



OIL PRODUCTION BACK ONSTREAM AND GROWING

NEW BID ROUND TO BE ANNOUNCED

BENGDARA TALKS FINANCE WITH NEW CBL GOVERNOR





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OIL PRODUCTION IS BACK ONSTREAM - AND GROWING

By Moutaz Ali

On 3 October 2024, the National Oil Corporation (NOC) announced that it was lifting force majeure on oil production at all Libyan oilfields and on oil exports from all terminals with immediate effect.



n its statement, the NOC noted that the end of force majeure also covered the Sharara and El Feel fields in southwest Libya. Force majeure had been declared in relation to Sharara on 7 August, three weeks before the prime minister of the Benghazi-based Government of National Stability, Osama Hamad, announced force majeure in relation to the entire Libyan oil sector. In fact production and exports from oil fields and terminals were significantly curtailed rather than stopped altogether. The NOC itself announced force majeure for El Feel on 2 September and shipments through the Sidra terminal on 12 September.

In its 3 October statement, the NOC said that after reviewing the situation in Sharara, El Feel and at the Sidra terminal it could now resume its oil operations at the two fields and exports to its customers. Consequently, force majeure was now ended for all oil fields and terminals.

Production returns rapidly

Just five days later, on 8 October, the NOC said that over the previous 24 hours, the production

rates had reached 1.133 million barrels a day (b/d) of crude oil and condensate, in addition to 206,666 b/d of oil equivalent in gas. The next day the figures had risen to 1.159 million barrels of oil and condensate. Then on 11 October, the NOC said that production in the previous 24 hours had further risen to 1.248 million barrels. Already, that meant that Libya was not far off its pre-crisis rates of production.

"This recovery comes just days after the lifting of the force majeure, as a result of the guidance from the chairman and board members of the NOC, as well as the combined efforts of the employees of the NOC and the oil companies," the NOC said.

More than a recovery

By 13 October, the NOC reported that production of oil and condensate during the previous day had reached 1.305 million barrels. That was around the figure before production had been curtailed. A week later, it was at 1.33 million b/d. Not only was this higher than the pre-crisis level, it was the highest production

Oil & Gas Production



figure in a decade. As yet, that does not seem to have sunk in with the Libyan oil industry or the Libya public.

The speed at which production has rebounded was equally remarkable. The last time there was a massive disruption, between July 2013 and September 2016 when Ibrahim Jadhran blockaded the eastern terminals and also terrorist attacks on a number of oilfields, it took months for the oil industry to get back to early-2013 production levels.

Comparison between production rates before and after reductions

The drop in output had been severe. Prior to it happening, production had been running at around between 1.1 and 1.2 million barrels a day. On 20 July, before force majeure was declared in regard to the Shahara field, it was 1.28 million b/d. Of that, Sharara accounted for 270,000 b/d.

On 29 August, three days after the general enforced cutbacks started, the NOC posted figures comparing the average production before and after closure. Over the three previous days, it had dropped to 985,979 barrels on 26 August, then 783,422 barrels the next day, and then 591,024 on 28 August. Thereafter output was estimated to be running at between 500,000 b/d and 550,000 b/d. Some companies fared worse than others; the picture was far from even. Akakus, Sirte, Harouge, Sarir, Agoco and Zallaf all saw production plummet, but to different degrees. On the other hand, Waha, which had recently become Libya's biggest producer, saw production reduce by just 15 percent over the three-day period. A couple of smaller companies actually saw production rise during the first three days of the general reduction.

Libyan oilfields: a long history of disruption

The enforced reductions fit in a history of oil production stops and starts, which in several cases have impacted on flows at wellheads. The past 13 years have seen a succession of them. The NOC faced a stoppage at the start of this year when protestors on 7 January forced the closure of the Sharara oil field.

That interruption resulted in the suspension of crude oil supplies to the Zawiya terminal. Prior to that, Sharara was seriously disrupted in July 2023 when local disputes forced operations to shut down. There have been many others at the field.

None of these, though, compare to what was the greatest blow to the Libyan oil industry, when Ibrahim Jadhran, ironically head of the regional Petroleum Facilities Guard, shut all crude exports from the east between 2013 and 2016. The then boss of the NOC, Mustafa Sanallah, bemoaned the fact that as a result of the shutdown, Libya had lost oil sales in excess of \$100 billion. The country had been forced to finance all its expenditures from its central bank reserves which declined to an historic low.

The recent six-week enforced cutbacks have again been painful for Libyan revenue streams, although the costs are still to be quantified. But it was not the disaster that befell Libya in 2013-16. Quite apart from the fact that this time gas production continued and oil output was curtailed rather than stopped, companies also continued to drill wells, upgrade equipment and generally get on with other operations during the period.

That can be seen as the reason why oil production managed to bound back so quickly and why it is now higher than when the crisis started.

THE NOC CHAIRMAN TALKS FINANCE WITH NEW CBL GOVERNOR

By Moutaz Ali

On 1 October, the new governor of the Central Bank of Libya, Naji Issa, was sworn into office by the House of Representatives in Benghazi and then flew to Tripoli to take over the bank's iconic headquarters, which he did the next day.



he first major Libyan figure to visit was the chairman of the National Oil Corporation (NOC), Farhat Bengdara . He went to the CBL building on 3 October to congratulate Issa on his appointment.

The talks, though, were not just about congratulations. They were also about CBL financial support for the NOC. More specifically, the two discussed the mechanisms to fund NOC oil projects needed to increase production and thus ensure Libya's financial security and to compensate for the loss of revenues resulting from the oil field closures, as well as for the decline in international oil prices.

The NOC and CBL are the two most important financial bodies in Libya. Both have cooperated over the years, with the NOC selling Libya's oil and gas worldwide and the CBL collecting the income via its wholly-owned Libyan Foreign Bank, and then processing it.

The NOC itself officially retains none of its earnings. It has no income for anything. Even staff salaries are paid by the CBL directly to individuals' accounts, as is the case with almost all other state institutions. In the past, not least during the Qaddafi era, this meant that all too often there were lengthy delays before the government-approved payments from the CBL for key development projects were made. That was even the case for paying the monthly wages.

During their meeting on 3 October, Bengdara asked Issa to boost the CBL funding for the NOC's oil development projects. Already in fact, on 10 July, 2024, the House of Representatives, when setting budgets for the governments in both Tripoli and Benghazi, had approved LD 10 billion for NOC development projects and a further LD 10 billion for investment specifically at NC7 concession in the Hamada oil and gas field.

However, as far as the NOC is concerned more funding is required to cover the cost of the many projects to increase production, indeed in some case simply to maintain production levels.

Money is being paid out on the NOC's behalf for salaries, running costs and development spending by the CBL. But the figure been decreasing over the past couple of years.



In 2022, in order to help increase production, special financial arrangements resulted in an agreement to give the NOC \$7bn (LD 34 billion) during the year. By the end of that year, LD 34.3 billion had indeed been spent by the CBL on the NOC's behalf, according to the CBL's own revenue and expenditure report published at the end of December 2022.

In 2023, however, the amount paid out for the NOC by the CBL halved to LD 17.5 billion. This year, it looks as if it could be even lower. According to the CBL's monthly report at the beginning of November, it spent LD 6.7 billion on behalf of the NOC for the period 1 January to 31 October. This compares to LD 8.8 billion for the same period in 2023.

Moreover, the amounts are not ringfenced for project development. For the first time, in its August 2024 report, the CBL showed that the figures also cover salaries for the NOC and its affiliates as well as running costs. The CBL figures published at the end of August for the entire first eight months of 2024 showed that of the LD 5.4 billion paid out on the NOC's behalf between 1 January this year and 31 August, just LD 1.9 billion, or 35 percent, had gone on development.

The NOC wants development funding paid out by the CBL to rise significantly. No figures have been disclosed but it is thought that it wants the amount to get back to at least the 2022 level.

CBL Payments for NOC until September 2024

(In millions of Dinars)

March	April	May	June	July	August	September
656	327	3 4 1 7	300	300	400	900



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NOC IT PLANS HAVE SIRTE OIL IN THE LEAD

By Moutaz Ali



One of the NOC's current goals is to have real-time information on production and operations at all oil and gas fields throughout the country. It wants its affiliates to digitise and transmit the data to its information centre at the NOC headquarters in Tripoli.

eading the field so far among the affiliates in being able to provide the data is Sirte Oil Operations.

It has pioneered the first digital control system in an oil company with the commissioning in September of its state-of-the-art control centre at its headquarters in Brega.

The centre will provide updated reports which can be used to help improve staff efficiency, decrease costs, enhance sustainability and increase production. According to Sirte Oil's chairman, Mustafa Hamad, the roll-out of the centre is a key part of the company's 2024 programme to digitalise all reporting operations.

The centre will have access to real-time information on all the company's departments in all its fields and to the industrial complex in Brega. It covers drilling, production rates, maintenance, safety and planning, pipeline flow and shipping. Production at the industrial complex will also be monitored digitally and included in the system.

Sirte Oil's move is what the NOC wants its other affiliates to copy, so that it can have a complete

picture of production or possible problems relating to production at any point in time.

Meanwhile, the NOC has also been making its own moves. It has opened a centre to synchronise real-time information on welldrilling operations at the oil companies.

"The real-time view will help us to follow and observe rigs' performances and enable us to take the right decisions at the right time on technical issues," said Faisel Milud, the NOC's head of drilling and wells maintenance.

The technology used is the Wellhead Integrity Management Systems (WHIMS).

The system provides an integrated, real-time view of all production and safety data for each wellhead in a field and, by relying on this, can contain risks and thus the cost of intervention in well incidents.

The NOC sees digitalisation as an invaluable tool in knowing what is happening in the fields at any point in time and so being able to make informed decisions about output or whatever support its affiliate companies may need.

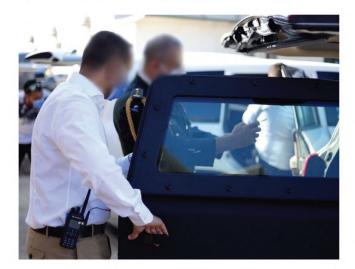
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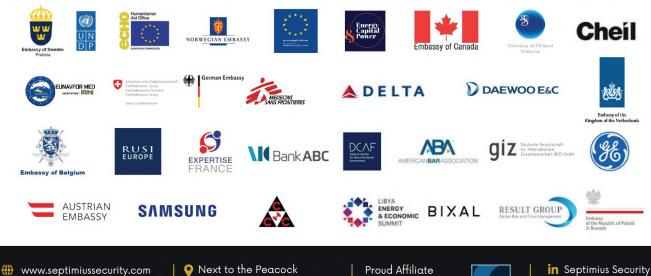
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NOC TO UNVEIL NEW CONCESSIONS ROUND

By Paul Grant



For the first time in almost 20 years, a new round of bids for oil and gas concession licences across the country is planned by the NOC in the next few weeks. Ahead of it, the NOC and the oil ministry are encouraging international operators to invest in Libya.

inal preparations for the new call were discussed by the NOC's directors on 6 October, with the team tasked with drawing up the tender programme presenting their proposals.

Details of terms and locations have not yet been made public but the Tripoli-based acting oil minister, Khalifa Abdul-Sadek, has been reported saying that onshore areas in the Murzuq, Ghadames and Sirte basins will be the prime focus. Significant offshore exploration licences are also expected. It is claimed, too, that areas previously awarded but never worked on will be re-offered.

It was no surprise then that a couple of weeks earlier, at the Gastech 2024 conference in Houston, Texas, on 17-20 September, Abdul-Sadek, who is also a director of the NOC, was actively promoting investment in the Libyan oil and gas industry and urging the multinationals to take part in the new concession round. "Libya is back and Libya is open for business," he declared. To encourage investors, he also made it clear that there would be fiscal incentives to operate in Libya.

The message that Libya is back and open for business was repeated by Abdul-Sadek on 29 October at the Italy Libya Economic Forum in Tripoli. He also made some important clarifications about new concessions as well as about NOC plans for the oil and gas sector.

He confirmed that the NOC production target is now 1.4 million b/d by the end of 2024, a figure he confidently expected to be reached, 1.6 million b/d by the end of 2025 and two million b/d by 2028. He also said that concessions will be classified according to the scale and nature of the exploration and production and be awarded accordingly.

The first type will be major concessions such as the A & E offshore platforms being undertaken by Eni. These will be awarded to major national or international exploration and production companies. However, the development of marginal fields and of brownfield sites where new technologies could result in closed wells returning to production could go to local Libyan companies provided they are in a joint venture with an international operator. Indeed, he indicated that Libyan private sector firms will be given priority in these smaller concessions as part of the policy to develop the private sector.

Abdul-Sadek also told the Italy Libya Economic Forum that whereas the oil and gas industry is currently divided into upstream (exploration, production and distribution) and downstream (hydrocarbon-based industries and refineries), in future it will be split in three areas of activity by separating distribution from upstream. It will become midstream.

It will result in the pipeline network and other infrastructure, much of which needs substantial maintenance work, being contracted out to separate oil services companies, national or international.

Investment, particularly in pipelines, many of which are in dire need of repair or replacement, has been a major NOC aim for some time. It has been estimated that at least ten percent of gas is lost because of pipeline leaks.

"We have a number of pipeline projects that are ready to go," he had stated at the earlier Gastech conference.

With investment in mind, Abdul-Sadek met a host of international oil executives, in particular American oil executives, during Gastech to impress on them the value of operating in Libya.

The last major series of bids for exploration

licences began in 2005. There were three rounds which took a couple of years to complete. In the first, US companies were awarded the majority of concessions, in the second it was mainly European companies that won out. In the third, at the end of 2007 when the focus was firmly on increasing gas production, concessions were awarded to Russia's Gazprom, Poland's PGNiG, Royal Dutch Shell and Algeria's Sonatrach.

"Libya is back and Libya is open for business"

Khalifa Abdul-Sadek

Sonatrach is still very much in the NOC's sights in the new round. At Gastech in September, Abdul-Sadek and his team had extensive talks with the Algerian company's CEO, Rachid Hachichi, and his group about Sonatrach undertaking new oil and gas exploration as well as renewable energy projects, training and oilfield services.

As in 2007, gas is also still very much in the NOC's and oil ministry's sights and, while in Houston, Abdul-Sadek had talks with the new CEO of Oman's Integrated Gas Company about investing in Libya.

Gas flaring was also in the minister's thoughts in Houston. He told the conference that the NOC intends to eliminate flaring by 2030. Given that firm declaration, while the details of the NOC's planned bid round are not yet known, it seems fairly certain that companies making an offer will have to include a commitment to zero flaring.

That goal of zero flaring was repeated at the Italy-Libya Economic Forum at the end of October both By Abdul-Sadek and by the GNU prime minister Abdulhamid Dabaiba.



OIL AND GAS: THE ITALIAN CONNECTION

By Michel Cousins

Libya plans to boost gas production to four billion cubic feet of gas a day within the next four to five years. Italy's Eni is already involved in 80 percent of the country's gas production. Its position will be strengthened with the development of the offshore Bouri gas field and the start of drilling in October at the concession in the Ghadames Basin. Italy's role in Libya production was in the spotlight in Rome in September.



n January this year, the Libya Energy & Economic Summit was held in Tripoli, for the second year in a row. Another summit is planned in Tripoli for January 2025 and, as a leadup to it, there was half-day gathering in Rome on 23 September.

Entitled "Libya-Italy Roundtables", it was organised by Energy Capital & Power in collaberation with the Italian-Libyan Chamber of Commerce, the Italian Trade Agency, the Rome Chamber of Commerce and the Italy-Libya Inter-Parliamentary Friends of Libya. It focussed heavily on Libyan-Italian connections in the oil and gas industry. In doing so, it showed how significant is Italian involvement in the sector.

Italy has been a major player in the Libya energy industry from the beginning, indeed even before the official start in the late 1950s.

In 1938, Italian explorer and geologist Ardito Desio was the first person to discover oil in Libya, but it was not viewed as being commercially viable. Things changed after the discovery of oil in neighbouring Algeria. In 1957, AGIP first applied for a concession. Two and a half years later, towards the end of 1959, it was awarded the 30,000-square kilometre Concession No. 82, in Cyrenaica.

For the last 65 years the energy relationship has been of paramount importance to both countries. Today, there is the Greenstream gas pipeline connecting Libya to Italy while Italian energy giant Eni, which absorbed AGIP in 2013, is the partner in onshore and offshore fields.

Figures for the first seven months of 2024 also show that Libya again became the biggest supplier of oil to Italy. According to the Romebased Energy Union for Mobility (UNEM), Italy imported 7.39 million tons of Libyan crude during the seven months, 22.3 percent of total Italian oil imports. That is a 28.6 percent increase over the same period last year when the biggest source of Italy's oil imports was Azerbaijan.

Italy has a very material hydrocarbon connection with Libya, the Greenstream gas pipeline from

Oil & Gas Production





Mellitah to Gela, Sicily. It symbolises the fact that, despite the size of Italian imports of Libyan oil, Libyan gas is possibly even more important as far as Italy is concerned.

However, the amount of gas going through the pipeline has been declining, even though Eni is involved, directly or indirectly, in 80 percent of Libyan gas production.

The decline has come about not just because the overall amount of gas being produced in Libya has decreased but also because Libyan domestic gas consumption is rising.

In February 2022, annual Libyan gas production was put at 24,400 billion cubic metres (861,678 billion cubic feet), eight percent less than the planned target. It was a daily average of 66.85 million cubic metres a day (2.36 billion cubic feet a day). In the first half of 2024, gas production was less than half that figure. In March this year, output was reported at between 30 million and 35 million cubic metres (1.06 billion and 1.24 billion cubic feet) a day.

Most of the gas produced goes to the power stations of electricity company GECOL.



According to Italian officials, just 2.5 billion cubic metres (88.29 billion cubic feet) went through Greenstream to Gela in Sicily in the past year, an average of 242 million cubic feet a day.

Inevitably, the development of the Italy-Libya energy connection, especially gas, was central to the Rome 23 September event.

The first session was almost entirely focussed on it, with Eni's head of North Africa and Levant region, Martina Opizzi, reeling off upcoming projects to be implemented by the Italian energy giant. The A & E project is being launched, gas production was expected to start at the end of 2026 and would produce up to 750 million cubic feet per day when fully operational, she said.

Opizzi also added that work would start "by 2025" on the Sabratha Platform Compression project which, she said, is expected to process 100 million cubic feet of gas per day.

Meanwhile, the Milan-headquartered multinational engineering company Saipem announced it had pre-qualified for the Engineering, Procurement, Construction and Commissioning (EPCC) works for the E structure platform.

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Saipem had already won the contract in July for supervision and subsea intervention services for Greenstream.

In truth, there was little new in the announcements.

In January 2023, in a much-publicised event and under the watchful gaze of Libyan Government of National Unity prime minster Abdulhamid Al-Dabaiba and his Italian counterpart, Giorgia Meloni, NOC chairman Bengdara and Eni CEO Claudio Descalzi signed their \$8-billion agreement to develop the A & E project and other hydrocarbon schemes. Likewise, just over a year ago, Italian engineering firm Antonini Group won the \$217-million contract for the compression unit.

Nonetheless, the announcements at the Rome event were important. The A & E project, the most important Libyan offshore development since 2000, will make a major change to gas production in Libya and to the amount going through Greenstream. Adding 750 million cubic feet a day to current production would bring the figure to some 1.95 billion cubic feet a day. It is still less than in 2022, but it is a massive 63 percent rise on current figures. It would also be



sufficient for domestic requirements and provide for increased exports to Italy and beyond.

The project, in the offshore gas fields in Contract Area D, covers the installation of platforms at two locations.

Structure A is in the central-western part of Area D, approximately 80 kilometres off the Libyan coast north of Sabratha, in water depths of between 95 and 105 metres. Structure E is in the central-eastern part of Area D, some





130 kilometres from the coast in water depths between 205 metres and 235 metres.

Also part of the project are 31 subsea wells. The platforms will be linked by pipelines to the Sabratha Platform, some 110 kilometres from the coast, and from there to the Mellitah complex.

What is important about Opizzi's statement is that, while it is not new, it confirms Eni's intent to launch the A & E project. There had been speculation that it was being delayed.

Equally important was Opizzi's announcement that onshore exploration in the Ghadames Basin would begin soon. In fact, it started at the end of October and is expected to result in yet further gas production.

The project, a joint venture with BP and the Libyan Investment Authority, had also been subject to speculation about delays. It is exactly five years since the BP and Eni signed an agreement with the NOC to resume exploration and production activities in Libya.

"Exploration remains a fundamental pillar of Eni's business," Opizzi told those attending the Rome event, adding that "we estimate that there is much more still to be discovered". Eni, she said, had "never stopped looking at Libya as a crucial region for oil and gas production".

At the Rome event, a considerable number of the speakers mentioned the importance of Libyan-Italian economic relations and the need to develop them. After all, Italy is, as Italian ambassador to Libya Gianluca Alberini noted, Libya's main trading partner, with annual trade in excess of €9 billion.

But at the event, the focus for Italy was hydrocarbons.

"It is necessary to invest and promote the growth of this key sector to help Libya overcome the current difficulties," the head of the Italian Libyan Chamber of Commerce, Nicola Colicchi, was later reported saying.

He was referring in particular to the involvement of Italian investors.

Italy's need for gas, for energy, and the business that goes with developing this, is a prime motor for Italian interest in Libya, with the A & E project acting as a new flagship for it.



DAHRA: THE DOYEN OF THE OIL FIELDS

By Mohamed Elhejaj



aha Oil Company is looking to improve and develop its fields to increase overall oil production and to maintain the record it set last July when it produced a total of 322,000 b/d, which Waha has understandably described as an historic achievement.

One of its fields is Dahra. It was the first commercially-productive field in the country, having been discovered in 1958 by Waha (or Oasis Oil as it was then called). Not surprisingly, many in the oil industry and those interested in energy in Libya sometimes refer to it as the Doyen of Fields (meaning the most senior of fields).

When production started, the field was producing 125,000 b/d. However, according to a field engineer speaking recently to *Libya Energy*, production in the first quarter of 2024 was running at a mere 5,000 b/d. This, he pointed out, was just four percent of the field's potential daily output. Moreover, he added, production had sometimes fallen to between 3,000 and 4,000 b/d.

Things had started to look up. The engineer noted that production had reached a high point in the second quarter of the year when it rose to between 9,000 and 10,000 b/d. However, the field lost 50 percent of this in the third quarter due to the many leaks, which need urgent attention. It is a problem the entire industry faces.

According to the source, technical teams are now working to increase production and overcome the third-quarter losses by no later than the end of this year, when they expect to have output back up to 10,000 b/d.

Even so, that is still down on the 25,000 - 30,000 b/d that Dahra was producing before March 2015. That was when it attacked by an ISIS terrorist group.

The assault left the entire infrastructure damaged and largely unusable. That included wells, pipelines, vehicles, equipment and buildings, including workers' accommodation. Office furniture was also stolen or vandalised, according to the source.

The oilfield then remained out of production for seven years. In 2017, work started, initially by maintaining what was there but gradually rebuilding or replacing and upgrading the infrastructure. In August 2022, Waha announced the success of the technical teams in a trial operation of the field and the start of production from its main PL5-1 plant. This was followed shortly afterwards by the relaunch of the PL7-2 plant.

But the frequent leaks and the poor state of the field have proved a challenge to Waha's ambitions to restore full output.

Nevertheless, the rebuilding of the facilities meant that Waha could run its first air flight for production workers on May 2023.

There are drilled wells ready for operation, according to the source, but the supply of field equipment has been a major issue. The engineer noted that four turbine generators were supposed to be installed in June, but the transport broke down. The source also spoke of delays in providing spare parts which has also affected the hoped-for rapid restoration of output.

This, according to the source, goes some way to explain why the Doyen of Fields is sometimes also called the Sad Field by some in the industry. Despite its 610 million barrels of proven reserves, it has struggled to recover from the 2015 terrorist attack.



But the second title may soon disappear. Waha is determined to boost output from Dahra in line with the NOC's plan to increase Libya's overall production to 1.6 million b/d by the end of 2025 and thereafter push production to two million b/d within four years.

A kindlier description may yet be picked, or simply have everyone go back to the honourable title of Doyen of the Fields.



LIBYA ENERGY WEEK IN CAIRO IN DECEMBER

By Michel Cousins

The NOC's growth plans over the next five years will be showcased at the 5th Libya Energy Week in Cairo on 3-5 December. It is the co-host of the event and participants will include a sizeable slice all its top management. These include the chairman, Farhat Bengdara, his senior advisor for upstream, Bashir Garea, board member for downstream Masoud Suleiman, the new head of investment affairs, Hisham Najah, director of gas Rida Elmodeer and the director of agreements and contracts, Ramadan Benshaban.

Also scheduled to take part in the event, organised by international energy industry consultants IN-VR, are numerous figures in the energy industry in Libya. These include the chairman of Jowfe Oil Technology, Khalid Omran Blaou El-Ferjani and OMV exploration manager in Libya Zarko Sever-Vitez. Also taking part are numerous international figures already linked to the Libyan oil and gas industry or interested in it. Altogether there will be 30 speakers at the conference and workshops over the three days. Some 300 attendees are expected.

Day One will see workshops on how to enter the Libyan energy market and on decarbonisation

and carbon capture, utilisation and storage (CCUS). Day Two will focus on upstream and midstream plans and Day Three on downstream, gas and new infrastructure requirements.

Subjects for discussion will include infrastructure projects, gas opportunities, diversification and policies on natural resources. There will also be reviews of recent developments involving Libyan oil companies including AGOCO, Mellitah Oil & Gas and Sirte Oil.

The organisers say that, as with previous Libya Energy summits, the event will not only be a platform on which the NOC's plans will be presented but also a networking event, bringing together the NOC, its affiliates, private sector players, local service companies, Libyan officials and international investors. The organiser promise some 50 one-on-one meetings with Bengdara and with the NOC team.

The event will also see a number of major announcements from the NOC, according the organisers, along with a Libya Energy Awards ceremony.





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News from the Fields

Akakus adds five wells in Sharara



Akakus Oil Operations announced on 7 October that it had completed the drilling of two development wells, Nos. A41H and A44, in the NC115 block in the Sharara field, west of Obari. Each has a produc-

tion capacity 3,500 b/d, making a total of 7,000 b/d. Initial results have shown that both wells contain high-quality hydrocarbon-source rock and reservoir characteristics. They are expected to enter into production in the near future.

A week later, Akakus announced that a further three wells were being brought on stream, increasing production capacity by a further 8,000 b/d. The wells are Nos. R-35, R-36 and B-51 at the oil fields, R-NC115 and B-NC11.

The expected total of all five wells is 15,000 b/d.

Akakus said on 20 October that output at Sharara was at 274,365 b/d. As a result of the new wells and others that are planned, it reportedly expects production at the field to soon exceed the field's previous capacity figure of 300,000 b/d.

Erawin field to link wells



Zallaf Oil officials met representatives from BaderOya Oilfield Services & Energy company at the oil company's Sebha offices on 9 September to review the project to link the wells in Zal-

laf's Erawin field. BaderOya is the contractor implementing the project.

Attended by members of Zallaf's management committee for engineering and projects, the project manager and other Zallaf officials together with representatives from BaderOya, the meeting dealt with setting out a clear work plan and defining responsibilities as well as discussing communication mechanisms and studying potential risks.

Construction of tanks at Messla



AGOCO's project to install two crude oil tanks at Complex 9 in its Messla field took a major step forward with discussions in Benghazi on 29 September on its speedy implementation. These took place

between, on the one side, AGOCO chairman Mohamed Ben Shatwan and the head of the company's management committee, Ibrahim Al-Ghamari, and Nabil Akhlifa of its engineering and construction department and, on the other side, Fathi Al-Saudi, director of Arena Libya. A letter of credit has been opened for the project.

There was also a second set of discussions the same day between AGOCO's engineering and construction department, which is supervising implementation of the project, and the technical team from Arena.

Mellitah reopens Abu Attifel well



Mellitah Oil & Gas has succeeded in restarting its well No. A-28 in Abu Attifel field.

Initial results show that it has a production capacity of some 1,820 b/d.

Nafusah Oil increases Hamada production



Oil production at the north Hamada field operated by Nafusah Oil Operations now exceeds 10,000 b/d, according to an announcement by the NOC.

The figure was set as the target rate for the first stage of the field's development. The field is located in Contract Area 47 of the Ghadames Basin.

Nafusah Oil is currently working on preparing the two other wells, A-1 and A-4, in order to bring them into production by the end of November. This which will result in total production of 14,000 b/d at the field.

AGOCO replaces pipeline



As part of its programme to update infrastructure and prevent output losses, AGOCO announced on 26 September that it has replaced the pipeline between the two wells, Nos. G244

and G274, in the Nafoura field. The old, corroded and dilapidated pipes were replaced with a new 600-metre long 3-inch line. The wells have been connected to the new line.

The works are part of a large programme to modernise and improve pipelines many of which have been poorly maintained for years.

Sarir Oil well has 3,000 b/d capacity



Sarir Oil Operations has completed drilling a new development well, No. B54, in the contractual area A91 of the Sarah field, itself in the Sirte Basin west of Awjila. In an announcement on 4 Octo-

ber, the oil company also said that initial tests showed a production capacity of 2,400 b/d. This is expected to rise to 3,000 barrels after the completion of final tests and the return of the field to full production.

The new well is the first in the Sarah field since 2013. It is also the first since the establishment of Sarir Oil Operations in late 2020 following the transfer of operations from the former concession holder, Wintershall.

A week later, Sarir announced that that it had carried out maintenance on four oil wells, two of which were now operating back at pre-existing production rates. The other two, Nos. B22 and B15, were reported to be each producing more than 1,000 b/d. Well No. B22 had been out of service for technical reasons ever since Sarir took over the concession from the previous operator.

Sarir also completed maintenance on three other wells without the need to use drilling rigs. The objective was to reduce production of associated water. The work resulted in oil output at wells Nos. B14, B24 and B46 increasing by 2,000 b/d.

Eni now drilling in Ghadames Basin



The NOC announced on 26 October that Italian energy company Eni had begun drilling its first well in the Area B concession (96/3) in the Ghadames Basin, some 650 kilometres from Tripoli.

Eni, which operates the area in partnership with BP and the Libyan Investment Authority, announced in September at the Libyan-Italian round-table event in Rome that it would soon start drilling.

The geological formations at the well are said to be promising and it is thought that the well contains both oil and gas. The NOC said that drilling is estimated to reach down to about 10,327 feet.

Postive results from Atshan well



The NOC reported on 22 October that it had reviewed the results of well tests in the Atshan concession in the Ghadames Basin operated by its affiliate Zallaf Oil, and that these were

encouraging. Results from well G3-1 nearby were said to be particularly promising.

New Nafoura extraction system



AGOCO announced on 6 October that it had successfully switched from using an industrial gas extraction system at its well No. G224 in the Nafoura field to one using the advanced "Sucker Rod"

system. Production capacity at the well was initially put at 600 b/d. At 10,000 feet, it is one of the deepest wells in the country.

Two weeks later, AGOCO said that it had completed work connecting two wells, K-7 and K-9 in the K area of the field to the pipeline network and that their production capacity was expected to be 3,500 b/d. It added that work was continuing to connect a further 11 wells.

THE SUPREMACY OF HYDROCARBONS: THE ALTERNATIVE VISION OF THE G.N.U. MINISTER OF THE ENVIRONMENT

By Michel Cousins

Clean energy is key to Libya's environmental and financial future insists the GNU's Minister of the Environment, Ibrahim Munir. The country has, he points out in an interview with Libya Energy, an enormous resource in the amount of solar radiation and large empty spaces in which to locate solar farms.



n the minister's view there are so many factors holding back the development of renewables, social and financial, and from both the public and elsewhere. There is even opposition to his ministry's environmental initiatives from a number of offical quarters. Getting people motivated and triggering action is an uphill struggle, he says.

Many countries around the world are shifting to different kinds of energy, he notes. "Every country has its own plans and policies on that." He recalls when visiting Greece seeing massive farms producing solar power. It should be the same in Libya he says. After all, he points out, the country enjoys great resources in solar exposure and a very small population.

But Libya also has abundant resources of oil and gas, an existing infrastructure to exploit them and an economic system based almost entirely on their continued production, indeed even on boosting it. For oil, the target is two million barrels a day by the end of 2025. That presents challenges, the minister points out. "Unfortunately, until now renewable energy has not been a major consideration in Libya", he says. There is even opposition from some officials. They do not really welcome a transition, "and sometimes even try to block proposals for renewable energy projects because it is not in their interest".

Challenges ahead

There is, though, one area where things are going to be different. Gas flaring is very much in the minister's sights and it is an area where he fully expects change. This is perhaps not so much because of the pollution the flaring causes, and there are complaints from communities living near sites where gas is flared, but because it is a wasted resource. The gas currently flared can be converted on site at oilfields to electricity which can then be fed into the power grid, enabling other gas to be sold and bring in revenue.

"For the sake in protecting the environment in Libya, we have to establish plans for how to use the associated petroleum gas for creating energy and at the same time protect the environment from emissions. We are cooperating with the National Oil Corporation (NOC) regarding this," Munir says.

His ministry is taking practical steps here, he explains. "We are now sending our representatives to many oil fields to make inspections and are now pressing oil companies to reach zero flaring."

As an example, he points out that ministry officials are in talks with Mellitah Oil about flaring. But the ministry has been looking to secure agreements with all oil companies on the issue. Moreover, there is, he says, a commitment in principle from them to end flaring.

As to whether there should there be more stringent monitoring of the oil and gas sector to ensure compliance with environmental standards, Munir notes that the ministry has been in discussions with the NOC about inspection visits to oil fields by the environmental police, which come under his ministry.

"We have already given them [the NOC] reports of pollution in the fields," he says, "alerting them in particular to pollution occurring close to areas of population". The pollution consists, in particular, of emissions of harmful gases and of sewage water.

The ministry will continue this, he says, because "the most polluted oil fields in the world are Libyan ones".

Change is slow

The move to renewable energy is slow and that is because so much of it, as Munir indicates, is all about money, specifically upfront investments. Referring to plans for a solar power project which will produce electricity going to Italy by undersea cable, he says that it is still just a project because it requires, as he put it, "massive investment".

He also points out that a move to electric cars, which is being seen elsewhere around the world, has not even begun to happen in Libya.

"I haven't seen any electrical car points in Libya so far and I think I've seen only one electric car", Munir says.

Recharging points are necessary but there is also the issue of persuading people to want to use electric cars, a desire which is not there at the moment. It is down to costs, he says. Most Libyans cannot afford to buy an electric car and currently there is absolutely no incentive to do so.



"Electric cars are gaining popularity in many thirdworld countries. However, Saudi Arabia and the Gulf states have not officially adopted them, despite their relatively high per capita income levels. The cost of electric vehicles remains a significant barrier for many, with the minimum price often starting around \$25,000 which is huge amount for Libyans, even those in the middle-income range like judges and university professors. They will find themselves unable to buy this kind of car."

Cost a factor

At present, the cost of an internal combustion engine car in Libya, invariably a second-hand import, starts at around LD 15,000 (around \$3,000 at the official rate). This and the extremely cheap cost of fuel in Libya, just 150 dirhams (just over two US cents) a litre, has resulted in the country's streets being overwhelmed by traffic. It is sometimes claimed that there are almost as many vehicles as there are people. Driving around in a petrol-fuelled car in Libya is part of a lifestyle.

Even at his own ministry, Munir says, not a single member of staff has transitioned to an electric vehicle.

"We have four hundred employees at the ministry's office. If a quarter of them started using environmentally-friendly vehicles, it would be an achievement in itself," the minister said.

The same goes for all other ministries and government organisations, he said. The authorities are not setting an example.



His ministry has, however, proposed that the government provide loans to staff interesting in buying an electric vehicle or even just a bicycle. "But it is a bit difficult to instil this lifestyle in the minds of Libyans".

There are proposals by governments in several industrialised countries to ban the sale of new petrol and diesel vehicles as of 2030, a move that is likely to end widespread production of such vehicles. But to Munir's mind this is simply not going to work in Libya.

Even so, his ministry has other ideas about energy use. The ministry has, says Munir, been talking to the Libyan aviation industry about a carbon tax on internal flights. So far, there has been no decision.

An uphill struggle

Munir speaks of a reluctance at all levels to embrace the environmental agenda.

"The ministry currently faces the most difficult times ever because the commitments and obligations of the ministry are very huge", but it is underfunded. There needs to "a very strong political will" for it to put into effect its plans and programmes. "But unfortunately we are neglected completely in the government's plans and projects. We receive a very tight budget which goes no way to carry out even small awareness projects."

Munir also points to an added problem: a shortage of skilled staff who can work on public awareness. "Our online presence is very weak due to the shortage of expertise and funding". Most of the ministry's activities, he notes, are in places away from the ministry buildings, but "the ministry doesn't own any vehicles or cars".

Environmental studies have been taught at Libyan universities since 1976, Munir explains, and the ministry has some long-standing staff whose expertise is "valuable and needed". But some of them are now nearing retirement and events over the past ten years have done nothing to attract new staff.

Another problem has been low pay. As with other government departments, those at the environment ministry have received salaries "which didn't cover 20 percent of their needs". Only since April 2024, he says, have things improved with a rise in government salaries. Given its importance, he says he is now looking at staff training and also at ways to encourage specialists to return to work at the ministry.

Nonetheless, Munir is committed to altering the revenue balance in Libya and the hydrocarbon-dependent lifestyle.

"As a principle, we have to go for the clean energy", he says.

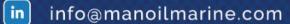


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GREEN HYDROGEN: LIBYA'S QUEST TO ENTER A NASCENT ENERGY MARKET

By Majd Gannud

Countries around the world have been casting around to find alternative sources of energy to replace the environmentally-damaging carbon emissions from traditional fuels.



ydrogen fuels, which can be produced from natural gas, biomass or nuclear energy are seen as one answer. Grey and blue hydrogen are by-products of fossil fuels but green hydrogen is made when hydrogen particles are separated from water using electricity derived from renewable energy sources, such as solar and wind, that create no carbon emissions.

Potential for low-cost green hydrogen production

In June 2022, an International Energy Agency (IEA) report noted Africa's enormous potential to produce green hydrogen using its rich renewable energy, qualifying it to become a major hydrogen player. It estimated that Africa has the ability to produce five billion tons of hydrogen annually for less than \$2 a kilogram.

The report singled out certain areas as being even cheaper. It predicted that hydrogen produced in North Africa from natural gas could by 2030 cost \$1 per kilogram. Libya is one of the places with the potential for particularly lowcost production, along with Egypt, Sudan and Chad.

Libyan endeavours to start hydrogen production

At the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) in November 2022, the NOC chairman, Farhat Bengdara, confirmed the corporation's commitment to reducing harmful emissions to protect the environment and build a more sustainable future. During the conference, he highlighted Libya's immense potential to transition into renewable energy.

Four months later, in March 2023, the Tripolibased prime minister, Abdulhamid Dabaiba said in a speech on the sidelines of the second Libyan-German Economic Forum in Tripoli that his government had "opened the door to investment in the field of energy", and it had decided to enter the field of green energy. He likewise described Libya as "possessing everything in this field". More specifically, the head of Libya's Centre for Solar Power Research and Studies, Yousef Alnass, has said that Libya will indeed launch a national green hydrogen project. It will have a research station south-east of Misrata dedicated to producing the hydrogen. This will be under the supervision of the Libyan Authority for Scientific Research in Tripoli. It will be the first research project in the country on the production of green hydrogen and its applications.

Do the ambitions align with the available capabilities?

Energy academic researcher Rami Al-Misrati has warned that investing in green hydrogen production requires huge logistical capabilities which are not currently available in Libya.

He explained: "hydrogen requires pressure that is about 80 times greater than the pressure of liquid gas, and its storage requires the availability of very low-temperature warehouses." He stressed that these facilities do not currently exist in Libya and that building them would require a huge budget.

Al-Misrati adds that Libya also completely lacks wind and solar energy sources, which are the basic elements for the electrical energy needed to produce green hydrogen.

"So far, there is no solar energy station, and even the wind station that was established in the Al-Fataeh area in Derna has been out of service since 2011," he notes.

Investing in clean energy

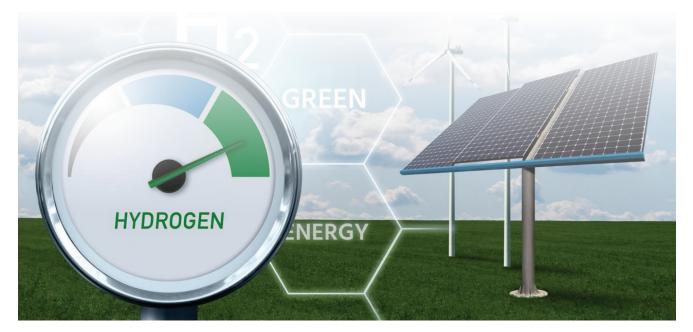
Developping renewable energy in Libya has been slow. In June 2022, the Renewable Energy Authority of Libya (REAoL) signed an MoU with W Solar Investment, a subsidiary of the UAE's Alpha Dhabi Holdings to build a 500 MW solar park to export electricity to Europe. Output should eventually rise to 2 GW. But the project is still on the drawing board.

The same month, the General Electricity Company of Libya (GECOL) announced plans for a 500-MW solar park in cooperation with the Renewable Energy Authority of Libya (REAoL) and France's TotalEnergies at Sadada near Misrata. The plan is that it will generate up to 152 TWh per year.

In April 2023, it was announced that work was starting. Again, since then, progress has been slow.

Yet as part of REAoL's Energy Plan 2023-2035, Libya seeks to produce 4,000 MW, with an initial 1,700 MW by the end of 2026, and thereafter 900 megawatts by 2030 and the remaining 1,400 MW by the end of 2035.

The plans should open the door to the substantial production of cheap green hydrogen in Libya. REAoL has made clear its commitment to developing green hydrogen as an environmentally sustainable feedstock for fuel. However, what is needed first is an abundant supply of renewable energy.



LIBYAN EXPRESS: AVIATION SERVICING THE OIL & GAS INDUSTRY

By Michel Cousins

Aviation is a crucial lifeline for the Libyan oil and gas industry. Without aircraft flying oilfield workers and management from Tripoli, Benghazi and Misrata to the all-too-often remote oilfields, the industry would grind to a halt. The country is too big and fields too dispersed to rely on road transport. It is too slow.



rom the industry's beginnings in the late 1950s, aviation has been an integral part of oilfield operations, every bit as important as surveying or well drilling. Some companies, such as Waha, at one point even maintained their own fleet of aircraft to service the fields.

Today, that is no longer the case. The work is contracted out to aviation companies specialising in servicing the oil industry, usually on a charter basis, but not entirely.

One of those operators is Libyan Express. From its start in 2021, this private company headquartered in Tripoli has grown in just three years to become one of the leading players in the oil industry aviation sector.

Operating two Boeing 737s, with a third due to be delivered shortly, plus two Beechcraft King Air 200 turboprops, a Let 410 capable of carrying up to 19 passenger and an ATR 42 also recently delivered, collaboraton with the oil industry is a key part of the company's business. It operates two to three flights a day for oil companies, "sometimes more" notes a Libyan Express official.

It provides regular flights for Waha Oil to Sidra and the Waha, Gialo and Samah fields from Tripoli's Mitiga airport. For Mellitah it flies to the El Feel, Wafa and Abu Tiffel. For SLB (formerly Schlumberger), it flies to Zueitina.

Libya Express also provides flights for the NOC's PetroAir, currently without any serviceable aircraft because of damage sustained during and since the revolution, servicing its clients, Sirte Oil, Akakus, Zallaf and Zueitina Oil. That means flying to Brega from Tripoli, Benghazi and Misrata, to the Sharara field from both Tripoli and Benghazi, and to Zallaf's Erewin field and to Zueitina's fields.



Even so, a significant number of passengers who are not in the oil and gas industry also fly on Libyan Express flights, booked as and when they are required. These include VIPs, the sick and injured needing the Libyan Express flying ambulance services, and football teams, in particular the Libyan national team but also even Tunisian teams playing abroad.

The airline has taken the Libyan national team as far away as the Cape Verde Islands and most recently to Abuja, for the qualifiers for the 2025 African Cup of Nations which they lost 1-0.

With over 200 staff, Libyan Express is meanwhile developing in other directions.

It has started regular commercial flights, beginning with a Tripoli-Ghat route on 18 October, to be followed soon by Tripoli-Benghazi and Tripoli-Tobruk flights.

Final security and safety checks at Ghat were undertaken in late September. Such checks, says Libyan Express' general manager Ali Alderrat, are an essential part of company practice. It will not start operations anywhere without first dispatching an audit team to assess the runway, security and safety, local staff capabilities and other necessary aspects of the airport, he says.

At the same time, the Libyan Express commercial department is reported busy at the moment preparing to fly to Europe, using European-registered aircraft which the company expects to receive soon.

More significant for Libya, though, is the project to set up an aircraft maintenance centre at

Misrata airport by Horizon Tech, in which Libya Express in the main partner.

The project has been in development for the past two years and due to open early next year. It will be the first privately-owned aircraft maintenance facility in Libya. It will deal mostly but not exclusively with Boeing aircraft, and is expected to handle not only Libyan planes but those from other African countries as well.

However, Alderrat points out that while Libyan Express intends to grow and become a major player in the Libyan aviation industry, it also intends to hold on to its oil industry base, and grow it.

NAFOURA AIRPORT REOPENS

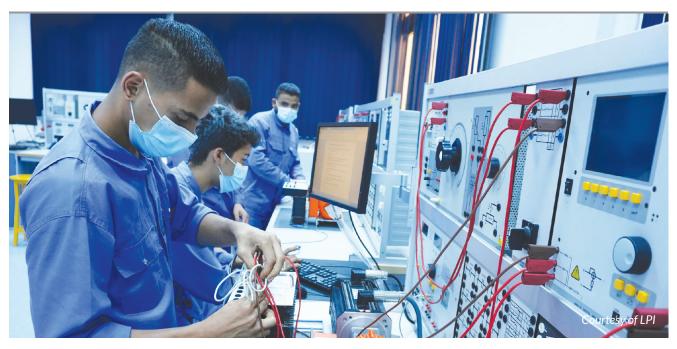
GOCO's Nafoura oilfield airport was reopened on 14 October. The airport, southwest of the Jalu oasis town of ljkharrah, closed on 1 June for what were initially planned to be three months of maintenance and upgrading. Flights were transferred to the Jalu field airport 80 kilometres further south. Work included repairs to the airport runway and aircraft parking areas where cracks had appeared. The runway was also repainted and new remote-controlled lighting installed.

The reopening, which followed an inspection by the Civil Aviation Authority, was carried out by AGOCO's chairman, Mohamed Ben Shatwan. Regular use started the next day with the first passenger flight in four and a half months.

THE LIBYAN PETROLIUM INSTITUTE: CREATING QUALIFIED OIL WORKERS

By Majd Gannud

Working in the oil and gas sector is the ambition of a large number of Libyan youngsters. The industry offers many job opportunities, a conducive environment for those seeking to develop their skills and the chance to progress in their careers.



raining Libyans for the oil industry is all the more important given that for the past 65 or so years it has depended heavily on foreign oil expertise.

Oil production began in 1961, three years after its discovery. Since then, decision-makers have sought to localise the workforce in the field. That first resulted with the establishment of the Petroleum Institute in August 1970, with its headquarters in Tripoli and directly affiliated to the oil ministry.

Founded to meet sector needs

Since then, the institute has graduated over 50 annual batches of students. Today, oil graduates account for more than 70 percent of the trained technical workforce in all the various Libyan oil companies.

The government relies in particular on the institute to train and graduate would-be oil engineers who are fully aware of the latest developments in the energy sector worldwide. It works on two important tracks:

- Localising jobs in the oil and gas sector;
- Localising the manufacturing of oil equipment within Libya.

Growing demand for enrolment

The institute has a high intake of applicants every year. The number usually exceeds 5,000, of whom only 250 to 300 are accepted. There are 15 local committees across the country who interview and decide whether to accept candidates. That acceptance is based on the needs of the oil sector.

The institute, which at present admits males only, requires applicants to be at least 16 years old and no older than 18, be Libyan nationals, have a school certificate with a general grade of at least 'good' and have a score of no less than 65 percent in both science and mathematics.

They must also successfully pass written entrance exams and a personal interview, prove their physical

fitness in a medical examination and agree to undergo training and study at any location designated for them. The applicants must also agree to work at sites assigned to them after graduation.

Fields of study: Operations department in the forefront

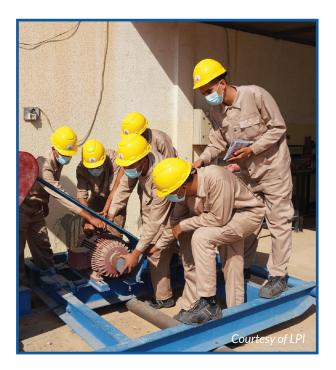
The institute provides a number of specialisations, primarily operations, mechanical and electrical maintenance, health, safety and the environment.

The operations department includes three drilling sections. It is considered one of the most important as it qualifies students to work as assistant drillers capable of handling equipment including various types and sizes of bits, pipes and drill strings.

The operations department was set up to meet the need for qualified local technicians to replace foreign technicians who previously dominated most aspects of technical activities in the sector.

Graduates from the department are capable of operating all production and manufacturing equipment in the fields and refineries. They are trained to identify and solve any operational problems or, just as importantly, to prevent them arising in the first place.

The production department, established in 1974, is one of the most important. It trains students for work in the oil fields and terminals. It produces students who can monitor the movement of crude from underground reservoirs to storage tanks, including



measuring the pressure and temperature of wellheads, and monitor the separation and treatment processes of crude to ensure compliance with international standards and specifications.

Technical departments: Vital specialisations at the heart of production processes

The mechanics department is also a key unit at the institute. It was established to meet the industry's need for general mechanical maintenance technicians dealing with all types of machinery including pumps, compressors and valves, all of which are essential at fields and oil refineries.

The maintenance field also includes a specialised electricity department to train students to maintain and operate generators and electric motors. There is also the refrigeration and air-conditioning training department. In 2010, the precision instruments and electronic maintenance sections were merged to become the precision instruments department.

Years of study from admission to the fields

Students at the institute study for three years, focusing on the various specialisations. This includes lengthy training in workshops, laboratories, fields and ports.

The student is required to complete a total of 33 subjects, the first of which covers ten courses. In his second year, he then transfers to a department based on his grades and preference. Here he undertakes 12 courses. The third year focuses on specialisations, plus practical visits to the fields, and includes 13 subjects. The classroom training takes place during 36 weeks over the three years.

The three-year journey

Like most students at the institute, Salah al-Ghariani, is not from Tripoli. He resides in one of four buildings that can accommodate 700 students.

He said that the institute provided them with all necessities including three main meals daily, snacks and even entertainment. It also covers their travel expenses. Additionally, each student receives a monthly allowance.

For many of the institute's students, the three years, often far away from home, can be challenging. But at the end of it, the trainees are qualified to work straight away in oil fields and terminals, and the doors for them to do so are wide open.

SIRTE OIL TAKES EYE SPECIALISTS TO BREGA

By Moutaz Ali

Over three days at the end of September, a team of eye specialists from Tripoli carried out a total of 225 operations on patients at the hospital in Marsa El-Brega, some 800 kilometres away on the Gulf of Sirte. The team, made up some 37 specialists and nurses from Tripoli Eye Hospital, also conducted around 2,500 eye tests.



he entire operation, named Nur Libya Ophthalmology Caravan, (*Nur* in Arabic means Light), was done entirely free of charge, not just for Sirte Oil staff but also for members of the public in the area served by the hospital. The first of its kind to Brega, the visit by the eye specialists was organised by the NOC and its affiliate Sirte Oil Operations, which has its headquarters in oil terminal town.

It was, though, just the latest in a long series of health initiatives organised by the NOC or its affiliates which have seen medical specialists undertaking visits to smaller hospitals around the country.

One of the patients to benefit from the visit revealed that, before it took place, he had thought that his eyesight was fine. Nevertheless, he and his wife applied to be tested. It was just as well. Both he and his wife ended up having cataract operations, he wrote in a thank-you letter to the team.

At a ceremony organised by Sirte Oil at the end of the visit on 29 September Dr Rania Alkhoja, the manager of Tripoli Eye Hospital who led the Brega ophthalmology caravan, said that the exercise had been a success and indicated that she would be back.

"Our trip to Brega was relatively short this time, but I hope this will not be the last. We promise to return shortly." She also said that she appreciated the welcome she and her team had received from staff at the hospital and working with them. "We hope to receive them as well in Tripoli," she added.

She also thanked the NOC and Sirte Oil for making the visit a success. Sirte Oil's acting chairman likewise congratulated the eye specialists, noting that in his 25 years with the company, it had been a unique initiative.

This was not the first time that the NOC had collaborated with the Tripoli Eye Hospital.

In August, the NOC presented it with six sets of eye-testing equipment, three for use at the hospital and three for outreach visits to patients in different parts of the country.

The Human Angle

The NOC has its own healthcare programme which provides medical coverage including equipment and medications to outlying hospitals and clinics. It also deals with emergencies or natural disasters. On 15 September 2024, the NOC dispatched a medical convoy to Sebha hospital after exceptionally heavy rains flooded parts of the city, including the hospital itself.

Nor is the NOC's medical outreach limited to dispatching supplies or teams of specialists. In March 2023, it announced that it was taking over supervision of the 120-bed general hospital in Obari. The hospital, which provides treatment for locals in the surrounding area, had been struggling because of dwindling numbers of staff, of equipment and medications.







Last June, in a deal with the health ministry in Tripoli, the relationship was formalised and the hospital was taken under the umbrella of the NOC's Oil Clinic in the capital. It resulted in the NOC sending specialist medical teams, including midwives, obstetricians and gynaecologists, orthopaedic surgeons and dermatologists, to the hospital along with medical equipment and medicines. A team of technicians was also dispatched for maintenance work.

For its part, Sirte Oil continues to develop healthcare facilities for its staff. On 6 October, it announced that new equipment at its Family Clinic Laboratory was capable of processing 400 blood samples a day, each being done in less than an hour. This would, Sirte said, enable doctors to diagnose company patients more accurately and more quickly.

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The magazine publishes well-researched articles about planned developments and those being achieved in the Libyan oil and gas sector and in the field of renewable energy as well as accurate and authoritative information and statistics.

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SIVAM LONG STROKE HYDRAULIC PUMPING UNIT Increase oil production in sucker rod systems

Using a SIVAM long-stroke hydraulic pump in sucker rod completions allows for a significant increase in oil production. The long stroke enables a reduced pumping speed, allowing the system to achieve greater downhole efficiency. When compared to a conventional system, the production increase can range from around 20% to 30%, and in some cases, even double the production.



The long stroke, combined with the low pumping speed, will reduce friction and wear on the sucker rods against the tubing walls. This helps preserve the integrity of the system, extending its lifespan



and reducing the number of interventions required for fishing damaged sucker rods and replacing the entire sucker rod string.The long stroke allows for better management of deviated wells and those with a high Gas-Oil Ratio.

Desert applications



SIVAM's hydraulic pumps are designed and manufactured to operate in extreme desert environments, with temperatures exceeding 50°C. The hydraulic pumps and cylinders can easily withstand sandstorms as well.

Without a gearbox, Sivam's hydraulic units have no depth limitations imposed by the machine. By setting the downhole pump closer to the formation, the amount of free gas inside reduced, the tubing is for allowing better management and increased production in wells with a high GOR.



No depth limit



A team of specialists is always ready.

By Bronsi Petroleum info@bronsi.ly

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Marathon 550

THE TOUGHEST UNIVERSAL HIGH BUILD EPOXY PRIMER FOR ALL AREAS DOWN TO ST2. ENGINEERED FOR FASTER PRODUCTION.

PRODUCT

Marathon 550 is surface tolerant for early immersion, and can be applied on damp surfaces. It is high build and abrasion resistant, low VOC and made for efficient application.