JANUARY 2024



# **BAHRAIN JOINS FIGHT AGAINST ENISSIONS**

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JANUARY 2024 Vol. 41 No.1 Reg No. 1 OGN 025



Real test for world in climate change fight After a raft of pledges at COP28, gov ernments and businesses will need to turn them into real-economy outcomes. The global stocktake clearly shows that progress is not fast enough, but it is gathering pace - Page 6



CO2 capture plant, a first in Western KSA Gulf Cryo, a leading provider of industrial, medical, and specialty gases, has opened the first carbon capture plant dedicated to the merchant market in Saudi Arabia's Western Region – Page 10



timing for transition Africa still needs time – time that the Western world has already had and, frankly continues to milk – to resolve energy poverty and industrialise – Page 14

## **O&G 'MUST RAMP UP CLEAN ENERGY INVESTMENT'**

### **By ABDULAZIZ KHATTAK**

MANAMA: The oil and gas industry's efforts in climate action, especially committing resources to clean energy, may not currently be encouraging, but they offer the potential for crucial contributions.

Currently, the industry invests only about 2.5 per cent (\$20 billion) of its total annual capex of \$800 billion in clean energy, and accounts for only 1 per cent of global clean energy investment.

But in scenarios presented by the International Energy Agency (IEA), this could go up to 8 per cent of the global share.

In the report, 'The Oil and Gas Industry in Net Zero Transitions', the IEA suggests oil and gas producers put 50 per cent of their investments in clean energy by 2030, on top of the investment needed to reduce Scope 1 and 2 emissions, if they want to play their full part in meeting Paris Agreement goals.

The report reveals that more than 60 per cent of the present investment came from only four companies: Equinor, TotalEnergies, Shell and BP, which spent each around 15-25 per cent of their total budgets on clean energy. This leaves room for other producers to step up.

Contrary to misconceptions, the net-zero transition offers opportunities for the industry. The IEA report finds the sector well placed to scale up some crucial technologies for clean energy transitions.

In fact, up to 30 per cent of energy generated by clean energy systems could benefit from the industry's skills and resources, including hydrogen, carbon capture, offshore wind and liquid biofuels.

The IEA also doesn't deny the fact that some investment in oil and gas is needed to ensure the security of energy supply and provide fuel for sectors in which emissions are harder to abate.



The oil and gas industry urged to become part of the climate action solution

Oil companies, both national and international, are all critically important stakeholders in their host countries and will also be critical to efforts to achieve net-zero transitions, both domestically and globally.

The profits made by them have helped governments to finance a great deal of public spending, while supporting public infrastructure investments and employment.

Also, the sector's corporate venture capital (CVC) investments in clean energy start-ups increased fivefold since 2018, hitting \$1.2 billion in 2022. This was mainly driven by hydrogen, CCUS and renewable energy technologies.

In a situation where a national oil company (NOC) might decide to retain a focus on liquids production, leveraging its existing assets while building up new capabilities to produce low-emissions fuels, the IEA presents a promising scenario.

find 55 per cent of its capex invested in lowemissions fuels and products, 25 per cent in carbon removal and the remainder 20 per cent in oil supply.

The IEA also calls upon governments to change their oil and gas fiscal regimes in order to give companies more space to invest in clean energy.

In an ambitious situation, where government taxes (currently 50 per cent of industry revenue) and shareholders dividends (currently 10 per cent) fall to 35 per cent and 5 per cent, respectively, the oil and gas industry can be left with 50 per cent capex, or \$300 billion, to spend on clean energy. That's 8 per cent of all investment in clean energy in 2030, up from just over 1 per cent today.

"Oil and gas producers around the world need to make profound decisions about their future place in the global energy sector. The industry needs to commit to genuinely helping the world meet its energy needs and climate goals," said IEA Executive Director Fatih Birol.

### **KPC** faces financing issues: Report



KUWAIT CITY: State-owned Kuwait Petroleum Corporation (KPC) is facing difficulties in securing new loans, from both international and local banks, Saad Al Barrak, Kuwait's Oil Minister and KPC Chairman said, in a document seen by Reuters. He said some global banks had stopped financing oil and gas

firms due to "the world's trend towards applying standards of governance, social and environmental responsibility, and alternative energy."

Meanwhile, locally, Kuwait's central bank has not increased the quota for the sector, Al Barrak said in response to a parliamentary query dated December 24.

As a result, he said it was 'extremely' important that KPC keep its profits, to cover part of the expected deficit, to ensure business continuity and completion of required projects.

In November, Reuters reported that KPC was facing a \$45.7 billion shortfall to meet its five-year spending plan (forecast at \$77.98 billion and which runs until March 31, 2028), and would need to borrow and sell assets to help plug the gap.

Confirming this, Al Barrak said: "Borrowing will be through commercial or Islamic loans and export credit agencies, and the assets that will be sold are non-strategic assets, which are no longer useful."

KPC owes the government about over \$20 billion in arrears

It estimates that if the NOC would invest \$15 billion annually until 2050 to undertake this transformation of its energy portfolio, it would

### Member exits add to Opec's worries of falling demand

LONDON: The Organization of the Petroleum Exporting Countries (Opec) is facing weakening demand in H1 2024 just as its global market share declines to the lowest since the Covid-19 pandemic on the back of output cuts and member Angola's exit, Reuters forecasts.

The trend means the group would struggle to ease production cuts unless global oil demand accelerates or the group is prepared to accept lower oil prices.

Angola said it is leaving Opec from January 2024, following exits by Ecuador in 2020, Qatar in 2019 and Indonesia in 2016.

This leaves the group with 12 members and takes its production to below 27 million barrels per day (mbpd), less than 27 per cent of the

total global supply of 102 mbpd.

Separately, a Reuters poll last month predicted oil prices to stay near \$80 a barrel in 2024. A survey of 34 economists and analysts forecast Brent crude would average \$82.56 in 2024, down from November's \$84.43 consensus. Just one contributor expected prices to average above \$90 mark next year.

Meanwhile, the International Energy Agency (IEA) predicts oil demand reaching 102 mbpd in the late 2020s before declining to 97 mbpd in 2050.

There are large declines in oil use in cars, buildings and power generation, although most of this is offset by growth in oil use in trucks, aviation and petrochemicals.



Almost half of global oil use is currently in road transport, but this is under increasing pressure from the rise of electric vehicles (EVs). The EV market has been growing exponentially in recent years, and nearly 20 per cent of new cars being sold globally in 2023 are electric.

to date, the minister said.

### Geothermal energy explored

JEDDAH: The King Abdullah University for Science and Technology (KAUST) is drilling a 400-m deep well on its campus in Thuwal to study the potential of geothermal energy in Saudi Arabia.

It has contracted TAQA Geothermal Energy Company to execute the shallow well, which will be spudded by January 2024-end

Professor Thomas Finkbeiner, Project Lead and Research, said: "Although energy will not be harvested from this well, this project nonetheless marks an important first step towards realising KAUST's goals to enabling and developing geothermal energy as a viable renewable energy resource

for the Kingdom.

Geothermal resources in the Kingdom present a unique and untapped opportunity to decarbonise and diversify the energy mix.

Geothermal currently provides just under 1 per cent of global energy supply.



# **BAHRAIN ON A STEADY PATH TO NET-ZERO**

After unveiling its national energy strategy and launching a climate solutions fund, the Kingdom has stepped up commitment to achieve net-zero emissions by 2060

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### **By ABDULAZIZ KHATTAK**

AHRAIN is well on the road to netzero and its fight against climate change with serious efforts, such as the launch of a \$750 million climate technology fund and a new national action plan to achieve carbon neutrality and tackle climate change effectively.

Announced right before the start of the COP28 summit in Dubai in November, the fund was launched by Bahrain-based Investcorp, a global alternative investment manager, and is backed by the country's sovereign wealth fund, Mumtalakat.

Called Climate Solutions Partners, it will be used to "accelerate the global transition to a zero-carbon economy with a focus on the deployment and rapid scaling of commercially proven climate solutions that have the potential to transform industries", the manager said on its website.

Investments in this regard will be done across four key impact pathways: Carbon management, buildings, transportation, and food and agriculture.

This was reiterated by His Majesty King Hamad of Bahrain in his speech at COP28, where he announced Blueprint Bahrain, a new national energy strategy, which will focus on three aspects: Moving to a low-carbon economy, adapting to climate change and creating sustainable opportunities.

### NATIONAL ENERGY STRATEGY

Blueprint Bahrain is a reaffirmation of Bahrain's commitment to the Paris Agreement, reducing emissions by 30 per cent by 2035 and reaching net-zero in 2060, as announced at the COP26 Glasgow Summit. A BNA report said the plan, one of six priority sector strategies in the Kingdom's Economic Recovery Plan, is rooted in the twin objectives of decarbonising Bahrain's economy while ensuring reliable and affordable access to energy for its economic growth.

According to the strategy, Bahrain has opted for a partnership model, which will see collaboration between government and industry.

The strategy relies on three levers: optimising energy demand to reduce energy intensity and consumption, diversifying the country's power mix to include cleaner energy sources, and deploying carbon abatement technologies to decarbonise hard-to-abate sectors.

Banrain sees economic opportunity in its plan. Its size, location and favourable regulatory environment, make it uniquely positioned to serve as a regional hub for the development and testing of innovative clean technologies. His Highness Shaikh Nasser bin Hamad Al Khalifa, Representative of His Majesty the King for Humanitarian Works and Youth Affairs, Chairman of Bapco Energies said: "Bahrain is embarking on a transformative journey towards a more sustainable future where energy security evolves as a shared responsibility, nurtured by the innovation of our domestic energy industry." At COP28, the King also highlighted the Safa carbon offsetting platform, which was launched by Mumtalakat early December to help businesses and individuals better understand and manage their carbon footprint.



Mumtalakat said Safa shouldn't be seen as an alternative to decarbonisation efforts but it is meant to create awareness and empowering action at the individual and corporate levels.

"With Safa, individuals and businesses have the ability to decrease their carbon footprint and actively participate in creating a more environment-friendly future, supporting the Kingdom of Bahrain's goal of reaching net zero emissions by 2060," Shaikh Abdulla bin Khalifa Al Khalifa, Mumtalakat CEO, said.

The platform will facilitate the transaction of high-quality and globally certified carbon credits through a partnership with CHOOOSE, a climate tech company that offers carbon emissions information and access to trusted climate solutions.

The King extended an invitation to top scientists and entrepreneurs to come to Bahrain to innovate in energy solutions.

Bapco Energies, the state-owned integrated energy company, is also not behind in driving energy transition in the country,

Mark Thomas, Bapco Energies CEO, said the national oil company's operations were aligned with the Kingdom's sustainability ambitions.

"This includes our Bapco Modernization Programme, which once completed, will be one of the most efficient, complex, and modern refineries within the region. In the past month, we have expanded our financing capabilities, proudly launching our Sustainability Linked Finance Framework in partnership with Standard Chartered Bank. In doing so, we became the first national oil company in the world to directly link financing to our decarbonization targets,

coast in the Khaleej al-Bahrain field.

In 2022, Thomas had told OGN energy magazine the field would be "uneconomic to develop using today's technology and approach", adding there were no plans, for 2022 or 2023, to do any further work offshore, at least, not in the Khaleej al-Bahrain field.

Separately, Bahrain aims to cut domestic natural gas consumption and use the saved fuel for exports to international markets.

Sheikh Nasser said the plan was to add solar as a source of energy into grid instead of just "wasting" gas.

He said some of the solar farms will be located in neighbouring Saudi Arabia and the UAE.

Bahrain produces around 2 billion cu ft feet per day of gas, most of which is used to generate power locally. It also produces around 190,000 barrels per day of oil at an onshore and an offshore field.

Furthermore, the Kingdom is studying the possibility of constructing a floating liquefied natural gas (LNG) facility to export gas in order to capture strong international demand.

In October, Thomas said Bapco Energies was considering raising cash selling its assets in the next six months.

"We could be making some announcements within the next six months on potential for some asset monetisation," Thomas told Reuters.

### **ALTERNATIVE ENERGY SOURCES** Bahrain aims to improve the total share

of renewables in the energy mix to 5 per cent by 2025 and 20 per cent by 2035. A BNA report quoted Kamal bin Ahmed

SGS's carbon reducing tech deployed in KSA, Kuwait TGT Diagnostics completes first batch assembly in UAE Saab announces Double Eagle sale to Kuwait UTEC boosts position in KSA subsea survey segment

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Merged Swiss-Italian company to deliver advanced subsea services Tenaris acquires Mattr's pipe coating business unit

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### Regional forum to focus on net-zero pathways

For more features, visit www.ognnews.com encompassing Scope 3 emissions.

Bapco Energies will also be introducing three new ventures to maximise enterprise value through investments in cutting-edge technologies and renewable energy, demonstrating the numerous collaborative opportunities within Bahrain's flourishing energy sector.

### **BOOSTING ENERGY SUPPLIES**

Bahrain is pushing to increase its oil and gas resources. In the beginning of 2023, Bahrain announced two unconventional natural gas discoveries in the Al-Joubah and Al-Jawf reservoirs, located under the existing onshore gas-producing fields of Al-Khuf and Al-Onaiza.

There are currently no updates on the finds.

In 2018, a mega discovery of, at least, 80 billion barrels was announced off the

Mohammed, President of the Electricity and Water Authority (EWA), as saying his authority was simplifying the process of integrating renewable energy resources to EWA's electricity network.

EWA is coordinating with the Information and e-Government Authority (iGA) to digitise all stages of renewable energy applications through the unified portal, Benayat, and help accelerate the applications process.

Mohammed said 303 applications have been submitted for the installation of renewable energy from residential, commercial and industrial sectors, and 180 of these have been successfully commissioned and connected to EWA's electricity distribution network.

The total connected capacity currently exceeds 38 MW, with over 150 MW expected to be installed by 2026.



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### BAHRAIN REVIEW 3

## Emissions reduction: SLB aims for gold standard

The company's tailored solutions tackle methane and flaring challenges head-on with the tools and services needed to measure and report emissions, reduce methane, and achieve zero routine flaring, Somaya Al-Radhi, SLB Bahrain Managing Director, tells **OGN** 

### **By ABDULAZIZ KHATTAK**

Better part of the past century; however, in more recent years it has witnessed a shift of focus towards sustainability initiatives.

Under the guidance of the Kingdom's leadership, His Highness the Crown Prince and Prime Minister Sheikh Salman Bin Hamad Al-Khalifa unveiled Bahrain's National Energy Strategy in line with the United Nations' Sustainable Development Goals (SDGs), adopting objectives that address climate change, promote clean energy, and ensure sustainable economic development.

"Taking such positive steps towards a more sustainable future puts the Kingdom at the forefront on a regional level," Somaya Al-Radhi, SLB Bahrain Managing Director, tells **OGN** energy magazine.

Similarly, it is integral to address emissions due to their significant impact on climate change. Some strategies that Bahrain has adopted to repurpose byproducts of oil and gas production and refining include the introduction of the Bapco Gas Expansion company, which focuses on the processing, storage and distribution of byproducts such as propane, butane and naphtha.

Nevertheless, further steps can be taken to focus on managing and repurposing methane and CO2 emissions brought about by oil and gas extraction and production.

The industry has been increasingly focused on addressing methane and CO2 emissions due to their environmental impact. As a result, technologies and practices have been formulated to reduce and repurpose such emissions.

#### SLB SYSTEMS & SOLUTIONS ADDRESSING METHANE EMISSIONS

After Schlumberger introduced its new identity in 2022, SLB, it has focused on energy innovation and decarbonisation to address the world's energy needs and to navigate the energy transition, affirming its transformation to a global technology company focused on driving energy innovation for a balanced planet.



An illustration of the SEES process

"The company has spent years laying the groundwork for its



Al-Radhi ... leading SLB's sustainability measures

ard, by meeting the involved requirements.

#### CCUS, A VIABLE SOLUTION

Al-Radhi says the global interest in carbon capture, utilisation and storage (CCUS) has been increasing as a means to mitigate carbon dioxide (CO2) emissions and combat climate change.

CCUS involves capturing CO2 emissions produced from the use of fossil fuels in various industrial processes, transporting the captured CO2 to a storage location, and either utilising or permanently storing it to prevent its release into the atmosphere.

"CCUS is essential to reach net-zero greenhouse gas emissions, and it is one of the few decarbonisation mechanisms that is technically viable today. But the challenge lies in feasibility," says Al-Radhi.

"Often, high costs, operational risks, and complexities navigating the value chain stall CCUS project development," she adds. "Thus, it is important to assess, develop, and operate across the entire CCUS value chain. This includes project economics, technology selection, flexible business models, carbon capture, sequestration, monitoring, etc."

Furthermore, the continuous development, adaptation, and application of innovative CCUS technologies is essential, along with deploying digital tools to improve operations.

This may include using automation, artificial intelligence, and comprehensive data management to create new levels of efficiency and performance.

#### **ROI & EMISSIONS**

Sustainability initiatives are often associated with high costs and a low return on investment in the short-term, which is the main demotivator for countries and companies alike when it comes to their implementation. However, several methods can be adopted to monetise methane and CO2 emissions, through the SEES and CCUS, respectively.

The SEES introduces gas-to-value consulting services to help companies find the potential marketable products and the various technologies that enable their transformation from gas that would otherwise be flared or vented.

Using techno-economic analysis, every technology that is applicable is rigorously evaluated to the site where it would be deployed.

The results are then used to determine the optimal method to monetise the gas.

A model is generated to help identify and apply the gas-to-value conversion technologies for each unique gas source, projecting the revenue generated and emissions reduction achieved.

This unique approach can also assess the possibility of transforming gas into energy, fuel, and other resources that can be used in the field.

When it comes to CCUS, there are several approaches that can be adopted to monetise CO2.

One of the proven approaches is using CO2 for enhanced oil recovery (EOR).

EOR involves injecting captured CO2 into oil/gas fields to stimulate production, which is an excellent solution when dealing with mature fields.

Historically, EOR implementation was mostly an afterthought,



The methane lidar camera alongside the methane point instrument

considered only when primary and secondary production means were exhausted.

The fact is, EOR is more effective when initiated at the early planning stages and by monitoring events as they unfold in order to control and optimise the outcome.

SLB's approach to EOR provides an efficient "concept-to-field-trial" roadmap to boost production far faster compared with traditional workflows.

increasing focus on low- and zero-carbon energy technology solutions while continuing to drive innovation, decarbonisation and performance for the oil and gas industry," says Al-Radhi.

Managing methane emissions and routine flaring has quickly become a major focus for every oil and gas company worldwide.

To address this, the SLB End-to-end Emissions Solutions (SEES) introduce tailored programmes that tackle methane and flaring challenges head-on with the tools and services needed to measure and report emissions, reduce methane, and achieve zero routine flaring.

The accurate measurement and reporting of methane emission levels are integral components of the SEES programme.

Over 100 companies have voluntarily committed to the United Nations Environment Program's Oil and Gas Methane Partnership 2.0 (OGMP) programme, in pursuit of their highest international standard of reporting methane emissions, the OGMP Gold Standard.

Companies that achieve this are considered world leaders in accuracy, granularity, and breadth of methane reporting.

The SEES assists partners to achieve the OGMP Gold Stand-



SEES Lidar camera readings

#### **BAHRAIN'S EMISSIONS REDUCTION EFFORTS**

Bahrain is working on various initiatives with several international consultancies and companies, including SLB, towards the goal of reducing 30 per cent of carbon emissions by 2035, and it is witnessing positive steps towards a more sustainable future.

Al-Radhi says in-depth studies need to be carried out prior to the implementation of any initiative by investing in research and development to formulate strategies that are more efficient and cost-effective.

"It is crucial for countries to invest in pilots to identify the potential of these projects and their feasibility," she says.

Hopes of investments by external companies or other countries are unrealistic, as these are relatively new approaches that need to be funded by the country itself as it is the one gaining the resulting environmental and economic benefits.

"Nonetheless, we must bear in mind that the world's dependance on fossil fuels will uphold for the foreseeable future. However, we can work on ways to reduce the harmful environmental impact of oil and gas extraction and production," concludes Al-Radhi.



### **BAHRAIN REVIEW**

## **Bapco Energies agrees to** report methane emissions

As a member of OGMP 2.0, Bahrain will leverage science-based measurement frameworks to report emissions on both operated and non-operated bases across all assets

### **By ABDULAZIZ KHATTAK**

APCO Energies, the integrated energy company leading the energy transition in the Kingdom of Bahrain, has become a member of the Oil and Gas Methane Partnership 2.0 (OGMP 2.0).

As a signatory to the United Nations Environment Programme's OGMP 2.0 Framework, Bapco Energies will be annually reporting methane emissions from operated and nonoperated assets.

This involves leveraging the most accurate measurement methods and science-based measurement frameworks to report emissions on both operated and non-operated bases across all assets.

This strategic decision aligns with Bapco Energies' commitment to reduce carbon emissions in line with the Kingdom's National Energy Strategy.

The company aims to implement cuttingedge solutions to minimise emissions in alignment with the Kingdom's decarbonization targets, it stated.

At the COP26 summit held in Glasgow in

2021, His Royal Highness Prince Salman bin Hamad Al Khalifa, Crown Prince and Prime Minister of Bahrain, made a commitment that the Kingdom would achieve net-zero by 2060, cut emissions by 30 per cent through decarbonization and efficiency initiatives by 2035, and double the deployment of renewables.

Commenting on the partnership, Group CEO Mark Thomas said: "We are proud to be joining the United Nations Environment Programme's Oil and Gas Methane Partnership 2.0 Framework. This globally recognized, industry-specific reporting standard enables us to comprehensively track and compare our progress and performance with peers in the industry."

He said the announcement at COP28 was a testament to the Kingdom's responsibility and commitment to deliver real climate action.

"As signatories to the OGMP 2.0, we stand committed to achieving our net-zero targets which necessitated a complex decarbonization plan, particularly addressing unabated sources," he added.

Reducing methane emissions in our industry is one of the key global opportunities to preserve the environment and enhance the quality



Thomas ... commitment to real climate action

of life for everyone."

"We are thrilled to welcome Bapco Energies of Bahrain as part of our initiative," noted Giulia Ferrini, the OGMP 2.0 Programme Manager.

"Action by national oil companies is critical for methane progress, as they represent over half of global oil and gas production. By joining the Partnership, Bapco Energies demonstrates its commitment to better methane reporting and management and supports Bahrain's climate efforts under the Paris Agreement and Global Methane Pledge in time for COP28," she said.

OGMP 2.0, is the flagship oil and gas reporting and mitigation framework of the United Nations Environment Programme (UNEP).

It is a comprehensive, measurement-based international reporting framework for the energy sector that works to improve the accuracy and transparency of methane emissions reporting, which is crucial for meaningful mitigation.

2022. This was up from 62.937 Mt CO2eq in 2015, 43.733 Mt CO2eq in 2005, and 30.224 Mt CO2eq in 1990.

The country's GHG emissions per capita has decreased over the years owing to the significant population increase. It was 39.290 t CO-2eq per capita in 2022 for a population of 1.78 million (according to Edgar figures), compared to 45.877 t CO2eq per capita in 2015 for a population of 1.372 million.

EDGAR's graphs compare GHG emissions for the last available year (2022) with the emission levels of the previous year (2021) and of two key years: 1990 (base year for national GHG inventory) and 2005, when the Kvoto Protocol came into effect.

The power industry has been the most carbon intensive overall, with emissions increasing 258 per cent in the period from 1990 to 2022. The industry reported a steady decline in emissions from 2005 to 2022, when it was 61 per cent.

When comparing emissions in 2022 to 2021, transport topped other sectors with a 6 per cent increase. This was followed by agriculture and buildings, each recording a 5 per cent increase; waster water sector, 3 per cent increase, industrial combustion and processes, 2 per cent increase; and the power industry and fuel exploitation segment both recording zero emissions.

Global greenhouse gas (GHG) emissions increased by 1.4 per cent in 2022 compared to 2021, reaching 53.8 gigatonnes of equivalent carbon dioxide (GtCO2eq), according to ED-





Address: Plot No. S-50807, Jebel Ali Free Zone (South), P.O. Box 17729, Dubai, United Arab Emirates Tel.: +971-4-8865119 | Fax: +971-4-8865118 | Email: sales@sso.ae – info@sso.ae www.shreesteeloverseas.com

Branches: 1) Shree Oilfield Supply LLC Global Ascent Business Center, Office No.: 5, Block 2 - Unit 16, M4, Plot 12, Near Musaffah Sanaiya, Abu Dhabi, UAE Tel: +971-2-6214290, Fax: +971-2-6214289 2) Steel Piping Solutions LLC, Muscat, Omar

#### BAHRAIN EMISSIONS RECORD

Bahrain saw a 1 per cent increase in GHG emissions in all sectors-power industry, industrial combustion and processes, buildings, transport, fuel exploitation, agriculture, and waste-in 2022 compared to 2021.

However, emissions grew 60 per cent versus 2005, and 132 per cent versus 1990, , according to data released by the European Commission's in-house Emissions Database for Global Atmospheric Research (ED-GAR).

Bahrain emitted 69.976 million tonnes of carbon dioxide equivalent (Mt CO2eq) in GAR data.

These figures are 2.3 per cent higher than the 52.6 Gt CO2eq emissions recorded in 2019. China, the US, India, the EU27, Russia and Brazil were the six world largest GHG emitters in 2022.

Together they accounted for 50.1 per cent of global population, 61.2 per cent of global GDP, 63.4 per cent of global fossil fuel consumption and 61.6 per cent of global GHG emissions. Global emissions have grown steadily since

the beginning of the 21st century in comparison to the two previous decades, mainly due to the increase in fossil CO2 emissions by China, India, and other emerging economies.

In 2022, the majority of GHG emissions were from fossil fuel, which accounted for 71.6 per cent of total emissions, while methane (CH4) contributed by 21 per cent to the total, nitrous oxide (N2O) by 4.8 per cent and fluorinated gases (F-gases) by 2.6 per cent.



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This project showcases Bapco Upstream's commitment to meeting Bahrain's growing energy demands through a sustainable gas supply until 2030 from the Awali field

## Phase 2 Awali gas project to boost Kingdom's gas supply

### **By ZAINAB AL TAITOON**

Bergies, is implementing two new well manifold facilities as part of Phase 2 of the non-associated gas (NAG) long-term field development (LTFD) project.

This project showcases Bapco Upstream's commitment to meeting Bahrain's growing energy demands through a sustainable gas supply until 2030 from the Awali field.

Announced in Q1 2019, the project, is currently under construction and is expected to be commissioned between March and April 2024.

Phase 2 of the project will see the installation of a series of gas processing units, wells and pipelines.

After months of negotiations and delay, an EPC contract for Phase 2 was signed in June 2022 between Tatweer (now Bapco Upstream) and TDE, which had submitted the lowest bid, of \$36 million, in March 2021.

According to the contract, TDE will act as the project management consultant and provide front-end engineering design (FEED), and engineering, procurement, and construction (EPC) services.

The construction work on Phase 2 began in April 2023 with Bahrain-based Mechanical Con-



The NAG project will boost Bahrain gas supply

tracting and Services Company (MCSC) hired as the construction and installation subcontractor.

The project scope encompasses the design, procurement, fabrication, installation, testing, pre-commissioning, commissioning, and startup of two new well manifolds.

The facilities are designed to handle 35,000 barrels of water per day (bwpd), 4,000 barrels of oil per day (bpd), and 75 million standard cubic feet per day (mmscfd) of gas.

Additionally, the project includes the imple-

mentation of a separator, production and test header modules, test separator, buffer tanks, liquid pumps, associated utilities, instrument and plant air, fuel gas system, flare system, chemical injection skids, drain system, control system, incoming electrical supply receiving RMU, and transformer and distribution.

Previously, the completion of the first phase in 2018 witnessed the installation of a new centralised gas dehydration facility, which marked the initiation of a series of planned gas capacity projects.

The phase included the upgradation of five existing wellhead areas and new pipelines installation to provide connectivity with both new and existing field infrastructure.

The EPC contractor for Phase 1 was Petrofac and the entire construction of the project was awarded to MCSC.

Furthermore, earlier, the project incorporated the addition of two new gas processing trains, along with supplementary wells and infrastructure, to facilitate the transportation of gas to the processing facilities.

As part of the NAG Long-Term Development Plan, multiple strategic projects have been executed in 2022 to bolster and maintain the deliverability of the NAG system, establishing a dependable Khuff gas supply source to meet Bahrain's gas demand.

## Global consultancy's Bahrain office to serve O&G industry

The office will allow for Oliver Wyman to work even closer with clients in Bahrain, while also actively fostering the growth and development of Bahraini talent

LIVER Wyman, a global management consulting firm and a business of Marsh McLennan, has opened a dedicated office in Bahrain to work on transformational projects in the country across multiple industries, including oil and gas, the public sector, financial services, fiscal, health, technology, transportation, and tourism.

Bahrain, with its ambitious economic growth



ways and programmes that will provide Bahrain's future leaders with invaluable opportunities to collaborate with best-in-class global experts and strategists.

These carefully designed programmes are specifically tailored to unlock the profound potential of Bahrain's growing workforce.

In the last decade, Oliver Wyman has expanded across the India, Middle East and Africa (IMEA) region, where it now boasts six offices across the GCC, as well as one in South Africa and two in India. Pedro Oliveira, Managing Partner - IMEA, Oliver Wyman, says: "We have grown rapidly throughout the Gulf over the last two decades, both in terms of offices and talent. Whether in Bahrain or elsewhere across the IMEA region, we always seek to work with organisations that can truly benefit from Oliver Wyman's expertise and capabilities – including impactful transformation, strategy, digital, risk management, operations, organisational effectiveness, and climate and sustainability." Oliver Wyman has offices in more than 70 cities across 30 countries and more than 6,000 professionals, who work with clients to optimise their business, improve their operations and risk profile, and accelerate their organisational performance to seize the most attractive opportunities.

strategy, represents a significant regional market for Oliver Wyman, and its new office in Manama will be led by experienced partners Ibrahim Ghoul, Mark Kremers, and Syed Jafri, who collectively have decades of expertise in working with key stakeholders across Bahrain.

The partners will be supported by an office composed of world-class consultants, including Bahrani nationals, who will work on highimpact and strategic projects.

According to Syed Jafri, Partner and Head of Oliver Wyman's Bahrain Office: "Oliver Wyman has served public and private sector clients in the Kingdom of Bahrain for more than 20 years, and this new office opening enables us to work even closer with our valued clients, and scale-up our service delivery; it also demonstrates our strong belief in Bahrain's dynamic and growing economy. We look forward to continuing to work with organisations across the Kingdom to help make Bahrain's Economic

Oliver Wyman works on projects across multiple industries, including oil and gas

Vision a reality.'

The new Bahrain office is emblematic of the global consultancy's continued push to better serve its growing clientele by establishing a physical presence in important regional centres. The new office will allow for Oliver Wyman to work even closer with clients in Bahrain, while also actively fostering the growth and development of Bahraini talent.

This commitment will be exemplified through the implementation of comprehensive path-



