



CENTRE.gy

April 2020



ADJUSTING TO COVID-19

Adjusting to the challenges of COVID-19, the Centre continues to support the Guyanese business community through online and virtual services.

FIRST OIL

Less than five years after the initial discovery and well ahead of the industry average, first oil marks the start of a powerful new chapter in Guyana's history.

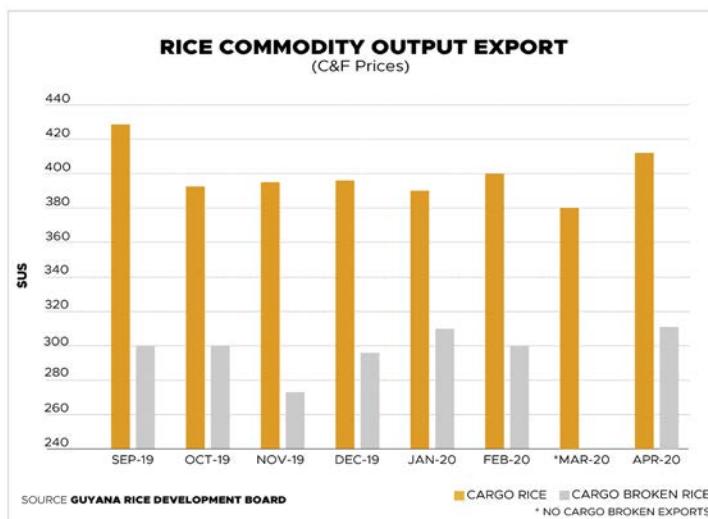
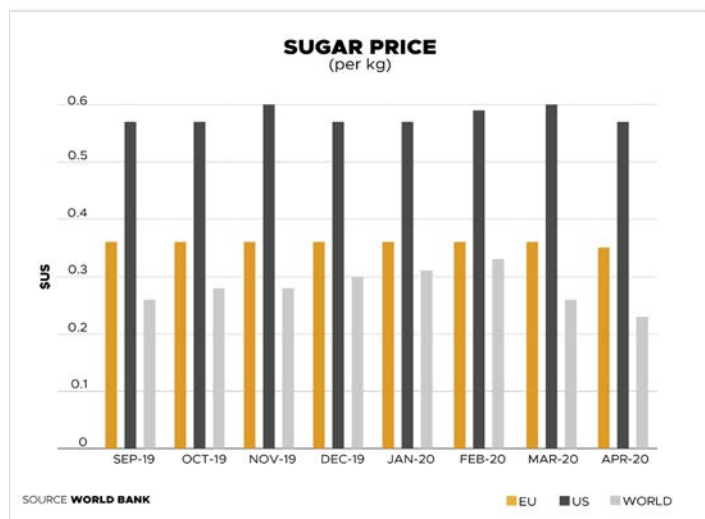
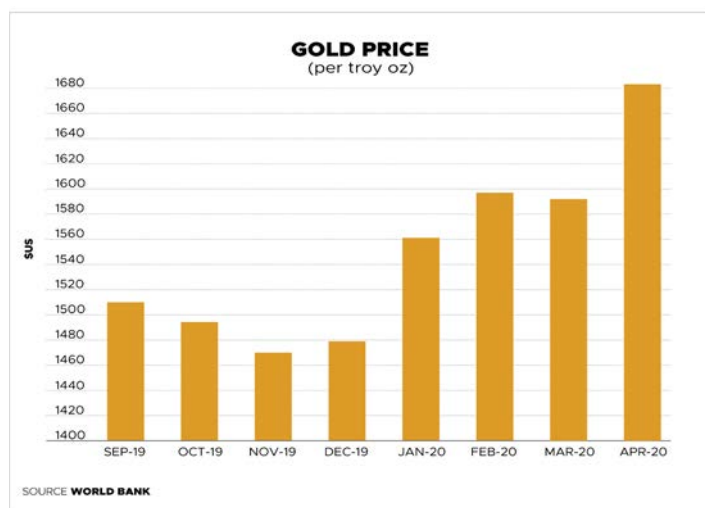
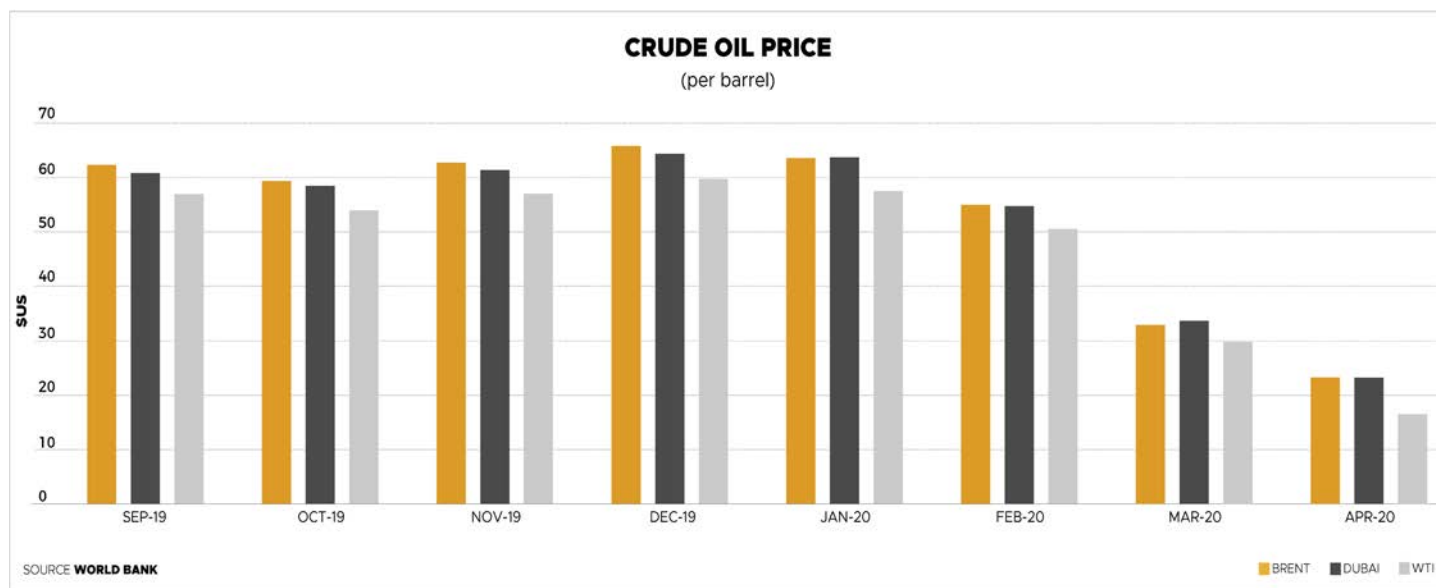
JOIN THE CONVERSATION

As part of its new *Join the Conversation* speaker series, the Centre hosted world-renowned energy expert Robert McNally and API's Chief Economist Dr. Dean Foreman.

www.centreguyana.com

In Photo: FPSO Liza Destiny | © ExxonMobil

Guyana Economic Indicators



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**CENTRE FOR
LOCAL
BUSINESS
DEVELOPMENT**

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Welcome from the Centre

Dear Reader,

It is my pleasure to welcome you to the second issue of *Centre.gy* magazine.

Since our last publication, a number of critical developments have occurred in Guyana, the foremost being the advent of first oil. As the result of continued exploration success, the country was deemed the world's oil and gas exploration hotspot in 2019.*

However, like the rest of the world, the Guyanese business environment and marketplace are being impacted by COVID-19. The Centre is adapting its services to meet these challenges in order to continue to support the local business community (please see full Centre article on page 2).

The name of our magazine, *Centre.gy*, is no coincidence. Our mission at the Centre for Local Business Development is to serve as Guyana's "epicentre" for oil and gas business and industry information, professional networking and policy advocacy while offering essential business training, mentoring for growth and procurement linkages.

In this issue, the Centre celebrates first oil, reflects on exploration success and the expanding recoverable resource base and looks at our Smart Partnership approach to doing business. We also revisit the success and impact of GIPEX 2019 and introduce our recently launched *Join the Conversation* speaker series.

Additionally, we now offer an opportunity for companies and organizations to advertise directly in *Centre.gy* magazine. Advertising with the Centre provides broad reach to Guyana's leading local and international businesses, the diplomatic community and senior government officials.

We also invite you to visit our redesigned www.centreguyana.com website to access up-to-date information on Centre seminars, business courses and procurement announcements as well as articles from our latest newsletter and newly-produced Centre videos.

Finally, I would like to acknowledge the continued support of ExxonMobil, Hess Corporation and CNOOC in supporting the Centre and our programmes.

We are inspired by the emerging local and international business opportunities in Guyana and hope you are too.

Patrick Henry

Director

Centre for Local Business Development



Centre Adapting to COVID-19

The Centre's core mission of assisting Guyanese businesses is even more critical during the current COVID-19 pandemic. Guyanese businesses are presented with the challenge of supporting the oil and gas sector while keeping their staff safe and ensuring business continuity. The Centre is assisting businesses by continuing to offer its core services while transitioning to online and virtual support.

During the month of March, the Centre transformed its operations to support businesses virtually in critical areas including Health, Safety, Security and Environment Systems (HSSE) and ISO 9001. In addition, the Centre launched new services including its Supplier Registration Portal (SRP) mobile application for IOS and Android. It also finalized a redesign of its website to provide businesses with more information and easier online access. Although these are trying times, the Centre remains a phone call or email away to answer any questions and help guide businesses forward.

The Centre migrated its three short courses for the HSSE Management Programme into online webinars. These webinars allow businesses to take the HSSE courses in short, 30- to 45-minute online segments. Webinars keep everyone safe while allowing a business's HSSE Management System to gain the key information for upgrades and process finalization. The requisite in-person follow-up consultations are now being performed over the telephone or online as well.

As the Centre moves more functions online and builds more remote capacity, it allows the businesses we serve to maintain their safety protocols and prepare for upcoming tenders and advertised business opportunities through constant access to our HSSE team.

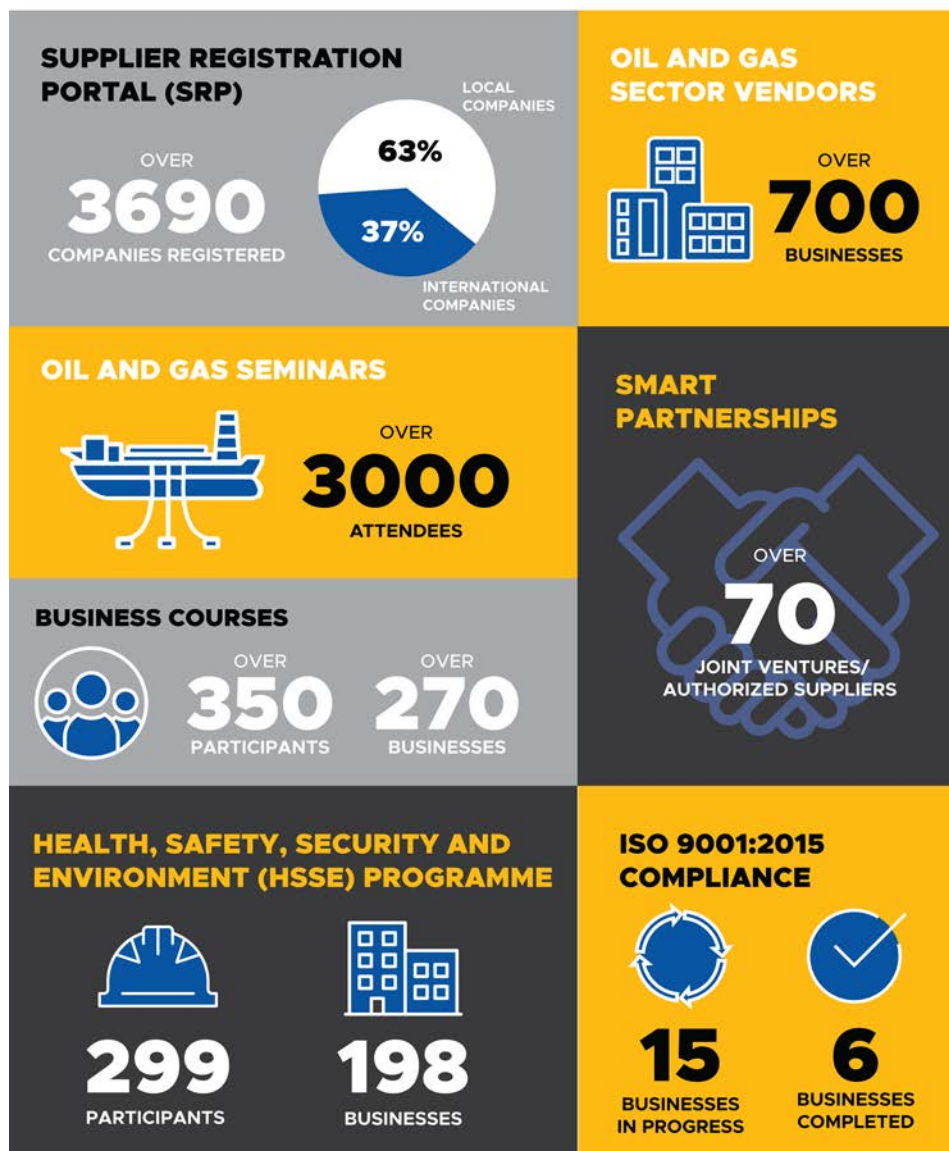
The ISO 9001 programme has followed a similar Centre approach by transitioning to virtual meetings. Through online support, the Centre continues to assist businesses through the critical steps necessary to attain ISO 9001 compliance.

The Supplier Registration Portal is getting a much needed "spring cleaning" to ensure that data are up to date across its 3,000 plus local and global suppliers. The Centre's team is reviewing the data to ensure that phone numbers, emails and registrations are complete. We urge those already registered with the SRP to please take this time to ensure your firm's data are current. However, do not be surprised if the Centre team reaches out to confirm the validity of firm data.

We also encourage SRP users to please go to Google Play or the Apple App Store to download the Centre's mobile app. This app allows firms to easily check updates and keep abreast of all Centre-related information from smart phones and tablets.

In these challenging times information and adaptation are essential to conducting successful business. Please visit the Centre's new online and mobile offerings and let us know if you have questions or comments.

THE CENTRE BY THE NUMBERS





Natasha Gaskin-Peters
Deputy Director,
Centre for Local Business
Development

Guyana is on the cusp of significant economic transformation. With first oil in December 2019, repeated offshore discoveries and the country's oil reserves now estimated at eight billion barrels, Guyana is poised to become a major player in the global oil and gas market.

The oil and gas sector is already driving Guyana's economic growth. In 2019 the economy grew by 4.7%, with the petroleum industry contributing significantly to this growth. However, as the country's economy develops and expands, emphasis should continue to be placed on more traditional sectors including agriculture, fishing and forestry as well as services including education, finance, information and communication.

The Guyanese private sector continues to rise to meet the increased business demands of the oil and gas (O&G) sector. A random survey conducted by the Centre for Local Business Development (Centre) in 2019 revealed that one in four local businesses had worked directly or indirectly with the O&G sector.

In fact, the industry is already utilizing local companies in almost every aspect of the economy including shipping and logistics, accommodations, catering, civil works, engineering and construction, fabrication, waste and environmental management, communications/marketing and management consulting.

Data on the O&G sector reveals that since 2015 more than 600 local vendors have been working in the O&G sector with ExxonMobil outlaying roughly US\$228.6 million (over GY\$47 billion) into the Guyanese economy. Between 2018 and 2019, expenditures through local Guyanese

Maximizing the Benefits of Local Economic Development

vendors rose by 74%. This upward trajectory is expected to continue well into the future.

To continue to support supply chain development for local Guyanese businesses, the Centre launched several initiatives in 2019 including a Health, Safety, Security and Environment (HSSE) Management System programme. The multi-faceted programme includes an initial seminar tailored specifically for senior management executives followed by individual follow-up sessions with the Centre's international HSSE experts. These sessions provide businesses with the opportunity to discuss their HSSE status and receive guidance over six months on developing or enhancing their HSSE management systems.

The Centre continues to build the capacity of local companies through its business courses, oil and gas seminars and computer-based training as well as its ISO 9001 mentorship program. Recognizing the increased market opportunities available to them, local companies have not only been investing in their staff through participating in Centre

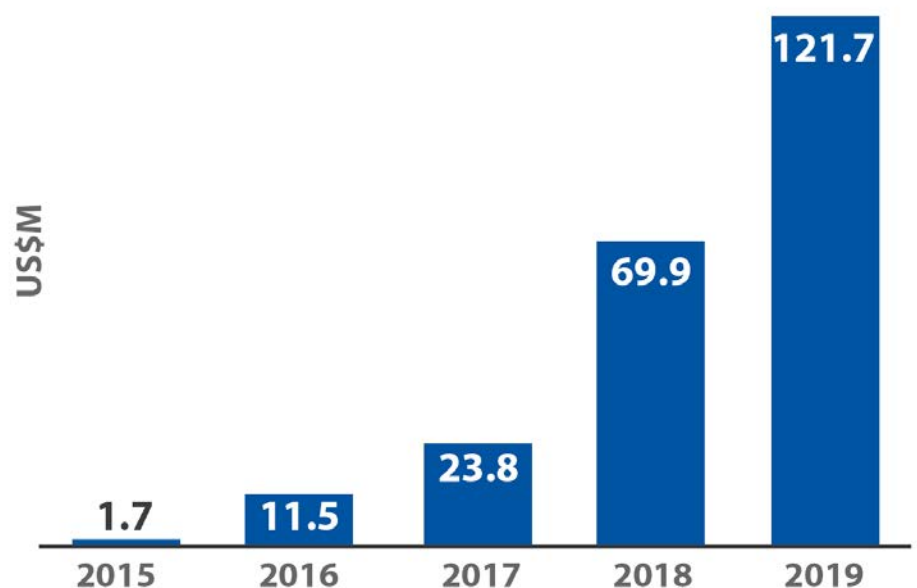
programmes but are upgrading their internal management, ICT, procurement, accounting and financial systems to become better vendors to the O&G sector.

In fact, a Centre enterprise development survey of companies conducted in 2017 and again in 2019 demonstrates how in just two years local companies have significantly improved their operations, costing, pricing, business inputs and delivery times.

As the O&G sector continues to expand with the Liza Phase I field producing oil and Liza Phase II in the development stage, there will be increased demand for local operations and maintenance companies as well as a wide variety of business suppliers and services.

In order to maximize the local capture and content from these two projects (and others to come), the Centre continues to work closely with the business community to provide the types of courses, linkages and expertise required to support economic transformation and development in Guyana.

Local Spend with ExxonMobil Guyana Activities



It Is Guyana's Time to Shine

For many years Guyana pursued the discovery of commercially viable hydrocarbon resources without success, but we never gave up. Together with ExxonMobil and its co-venture partners, successive administrations of the Cooperative Republic of Guyana (CRG) have now finally realized this remarkable achievement. December 20, 2019 is now known as First Oil Day in the annals of the history of the CRG, commemorating a day of national pride and promise.

The journey to First Oil required foresight and tremendous investment that ended with Guyana realising its first drop of "black gold" significantly ahead of the projected schedule.

Few nations and even fewer individuals are privileged to witness or be part of such a moment. While it is an exciting opportunity, its challenges and its promises require us all – explorers, operators, managers, state agencies and citizens – to be aware that we must be thoughtful stewards of this resource.

The oil and gas sector, even during the current global market conditions and pandemic response period, provides us as Guyanese a notable opportunity to achieve transformational socioeconomic growth and to change the development trajectory of our country. We are being given the opportunity to leapfrog ahead, foregoing conventional economic progress from an agrarian to an industrialised to a high-value service economy. We as Guyanese will determine where we go and how we get there. The future is in our hands if we stand together as a unified nation.

Since First Oil, Guyana has already gained her first entitlement lift under the profit oil arrangement, generating nearly US\$55 million for the people of the CRG. The country is entitled to at least four more significant lifts in 2020. The CRG and its investment partners remain bullish and clear-eyed about the prospects for this country as highlighted by our investment and promotion at GIPEX 2019. GIPEX will continue to be our marquee platform to promote local business opportunities and the country's growth.

Given Guyana's history of disappointment surrounding petroleum exploration, it was difficult to fully prepare for our recent success. Since 2016, the Guyana Geology and Mines Commission (GGMC) within the Ministry of Natural Resources (MNR) and, more recently, the Department of Energy within the Ministry of the Presidency and its national partners, have been fully engaged in a tremendous organizational, legislative, policy and technical learning curve.

In an extremely short period of time our organizations have developed a number of different policies and guidelines including the Natural Resource Fund Act; Legislative Review; Local Content Policy; Crude Lifting Agreement; Marketing Strategy for Guyana's first three cargoes; Depletion Policy Guidelines; Measurements, Calibration and Testing Guidelines; Entitlement and Royalty Reconciliation Procedure; Customs

and Excise Procedures; Production Sharing Agreement (PSA) Contract Administration Guidelines; Workplan and Budget Guidelines; and Field Development Review Guidelines.

These policies, procedures and protocols are critically important to support the orderly development of our offshore oil and gas sector and to realize the best value for the people of the CRG in the shortest possible time.



Dr. Mark Bynoe
Director, Department of
Energy, Ministry of the
Presidency, Cooperative
Republic of Guyana

POLICIES, PROCEDURES & PROTOCOLS



Natural Resource Fund Act



Legislative Review



Local Content Policy



Crude Lifting Agreement



Marketing Strategy for Guyana's First Three Cargoes



Depletion Policy Guidelines



Measurements, Calibration and Testing Guidelines



Entitlement and Royalty Reconciliation Procedure



Customs and Excise Procedures



Production Sharing Agreement (PSA) Contract Administration Guidelines



Workplan and Budget Guidelines



Field Development Review Guidelines

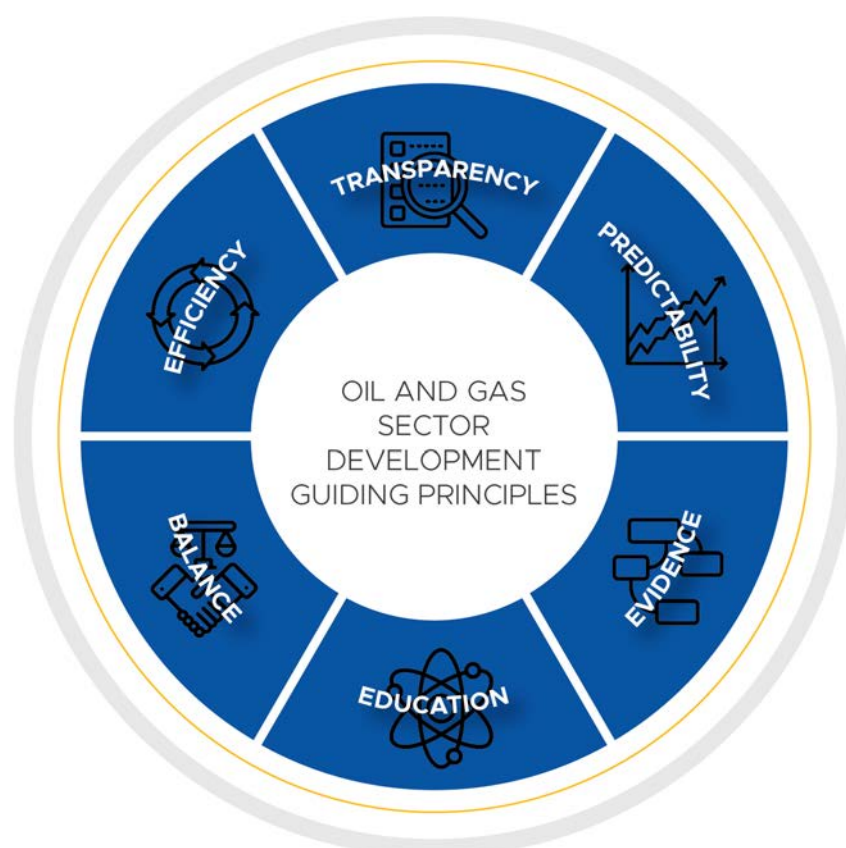


We continue to pursue further capacity building in the agencies responsible for managing our resources, and to revise our laws and production-sharing contract templates and carry out further seismic surveys in preparation for future licensing rounds. Undoubtedly, these achievements would not be possible without a truly Herculean effort by all those involved, including our industry partners, ecosystem of agencies and development partners.

The Department of Energy and its sister agencies and departments continue to learn, grow and seek ways to streamline operations that are essential for transformative development within Guyana's offshore oil and gas sector. This drive rests on six broad principles: Efficiency, Transparency, Predictability, Balance, Evidence and Education.

The government and people of Guyana sincerely thank ExxonMobil and all those involved who helped bring us to First Oil – the surveyors, the geologists, the engineers, the oil companies, the global contractors, the local businesses and more.

We now must be good custodians of these precious and hard-earned hydrocarbon resources. We are humbled by the responsibility of leading our people toward a brighter future marked by peace, prosperity and plenty. Guyana's Decade of Development is truly closer to being realised. May God continue to bless and guide our paths.



Development and First Oil



On December 20, 2019, the floating production storage and offloading (FPSO) vessel *Liza Destiny* began producing Guyana's first oil in the Stabroek Block, 120 miles offshore. Production from the Liza Phase 1 field, the first of multiple offshore projects planned for Guyana, began ahead of schedule.

Less than five years after the first discovery of hydrocarbons, well ahead of the industry average for deep-water developments, first oil marked the start of a powerful new chapter in Guyana's history. The Cooperative Republic of Guyana, with its current estimated discovered recoverable resource for the Stabroek Block of more than 8 billion oil equivalent barrels, is emerging as one of the world's most promising energy hubs.

The extraordinarily paced development of this successful first phase underscores the tireless work by many, including geoscientists, engineers and support services of the operator ExxonMobil and its contractors and subcontractors. Excellent planning and focused execution have been directed towards the shared goal of safely, efficiently

and effectively achieving first oil. Multiple teams working together to ensure timely technical delivery from a number of places around the globe were essential for the project's success.

The quality and leadership in project execution from ExxonMobil and prime contractors Technip FMC, Saipem and SBM – who remained coordinated and laser-focused on the objective of meeting their commitments to deliver the assets – have set an outstanding precedent for future development of these world-class discoveries.

Each vitally contributed to the materialisation of first oil. Technip FMC, a global leader in subsea, onshore, offshore and surface technologies, provided Subsea Umbilicals, Risers and Flowlines (SURF) – subsea equipment which includes enhanced vertical deep-water trees and associated tooling, manifolds, associated controls and tie-in equipment.

Multinational oilfield services company Saipem was responsible for installation of the tie-back system involving installation

engineering; procurement; construction and the installation of production, water injection and gas injection flowlines; installation of dynamic and static infield umbilicals; manifolds; and pipe-laying activities. Saipem also used revolutionary technology for the production, treatment and transportation of hydrocarbons on the seabed.

Putting the final piece in place for the development project, SBM Offshore delivered FPSO *Liza Destiny* to Guyanese waters. The conversion of a Very Large Crude Carrier (VLCC) into the *Liza Destiny* Floating, Production and Offloading Vessel (FPSO) was a unique project. SBM was involved in the design phase before moving into rapid construction work to complete ahead of schedule.

Crude Lifting

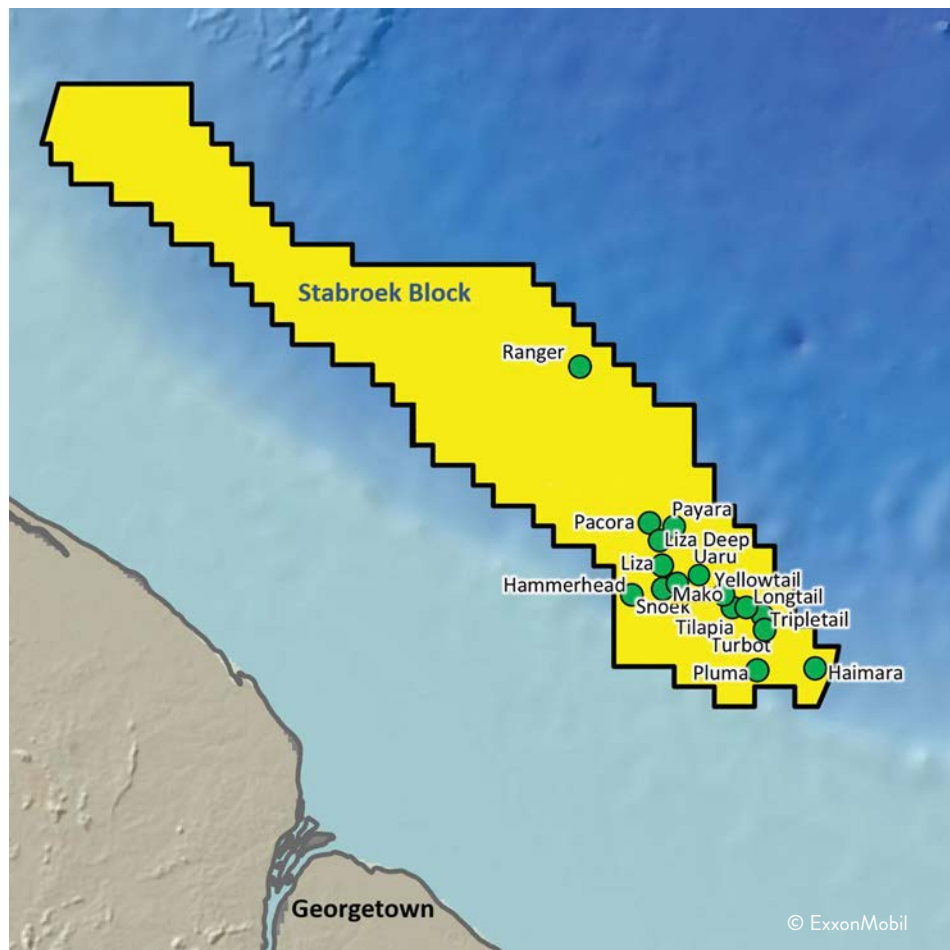
The first crude lift, the process in which crude oil from the FPSO vessel is transferred to an export tanker, took place in January 2020. In adherence to the monitoring regulatory processes in place, the Guyana Bureau of National Standards and custom officers were on board to witness the lift and the

required clearances were received from Guyanese authorities for the lifting before the tanker left Guyanese waters.

In keeping with standard industry practice, operator ExxonMobil sent the first one-million-barrel cargo to one of its refineries in order to clean up any impurities that are usual for new wells. Remnants of fluids, which are in the wells and pipes before start-up, can be present in the initial crude lifts.

What First Oil Means

With offshore production now underway, new opportunities have been rippling back onshore, translating into new economic opportunities for Guyana that set the stage for transformative development. Local businesses are seeing unprecedented opportunities emerge. Since oil and gas is new to Guyana, making informed decisions to foster responsible and sustainable development is vital.



nies. Since its establishment in 2017, it has been a reliable resource for information on safety, technical standards, procurement opportunities and project-specific information – a well as for improving the competitiveness of Guyana’s industrial base.

More and more Guyanese companies are contributing directly or indirectly to the success of project activities in Guyana. During 2019, through ExxonMobil activities, more than US\$121M/GY\$24B was spent with over 735 Guyanese vendors. Approximately 1,900 workers supporting activities are Guyanese – more than 50 percent of the total workforce.

ExxonMobil and its direct contractors have spent approximately US\$228.6M/GY\$45.7B with more than 730 local suppliers since the first discovery in 2015 – evidence of the growing capacity and impact the industry is having even at this early stage.

First oil means beginning a new sector of the Guyanese economy and a revenue stream that has the potential to transform the lives of Guyanese. It is the beginning of a new industry, with ripple effects that traditionally benefit communities and businesses by building capacity, inducing the development of a strong safety culture, creating opportunities and increasing foreign investment.

What’s Next?

With 16 discoveries to date, and ongoing production and exploration activities, current and potential projects will result in decades of development of oil and gas resources. ExxonMobil has committed to long term cooperation with the Co-operative Republic of Guyana to undertake this in a responsible and mutually-beneficial way.

Absorbing the first cargo, at market value, to run through the refinery before entering the global market, ensures that the standard of crude is established at its best.

During maximum production, following the separation of oil, gas and water in the top-side processes, produced oil is moved to the FPSO cargo tanks for storage.

The oil will then be lifted to tankers every 8-10 days in one-million-barrel cargos and sold on the global market. Cargo allocations are determined by an entitlement formula in line with the product sharing agreement and will be allocated to lifting parties on a rotational basis. Guyana’s first lift took place in February.

Department of Energy Director Dr. Mark Bynoe asserts, “It is also imperative that as Guyanese we begin to appreciate that the direct and indirect benefits from this sector will go far beyond anything that we have seen to date.”

It takes investment in time, money and resources to grow the supply base in Guyana and although it does not happen overnight, it most certainly is happening.

A resource that helps expedite growth is the Centre for Local Business Development. The Centre continues to be a hub for strengthening the capacity of local compa-

In place locally are ExxonMobil’s Liza phase’s one and two Environmental Socioeconomic Management Plans (ESMPs), which cover regulatory compliance as well as environmental and socioeconomic management and monitoring requirements for the project-related activities. These plans include very important baseline studies to gauge conditions onshore and offshore, and to ensure that environmental impacts resulting from drilling activities are responsibly managed.

As Liza 1 steadily ramps up to capacity of 120,000 barrels of oil per day, other projects are progressing; most immediately, Liza Phase 2 and, potentially, Payara. To support the larger Liza Phase 2 development, a second FPSO – Liza Unity, utilising a design

incorporating SBM Offshore's new build, multi-purpose hull combined with several standardized topsides modules, is under construction. The *Liza Unity* is currently in Singapore and will have the capacity to produce up to 220,000 barrels of oil per day. Startup is expected in mid-2022 and is anticipated to develop approximately 600 million barrels of oil over its lifetime.

There is a potential third phase, the Payara project, for which field development plans

have been submitted and an environmental impact assessment undertaken. This phase would require a third FPSO, namely Prosperity, which could be brought online as early as 2023 pending government and regulatory approvals. The timely development of these additional projects will ensure that the local workforce and the utilization of local suppliers continues to grow.

The Stabroek Block has the potential to use more than five floating production, storage

and offloading units. Total output from the block could exceed the 750,000 barrels of oil per day mark by 2025. With exploration activities expanding into several other blocks, the road ahead is paved with potential for Guyana.

This methodical development of Guyana's natural resources will enable this sector to maintain the momentum for local content and provide additional opportunities that will help transform the Guyanese economy.



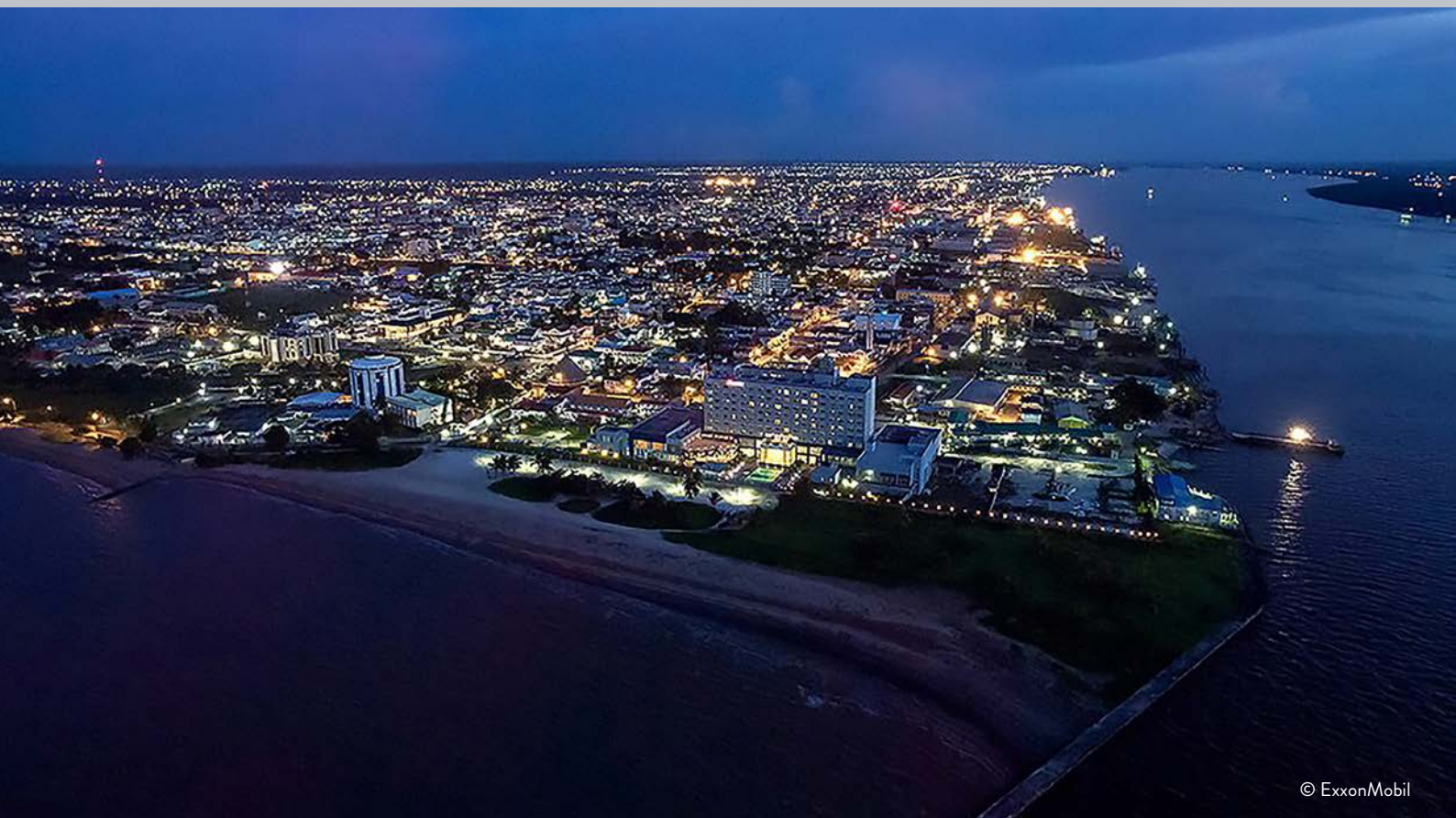
Rod Henson
Country Manager,
ExxonMobil Guyana

ExxonMobil Guyana

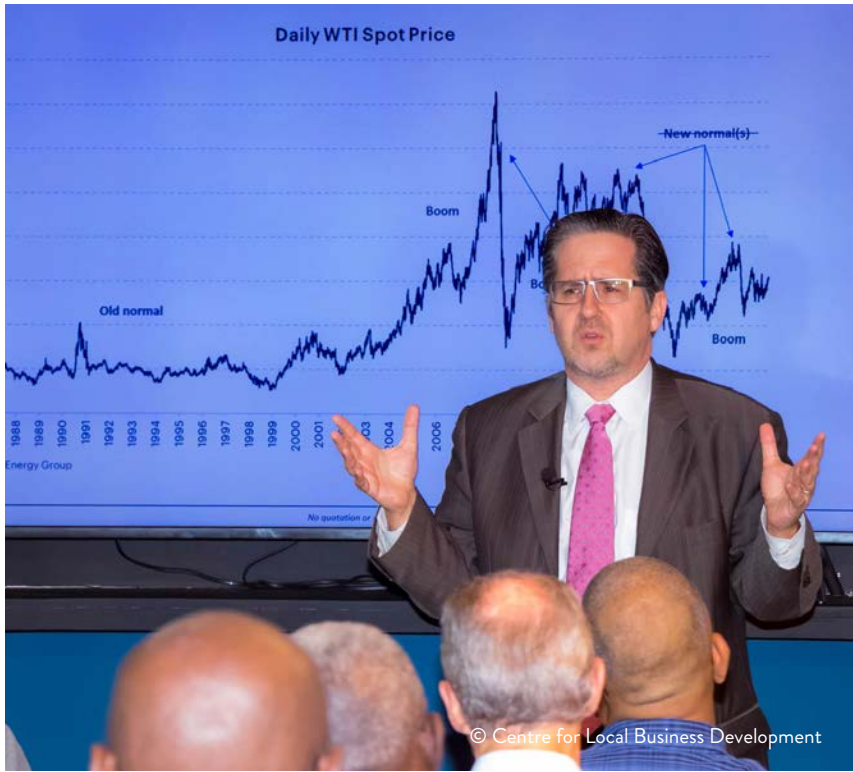
– Highlighted the contribution of all the players

“It is only through the collaboration and cooperation of our co-venturers, contractors and the many great people and partners in the Cooperative Republic of Guyana that we are here today.”

— Rod Henson



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The Centre Launches *Join the Conversation* Speaker Series

As part of its *Join the Conversation* speaker series, the Centre hosted world-renowned energy expert **Robert McNally** in Georgetown and recently conducted a webinar with the American Petroleum Institute's (API) Chief Economist **Dr. Dean Foreman**.

Join the Conversation provides access to distinguished international energy experts and policymakers who provide their unique perspectives on the global oil and gas industry and its development in Guyana. As part of the series, energy markets expert, Mr. McNally authored a Centre discussion paper entitled, "The Challenge of Managing Boom and Bust Oil Prices in the Global Oil Market."

Mr. McNally is the founder and president of the Rapidan Energy Group and previously served on the U.S. White House staff as Special Assistant to President George W. Bush on the National Economic Council and as Senior Director for International Energy on the National Security Council. He is also a non-resident fellow at the Columbia University Centre on Global Energy Policy and recently authored the award-winning book, *Crude Volatility: The History and the Future of Boom-Bust Oil Prices* (2017).

During his visit to Guyana, Mr. McNally met with a wide variety of representatives from local business, government, academia and the oil and gas industry as well as members of the international business and diplomatic communities. Highlights of his visit included a roundtable discussion on oil market volatility for business leaders and a briefing hosted

at the Centre for local media on how global oil markets function. Mr. McNally also addressed a student forum at the University of Guyana on oil markets and future opportunities for growth and development in the sector.

"As a student and historian of the oil market, it is very rare these days to see a brand-new major producer like Guyana. And it was all the more thrilling to be the first speaker hosted by the Centre to share perspectives on the global oil market fundamentals and pricing, which will increasingly be of interest to all Guyanese." - **Robert McNally**

In discussing Guyana's oil future, Mr. McNally explained that leading long-term forecasts project that global oil demand will continue to grow. He also noted that oil is likely to remain the primary fuel source for land, air and sea transport as well as for heating, power and petrochemicals well into the future.

However, because oil markets are historically volatile and prone to wild "boom-bust" cycles, oil-producing nations like Guyana should plan and budget for the highs and lows experienced from oil revenue generation.

The Centre also recently hosted a successful webinar with Dr. Dean Foreman to discuss the current state of the global oil industry. Dr. Foreman is the Chief Economist at API and holds a Ph.D. in Economics from the University of Florida. He came to API from Saudi Aramco Strategy & Market Analysis in Dhahran, where he managed short-term market monitoring and the long-term oil demand outlook. Dr. Foreman has more than 20 years of industry experience in corporate strategic planning, forecasting, finance/risk management and regulatory policy at ExxonMobil, Talisman Energy, and Sasol North America.

Through *Join the Conversation* and hosting industry experts like Mr. McNally and Dr. Foreman, the Centre provides local access to comparative analysis from leading outside authorities on how global oil markets function and how energy trends should be interpreted.

Join the Conversation also builds value by providing a platform for meaningful dialogue for the Centre's growing local and international business audiences, government, policy makers, media and the public regarding oil and gas industry development and its economic benefit to Guyana.



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Exploration Success in Guyana Continues



The decade started off auspiciously for Guyana's oil and natural gas outlook with the announcement that ExxonMobil had raised estimates that placed Guyana's recoverable resource base at more than eight billion barrels of oil equivalent, an increase of two billion barrels from the previous estimate.

This new estimate does not even include the most recent 16th discovery made in January, the Uaru well, but is the result of finds over the last few months of 2019 — Tripletail and Mako — south of the Liza 1 well where production is already underway.

The exploration success in Guyana last year led to a four-year high for its global oil and gas discoveries. According to respected energy analysts Rystad Energy, Guyana was the world's oil and gas exploration hotspot in 2019, surpassing Russia, Iran, Norway, Angola and other top hydrocarbon producers in terms of conventional discovered volumes.

Oil and gas companies have invested some \$8.1 billion in exploration and development activities in Guyana's offshore between 2015 and 2019 to help bring about that drilling success, Rystad noted in a report issued this February. It predicts that Guyana's oil production could hit 1.2 million barrels per day by the end of the decade.

"Guyana's rising oil revenues will make a huge difference in the continued development of the country," said Sonya Boodoo, vice president of upstream research at Rystad. "At the same time, in order for Guyana to realize the full potential of these resources, a stable regulatory and fiscal environment will be a key factor."

Remarkably, from discovery to first oil, Liza 1 in the Stabroek Block came on stream in less than five years, about half the time of typical industry practice. But the road from discovery to production can be a long and risky one. Just because oil resources are found, it does not always mean they are commercially viable. It is not unusual for companies to re-evaluate the commercial potential of their finds depending on the quality of the oil. Heavy oil, for example, is costlier to extract and cannot be processed in every refinery.

There are several stages in the process of oil and gas exploration and production. **Exploration** is usually the most costly and risky. (There were some 40 dry holes, or wells, that did not find commercially viable hydrocarbons drilled offshore Guyana before ExxonMobil hit success with Liza in the Stabroek Block.) During this exploratory drilling phase, companies extract important information that will guide their develop-

ment decision: Do hydrocarbons exist? How much may be available? At what depth do the hydrocarbons exist? Are they located in an environmentally-sensitive area? What type of hydrocarbons are they — gas or oil or light or heavy?

The next phase — **appraisal** — is characterized by further drilling to assess the potential of the discovery and to delineate the size of the reservoir to help determine whether or how to develop the field most efficiently. Important data is collected to better predict how the reservoir will perform during its productive life.

In the **development** phase, plans are drawn up to decide how many wells should be drilled, what facilities need to be constructed and what other important decisions need to be made to move toward commercial production. It is still possible at this stage that not enough hydrocarbons are found to justify commercial development and a well could be abandoned.

There are four categories to classify oil and gas resources: remaining oil and gas in-place; technically-recoverable resources; economically-recoverable resources and proved reserves. It is important to not confuse them as there are very important distinctions.

Remaining oil and gas in-place is the volume of hydrocarbons within a formation before the onset of production minus cumulative production. While this would appear to have the largest volume of all four categories, it is also the most unpredictable as it requires estimating the amount of oil and gas trapped within rocks.

Technically-recoverable resources are the oil and natural gas that can be produced based on current technology, industry capacity and knowledge of the reservoir. Estimated volumes of technically-recoverable resources increase as technology and industry capacity improve and understanding of the geology increases.

Within the volume of technically-recoverable resources are **economically-recoverable oil and gas** resources that can be produced depending on prevailing oil and gas prices and capital and operating costs. For obvious reasons, the volume of economically-re-

coverable resources fluctuates according to market conditions.

The most certain category, albeit with the smallest volume, is **proved reserves**. Proved reserves are volumes of oil and natural gas that scientific data show with reasonable certainty are recoverable in future years from known reservoirs under existing economic and operating conditions. Proved reserves generally increase when new production wells are drilled and decrease when existing wells move into production.

Crude oil and natural gas resources are considered to be estimated volumes since the quantity that will ultimately be produced cannot be known with any certainty. These resource estimates fluctuate as new technologies emerge, markets evolve and the supply/demand balance shifts.

Resources indicate how much oil and gas exists that could potentially be recovered. It is very difficult to estimate this number precisely though it follows predictable trends — rising with new discoveries and new technologies for extraction, and falling with production and depletion. Reserves, on the other hand, indicate how much oil can be technically and economically produced at prevailing oil or gas prices. That means proved reserve estimates rise and fall based on global commodity prices and the cost of oil extraction.

In December 2019, Liza 1 entered the production phase and the first cargo of Guyana crude oil left for a U.S. refinery in January. When Liza 1 reaches full production of 120,000 barrels a day, a tanker will load every 8-10 days.

The wells on the Stabroek Block have mostly discovered high-quality oil so far, with varying percentages of gas. These gas resources can be difficult to immediately calculate. However, the gas generally will be required to help run the offshore operations by powering the Floating Production Storage and Offloading (FPSO) unit and critically reinjecting it to sustain and increase oil production from the reservoir. If there is gas in excess of these requirements, it can be delivered to shore through a pipeline and sold for power generation and other industrial or manufacturing uses.

Explorers are keen to see the pace of discovery continue. By the end of 2020 there will be at least five drill ships operating in the Stabroek Block alone, drilling more production wells and exploring new areas

that geologists and geophysicists suspect might contain oil.

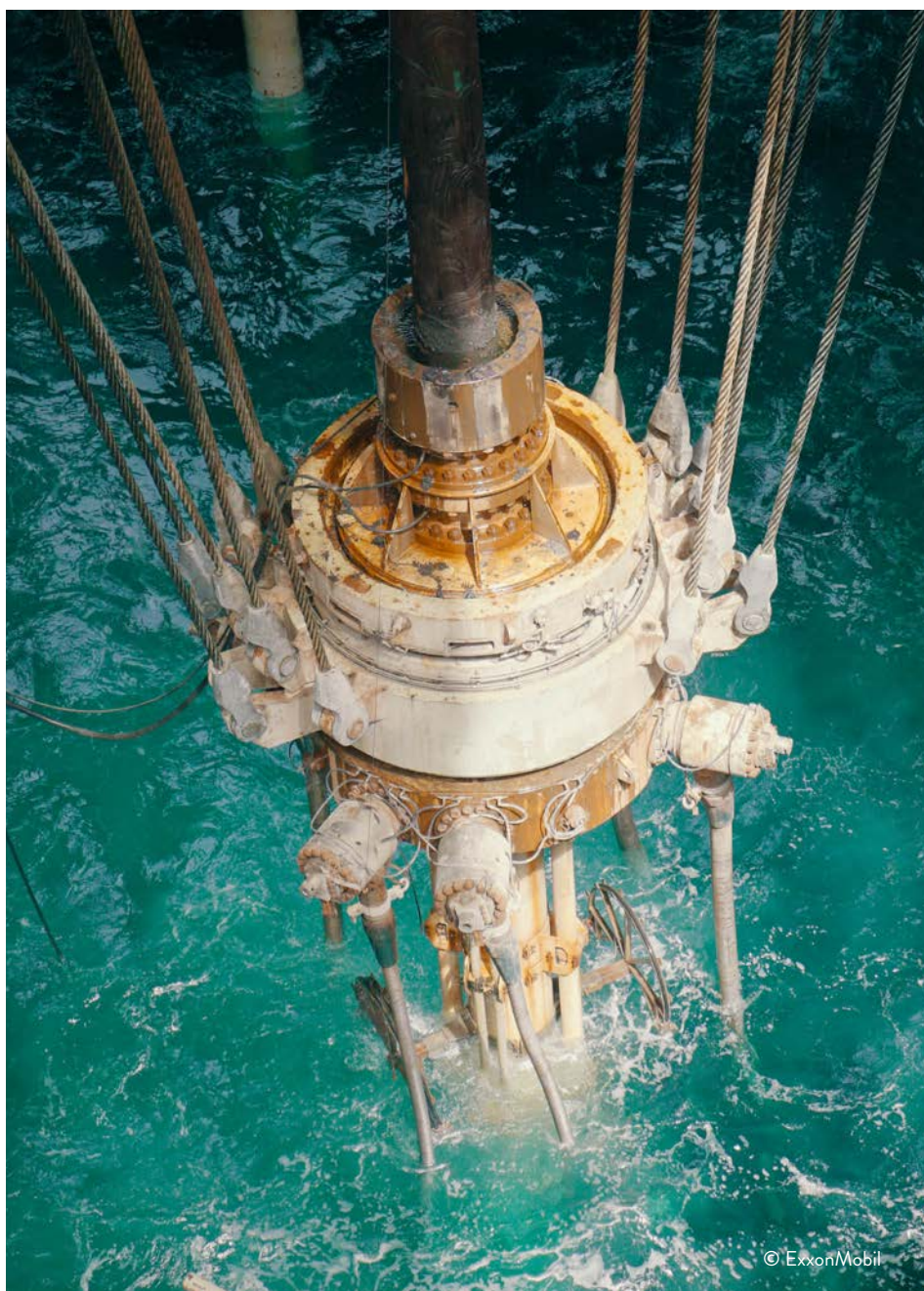
There are also exploration efforts ongoing on several blocks surrounding the Stabroek. Across the maritime border in Suriname, Apache and Total hit oil recently at the Maka-1 prospect and have identified several more prospects on Block 58.

In Guyana, Repsol is reevaluating drilling in the Kanuku Block after a find in January, which was deemed not commercially viable. Tullow is evaluating next steps this year with its partners, Total and Eco Atlantic, in the Orinduik Block where it previously struck oil. Rystad Energy also noted in its research that the fiscal regime and production sharing contract were “in line with other emerging oil and gas countries,” with Guyana having an

overall government take of 60%. The analysts did expect that new production contracts for new blocks would have higher government take, now that the initial investments have been made to de-risk the area.

Much of Guyana’s success so far has been because of the unusually smooth and rapid transition from discovery to production that companies were able to achieve.

Maintaining this kind of investment-friendly environment long term will be critical for Guyana. All future estimates include oil production from projects on the Stabroek Block and other parts of Guyana’s offshore territory that have not been built or fully explored yet. That is why it is so important that responsible development continues to proceed at a steady pace.



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Smart Partnerships

Expand Guyana's Business Ecosystem

In late 2017, local and international businesses began to actively seek new commercial relationships to meet the growing demands of the oil and gas industry in Guyana. However as Guyanese companies began exploring partnerships with international companies, they were having difficulties evaluating the demands and opportunities presented by a new but rapidly expanding industry. To assist business, the Centre began working with enterprises across a wide range of sectors to promote “smart partnerships.”

As part of the smart partnership approach, the Centre plays a pivotal role in counseling Guyanese companies as they pursue equitable, transparent and mutually beneficial business relationships with potential local and international partners. The Centre's smart partnership approach helps Guyanese businesses benefit from offshore oil and gas opportunities while maximizing skills transfer and technology development.

The Centre's smart partnership approach helps the Guyanese business community realize that investment in staff, international standards and systems and technology pays off and leads to new contracts, purchase orders and business success.

Smart partnerships take three primary forms in Guyana: 1) joint ventures (JVs), 2) subcontracting, and 3) authorized suppliers. Through joint ventures, a combination of

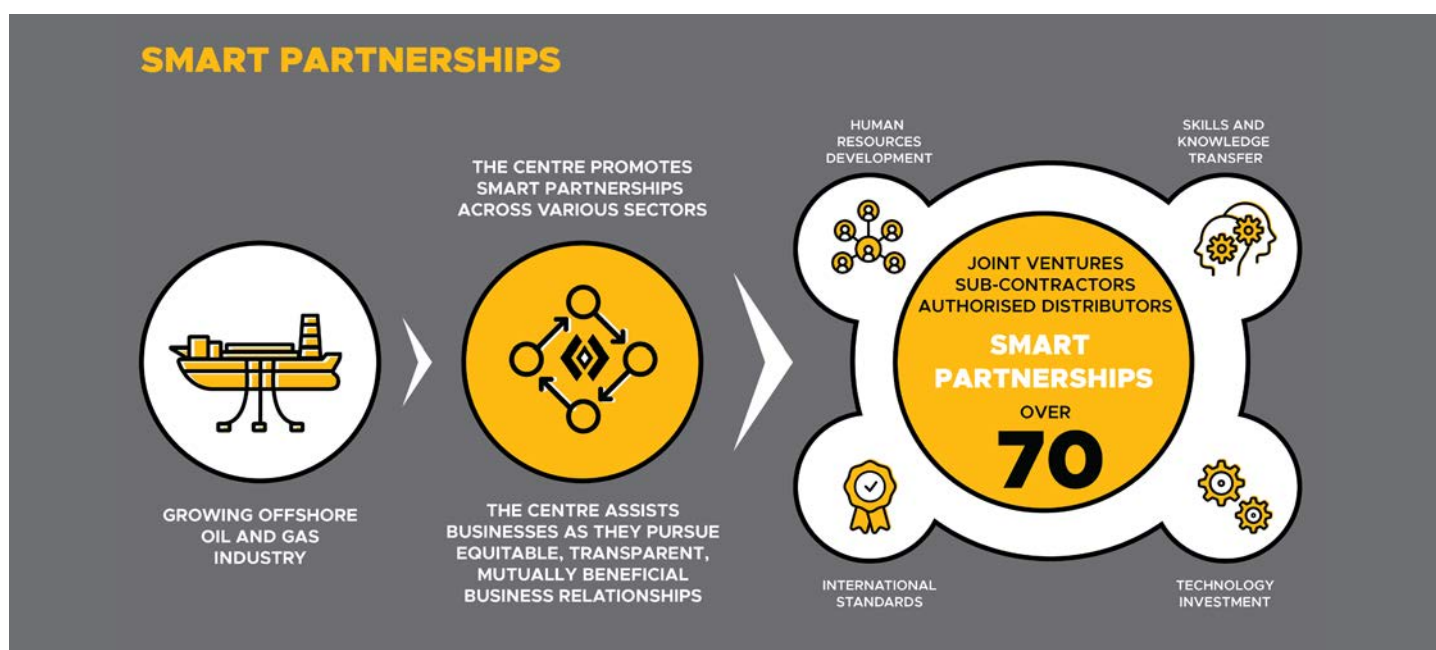


Guyanese and/or international companies make a joint investment, taking equity stakes in a newly created company established specifically to service the oil and gas industry. JVs continue to grow in popularity in Guyana, leading to the transfer of critical skills, expertise and technology to local business.

Guyanese companies subcontracting to the oil and gas industry exemplify smart partnerships as they deepen their expertise, learn about international standards and, most importantly, establish a track record of service delivery excellence and high performance that can lead to more business. Many Guyanese companies that started as subcontractors only two years ago have gone on to receive significant prime contracts from the industry.

Another form of smart partnership is becoming an “authorized supplier” of parts, machinery or equipment. In this case, a Guyanese company builds the expertise and makes investments to meet the rigorous standards of an international supplier. The international partner in turn provides training and technology support to the Guyanese authorized supplier to help them meet these demanding standards. The expansion of authorized suppliers means that long-term operations and maintenance for vital components of offshore oil production are serviced directly in Guyana.

Over the last two years, more than 70 joint ventures and authorized suppliers have been established in Guyana. The Centre's smart partnership approach not only maximizes skills and technology transfer but fosters business growth in concert with offshore oil and gas development.



Connecting at GIPEX 2019

The Centre was a leading exhibitor at the second annual Guyana International Petroleum Business Summit & Exhibition (GIPEX) 2019 held from November 20-22 in Georgetown at the Guyana Marriott Hotel. GIPEX 2019 provided an accelerated platform for major players from across the international oil and gas sector and local businesses to network, form collaborative partnerships in allied industries and learn how to enter Guyana's oil and gas sector.

The Centre's presence at the event provided access for hundreds of local and international businesses to meet with its representatives and learn more about its diverse business courses and service offerings as well as the benefits of registering with the Centre's Supplier Registration Portal (SRP). Businesses that register with the SRP and join its database of more than 3,000 local and international companies can access up-to-date procurement information and better compete for contracts in the oil and gas sector and related industries.

Natasha Gaskin-Peters, the Centre's Deputy Director, notes, "There was great buzz around GIPEX this year. Guyanese-owned-and-operated companies made connections and are benefitting from the immense networking and business opportunities being showcased. It is a very exciting time to be doing business in Guyana."

More than 250 companies, including 40 local suppliers and contractors, participated in this unique gateway which illuminated Guyana's untapped business potential.

GIPEX 2019 was organized by Valiant Business Media in partnership with the Government of Guyana through the Department of Energy, Ministry of the Presidency, and with support from the Guyana Office for Investment (Go-Invest). ExxonMobil Guyana was once again a Strategic Partner for GIPEX 2019. Lead sponsors also included CNOOC International, Hess Guyana and the Guyana Telephone and Telegraph Company Ltd.





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SUPPLIER REGISTRATION
PORTAL

Email

Password



NEW

SUPPLIER REGISTRATION PORTAL APP

The Centre's Supplier Registration Portal (SRP) is the premier spot for oil and gas suppliers and related businesses as they seek to contract, partner and purchase goods and services from Guyanese businesses. Based on its growing success, the SRP is proud to launch its mobile application to broaden its reach and improve access.



Easy
access



Instant
notifications



Simple
profile updates



Customised
alerts

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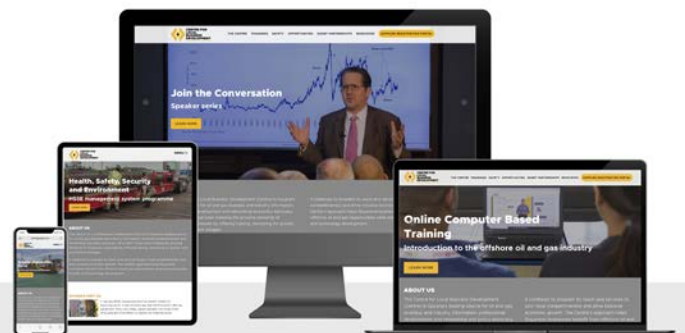


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CONGRATULATIONS ON FIRST OIL FROM THE STABROEK BLOCK CO-VENTURERS

ExxonMobil, HESS and CNOOC would like to congratulate the people of Guyana as you celebrate first oil. The strong partnership between operator ExxonMobil, Co-venturers, and the Government of Guyana, has allowed us to safely reach this historic milestone. We look forward to these partnerships continuing for the benefit of all Guyanese.

The vision we shared 5 years ago has become a reality through focus, hard work and support. Together we are looking forward to the advancement of the oil and gas industry in Guyana, and together we will responsibly manage the projects for the benefit of all.

This is just the beginning of what we expect to be a very successful journey.

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