July, 2017 PETRONAS and its partners announced they were not continuing with the project but would continue to be invested in Canada and be on the lookout for more e cient ways to monetise the resource in Canada into LNG.

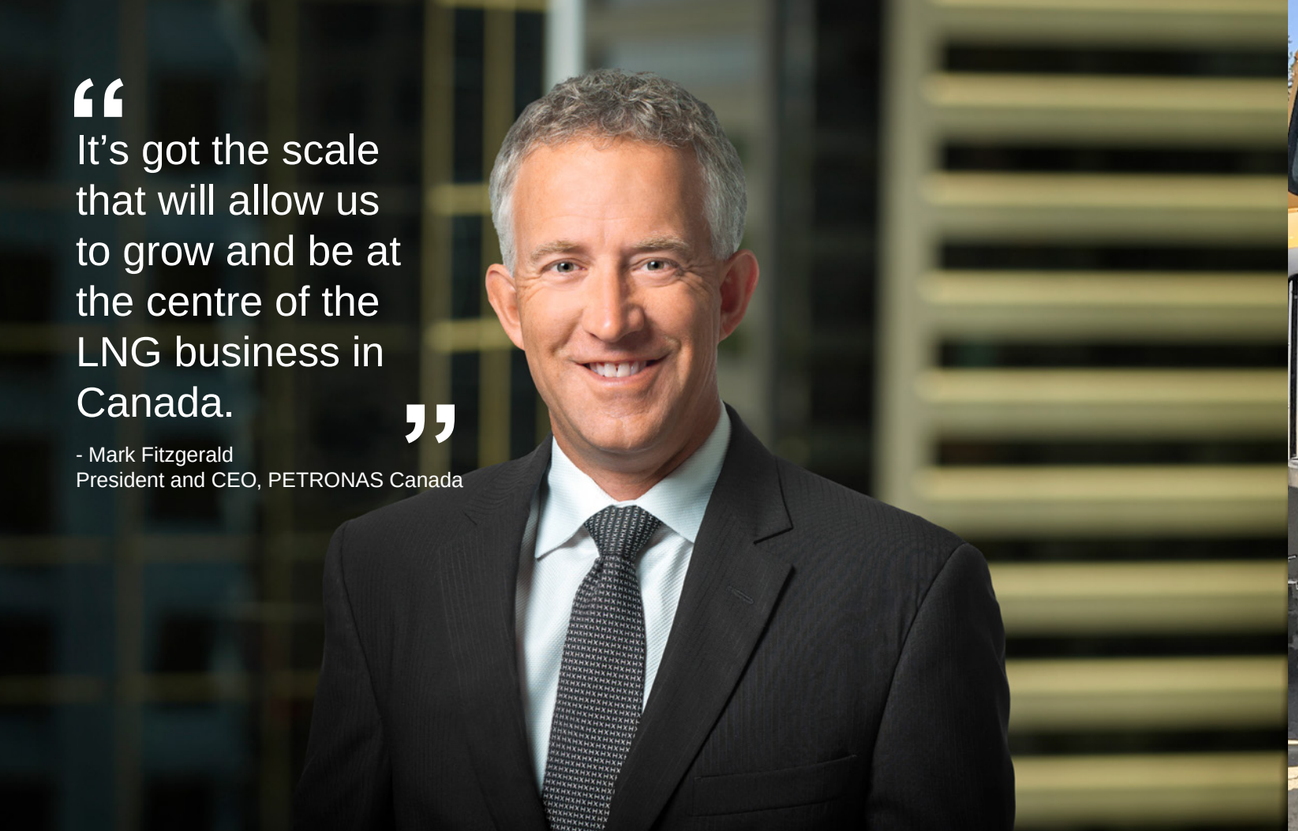
Towards a low carbon future

“We produce a gross of 700 million standard cubic feet per day (mmscfd) for the local (Canadian) market. It’s a good size production that generates half a billion Canadian dollars of revenue per year. Given the size of the resource, however, we have to continue to explore ways to bring this substantial supply of natural gas to multiple markets in order to meet growing global consumption and expectations. So that’s where LNG Canada and the continuing pursuit of LNG opportunities in alignment with PETRONAS’ worldwide LNG strategy came in,” says Mark. “We believe natural gas will play an important part in the planet’s transition to a low-carbon economy, and we’re thrilled to have the opportunity to get the cleaner burning energy to countries currently burning coal.”

Anuar expects that by 2024, the Canada LNG project will add 3.5 mtpa or about 60 cargoes a year, on top of the 420 LNG cargoes PETRONAS produces a year. “Now that people know we have that resource, other parties in LNG and petrochemicals are also approaching us to collaborate,” he says, reiterating the importance of leveraging opportunities and monetising the resource.

Strategically, the LNG plant on the western side of Canada also allows for unrestricted LNG cargoes to markets in China, Japan, Korea, Taiwan and South East Asia. Having the resource, people and

Canada has the potential to become a cornerstone of PETRONAS’ LNG business.



“It’s got the scale that will allow us to grow and be at the centre of the LNG business in Canada.”

- Mark Fitzgerald
President and CEO, PETRONAS Canada

capacity to develop these resources, we are setting up the foundation for growth.

Mark agrees, adding that, “We have a signi cant competitive advantage because of the proximity of the British Columbia coast to Asian markets. And, considering the scale and quality of our natural gas holdings in Canada, it is important to explore di erent avenues to monetise the resource, with LNG being the cornerstone of that e ort.”

Cornerstone of the business

Mark believes that in Canada, PETRONAS has a “fantastic opportunity” to build a core component of its long-term portfolio. “The resource has the size and is of the quality that will allow us to grow and create value. It’s unconventional which gives us the exibility to scale production according to our marketing commitments and it’s at the centre of an LNG business in Canada that will export cleaner burning Canadian natural gas to our markets with very short shipping times,” he adds.
Anuar agrees, saying that it’s important to look at Canada from the lens of the resource that PETRONAS has in the country and what the scenario would be like 40 years ahead. “What could we achieve? If we replicate the entire development of (the LNG Complex) in Bintulu, Sarawak with the resource that we have in Canada, what we will have is a multigenerational development that will allow us to be sustainable way beyond our borders.

Canada has the potential to become a cornerstone of PETRONAS’ LNG business and as a portfolio it would be one of those foundation countries that we have to be strong in, especially taking into account Malaysia’s nite resources. We have to look at ways of ensuring the future sustainability of the business,” he adds.

So it’s no understatement that much is riding on PETRONAS’ foray in Canada. “We are operating in a very dynamic market. We have to rst understand the nature of the market...we have to be nimbler and be faster at decision making, there will have to be new trading, hedging capabilities that we need to build. These are the things we need to do, and in the speed that is fast enough to allow us to capture opportunities as well as minimise risk.

“We have to be cognisant about the push towards a cleaner way of doing business, so we have to be very cautious and good at managing issues such as fugitive methane emissions. We must to be able to maintain our licence to operate from the environment perspective as well as manage relationships with First Nations and the community as a whole,” says Anuar.

As for the LNG Canada project, he stresses the need to ensure that it is being managed properly so that it can deliver the project, together with its partners right on schedule and right on cost. “This is the rst LNG project in Canada, so a lot is riding on it,” he says.

For major projects to be carried out in Canada, they have to be done in a manner that builds trust and ensures the concerns of regulators, policymakers, communities, First Nations, and the public are addressed.

Community-centred development

Although the PETRONAS decision to venture into the LNG Canada project came just a year after it cancelled the Paci c Northwest LNG project, Mark believes that much has changed. “The LNG markets are better, the project has fewer hurdles as they relate to capital and social risk. It’s got a strong partnership among the joint venture participants as well, similar to what we had at Paci c Northwest and a critical aspect of a successful project,” he says.

There are also crucial lessons that can be drawn from the cancelled project, particularly the importance of stakeholder engagement. “Major projects in Canada, have to be done in a manner that builds trust and ensures the concerns of regulators, policymakers, communities, First Nations, and the public are addressed.”

PETRONAS’ experience in helping to grow, develop and enrich communities in areas of its operations like the once largely rural Bintulu in Sarawak, which is now a bustling town, also gives him the optimism that the same success can be replicated in Kitimat, the site of the LNG Canada project.

Anuar is similarly optimistic. “Bintulu began as a small shing community of about 3,000 people when we started the LNG Complex in 1978. Today it is a thriving 200,000-person town.

The towns of Kitimat and neighbouring Terrace have a population of about 5,000 to 6,000 and are mainly shing communities, so imagine the potential and what it’ll be like 30 to 40 years from now,” he says.

The development of the indigenous community is also an aspect in PETRONAS’ operations in Sarawak that it plans to replicate in Canada. “From the experience in Bintulu, we have learnt that indigenous communities place importance on sustainable employment, development of skills, the preservation of social fabric and social systems in their communities, and with that really comes long-term sustainable partnership with indigenous and community leaders. And those partnerships and relationships are going to be critical to our success in the long term,” says Mark.

Where Good Flourishes

Community work has long been part of the PETRONAS culture for the last 45 years. With the recent launch of Yayasan PETRONAS, we look at the company's evolving sustainable strategies and the centralisation of their philanthropic e orts in delivering a broader impact.

Che Noorfaezah Mat Nasir shifted nervously in her seat, unsure of what she was doing in a class with 99 other Teluk Ketapang women. Earlier when she had been asked to sign up, Faezah didn't even know what to write for her telephone number.

As the instructor asked her what her talent was, Faezah just shook her head and sighed. A housewife and mother of six, she felt small and out of place. Other women in class had, at least, experience in selling food or sewing clothes.

They were all participants of PETRONAS' Planting Tomorrow programme which sought to upgrade the lives of single mothers and wives of shermen who live below the poverty line.

"I didn't have the con dence. At that time, most of the others in class had some small business. They all had something they were good at," explains Faezah, 36.

It was only after much encouragement from the trainer that she remembered friends and relatives' remarks about how good she was at giving massages. From that point, Faezah ourished in class. She met the targets set by the trainer, did her homework and even printed business cards.

Within a month, her income increased from RM100 to RM700, and is currently at RM2,700. In a room full of people, she no longer sits awkwardly in a corner. Faezah reveals that she has many clients now and has even started selling massage oil – a product she makes with her father.

"I used to be very negative and didn't believe I could do much. But this programme taught me to think out of the box to achieve di erent results," says Faezah.

The Yayasan PETRONAS launch was o ciated by Deputy Prime Minister Datuk Seri Dr Wan Azizah Wan Ismail in March. Also present were President and Group CEO of PETRONAS Tan Sri Wan Zulki ee Wan Ari n (left) and Chairman of PETRONAS Datuk Ahmad Nizam Salleh (right).

Planting the Future

SENTUHAN HARAPAN

Although volunteerism and CSR have always been part of the company's culture, it is only this year that Yayasan PETRONAS, the CSR arm of PETRONAS, was launched.

Lita Osman, Acting Chief Executive O cer, explains that now as the central body, Yayasan PETRONAS manages all of the CSR activities for better governance. It's all about doing better philanthropy, delivering programmes that are designed on our four guiding principles - creating value, sustainable impact, innovative solutions, and e ective partnerships or shared success."

Ensuring that all programmes remain sustainable, Yayasan PETRONAS will continue to make broader impact through three focus areas: Sentuhan Ilmu (Education), Sentuhan Harapan (Community Well-being and Development), and Sentuhan Alam (Environment).

By BRIGITTE ROZARIO

Lita (extreme left) with the ginger farmers of Kampung Pulutan, Sabah. Ginger cultivated here is now pulverised and marketed in many other parts of Malaysia.

Yayasan PETRONAS believes that social progress is inclusive and everyone can enjoy a better life. Reaching out to underprivileged communities and youth, the foundation's Community Well-being and Development focus area creates avenues for these groups to be exposed to social entrepreneurship programmes, promoting a more sustainable livelihood and better health. Flood relief and food aid programmes are also implemented during periods of natural disaster to allow a ected communities to resume their daily activities sooner.

Planting Tomorrow, for instance, allows Yayasan PETRONAS to work with Yayasan Sejahtera to help villagers in rural and remote areas of Sabah.

"In Sabah, there are many villages with no water supply. So, we provided water through our gravity-fed system. Villagers no longer need to go to the river, as this would have taken them four or ve hours on foot. The time they save can be used to work on the good soil.

"We even teach them about entrepreneurship, nancial understanding, design, marketing and branding, so they know how to market their products. We talk to them about new ways of planting and give them the necessary equipment,"explains Lita.

> "With the help of PETRONAS, we nally have water owing into the village through the gravity-fed system. Before that, we had to walk to the river, ll up our bottles and buckets and carry them back, three times a day."
>
> - Ginger farmer Justah

(From left) Ritah and Justah now earn three times higher income by harvesting Bentong ginger.

SENTUHAN HARAPAN

Crop Cultivation: Transforming Lives

Sisters Justah, 31, and Ritah Dahlan, 29, were among 19 participants of Planting Tomorrow from Kampung Pulutan in the interior of Sabah. Justah has two children and her husband works as a rubber tapper, while Ritah lives with their mother, who is also a farmer. They had been planting vegetables traditionally like the rest in their village until PETRONAS came into the picture in 2017.

The new programme introduced ginger cultivation to the villagers and it was a collaboration with Yayasan Sejahtera that lasted for about nine months.

The experts PETRONAS brought in, identi ed ginger as the most suitable plant for their soil. The local farmers were given seeds to sow on a large scale and were taught the right techniques for planting, including how to shorten the harvesting period. They were also advised to keep some seeds to plant in a nursery – a somewhat novel idea for the villagers.

With encouragement and some targets set for them, the farmers have changed the face of farming in their village and now grow ginger abundantly.

"With the help of PETRONAS, we nally have water owing into the village through the gravity-fed system. Before that, we had to walk to the river, ll up our bottles and buckets and carry them back, three times a day – in the morning, afternoon and evening," relates Justah.

Ritah further says that Planting Tomorrow opened her eyes to the bene ts of working together. "Previously, we used to work on our individual land. Now, we help each other, and reap more pro t. We also work faster together."

They are now nancially comfortable earning RM1,500 - RM3,300 a month from their ginger cultivation business, compared with their previous meagre earnings of RM150-RM500 – a substantial increase from before!

No

“parachute initiatives”

According to Lita, farming on their ancestral land is what these women do best. Although they knew the soil was good, they had not been doing so well because they didn’t know which crops were best to plant, nor how to maximise their harvest.

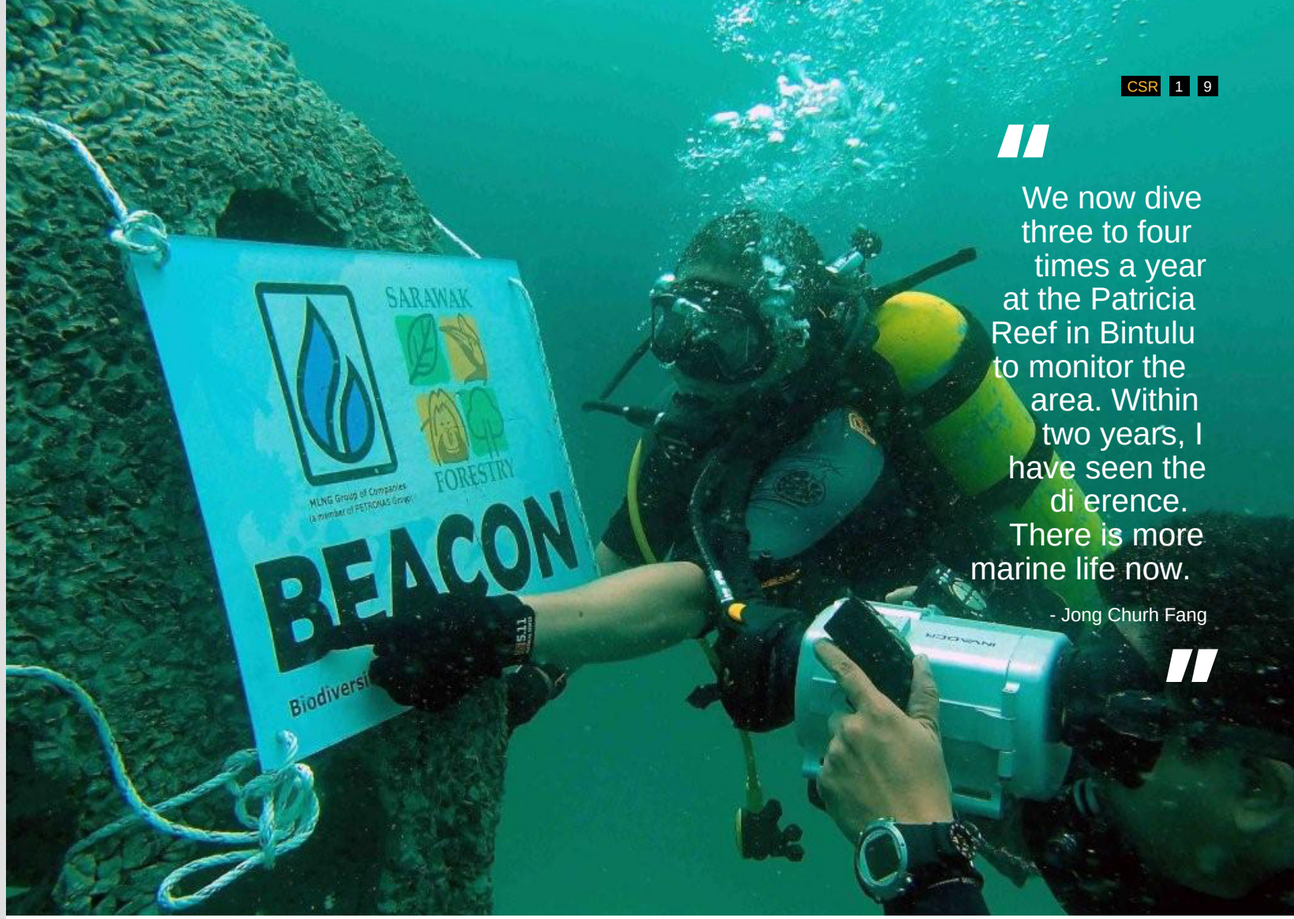
“They were surprised that we were willing to go the extra mile to help and give them gainful work where they could derive more value for their e ort. As we put in a lot of e ort, they too felt compelled to work with us and make the programme a success,” says Lita.

She stressed that Yayasan PETRONAS does not believe in “parachute initiatives” where you drop in, do a one-o charitable work and leave. The foundation aims to have sustainable programmes that provide the necessary tools for the communities to grow so that in the long run, these communities can improve their lives and enjoy a steady income stream.

With many senior PETRONAS sta coming from similar backgrounds and communities, some being bene ciaries of the company’s scholarships, the motivation to help is stronger.

“Naturally, they have that passion to give back to their own communities. It’s part of our DNA at PETRONAS,” Lita adds.

> “It's all about doing better philanthropy...”
>
> - Lita Osman
> Acting CEO, Yayasan PETRONAS



> “We now dive three to four times a year at the Patricia Reef in Bintulu to monitor the area. Within two years, I have seen the di erence. There is more marine life now.”
>
> - Jong Churh Fang

SENTUHAN ALAM

Better Care for the Ocean

Yayasan PETRONAS is cognisant of its responsibilities, not just to communities, but also the environment.

Through Sentuhan Alam, Yayasan PETRONAS seeks to better the environment through biodiversity conservation and carbon neutral programmes. The foundation’s initiatives include rehabilitation and conservation of coral reefs and mangrove swamps. In Kerteh, Terengganu, PETRONAS Chemicals Group works with the Malaysian Nature Society on the ecoCare mangrove learning centre, which has been in operation for the past 14 years.

PETRONAS’ involvement in regenerating marine biodiversity in Bintulu, Sarawak, started in 2013 with the Biodiversity, Environment & Conservation (BEACON) project where thousands of reef balls were embedded in the seabed for corals to amalgamate. In addition, BEACON also conducts diving lessons, and beach and coral cleaning.

MLNG operations technician Jong Churh Fang is one of the many PETRONAS employees who volunteers his time for this project. In fact, Jong learned to dive just so he could participate in BEACON. The programme’s agenda to conserve reefs and prevent illegal trawling resonates deep with the 33 year-old from Kuching, Sarawak. “I think this programme is good because we help promote coral growth, so that more sh can live there. It helps conserve our marine and raises awareness of the importance of conservation,” says Jong.

An avid shing enthusiast, Jong obtained a new level of appreciation for nature after going underwater. “I never really thought about learning to dive. I took it up to volunteer for the BEACON project. We now dive three to four times a year at the Patricia Reef in Bintulu to monitor the area. Within two years, I have seen the di erence. There is more marine life now. I remember the second time I went underwater and saw cuttle sh breeding near our reef balls - I was elated. I felt like I had accomplished something.”

Studying the Forest

Amidst lush greenery and the beautiful Imbak falls, the opening of the Imbak Canyon Studies Centre (ICSC) marked a historic milestone for the Imbak Canyon Conservation Area (ICCA), a pristine rainforest in the heart of Sabah and home to a wide variety of ora, fauna and unique landscapes.

The launch of the ICSC is an important step in the Sabah State Government's move to protect the State's rainforest heritage and the environment. This world-class biodiversity and environmental research centre, is a 27-hectare facility that sits within the 270,000-hectare core zone of the ICCA.

Since 2010, PETRONAS has committed a total of RM83 million towards the conservation of Imbak Canyon – making it the rst and largest ever local partnership by Yayasan Sabah Group in conserving a gazetted forest area in the State.

Datuk Seri Panglima Haji Mohd Sha e bin Haji Apdal, Chief Minister of Sabah says, "The ICCA has the potential to become the destination of choice for rainforest research, attracting both local and international researchers."

The Chairman of Yayasan PETRONAS, Datuk Ahmad Nizam Salleh concurs: "In order to promote research activities here, we plan to introduce an environment research grant to spur research related to carbon sequestration, new energy as well as in biodiversity."

Director of Yayasan Sabah, Datuk Haji Jamalul Kiram bin Datuk Haji Mohd Zakaria continues, "The construction of ICSC will create more jobs for communities living nearby in the Imbak area, especially young people, in hospitality and tourism related activities. Through these we hope they can better their standard of living in a sustainable way."

There are about 15 villages around Imbak. "Before ICSC was established, the people depended on the jungle to sell or use its natural resources, such as Tongkat Ali.

"When we work with Yayasan Sabah, we also have to work with the community in that area. We give them the opportunity to gain better employment and start their own business," Lita Osman explains.

> "The ICCA has the potential to become the destination of choice for rainforest research, attracting both local and international researchers."
>
> - Datuk Seri Panglima Haji Mohd Sha e bin Haji Apdal
> Chief Minister of Sabah

(From left) Datuk Ahmad Nizam, Datuk Seri Panglima Haji Mohd Sha e and Dr Yap Sau Wai, Group Manager, Conservation & Environmental Management Division of Yayasan Sabah at the ICSC Science Laboratory.

Imbak Canyon has rich biodiversity with over 600 species recorded to date.

New Tree Species

- Dipterocarpus megacarpus (Dipterocarpaceae) (Madani, 1992).
- Ceriscoides imbakensis (Azmi, 2000), a rare tree from the Rubiaceae family.

Mammals: 81 species – including Orangutan, Proboscis Monkey, Banteng, Bornean Pygmy Elephant, etc.

Birds: 245 species - a mix of lowland and montane species, including six species of pitta, all eight species of Bornean hornbills and 20 species of ycatcher.

Fish: 22 freshwater species.

Protecting Imbak Canyon

Before PETRONAS engaged the communities living near Imbak Canyon, the villagers had a tough time trying to make ends meet. The future looked bleak for their youngsters; they knew they would have to go to the city to earn a living.

Ranger David Francis, 32, lives in Kampung Imbak. "I used to work as a part-time porter in Imbak before I became a ranger in 2007. I thought I might have to work in a faraway place but, thanks to PETRONAS, I have not had to move to another state or to the city to nd work. There is now the gravity-fed water system, homestays by villagers, and more job opportunities in Imbak.

"Previously, there also wasn't much jungle monitoring to protect the animals from poachers. Now there is better protection of wildlife. Initially, I felt a bit out of place working in the jungle but now I have become very comfortable and I enjoy being there. I like being a ranger because there's a lot we can learn from the new species and subspecies found. I am happy with the new discoveries. I also get to regularly see deer, roe deer, mouse deer and gibbons. It is our job to protect nature and the wildlife so the younger ones know what a jungle is," says the father of two.

Part-time porter Ronny Mi, 25, also lives in Kampung Imbak. With a small shop and a vegetable garden, he only helps visitors when his services are required.

"After PETRONAS came in, there were many programmes to upgrade the community such as the porters association. I am a member and it informs me whenever someone needs a porter. My hope is that the people of Imbak can remain there and work in that area rather than leave their families to go to the city," he says.

Learn more about Imbak at www.youtube.com/user/PETRONASOcial

David and Ronny now serve a greater purpose - protecting the jungle of Imbak.