the japan times

THE KINGDOM OF BAHRAIN

WEDNESDAY, JUNE 26, 2019

Moving Bahrain forward by implementing \$32 billion on projects

The kingdom of Bahrain is strengthening its position as a hub for international businesses in the Middle East by investing in interconnected transport infrastructure.

In February 2019, the courier giant FedEx Express signed up as the anchor tenant for a \$58.5-million, 25,000-square-meter new cargo area at Bahrain International Airport (BIA).

"This demonstrates the kingdom's strong international reputation as a regional hub for businesses in the Middle East. Our island nation is a gateway to the Gulf Cooperation Council (GCC) market including the transforming Saudi Arabia, which is only 25 minutes away by causeway," said Bahraini Minister of Transportation and Telecommunications Kamal bin Ahmed Mohammed.

FedEx Express is not the only firm moving to the archipelago in the Arabian Gulf. In fact, in the first nine months of 2018, foreign direct investment into Japan's fifth-biggest trading partner increased by 138 percent. In addition to Bahrain's strategic location, investors are drawn by its well-coordinated policies and incentives for building the private sector, cost competitiveness and a highly trained workforce — all of which are contributing to an economy that is growing at 3-4 percent a year. Perhaps Bahrain's biggest draw is its infrastructure. It has always been good, which is why leading logistics companies such as DHL have used Bahrain as a base for their Middle East operations since the 1980s. But now the kingdom is investing a record \$32 billion into new infrastructure projects, including ones that will further expand and connect the country's transportation network both locally and internationally.

The minister explained the strategy behind this investment: "Without moving goods and people — be it by air, land or sea — efficiently and effectively, the kingdom cannot compete. To enhance our competitiveness, the government is increasing Bahrain's connectivity, which will facilitate growth in all of our economic sectors. We could not fully develop our potential in logistics, tourism and manufacturing, for example, if we did not have an excellent transportation and logistics network." At the heart of this expanding network is BIA, which is currently undergoing a \$1.1-billion modernization program, described by Mohamed Yousif Al Binfalah, CEO of its operator Bahrain Airport Company (BAC), as "the kingdom's key gateway to the world."

This year will see BAC complete the construction of a state-of-the-art new passenger terminal building four times the size of the current facility, increasing BIA's capacity to 14 million passengers a year. Once that is complete, other aspects of BIA such as its runway will be upgraded, said Al Binfalah: "Between now and around 2021, every single infrastructural element in this airport will be new."

Within approximately five years, an extensive new light-railway system that could cost up to \$2 billion to construct will further improve connectivity between the airport and the rest of Bahrain. This metro, which will use driverless trains to move 43,000 people an hour, will consist of six



Minister of Transportation and Telecommunications

lines covering 109 kilometers and allow optimal interconnections between all of the country's key locations. "We assigned a Spanish consultant, IDOM, to help us plan the routes that we needed, the phasing of the development and the technology we should use," stated the minister.

"The government has now started the next stage of its light-rail project. In February 2019, we launched an international tender to appoint a consultant to manage the tendering process for the development of the first phase of the metro system — two lines that are 32 kilometers long in total with 20 stations. We hope to make an appointment this summer," he said.

The gateway to the Gulf region

When it comes to moving goods around the kingdom and further afield, just 13 kilometers away from BIA is another important node in Bahrain's transport network: Khalifa bin Salman Port, a first-class transshipment hub for the world's largest ocean vessels. Between the air and seaport is a third vital facility: the in-demand Bahrain Logistics Zone, which is also being expanded.

The government now intends to build a 70-kilometer-long railway to connect these three nodes to the GCC rail network, which is progressively linking the transport systems of all Gulf countries. Goods and passengers will be able to travel seamlessly by train throughout the region via a planned second causeway between Bahrain and Saudi Arabia.

"The King Hamad Causeway will make our economic, political and trade relations even stronger," noted the minister, who added that a tender had been released for a consultant for the \$3-4 billion project, which is likely to be carried out under a public-private partnership.

Alongside the rail line, the proposed causeway includes four road lanes, which will further improve connectivity to Saudi Arabia by reducing vehicle traffic on the existent King Fahd Causeway over which more than 2 million people travel every month.

As Bahrain's transport infrastructure becomes increasingly robust and integrated, it is no wonder that logistics and cargo operators are among the many foreign investors looking to use Bahrain as a regional business hub.

The minister said: "We are currently negotiating with two companies, in addition to FedEx Express, wishing to operate warehouse space at BIA's new cargo area. I do not think any other countries offer the connectivity between air, sea and land transport that Bahrain does."

Bahrain. In addition, BIA's increased capacity

means it will be able to welcome more flights and

The new passenger terminal building has been

designed to reflect the hospitality, heritage, history,

art and culture that Bahrain is known for. Said Al

Binfalah: "We have a lot to offer and BAC would love

to develop charter flights with partners in countries

like Japan. Even after the completion of the Airport

Modernization Program, we still won't have the big-

gest terminal in this region — that's not what we are

trying to do. Our goal is to operate a friendly and

efficient airport that delivers high-quality services

leading airlines to the country.

The Bahrain Airport Modernization Program

The \$1.1 billion project will be inaugurated in 2019, increasing airport capacity to 14 million passengers a year.

The launch of Bahrain International Airport's (BIA) brand-new 210,000-square-meter passenger terminal building in 2019 will reinforce the kingdom's central position in Middle Eastern air transportation. Four times larger than the current facility, it will be capable of processing 130,000 air traffic movements a year and will have a handling capacity of 4,700 bags an hour. It will increase BIA's capacity to 14 million passengers a year and is built to the highest technological standards, ensuring a safe, secure and seamless airport experience.

The extra space is needed to accommodate the growing number of passengers and airlines using the airport. "BIA was last expanded in 1994 to meet a capacity of four million passengers but we have been running the airport at twice that for quite some time," said Mohamed Yousif Al Binfalah, CEO of the airport's operator and managing body, Bahrain Airport Company (BAC). In fact, around nine million travelers and 624,000 flights were received in 2018 — up 7 percent and 4 percent from 2017, respectively. This not only reflects an increase in visitors arriving for business and leisure, but also BIA's growing reputation among airlines for its low charges.

The Airport Modernization Program has come to fruition in record time, said Al Binfalah: "If you compare it with recent airport developments in our region, you'll be surprised how fast-tracked it has been. We appointed design consultants in 2014, mobilized a contractor in 2016 and are now just a few months away from realizing our efforts."



Mohamed Yousif Al Binfalah CEO Bahrain Airport Company

BAC is a part of the Gulf Air Group Holding Company, which was founded in 2010 to consolidate the aviation assets of Mumtalakat, the kingdom's sovereign wealth fund. Al Binfalah puts the Airport Modernization Program's speed and quality down to collaboration within the group and with external stakeholders.

An exceptional airport terminal

"BAC is agile and has worked closely with its partners to create a modern platform. For example, air-bridge stands are being increased from seven to 12 and have been designed in partnership with the kingdom's national carrier, Gulf Air," he noted. Gates are not the only thing expanding, he said: "Everything is being enhanced, including check-in counters, border controls, security, retail areas, food and beverage options and lounge capacity. We are also investing heavily in the latest digital systems to provide a very high level of service. For instance, we will probably be the first in the region to use some new security-screening technologies." The terminal's 25,000-square-meter new cargo area will also be equipped with cutting-edge systems to enhance e-commerce and express-cargo operations. FedEx Express has taken 9,000 square meters in this area, where space is being snapped up quickly as logistics companies recognize the opportunities offered by BIA's modernity, connectivity, competitiveness and proximity to the Gulf's largest economies.

The new airport also brings exciting opportunities in another of the kingdom's growing sectors, tourism. BIA recently became more accessible through Gulf Air's code-sharing agreement with Thai Airlines, which will link Tokyo, Bangkok and

"Everything is being enhanced, including check-in counters, border controls, security, retail areas, food and beverage options and lounge capacity."

and an exceptional travel experience."

Sitting at ACI Asia-Pacific

The CEO of Bahrain Airport Company, Mohamed Yousif Al Binfalah, has been elected as one of three new regional board directors for the Airports Council International.

In 2019, the CEO of Bahrain Airport Company (BAC), Mohamed Yousif Al Binfalah was elected as a director of the Asia-Pacific Regional Board of the Airports Council International (ACI), a global body which represents the world's airports and works closely with prominent aviation organizations to develop standards, policies and recommended practices.

Al Binfalah is the first Bahraini to become a director of the regional board, where he will sit alongside 24 other aviation leaders. The board represents the interests of over 600 airports in 49 countries, which

account for over 90 percent of the region's commercial air traffic.

"Getting the opportunity to serve on the board, in one of the fastest-growing regions for aviation traffic, will allow BAC to share knowledge and best practices with the world's leading airports," said Al Binfalah. Several of Al Binfalah's BAC colleagues are already members of regional and global ACI committees in areas of key concern for aviation: airport information technology, human resources, economics, operational safety and the environment. Minister of Transportation and Telecommunications Kamal bin Ahmed Mohammed said having BAC staff in these prominent roles showcases Bahrain's reputation as an important aviation hub. Congratulating Al Binfalah, he said: "This result is a point of pride, which reflects the ability and talent of Bahraini nationals and international confidence in the Bahraini professionals working in the aviation sector. This demonstrates the kingdom's unlimited potential to lead the aviation sector toward new levels of excellence."



Empowering local talent

The Tahleeq and Ajwaa training and development programs are placing citizens at the heart of Bahrain's development.

The Bahrain Airport Company (BAC) is committed to building the skills of Bahraini citizens and helping them to reach their full potential. Currently, an impressive 80 percent of BAC's employees are drawn from the local population and the goal is to increase that to 90 percent by 2021. But operating its new, state-of-the-art passenger terminal building will require expertise in specialized aviation fields. "Since 2010, we have invested heavily in developing our human talent — it is one of our big success stories," said BAC Chief Executive Officer Mohamed Yousif

Al Binfalah. At the center of this success is the Tahleeq program, a milestone training and development initiative aimed at shaping the future leaders of Bahrain's aviation industry.

Launched in 2014, the four-year plan equips participants with advanced skillsets required as part of Bahrain's Airport Modernization Program through both theoretical and practical training, and mentoring from international specialists. "We have recruited at least 80 Bahraini graduates through this program," he noted. In addition, the Ajwaa program, which is run in partnership with U.K.-based air-traffic management company Serco IAL, is realizing the potential of tomorrow's air-traffic professionals. BAC's investment in Bahraini skills goes much further than these two programs, however. In collaboration with international experts like Germany's Fraport AG Frankfurt Airport Services Worldwide, all of BAC's and its stakeholders' employees are receiving comprehensive training to familiarize them with the passenger terminal's new systems ahead of its opening.

"We will continue to invest in local talent to develop the kingdom's next generation of aviation leaders and we believe the sector as a whole will benefit from our investment," said Al Binfalah.



GLOBAL INSIGHT BAHRAIN

A new chapter in history

With a major new oil discovery and ongoing investments in multibillion-dollar projects that are now coming on stream, hydrocarbons are set to transform the Bahraini economy.

In April 2018, Bahrain's Minister of Oil Shaikh Mohamed bin Khalifa Al Khalifa announced the kingdom's biggest hydrocarbon discovery in decades — an estimated 80 billion barrels of oil, and gies are coordinated by the National Oil and Gas between 10 and 20 trillion cubic feet of natural gas had been found off the country's west coast.

"We have good reason to believe the find is commercial," he said: "Wells are being drilled now, will be flowing soon and our plan is to provide a full understanding of what we have toward the end of 2019. In the meantime, we are looking at a concession structure for international companies, which are welcome to either invest or partner with some of our companies to develop this large resource."

To put the discovery's size in context, less than 2 percent of that petroleum could supply 100 percent of the requirements of Japan, the world's fourthlargest oil consumer, for a year. Independently confirmed by U.S. petroleum experts, the find is expected to invigorate many sectors of the increasingly diverse Bahraini economy and provide a major boost to its hydrocarbon industry by stimulating international investment.

Responsible for annual revenues of around \$4.3 billion, that industry has historically been Bahrain's leading income generator — it was the first country in the region to discover and exploit hydrocar bons, with its inaugural oil export shipment going to Japan in 1934, which also received the kingdom's first outgoing gas consignment in the 1980s. Not including the new discovery, Bahrain has proven hydrocarbon reserves of around 125 million barrels. The government is now focused on exploiting those resources, and developing the wider oil and gas sec- to international companies with U.S.-based uncontor in order to move the kingdom from being an oil economy to being a "smart oil" economy.

This focus is opening up numerous investment possibilities in a region without "many inviting opportunities" in hydrocarbons, said the minister. Bahrain, on the other hand, has created a businessfriendly environment, he noted: "We are very welcoming to international business, our regulations are also open, there are few restrictions to foreign investment and our intention is to make sure that investors entering the market make enough money to meet their investment expectations. Our exploration concession structure has been positioned to be exciting for investors. We also do a lot of the preliminary work ourselves because the more information investors have, the less risk they face."

Bahrain offers many other advantages. As a result of its long history in oil, the sector is well established throughout the value chain from upstream to downstream. It also benefits from the kingdom's strategic location that allows 4.5 billion inhabitants of emerging countries — soon to become the world's largest purchasers of petroleum and its derivatives — easy access to Bahraini products.

In addition, the sector is effectively and effi-

organizations involved working in a coordinated fashion to facilitate development and minimize bureaucracy. Industry-wide governmental strate-Holding Company (NOGA) through its investment and development arm nogaholding, which aims to maximize synergies between the companies it oversees. These cover upstream, midstream and, increasingly, downstream activities as nogaholding looks to expand the value chain even further.

The minister, who is also the chairman of nogaholding, explained the specific roles of Bahrain's main public oil and gas companies: "We have shifted all of our exploration, oil production and gas development to Tatweer Petroleum, which has been wholly owned by nogaholding since 2016. The Bahrain Petroleum Company (Bapco) now exclusively operates in the refining space, Banagas is responsible for gas processing and liquefied petroleum gas production, and we also have the Gulf Petrochemical Industries Company (GPIC) that is focused on fertilizers and petrochemicals. Alongside these, nogaholding is promoting pioneering joint ventures between the public and private sectors, such as Bahrain LNG, the Middle East's first regasification terminal.

A wide range of investment opportunities All these companies have major expansion and modernization projects in progress or planned. For instance, last year's giant discovery in the Khaleej Al Bahrain Basin is "just one of multiple upstream initiatives. That location is shale oil, so we are talking ventional technology about it," noted the minister.

"Our intention is to make sure that investors entering the market make enough money to meet their investment expectations."

> Shaikh Mohamed bin Khalifa Al Khalifa Minister of Oil

Tatweer is also working on three other upstream fronts, he added: "We have our onshore oilfield where 85 percent of the oil remains. The geology is complex so we have been talking to Japanese partners that are experienced in enhanced oil recovery technology. Then we have a deep-gas field in the same area and are looking for international partners to work with on that. Finally, we have a resourcerich area of nearly 7,000 square kilometers offshore." In May, an exploration and production-sharing

ciently managed with the various ministries and was signed with an Italian oil company that plans to want to help them succeed financially."



Minister of Oil

to the outstanding resources and add more value started on an expansion and upgrade project at U.K. that will fund the majority of the project. to the exploration blocks. Tatweer has enhanced its data analysis through gravity, magnetic and seismic surveys. "We are carrying out these studies to attract companies, the drilling is not something we are focused on doing ourselves," he stressed.

Possibly the country's largest hydrocarbon development project is the \$5-billion Bapco Modernization Program, which incorporates a huge expansion for the kingdom's only refinery. "This is probably going to be one of the most modern refineries in the region," said the minister. Japanese input into this modernization program will be vital, he stated: "The refinery of the future needs to be safer, more available, more profitable and with the right technology you can achieve that. Engineering company JGC has always been a partner for Bapco and we also have digital control systems from Yokogawa. "As well as the modernization program, we are planning to integrate a petrochemical complex with the refinery in the future." He sees that complex as offering co-investment opportunities for Japanese partners: "We have done the engineering work—it marks an operational refocus for Bahrain's oldis a project that just requires the pressing of a button to start it. Bahrain-based petrochemical plants are a major opportunity for Japanese contractors, trading it discovered the first oil in the Arab region in houses and investors. We are going to be very transparent with those that move early."

JGC is also involved with another nogaholding company: Banagas, a gas processor. "We contracted JGC to supply an additional processing facility. It delivered the project on time and below budget at the end of 2018." Successful experiences such as this have convinced the minister that "Japan has a very big role to play in our oil and gas sector. We welcome tha, gasoline, kerosene, aviation fuel, ultra-low agreement for about a third of that offshore area Japanese entities, urge them to be proactive and we sulfur diesel, heavy lube distillate, fuel oil and



A significant proportion of Bahrain's new oil discovery is thought to be shale oil



Boosting production to 380,000 bpd

A \$5-billion expansion of the kingdom's oil refinery should double its earning potential.

begin drilling this year. To encourage other investors In March 2019, construction work officially ones from South Korea, Italy, Spain and the Bahrain's main Sitra oil refinery that is thought to be the biggest industrial development ever initiated in the kingdom

> "We are taking the refinery from its current capacity of about 270,000 barrels a day up to a capacity of 380,000 barrels. It already generates the lion's share of the cash flow that funds the kingdom of Bahrain. After the expansion, the earning potential is estimated to double," explained Peter Bartlett, CEO of the state-owned Bahrain Petroleum Company (Bapco), which runs the facility.

Revenues from the new refinery could reach even higher levels once it is completed in 2022, he added: "As well as the expansion, we are replacing equipment and modernizing features. It will be able to run at higher rates than we can tractors involved in the broad array of equip- the outlook for the industry, although we won't advertise because the state-of-the-art equip- ment being installed in the plant. We have a long get it completely right, of course. ment we are putting in place will offer the flexibility to optimize our operations."

The \$5-billion Bapco Modernization Program est oil and gas company. Originally set up in 1929 as an upstream and downstream enterprise, 1932 and started refining at Sitra on the kingdom's east coast in 1936.

With Bahrain's upstream activities now the responsibility of Tatweer Petroleum, Bapco's endeavors are concentrated on the refining, distribution, marketing and trading of a wide range of high-quality petroleum and gas products, including liquefied petroleum gas, naphasphalt.

In addition to the refinery, Bapco's Sitra complex includes storage space for 14 mil- facility. It has been a terrific partner over many lion barrels, as well as marketing and marine years in this refinery. In fact, we have Japanese far east as Japan, as far west as the U.S. and to export terminals. "We predominantly export technology and process control instrumenta- numerous locations in between, he noted: "We what we produce. About 10 percent of our tion throughout the facility. It is a pleasure to are able to do that because we have competitive production remains onshore and supplies the support advancing those bilateral relationships, shipping economics and manage our business domestic market, and the rest is all exported," so I would envisage that the deals Bapco makes responsibly." Once the refinery's new capacsaid Bartlett. Currently, about one-sixth of the with Japan's industry will be very prominent." crude oil that Bapco refines is Bahraini, with the remainder being imported from Saudi Arabia via pipeline.

The reliability of that oil supply is crucial for is designed, constructed and managed in a way tional markets. Bapco, especially given its targets for the new that benefits the kingdom for generations to refinery, he noted: "We have a terribly impor- come. Or, as Bartlett put it, "What we are really tant commercial and strategic relationship with Saudi Arabia and Saudi Aramco specifically. So, life of oil and gas in Bahrain." last October Bapco commissioned a brand-new pipeline to replace 70-plus years of pipeline infrastructure between the two kingdoms. That is now in place and nearly completely commissioned — all new oil is coming through that line. of energy efficiency; and reducing and mitigat- grade petroleum coke, which could be used But its only one feedstock and we are also looking to leverage other feedstocks in the region."

International involvement in the refinery There is significant international support for the Bapco Modernization Program and it is figuration that will make sure that the facility have the right resources managing it. Bapco's almost fully funded, Bartlett confirmed: "We remains competitively resilient. We are building job is to run Bahraini refining safely, competiare not yet at a financial close but we are close a refinery that will take medium- to low-gravity and are working through the final conditions to oils and upgrade them. It will convert more of investment does for us. It gives competitive get there. Our first port of call was to approach the 'bottom of the barrel' into high-value prod-resilience that allows the kingdom to make the export credit agencies and we have engaged ucts," he explained.

In addition, we have engaged commercial banks — international, regional and quite a number of local banks have been willing to put money against this project.

Having carried out detailed technical, economic and commercial assessments, Bapco has commissioned a consortium made up of the U.K.'s TechnipFMC, Spain's Tecnicas Reunidas and South Korea's Samsung Engineering to execute the project on an engineering, procure- is a huge jump in our capabilities." ment, construction and commissioning basis. Bartlett is certain there will also be substan-

tial Japanese involvement in the new refinery: "There is likely to be Japanese content in the eventual buildout of the facility and Japan will history with Japanese people — some of whom work in our company —and with Japanese businesses

"Japan will be represented in the large number of subcontractors involved in the broad array of equipment being installed.'

Bahrain Petroleum Company (Bapco)

Building in competitive resilience doing with this modernization is extending the

around three main pillars: expanding capacfacility more efficient — particularly in terms ing the environmental impact of the company's operations

"After looking at economic resilience and the

Evolving for a brighter future

nogaholding is a business-focused company that aims to create shareholder value by the successful management of the government of the Kingdom of Bahrain's portfolio of shareholdings in oil, gas and petrochemical assets. nogaholding aims to diversify its investment both domestically and internationally, participating in joint ventures and the establishment of other companies.

(Sponsored content)

www.global-insight.net

for petroleum products is heading, with the

Peter Bartlett, CEO

As a result, the facility has been planned

world moving away from gasoline as the transport sector turns to electricity, said Bartlett: The new plant will allow us to destroy more of the things that are less in demand — like black oil, fuel oil and other so-called black products. Instead, we want to produce more white products such as jet fuel and diesel, and that has been the primary bias in our engineering and equipment planning.

This strategy intersects with where demand

As part of this planning, said Minister of Oil Shaikh Mohamed bin Khalifa Al Khalifa, "We are installing the region's first LC finer, a cuttingedge ebullating-bed process for converting heavy oil into much higher-value diesel — this

With an eye on the future, the refinery has also been designed to be flexible, states Bartlett: "Historically, merchant refining is probably one of the toughest segments in the business — you win or lose on the basis of your competitive be represented in the large number of subcon-resilience. We have made a pretty good call on

"But what we will have is resilience and flexibility in what we are building, in case the market moves in a slightly different direction. Our engineers are creative people and they have designed systems that, for instance, allow Bapco to run more or less crude oil in the facility if it makes economic sense to do so."

Bapco connects to the global oil ecosystem Another advantage that Bapco has is Bahrain's proximity to regions such as the Gulf Cooperation Council (GCC) countries, South Asia, East Africa and the Far East, which are the growth markets for its products. "We are sure that we are competitively placed to access those markets and we know that we can sell our "We have a very consequential history with products there because we are not going to be JGC, for example, which is collaborating on at making new products but ones that are already least five major projects right now at the existing compliant with world specifications," he said. At present, Bapco exports to countries as ity is in place, however, Bapco will be looking for additional clients for its products and the company is developing a new commercial strat-Bapco's overall vision is to create a refinery that egy that will enable it to gain exposure to addi-

Bartlett sees Bapco as being an important part of the GCC oil-products ecosystem, however, "We will be more downstream centric and focused than our peers in the GCC. That's in our DNA and it's who we are." Additional downstream opportunities Bapco are likely to invest ity and generating more income; making the in at the Sitra complex include petrochemical manufacturing and the production of anodeto make aluminum at the nearby Aluminium Bahrain plant. "But those things are down the line," said

likelihood of generating the rewards we wanted Bartlett: "First things first. We have to settle the from our investment, we decided on a con- new refinery in place and make sure that we tively and responsibly — and that is what this most of its oil and gas.



www.global-insight.net





Bahrain LNG is responsible for the Middle East's first regasification facility

The technology factor

Bahrain is looking to attract technology companies and invites Japanese partners to help it boost recovery rates.

Although oil was first discovered in Bahrain regular pilot testing of advanced enhanced in 1932, 85 percent of its identified reserves oil recovery (EOR) techniques. Through its still remain in the ground due to the kingdom's challenging geology. Only one thing is preventing higher extraction levels, according to James Eastlack, CEO of Tatweer Petroleum, the company in charge of the country's hydrocarbon exploration and production activities: "It's not a matter of money — it's always possible to get money. Technology really is the whole answer to our problems.

The challenges are clear at the kingdom's Bahrain Oil Field, an onshore site in the center of Bahrain that is approximately 15 kilometers long and 5 kilometers wide. The field contains Eastlack a complex set of 16 oil and four gas reservoirs. Those reservoirs are stacked, with contents ranging from heavy oil near the surface, very it to build three-dimensional images of its light oil further down and gas at depths of 9,000 feet or more. And each of those reservoirs has unique geological characteristics that require different techniques for oil recovery. "The field's original oil reserves were estimated at 9.5 billion barrels and roughly 1.2 billion have been extracted to date. So, our recovery factor is roughly 12 to 14 percent, which is extremely low. The point is that there is an enormous amount of proven oil remaining to be produced, but the challenges are the reservoirs' characteristics and finding the technology to produce them," said Eastlack.

Tatweer has been working to meet those challenges since 2009. Prior to that, Bahrain Oil Field was the responsibility of the Bahrain Petroleum Company (Bapco) but, in a bid to tion with current technology is not cost effecrevive the fortunes of the mature field, the tive," Eastlack said. government set up Tatweer as a joint venture between nogaholding, the kingdom's oil and gas authority, U.S.-based Occidental Petroleum and Abu Dhabi's Mubadala Petroleum.

"At that time," noted Eastlack, "Production was roughly 30,000 barrels a day. Current production is around 42,000 a day. A lot of that success is because the joint-venture partners invested a considerable amount of money and engaged in an aggressive drilling program. The partnership dissolved in 2016 due to low oil prices, which meant there was not sufficient economic value for our international partners. Since then, Tatweer has been a 100-percent government-owned company.

The company's main goals are to increase the production of oil and the availability of gas to meet Bahrain's future energy demands, as well as to make a crucial contribution to energizing the kingdom's economic growth. "Tatweer's mission includes exploration, development and production of Bahrain's oil and gas, as part of which we are responsible for negotiating with international oil companies (IOCs). In addition, we manage a distribution system that supplies gas to roughly 30 commercial customers," he said.

Pioneering oil recovery methods

To meet its goals, Tatweer has drilled 949 new will get a success fee or a bonus based on the of well-production data should be available wells over the last 10 years and carries out

use of cutting-edge methodologies, Tatweer has received widespread industry recognition for achieving incredible recovery results under the circumstances, enabling reserves that were previously thought to be unrecoverable to be exploited today.

"We have been aggressively using whatever current technology is available to further is why we are piloting a lot of technologies in exploit the field. Due to the geological complexity, the option of using typical EOR methods is not available to us, neither is the option of infill drilling for tighter spacing," explained

One main weapon in Tatweer's arsenal at the moment is seismic analysis, which allows reserves, he stated: "As we refine this process, we will actually try to identify smaller fault blocks and target these blocks very accurately within our drilling program. It's very much like microsurgery in the oil field's development."

As a demonstration of how committed the company is to investigating every opportunity to extract more hydrocarbons from the Bahrain Oil Field, it is currently carrying out its seventh pilot project for advancing a shallow heavy-oil reservoir, where the oil is trapped in a fractured matrix of lime mudstone known as rubble

"The reservoir has over a billion barrels in it and there has been literally no recovery. It is just sitting there and it is mobile but extrac-

"We have a very open policy about evaluating different techniques and will pilot extremely novel technologies."

James Eastlack, CEO, Tatweer Petroleum

Although it has yet to find success with cial success. "It is an unconventional play," rubble heavy oil, through its concerted use of new techniques Tatweer has been able to maintain an even production level of around 42,000 barrels of oil a day for the last few years. But Eastlack wants to use more emerging technologies to generate much higher production volumes for the future.

"We are looking for technical concepts that can reliably deliver economic barrels. If someone has that, then money is not a problem as the government is funding us 100 percent right now," he stressed. To attract those technology can start by developing the onshore and then providers, Tatweer offers enticing incentives.

Eastlack gave the example of a project the company is working on with a leading U.S.- **De-risking opportunities for investors** based supplier of technology to the oil and gas Data collected from the wells will be used in industry: "If its technology works really well, it a virtual data room and the first six months level of that success. That is the sort of thing by the end of 2019. In a further bid to inter-

Tatweer has also recently begun talks with a Japanese oil company on an initiative to test the use of carbon-dioxide injection for the recovery of the potentially significant reserves in an as vet undeveloped reservoir.

Minister of Oil Shaikh Mohamed bin Khalifa Al Khalifa added that, in fact, Bahrain is in talks with Japanese companies about various EOR technologies: "There is a vast resource to be produced from the Bahrain Oil Field if we can find the right technology. The oil is there and the challenge is to produce it at a low enough cost to make it profitable — that the field.

A new challenge

Technology will also be an important component in the exploitation of Bahrain's 2018 hydrocarbon discovery — an estimated 80 billion barrels of oil, and 10-20 trillion cubic feet of gas

The field covers 2,000 square kilometers of shallow waters in the Khaleej Al Bahrain Basin off the kingdom's west coast and is thought to extend onshore. It is the country's largest oil and gas find since the Bahrain Oil Field in 1932 and the government is targeting oil production levels of 200,000 barrels a day from the new site by 2023

The geology of Khaleej Al Bahrain makes the minister optimistic about its future: "It is the same source rock as the giant fields of Saudi Arabia — one of the best source rocks in the world. Saudi Aramco has already started production on its side of the basin, so we know that the basin is rich and it is prolific."

However, although the geology suggests huge potential, as at the Bahrain Oil Field, it oil — a light crude oil held deep underground hydraulic fracking. Historically, shale oil has recovery rates of

only 5 to 15 percent — which translates as an enormous amount of oil, given the estimated size of the reserves, but could contribute to a relatively high production cost.

In addition, most of the field is offshore. It is in shallow waters but, to date, offshore shale-oil production has not seen commeradmitted Eastlack: "So what potential investors want from us is hard data from the field and long-term testing. Our role is to de-risk the development."

Tatweer is drilling up to four wells, he said: "Right now we are drilling two onshore wells toward the north west of Bahrain. We want to confirm that there is an onshore component. Putting that on the table makes it more economically tempting because operators move toward offshore production."

Discovery of 80 billion barrels of original oil in place. Objective: the production of 200,000 bpd in 5 years

in Bapco's Sitra ery and the Bapco

\$355 million invested in Banagas'expansion

First liquid natural gas terminal in the Middle East

we are trying right now with the service sector." on fiscal terms.

stated Eastlack.

"It's not a matter of money — it's always possible to get money. Technology really is the whole answer to our problems."

Evidence of this business-focused approach came in May 2019, when an Italian oil company signed an exploration and production sharing-agreement for an unexplored Bahraini offshore block of over 2,800 square kilometers further north than the Khaleej Al Bahrain field. It is one of four offshore exploration blocks in

Bahrain which Tatweer intends to offer to oil At the signing, the minister committed to "review all relevant aspects of the technical and to meet the expectations of a changing world. For required in the future. "During the ramp up of the is complex and technically challenging. Much commercial terms of the potential explora- example, GPIC is committed to adopting environ- facility over the coming years, having an FSU allows of the oil component of the reservoir is tight tion and development within a reduced time- mentally friendly technology. "Adding a urea plant the customer to trade in periods of low gas demand. frame." By March, the project was indeed on in 1998 reduced carbon emissions, for instance, as We have designed the terminal to take the world's in shale, which needs to be extracted by using the fast track to an exclusive concession, with did installing the Middle East's first carbon-dioxide drilling to begin by the end of the year.

IOC needs is in place.

regulations

"Tatweer's very collaborative relationship with Bahrain's other hydrocarbon companies provides easy opportunities to market an investor's production. If you are producing To get international oil companies that data, rich gas, for instance, Banagas can process it to extract the gas liquids. And even if Bapco cannot refine the lighter-crude product, they can export it. That takes a lot of risk out of the investment for international businesses.

> Eastlack said He would love Japan's oil, technology and servicing companies to play a greater role in expanding the Bahraini oil and gas sector: "The solutions to all the challenges in our unique fields are connected to technology We have a very open policy about evaluating different techniques and will pilot extremely novel technologies. So, there is a huge opportunity for Japanese companies."

\$5 billion investment

BAHRAIN GLOBAL INSIGHT

est IOCs in the site, Tatweer has not set fixed contractual arrangements and is open to ideas

"Potentially, Khaleej Al Bahrain field could be broken up into several different operating areas, and there could be simple exploration and production sharing agreements (EPSAs) to be in partnership with Tatweer. But one of the attractive attributes of the Bahraini oil and gas sector is that there is no fixed model.

"We ask investors: what would work for you? Bahrain is thought to offer some of the best EPSAs in the region, but if an EPSA doesn't work for you, we can negotiate a tax royalty, for example. That's why I call it one of the world's ultimate business-friendly places,"

James Eastlack, CEO, Tatweer Petroleum

"Khaleej Al Bahrain sits next to and under neath an existing field, so when it comes to infrastructure, for example, it is there. In addition, we have the right legislations and

Looking downstream for added value

Investments in gas, fertilizers and petrochemicals are securing future economic advances.

stream hydrocarbon sectors to add value to its to joint ventures and building long-term relationships with international partners. One of its largest recent investments went on stream in 2018: a major expansion of the gas processing capability of Bahrain National Gas Company (Banagas). Set up in 1979, 75 percent of Banagas is owned by Bahrain's oil and gas holding company nogaholding, while Chevron Bahrain and Kuwait's Boubyan Petrochemical Company each hold a 12.5-percent stake. Banagas' liquid petroleum gas facilities add value to associated gas that Tatweer Petroleum extracts from oil wells. Until a short while ago, it was turning 300 million standard cubic feet a day (mmscfd) of this gas into 3,000 barrels a day (bpd) of propane, 3,200 bpd of butane and 4,500 bpd of naphtha. However, as a result of Tatweer's excellent performances, Bahrain's oil wells are producing significantly more gas than Banagas can handle.

To take advantage of this, Banagas has invested in its third gas processing plant, said its CEO Shaikh Mohamed bin Khalifa Al Khalifa: "We have doubled Banagas' gas-handling capacity to 650 mmscfd and

made it a pillar of Bahrain's hydrocarbon economy." Banagas entrusted Japan's JGC Corp. with the contract to build the new facility, which was delivered on time and below budget. "Banagas has had a long and prosperous relationship with JGC since 1979, when it constructed our first processing plant and storage facilities. In 1989, it also built our second plant through an engineering, procurement and construction contract. This expansion has further strengthened that relationship," said Al Khalifa.

Huge potential in petrochemicals

Banagas' products are exported worldwide, with most being shipped to Asia for fuel or as feedstock for petrochemicals. One way Bahrain wants to add value to its hydrocarbons is by advancing its own petrochemical industry. "There are giant opportunities for Japanese investors," said Al Khalifa; "These products go into everything we consume and Japan has not invested a lot in petrochemicals yet."

At the heart of this burgeoning sector is Gulf Petrochemical Industries Co. (GPIC). "It was founded in 1979 to manufacture fertilizers and petrochemicals from Bahrain's gas. It's owned equally by nogaholding, Saudi Basic Industries Corp.and Kuwait's Petrochemical Industries Co. We manufacture ammonia, methanol and granular urea prod- ity, which is 800 mmscfd, about 50 percent of the ucts, which mainly go to Asia," said GPIC's president, Dr. Abdulrahman Jawahery.

The partners ensure that facilities, products, operations and strategies are constantly updated spectrum and well serviced — everything an protection, increase efficiency and raise capacity to the future."

Bahrain is making many investments in its down- take advantage of Bahrain's proximity to the world's biggest growth markets for fertilizers: Africa and resources and advance its economy. A notable fac- Asia. In 2018, production started at a new \$13 miltor in these investments is the kingdom's openness lion urea-formaldehyde facility built by JGC. "Also in 2018, a cryogenic nitrogen unit was commissioned we started installing high-technology loading-bay equipment and spent \$40 million on a maintenance and improvement program," he said.

> These investments are paying off, according to Jawahery: "In 2018, GPIC maintained the highest levels of productivity, reliability and safety, achieving over 30-million accident-free man hours. We exceeded our production targets by 1.3 percent by manufacturing 1.5 million tonnes of products, and profits rose from \$1 million in 2016 to \$82 million."

Innovative public-private partnership

Both Bahrain's petrochemical and energy industries expect a large boost from the oil and gas discovery at Khaleej Al Bahrain. Until that is exploited, the government is concerned about energy security for its citizens and its thriving industrial sector, especially when it comes to gas. "That is where Bahrain LNG comes in," said Owais Z. Ahmad, chief financial officer of the Middle East's first regasification plant.

"We have doubled Banagas' gas-handling capacity to 650 mmscfd and made it a pillar of Bahrain's hydrocarbon economy.'

Shaikh Mohamed bin Khalifa Al Khalifa CEO, Banagas

The innovative company is a public-private part nership between nogaholding, Teekay LNG Partners that is listed on the New York Stock Exchange, the Gulf Investment Corp. and South Korea's Samsung. "We receive, store and re-gasify liquid natural gas (LNG)," he explained. "The government is entering agreements with multiple potential LNG sources. We will re-gasify it and send it to the grid," added project director Tony Bingham.

The LNG will be kept in a floating storage unit (FSU) at an offshore terminal, while the re-gasified gas will go to the kingdom's existing gas network onshore via pipeline. "The Bahrain Spirit, our FSU has been delivered. Operations will start in Q2 2019 and ramp up to meet demand until it is at full capackingdom's total gas demand," explained Bingham.

Different from many, Bahrain LNG's regasification plant is located on a jetty rather than the FSU, so the terminal capacity can be expanded if largest LNG vessels," Bingham said. That is a comrecovery unit in our methanol plant in 2007. Both monality of all the kingdom's downstream hydro Another advantage for investors is that were supplied by Mitsubishi," noted Jawahery. carbon investments, Ahmad noted, "We are not Bahrain's hydrocarbon industry is mature, full GPIC's investments aim to promote environmental building for today, we are building for the needs of



Japan's JGC Corporation delivered the expansion of Banagas's facility on time in early 2019



www.global-insight.net

BAHRAIN GLOBAL INSIGHT

Beyond oil

The Bahrain Economic Development Board is creating an environment to boost investment and talent in order to embrace the 'Fourth Industrial Revolution'.

Although the outlook is bright for the Bahraini oil industry, the kingdom has no intention of straying off its very successful path of diversification and embracing the Fourth Industrial Revolution by combining Bahrain's traditional strengths with emerging technologies.

"So successful have we been that, over the last 15 years, non-oil sectors have grown from 60 to 80 percent of gross domestic product (GDP)," said Minister of Finance and National Economy Shaikh Salman bin Khalifa Al Khalifa.

This growth, accompanied by a dramatic rise in non-oil foreign direct investment (FDI), has recently taken on additional impetus. In 2018, the kingdom attracted about \$830 million from 92 international companies that will create over 4,700 jobs — figures up 17, 15 and 57 percent respectively on 2017.

"2014's global drop in oil prices contributed to a push for diversification. It was a blessing in disguise as it forced government, citizens and companies to change and move forward," said Khalid Al Rumaihi, CEO of the Bahrain Economic Development Board (EDB), the public agency with overall responsibility for attracting investment.

According to him, Bahrain's diversification strategy is focused on five sectors: "I think the Arab world missed the first three industrial revolutions, we must make sure we grab the fourth one. So, finance is our largest non-oil sector and we are



Khalid Al Rumaihi CEO, Bahrain Economic Development Board

seeing fantastic momentum in fintech. We have similar momentum in three other focus areas technology, manufacturing and logistics. And the last priority, tourism, generated about half of our FDI in 2018."

These priority sectors play to Bahrain's strengths, the biggest of which is that everybody, from the highly skilled citizens to government leaders, works together as "Team Bahrain" to advance the small country's economy. "It's not just a slogan. Companies have easy access to decision makers including ministers. That is rare," stated Al Rumaihi.

At the heart of Team Bahrain is the EDB, which was formed in 2000 and works with government and investors to create and support a forwardcentric business climate. Through 22 worldwide offices and numerous initiatives, the agency assists companies at every stage of an investment project by, for example, helping to find premises, introducing Bahraini talent and opportunities, and explaining legislation.

"The EDB has been very successful in reaching out to some of the largest companies in the world," added Al Rumaihi.

The ideal starting point in any sector

EDB's CEO explained how it achieved this: "Investors are smart and they want to make money. For each of the five sectors, we have a value proposition, a narrative and the facts to back it up." He begins by telling international businesses why they need to operate in the Middle East and North Africa (MENA) region: "It has a young, consuming population of around 300 million and a GDP of about \$4 trillion.

"Once they understand the importance of being a first mover in MENA, that's when we explain

Pioneering in fintech

The agile regulation of the Central Bank of Bahrain and the extensive network of Bahrain FinTech Bay have attracted flagship innovators such as Amazon Web Services to the kingdom.

"Bahrain has developed an extensive fintech ecosystem to future-proof our financial services sector and further transition the country into an innovation-driven economy," said Khalid Saad, CEO of Bahrain FinTech Bay (BFB), the leading hub for fintech in the Middle East and North Africa region and a key part of that ecosystem.

Enabling Bahrain to become a global fintech center is a pioneering regulatory framework for the technologies established by the Central Bank of Bahrain (CBB), probably the region's most respected and robust financial regulator.

The framework includes CBB's dedicated fintech and innovation unit, a regulatory sandbox, and regulations for crypto assets, crowdfunding, open banking and digital advice. "We work with the industry to design best-in-practice legislation and regulations, and we act quickly to deal with changes in the business environment," said Rasheed Mohammed Al Maraj, CBB's governor.

To further promote technology, "We have licensed two digital banks to set a new scene for

Board and FinTech Consortium, an ecosystem builder that operates BFB and similar hubs worldwide. BFB incubates, accelerates and provides office space to 40 startups with varied geographical origins, which benefit from a network of local and international companies that have moved to Bahrain to join the new ecosystem. "We have nearly 100 partners including Microsoft, Cisco, American Express, Amazon Web Services, Facebook, Visa, Mastercard and Finastra that contribute know-how and some sit on our advisory board," said Saad.

BFB is also building connectivity with other centers of excellence, he noted, "We have a memorandum of understanding with the FinTech Association of Japan, for example, and are exploring collaborations with them as we

"Bahrain has developed an extensive fintech ecosystem continue to develop the next generation of fintech leaders."

Another creating leaders is investor and accelerator Flat6Labs Bahrain, a 50-50 partnership between Egypt-based Flat6Labs and businesswoman Sabah Al Moayyed. "The labor fund, Tamkeen, funds us to invest in companies from any country and sector. We are looking for gems from places like Japan that want to move to the Gulf for funding," said Ryaan Sharif, managing director of Flat6Labs Bahrain.

To date, Flat6Labs has run two successful accelerator cycles, he said: "For example, we seed-funded Inagrab, software for retailers. It has got a second round and is close to securing much more." Wider opportunities for innovators include additional accelerator programs from organizations such as American Express Middle East and Hong Kong's Nest, and funding from, among others, the Bahrain Development Bank's \$100 million Al Waha Fund of Funds. "Bahrain has other advantages for technology companies," stated Sharif: "The biggest is the cost of doing business. Next is great regulation, and ease of access to decision makers and clients. Bahrain opens doors." Druption Druption Bahr Bahr H TECK

Sophia the Robot at the 3rd Middle East and Africa FinTech Forum on 21 February 2019 in Bahrain. The forum was attended by over 800 delegates.

Bahrain's strengths as a regional gateway." For all sectors, those strengths include a competitive cost of doing business; high quality of life; a government looking to shrink its role in favor of the private sector; enabling infrastructure; businessfriendly legislation; and well-educated, innovative local talent.

Bahrain is also developing a startup ecosystem to boost talent and ideas. Earlier this year, the Al Waha Venture Capital Fund of Funds closed \$100 million in funds that will support technology startups. This groundbreaking fund is managed by the Bahrain Development Bank (BDB), which was set up by the government in 1992 to support entrepreneurship and promote investment.

"The Al Waha initiative aims to attract international venture-capital funds that can boost the startup ecosystem in Bahrain and the region, although investments can also be made elsewhere in the world," explained Sanjeev Paul, BDB's CEO.

Additionally, BDB helps entrepreneurs through a program called Rowad, said Paul; "This provides coaching and mentoring, puts them in touch with other entrepreneurs, and assists them to present their ideas to local and international investors. We also run two incubators."

To further build Bahrain's startup environment, BDB is now forming international links, he said: "We want our startups and those in other countries to exchange ideas, set up companies together and help each other to expand into the other's regions. We have not reached out to Japan yet, but it is definitely something we should look at."

All of the BDB's Shariah-compliant services are open to foreign entrepreneurs setting up operations in Bahrain, which an increasing number are doing, according to Paul: "Bahrain is a great gateway to a stable region. When international businesses arrive here they find that the network of institutions that Bahrain has created for them are extremely helpful. The fact that Amazon Web Services has chosen Bahrain as its first regional base shows the kingdom's potential. I think that is

a game changer for the future of our private sector." Bahrain's strengths in manufacturing, logistics and as an export base are becoming increasingly clear to businesses like global food giant Mondelez International, which in 2018 made its second major investment in the country it uses as its MENA hub: a \$90 million state-of-the-art biscuit factory that is the size of 30 soccer pitches.

"I think the Arab world missed the first three industrial revolutions, we must make sure we grab the fourth one."

Khalid Al Rumaih CEO, Bahrain Economic Development Board

Recent investors in tourism, on the other hand, include hotel developments from Abu Dhabi's Eagle Hills and Dubai's Jumeirah, and one of the Gulf's largest retailers, Saudi Arabia's Jarir Bookstore, will anchor a new \$37 million retail complex.

Al Rumaihi gave a few reasons why tourism investments are picking up steam: "Some beautiful hotels will come up in the next few years, we have our new exhibition center, plus Gulf Air and the Bahrain Tourism and Exhibitions Authority are reaching out to more markets and operators. As with all five of our priority sectors, we have the team, we have a great narrative and we have momentum behind us."



Why Bahrain?

- 100 percent foreign ownership in almost all sectors
- Gateway to the \$1.5 trillion Gulf Cooperation Council (GCC) market
 Bahrain ranks 15th globally in the use of virtual social media networks
 89 percent of the information and communication technologies (ICT) workforce holds either a bachelor's or a master's degree
- 90 percent of the ICT workforce is fluent in English and Arabic, and Bahrain ranks first in the Middle East and North Africa and sixth worldwide for languages
- Strategic location: 30-minute drive to Saudi Arabia; Khalifa Bin Salman Port has the fastest clearance time anywhere in the GCC; and the easiest and most direct access to all of the GCC's airport hubs, with one-hour flights from Bahrain International Airport
- Eighth globally for business fundamentals in the Agility Emerging Markets Logistics Index
- 114 nationalities are now eligible for e-visa applications
- An investor's visa with a temporary commercial registration for 90-day visits can be applied for online
- Bahrain ranks first, for the second year, in the InterNations Expat Survey and fifth in HSBC's 2018 Expat

Bahraini banking," Al Maraj stated. The CBB is also one of the supporting partners of BFB, which was set up in 2018 as a public-private partnership by the Bahrain Economic Development to future proof our financial services sector."

Khalid Saad, CEO, Bahrain FinTech Bay

BAHRAIN DEVELOPMENT BANK GROUP

Explorer Survey for expat satisfaction

Leading the world in aluminum

Aluminium Bahrain has expanded its capacity to become the world's largest single-site aluminum smelter.

In 2019, Aluminium Bahrain B.S.C. (Alba) will fully bring online a major expansion of its production site that will make it the world's largest single-site aluminum smelter. "We will generate an extra 540,000 metric tons a year (mtpa) of the metal, giving us a total capacity of over 1.5 million mtpa, and it will add more than \$1 billion to our revenues in 2018 of \$2.4 billion," said Alba's CEO, Tim Murray.

Alba's aluminum smelting — a process in which the metal is extracted from its oxide, alumina — represents one of the kingdom's earliest successful diversifications beyond oil. Founded in 1968, the company was privatized in 2010, with 69.38 percent now owned by the sovereign fund Mumtalakat, 21.62 percent by Saudi Arabia's SABIC and 10 percent by the general public.

Over the years, the Alba plant has seen a number of expansions and, prior to the latest, it had five production lines. The latest expansion, "Line 6 Expansion Project," puts the company in pole position to take advantage of a deficit in aluminum. "Demand is growing by about 3 percent a year and there is currently a world deficit of "We will generate an extra 540,000 metric tons a year (mtpa) of the metal, giving us a total capacity of over 1.5 million mtpa."

Tim Murray, CEO, Aluminium Bahrain

around 2 million mtpa. To illustrate, that is the same amount that Japan imports a year. Outside of China, Alba is the only major expansion project in the pipeline," Murray stated.

To take advantage of the increasing demand, \$2.5 billion was raised to finance Line 6 Expansion Project from various sources including Nippon Export and Investment Insurance. Commissioning started, ahead of schedule, in December 2018 and it will be fully operational in the third quarter of 2019.

The new line is fitted with cutting-edge equipment, the CEO said, "Fuji Electric did a great job supplying us with critical equipment, for example."

As with the rest of Alba's plant, it is also very safe — by the end of April 2019, the smelter had exceeded 39 million hours of operations over two years without a lost time injury.

In addition to capacity, Alba has two main advantages over its global competitors. The first is in something all smelters consume in massive quantities: energy.

"We use Bahraini natural gas and have five power stations, the newest of which uses highly efficient turbines from General Electric," he noted. This leads to Alba's other advantage: cost, which it maintains at a competitive level by running an annual cost-savings "Titan" program that targets all aspects of its operations.

Half of Alba's new production will be exported in the form of ingots, billets, foundry alloys and slabs to the U.S., Europe and Asia, including Japan. The remainder will be used within Bahrain to build added value through downstream industries. The government has set aside land for these new sectors and some Japanese companies have expressed an interest.

Murray explained why: "Aluminum, automotive and other manufacturers setting up in Bahrain can use our liquid metal and save on remelting costs, the logistics are good, as is access to other Gulf countries. Plus, Alba's production is state of the art in all respects — it is a top-tier aluminum smelter." The bank getting closer to customers

The National Bank of Bahrain is leading a transformation in the banking sector.

Bahrain has been an important financial center since the 1970s and, at 17 percent of gross domestic product, financial services is the kingdom's second-largest sector after oil. "It is a historic hub," said Jean-Christophe Durand, CEO of the National Bank of Bahrain (NBB): "By which I mean pioneering. Bahrain started with a vision to turn the kingdom into the region's financial bridge to the world. Today, some of our neighbors also have financial centers, but what still differentiates Bahrain's is innovation. The country is creating a different type of banking industry."

Established as Bahrain's first bank in 1957, NBB is the kingdom's leading provider of retail and commercial banking services, and is at the forefront of the sector's advance. Listed on the kingdom's stock exchange, about 45 percent of NBB is owned by private and institutional shareholders, while the rest is held by Bahrain's sovereign fund and Social Insurance Organisation.

The bank is currently modernizing and diversifying — a process that is producing sustained growth: in 2018, its net profits grew by 14.8 per"This will help us attract new young professionals and entrepreneurs and further enhance our service quality to our existing client base."

> Jean-Christophe Durand, CEO National Bank of Bahrain

cent to a record \$186 million. Durand believes a significant proportion of NBB's continued success is due to Bahrain's strengths as a financial hub: "We have a good regulator, the Central Bank of Bahrain, which is very much aware of the sector's transformation, and there is a close relationship between the regulator, government and financial institutions. A further major strength is the caliber of the kingdom's experienced banking talent. It is second to none in the region."

One way NBB is looking to diversify is through strategic expansion in regional markets. "In the

near term, our first objective is to grow our presence in Saudi Arabia and the United Arab Emirates. As a Bahraini bank, we have a real advantage in those countries leveraging long-held relationships between us. We have always been a strong local bank and will now replicate our model, and use our infrastructure and teams to succeed in other markets," said the CEO.

NBB is also open to expanding by non-organic means, he stated, "I see potential in acquisitions and partnerships with complementary businesses in countries or product areas where we need to acquire knowledge." Another of NBB's diversification strategies is to embrace technologies by digitalizing its internal processes and introducing more digital products, services and platforms.

As part of its focus on banking technologies, NBB became a founding partner of the kingdom's fintech hub, Bahrain FinTech Bay. This partnership underscores NBB's commitment to innovation and to advancing its products and services in areas such as payments, transfers, electronic know-your-customer and open-banking systems that it can adapt to suit its clients in collaboration with developers of these technologies. "This will help us attract new young professionals and entrepreneurs and further enhance our service quality to our existing client base," explained the CEO.



The leading FinTech Hub in the Middle East & Africa

Bahrain FinTech Bay is the gateway to the Middle East, dedicated to enabling, fostering and ultimately building the complete FinTech ecosystem in the region, driving innovation and future-proofing Bahrain's financial services industry

Global Partners



International Hubs in Silicon Valley, Detroit and Singapore



www.bahrainfintechbay.com Contact Us: info@bahrainfintechbay.com

www.global-insight.net



Bahrain offers everything a tourist could wish for, including cultural events in its cosmopolitan capital of Manama, Formula One racing, first-class hotels and restaurants, ancient historical sites and world-beating diving experiences.





Ours, Yours...

With its rich heritage, talented population and a master plan for the future, Bahrain is attracting investors and tourists.

Located in the heart of the Arabian Gulf, Bahrain's economy is growing faster than any other in the Gulf region. "We have had an average growth in gross domestic product (GDP) of 3 to 4 percent for four years and are optimistic that this growth will continue," said Minister of Industry, Commerce and Tourism Zayed R. Al Zayani.

This achievement stems from it being the first of the region's oil economies to diversify away from hydrocarbons, he commented: "Bahrain has always been a pioneer. Diversification started in the 1960s, manufacturing now represents around 15 percent of GDP and financial services about 17 percent. We also adapted quickly to the modern age by implementing Bahrain's Vision 2030, our strategy for creating a robust and diverse economy for the future." Boosting the private sector and foreign direct investment (FDI) are key to this strategy. "The government wants to step out of the operational side. We have revisited all of our laws and regulations with one simple aim — making Bahrain easier to do business in. Only 2 percent of activities are now restricted to Bahraini ownership, for example — it is the most liberal regime in the region," Al Zayani said.

"We have revisited all of our laws and regulations with one simple aim making Bahrain easier to do and 80 percent of GDP came from the private sector last year.

The kingdom's ongoing development plans offer huge potential to Japanese companies, according to the minister: "We have strong trade relations with Japan but I would like to see more investments and joint ventures between us. There are opportunities in all sectors although we are focused on tourism, information and communication technologies, finance and banking and manufacturing and logistics."

Tourism is at the forefront of development The first of those sectors, tourism, is Bahrain's fastest-growing industry. "Today, we have 12 million visitors a year, 5.9 percent more than in 2017, and tourism's direct contribution to GDP is above 6.5 percent. In 2015, it was 4.6 percent. The average number of nights spent in Bahrain has also gone up over that period from 2.3 to 2.9," said Bahrain Tourism and Exhibitions Authority (BTEA) Chief Executive Officer Shaikh Khaled bin Humood Al Khalifa, who oversees the agency responsible for promoting, overseeing and providing investor services for the sector.

Bahrain's growing popularity comes from a unique blend of well-preserved historical sites from its 5,000-year-old civilization, culture and authenticity, as well as the cosmopolitan and tolerant nature of the country, explained the CEO, "Where else in the world can you find a Muslim mosque, a Hindu temple, a Jewish synagogue and a Christian



Zayed R. Al Zayani Minister of Industry, Commerce and Tourism

Bahrain is also building new attractions — nearly \$400 million is thought to have been invested in the sector in 2018 and that figure is predicted to rise by 6.9 percent a year for the next decade. One important project is the exhibition center that will be the largest in the region and will further position the kingdom as a leading hub for meetings, incentives, conferences and exhibitions. "It will be completed in 2021 and we already have a team dedicated to bidding for major international events," said the CEO.

"Our number one asset is the Bahraini people. That



Shaikh Khaled bin Humood Al Khalifa CEO, Bahrain Tourism and Exhibitions Authority

Until recently, the vast majority of tourists enjoying these attractions would have come from other Gulf countries. But BTEA is creating wider awareness of the kingdom's appeal, he said: "We have opened offices in Saudi Arabia, Kuwait, the U.K., France, Germany, Russia and India so far, which have been successful. We launched our London office in 2016, for example. In 2018, we sold almost 9,800 packages to Bahrain worth over \$13 million through that office, and have established relationships with 49 tour operators and travel agencies."

In addition to the international airport expansion, partnerships like this are making the country more accessible. BTEA works closely with Gulf Air, the expanding national carrier, to create targeted packages in collaboration with international tour operators and hotel groups based in Bahrain, such as Abu Dhabi's Rotana. "We want to reach out to Japan and Southeast Asia - it makes sense because we are part of Asia — but we do not have any direct flights between us yet. The impact is immediate when there are direct flights. In Russia, we opened an office in 2017, started charter flights in 2018 and now have two flights a week from Moscow carrying 440 passengers," said the CEO. Initiatives like this will continue to be introduced, he stated: "Bahrain is full of potential and it offers what the world's tourists are looking for. Now we are connecting the dots."

business in."

Zayed R. Al Zayani Minister of Industry, Commerce and Tourism

The government has also made the kingdom more attractive by strengthening transport infrastructure to allow investors to take advantage of its position as a gateway to the Gulf with many free-trade agreements. Current projects include a \$1.1 billion new terminal at Bahrain International Airport that will open this year and there are plans for a second road link to Saudi Arabia.

The economy has also been strengthened through fiscal policies. The country's budget deficit was reduced by 35 percent in 2018 from 2017's \$3.55 billion and 2019's introduction of a 5 percent value-added tax should bring further improvement. These policies are having the desired effect. In the first nine months of 2018, FDI grew by 138 percent church within 2 kilometers of each other?"

However, he added: "Our number one asset is the Bahraini people. That is why BTEA created the marketing slogan 'Bahrain. Ours. Yours.' — to highlight our hospitality." BTEA is promoting this slogan as part of its ambitious plans for the sector's continued growth. "We have built a strategy around four As: attractions, accommodation, awareness and accessibility. And the first thing we had to do was make sure our attractions were right," the CEO noted.

In line with the global trend in tourism away from sightseeing and toward unique experiences, the CEO noted: "Bahrain is building the full experience. We are the only country where you can enjoy traditional pearl diving, for instance. For shoppers, we have new developments and the souk, which is over 150 years old.

"We also host large sporting events like the Iron Man Triathlon and Formula One motor races. In addition, medical, educational, cultural and ecological tourism all exist here."

is why BTEA created the marketing slogan 'Bahrain. Ours. Yours.'"

Shaikh Khaled bin Humood Al Khalifa CEO, Bahrain Tourism and Exhibitions Authority

In January, Bahrain announced that it was planning to construct the world's largest underwater theme park as well. Containing a decommissioned Boeing 747 among its many attractions, the 100,000-square-meter diving site will also provide a haven for coral and other marine life.

To accommodate an influx of tourists, five substantial beachfront projects are in the pipeline, which will contain hotels and additional facilities. "For instance," stated the CEO, "A \$550-million upscale waterside development on Diyar Al Muharraq, an archipelago of seven man-made islands, should be ready next year."

OURS. YOURS.

Home of the LARGESTsmelter in the WORLD

From a blueprint, Alba's Line 6 Expansion Project is now a reality. With the First Hot Metal poured on 13 December 2018, Line 6 will boost Alba's per-annum production by 540,000 metric tonnes making it the world's largest aluminium smelter at 1.5 million mtpa. A historical project, Line 6 will pave the way for a brighter and sustainable future for the Kingdom of Bahrain

... one that we can all be proud of.

www.albasmelter.com



Your partner in business

As the National Bank of Bahrain, we have been here for generations, and have the stability and strength to understand and support your business. We provide innovative products and services for you that make the difference in this competitive global marketplace.

nbbonline.com

Closer to you

www.global-insight.net

GLOBAL INSIGHT BAHRAIN

Maximizing the potential of people and businesses

OV 12 2018

Bahrain has put in place a network of organizations that are boosting the private sector and turning the kingdom into a hub for both entrepreneurs and established businesses.

Bahrain is focused on advancing its private sector and making it the key driver of an increasingly diverse, competitive, entrepreneurial and knowledge-based economy.

To foster the development of its own citizens and businesses, as well as boost the local economic environment for foreign investors, the government has created an extensive and collaborative ecosystem of business-friendly organizations that are mandated to encourage private-sector enterprises of all sizes and realize the potential of those that set them up and their employees.

This strategy is working — in just the last three vears, the number of Bahraini startups has grown by 46 percent.

At the heart of this ecosystem is Tamkeen, the Bahrain Labor Fund, which empowers individuals and businesses through grants, financial assistance and programs for business development, in addition to offering wage-support initiatives.

"Tamkeen was founded in 2006 after the government had considered what was needed to reform the economy," said Chief Executive Dr. Ebrahim Mohammed Janahi, who noted that central to the organization's mission is investing in the development of human resources and Bahrain-based businesses that contribute to economic growth.

That investment has had a significant impact. Since its establishment, Tamkeen has injected \$3.1 billion into supporting Bahrain's private sector and has launched over 300 programs and initiatives. Thirty-eight percent of citizens working in the private sector have benefited from its training programs, while 53 percent of active businesses have received support.

"What Tamkeen has done has been amazing for the nation. It's been a huge success. To begin with, some in the business community were unsure about Tamkeen's potential but now they are very much in support of what we do," stated Janahi.

"Tamkeen is a success story for Bahrain because we work with small, medium, large and even micro level enterprises and, at the same time, we do a lot for individuals. Internationally, it is quite unique to reach out to both groups," he added.

The majority of the authority's budget for 2018 was allocated to training and wage support, according to Janahi, "We have invested significantly to make sure that Bahrainis have the right skills and professional qualifications to make them



Dr. Ebrahim Mohammed Janahi Chief Executive, Tamkeen

the right and affordable choice for companies in the country."

Tamkeen's training programs target every stage of an individual's career or a business's development, and cover a multitude of subjects including skill and career progression, entrepreneurship, funding and financing, with many being sector or employer specific. For example, it has recently supported courses created especially for staff of Citibank and Amazon Web Services, a technology

generation of 8,712 new jobs for Bahrainis within the private sector. In a bid to create even more employment opportunities, the organization has now extended this wage-support program, which provides any startup with the financial means to hire staff from the local population.

"Tamkeen's program covers any new graduate that is taken on as an employee in the private sector," explained Janahi; "We will support 70 percent of their salaries for their first year of employment and 30 percent for a further six months."

This wage-support program, along with all of Tamkeen's other initiatives, are open to companies from any country, he said: "They can be Japanese, British, American, Singaporean or German — we don't look at the nationality of the owner. As long as they are commercially registered in Bahrain they are treated exactly like a Bahraini company and get all the incentives a Bahraini businessperson can get.

"I would advise international companies to come and see for themselves how Bahrain's system works; how Tamkeen and other entities offer their combined support to investors; and how our initiatives address their needs."

To ensure Tamkeen's initiatives continue to address its current and future clients' needs, the authority reviews and adapts its strategy every three years.

"Every year, we hold a consultation forum, which brings the owners of around 500 enterprises and organizations together. We listen to their feedback about what they want, process those opinions and use them to develop our operational plan," Janahi explained.

As a result of this process, Tamkeen's 2018-2020 strategy is focused on transformation, he stated: "All our programs need to make an impact and serve the needs of companies in Bahrain but we

"We have invested significantly to make sure that Bahrainis have the right skills and professional qualifications to make them the right and affordable choice for companies."

Dr. Ebrahim Mohammed Janahi, Chief Executive, Tamkeen

company that opened a regional base in Bahrain in 2018. This wide variety of initiatives all have one thing in common, however: a focus on customer centricity, improving quality and delivering results.

Transformational initiatives

In 2018, Tamkeen increased the support it gave companies to pay employee salaries by 182 percent in comparison with 2017, resulting in the

also want to transform ourselves into the best possible entity for the benefit of our private sector." This focus requires Tamkeen to react quickly to emerging sectors and technologies. "For example, as part of our 2018-2020 strategy development we looked hard at what new services we needed to provide to cater to companies in the fintech sector," said Janahi.

One of those new services was launched in



February 2019 in conjunction with the sector's largest hub in the region, Bahrain FinTech Bay. The FinTech Talent Program is the first training and development initiative for the emerging technologies in the Middle East.

It was created in partnership with global experts in the subject such as the U.S.'s Georgetown University and should position the kingdom as a center of excellence for fintech skills and entrepreneurs.

Investing in startups

As part of Tamkeen's 2018-2020 strategy, "We are taking a new and expanded approach to the organization's investment activities by venturing into investments that enable us to become an even more active participant in the national effort to create a competitive and resilient economy," he stated. These enriched initiatives will allow the organization to further develop the private sector, said Janahi: "Our investment pillar will provide a diverse set of solutions to help improve access to finance for businesses at all stages of growth, including startups, and will support the emergence of new business sectors within the economy. In this regard, Tamkeen's investment initiatives will mainly bridge investors with relevant invest-

ees. This will be done through multiple strategic investment projects, carried out in collaboration with relevant stakeholders, that will support the acceleration of businesses.'

A major example of this new strategy came in May 2018, when Tamkeen became one of the most significant limited partners in the \$100-million Al Waha Venture Capital Fund of Funds. Managed by the Bahrain Development Bank, this fund is already boosting the technology startup ecosystem, with 45 percent of it having been allocated to various venture capitalists.

Another way in which Tamkeen is investing in the economy is through a support program for cloud computing launched in September 2018. Through this plan, Tamkeen covers the costs to businesses of cloud services from Amazon Web Services for a period of 18 months. "We think that enabling access to enterprise-grade technological infrastructure is crucial for enhancing our businesses' competitiveness in a changing market," Janahi explained.

"At Tamkeen, we seek to keep pace with the dynamic changes in the economy and design the most appropriate solutions in line with the opportunities," he added, noting that the authority believes accelerators are an excellent solution for enhancing the kingdom's entrepreneurial ecosystem.

For this reason, in 2018, Tamkeen partnered with Egypt-based Flat6Labs to launch the Flat6Labs Bahrain accelerator program. Through this plan, Tamkeen will invest in more than 40 local and international startups over the next three years, with each receiving \$30,000 in seed funding and mentorship-driven support.

As a result of Tamkeen's initiatives, as well as those of many other organizations in Bahrain, the kingdom's reputation for supporting talent is now so strong that it was chosen as the location for the 11th Global Entrepreneurship Congress in 2019. The event was held in April as a collaboration between Tamkeen and the Global Entrepreneurship Network, probably the world's most important entrepreneurial platform.

The successful congress brought together more than 3,000 leading entrepreneurs, investors, researchers and economic policymakers from over 170 countries, and shone an international spotlight on the talent that the authority is helping to nurture, said Janahi, "With Tamkeen's history of proactively developing and enacting programs designed to empower Bahrainis and new enterprises, we were perfectly placed to host this important event."



Contributing to the Kingdom of Bahrain's



supported



through training





economic growth since 2006

Tamkeen - the Labour Fund - is a national initiative established in the Kingdom of Bahrain in 2006 with the aim of investing in the development of human resources and economic growth. It offers extensive support solutions and services for both individuals and businesses to promote business development and opportunities for growth.

f y in c 0 tamkeenbahrain www.tamkeen.bl +973 1738 3333



