

A Gulf Intelligence

Special Report

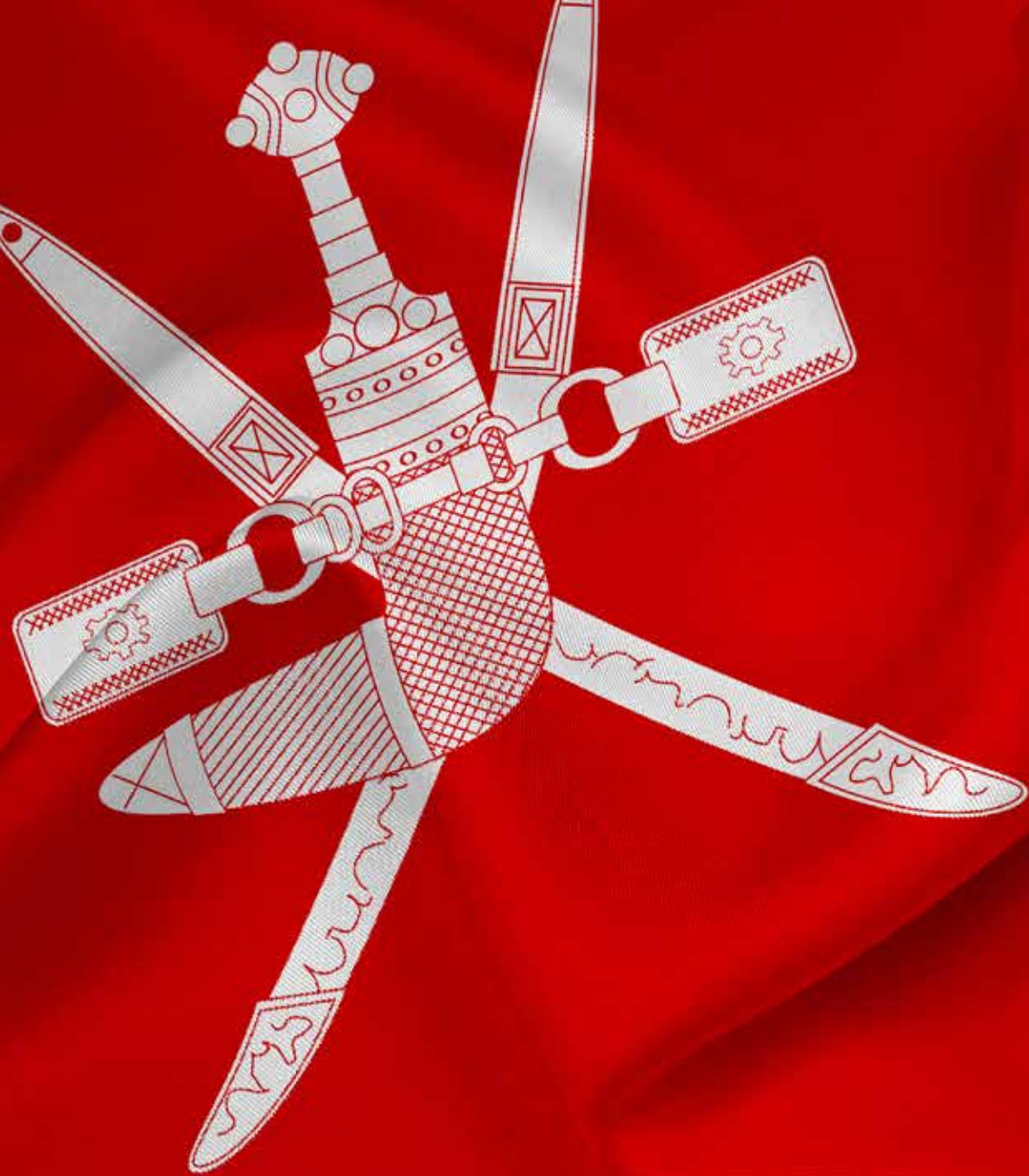
2015



Oman

***How to Build a National Labor Force
for 21st Century Energy Industry?***

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Q&A with HE Dr. Mohammed Al-Rumhy, Minister of Oil & Gas, Oman

SEAN EVERS (SE): What is the most problematic factor for doing business in Oman?

The highest vote was 36 percent on inefficient government bureaucracy; restrictive labor regulations received 24 percent of the vote, followed by inadequately educated workforce.

Your Excellency, is there anything about this result that surprises you?

DR. MOHAMMED AL-RUMHY: Not really. I would have thought Restrictive labor regulations maybe would be a bit higher than 24 percent.

SE: While private sector establishments account for over 60 percent of Oman’s labor market, only about a third of Omanis are currently employed in the private sector. Which of the following initiatives should be taken in order to increase local private sector participation throughout the country’s labor market?

Inevitably, the answer to this probably is “All of the above.” What do you think of the result Your Excellency?

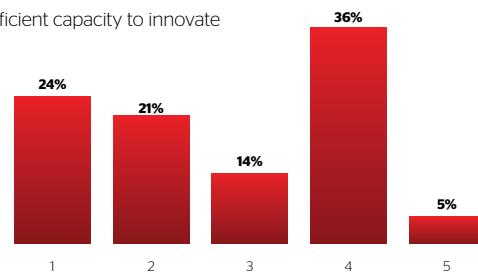
DR. MOHAMMED AL-RUMHY: I think that’s wrong because the assumption is most Omanis are going into the public sector and they don’t have any skills. And the assumption is that the public sector takes anyone, whether they have skills or not doesn’t matter, we just fill up the numbers. And I don’t think that’s necessarily true.

Before you put up the results I would have thought number 3 -- decrease public sector benefits -- would receive the most votes. At the moment the public sector benefits are very attractive, and they are not just material -- less hours, close to home and comfortable environment. It’s also the job security benefit. If you go to a government job, you’ve got almost a job for life. So a number of our youth, unfortunately, go for that.

But in the private sector things are toughening up a little bit and I think that’s where the problem is, more than the need for vocational training programs. The private sector is not failing to recruit, but the desire to work in the private

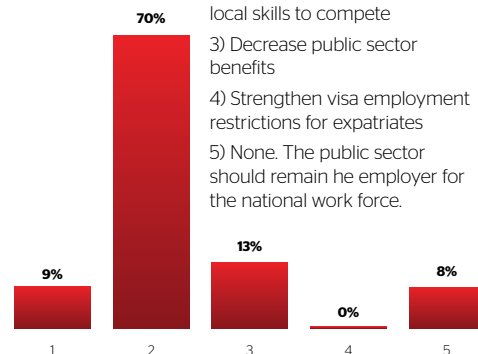
What is the most problematic factor for doing business in Oman?

- 1) Restrictive labor regulations
- 2) Inadequately educated workforce
- 3) Insufficient productivity amongst national workforce
- 4) Inefficient government bureaucracy
- 5) Insufficient capacity to innovate



While private sector establishments account for nearly 60% of Oman’s labor market only about a third of Omanis are currently employed in the private sector - Which of the following initiatives should be taken in order to increase local private sector participation throughout the country’s labor market?

- 1) Increase the minimum wage for the private sector
- 2) Invest in vocational training programs in order to upgrade local skills to compete
- 3) Decrease public sector benefits
- 4) Strengthen visa employment restrictions for expatriates
- 5) None. The public sector should remain the employer for the national work force.



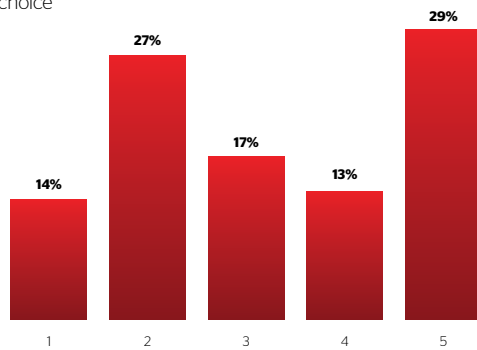
sector is declining. It's not that people want to work and then they're rejected because they're not skilled. The Omani youth are rejecting applying to the private sector before we even determine whether they're skilled or not. They reject it, I think, in my opinion, because of the attractive public sector benefits available in government jobs.

SE: Out of 148 countries, Oman ranked 139 in the latest World Economic Forum Global Competitiveness Report for women in labor force ratio to men.

Your Excellency, What do you think is the main reason for this low ranking?

Out of 148 countries, Oman ranked 139 in the latest World Economic Forum Global Competitiveness Report for 'Women in labor force, ratio to men' - What is the main reason for this low ranking?

- 1) Gender stereotyping
- 2) Lack of encouragement and support from family
- 3) Skills don't match economy's needs
- 4) General lack of infrastructure to accommodate female employees
- 5) Own choice



DR. MOHAMMED AL-RUMHY: I think we have to question what definition was used in this World Economic Forum study. It's like the definition of an unemployed person: somebody who wants to work but cannot find a job.

This result looks wrong to me. I suspect this study is using the whole population and not just those women who are looking to work. I think comparing Omani women who work versus Omani men who work is incorrect in my opinion. The proper way of doing it is to really determine women who want to work but cannot find a job, and then come up with these ratios. Because I think we're doing very well in terms of hiring women.

I'm disappointed with these statistics, to be honest with you. Not the results. The results are probably fair. But we are 139 out of 148. That's probably a little bit on the wrong side. We are not in the top ten, of course. But, I would say at least we are halfway in the league table.

SE: Social licenses only function if they are not just intangible and informal, but legal requirements in a country. Should Oman make the concept of social license a legal requirement as part of a broader regulatory framework?

Before we bring up the answers, what are your thoughts on that question?

DR. MOHAMMED AL-RUMHY: I don't like to use legislation on issues like this. Social License is really in the eye of the beholder, if you like. And I think when you start to play around with law then it's probably going to work against you. I think we need to campaign. We need to convince, particularly the private sector, that a social license

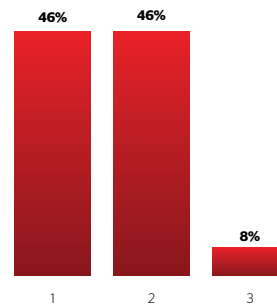
is good for business. It's not a charity concept. And that is the misconception that I see in many organizations. I think a social license, and the case studies that we have seen in some of our organization proves that actually, it's good for your business if you are good in your social contribution, social activities.

SE: Your Excellency, how would you characterize the success of Omanization in the oil and gas sector?

DR. MOHAMMED AL-RUMHY: I think we've been very successful, so much so that others are trying to find out

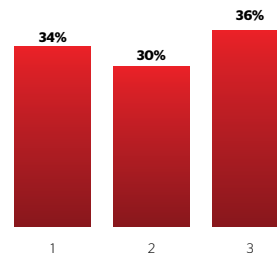
'Social licenses' only function if they are not just intangible and informal but legal requirements in a country - Should Oman make the concept of 'social license' a legal requirement as part of a broader regulatory framework?

- 1) Yes, and sooner rather than later
- 2) No, it's a waste of time and energy
- 3) Not sure, what is a 'social license' anyway?



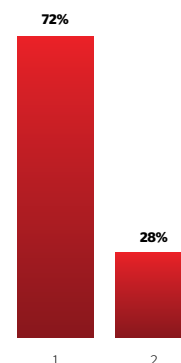
What should be the priorities for international companies operating in Oman's oil and gas sector as part of their 'social licenses to operate'?

- 1) Local content development
- 2) Engagement with communities
- 3) Applying technological and operating best practices



Getting international companies to operate with a 'social license' is as or even more important than the foreign investment that they make in a country?

- 1) Agree
- 2) Disagree



SPECIAL REPORT

why we've been successful. We are producing not only numbers, but we're producing leaders now. And, if you look around in the country, chances are that the leadership is coming from the oil and gas sector. So we produce quality as well as quantity in terms of percentage of Omanization.

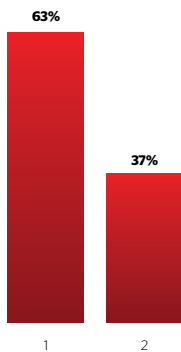
SE: Your Excellency, What do you think of the perception that the biggest obstacle for young Omani job seekers and a major challenge for the energy companies is the growing mismatch between higher education institutions and the skills required in the labor market?

DR. MOHAMMED AL-RUMHY: I don't think it's necessarily true. I think if you talk to, forget about the national companies, like PDO, Oman LNG and others, but if you talk to foreign companies like Schlumberger or Halliburton, Weatherford, they've been very successful in the recruitment of Omani talent. As a matter of fact, at least this is what they tell us, Omanis are taking most of the regional graduate positions which were supposed to go to Kuwait, Saudi and the Emirates and others – the IOCs tell me they find the quality here in Oman and the desire to work for multinational oil companies are much better than our neighbor.

SE: Given Oman's long-term energy demand outlook, if you look as far out as 2100, will Oman have to introduce coal and nuclear power to its energy mix -- Your Excellency, has there been any change in outlook on these matters?

Given Oman's long-term energy demand outlook, will the Sultanate have to introduce coal and nuclear power to its energy mix?

- 1) Agree
- 2) Disagree



DR. MOHAMMED AL-RUMHY: I don't think the dial has moved on nuclear and I don't think it will move. Who knows what will happen in the year 2100. I can't even pronounce it, let alone think about it. But, yes I would include coal in the energy mix, and renewable will also be there. And, I think, there will still be a contribution from hydrocarbon in the year 2100.

SE: If you think about the development of nuclear as we are seeing in the UAE, five nuclear power plants under construction, would you see it as a possibility that if and when they may consider exporting electricity that Oman could be a customer?

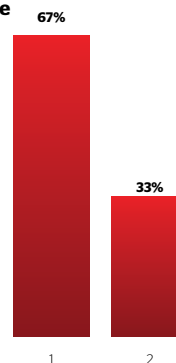
DR. MOHAMMED AL-RUMHY: Perhaps. We have a grid system in the GCC. Through the grid, we are legally obliged to link ourselves with the UAE. There is a southern GCC and northern GCC, and the southern is us and UAE.

It's inevitable that those kilowatts from those five plants may end up lightening our bulbs here. In the year 2100 we may see something different because nuclear power itself is going to change, I'm sure, after 80 years from now. But I think as it is now, I don't think the UAE will increase the capacity of its nuclear power plants.

SE: GCC states wouldn't need nuclear power if they had a coherent joint energy strategy and committed to investing jointly in large-scale renewable projects -- Agree? Disagree?

GCC states wouldn't need nuclear power if they had a coherent, joint energy strategy and committed to investing jointly in large-scale renewable projects - Agree?

- 1) Agree
- 2) Disagree



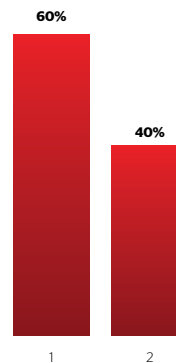
DR. MOHAMMED AL-RUMHY: I disagree.

There are alternatives. I was pleased to hear that Dubai is thinking of coal. I think there is room to introduce renewables, particularly solar. I don't think there's a need to go nuclear in the GCC. Perhaps we should all take note when energy deficient countries like Japan and Germany are moving away from nuclear and they have the know-how and experience.

SE: Oman will have to give up LNG exports when their supply agreements expire in 10 years from now to meet domestic requirements – Agree or Disagree?

Oman will have to give up LNG exports when its supply agreements expire more than 10 years from now to meet domestic requirements - Agree?

- 1) Agree
- 2) Disagree



DR. MOHAMMED AL-RUMHY: Probably Agree. You know, I think this is a very philosophical discussion, because if we look at the European model, particularly countries around the North Sea, you see countries that export gas, import gas, export electricity, import electricity. It's just a commodity.



“ I don't think there's a need to go nuclear in the GCC. Perhaps we should all take note when energy deficient countries like Japan and Germany are moving away from nuclear and they have the know-how and experience.”

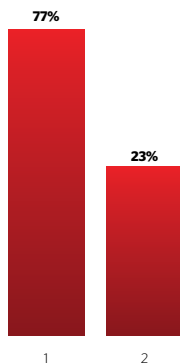
And there's no harm in exporting and importing. And I think 10 years from now, maybe we will mature as a region enough for us to be able to export LNG so we don't have to decommission the LNG plant and import something else. At the moment it's either/or.

And this is what is bothering us. And I hope, 10 years from now, our mentality, our mindset, will be different to start thinking about business rather than strategic planning, which we are obsessed with right now. So I don't know but the 60-40 split is probably reasonable.

SE: Tight and shale gas developments have the potential to become a real game-changer for Oman just as it did in the U.S., agree or disagree?

Tight and shale gas developments have the potential to become a real game changer for Oman, just as it did in the US - Agree?

- 1) Agree
- 2) Disagree

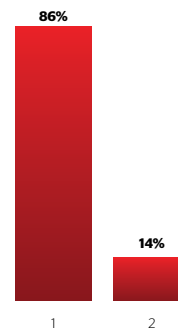


DR. MOHAMMED AL-RUMHY: Well, the potential we are told is good. The potential of these unconventional resources, shale gas, shale oil, are supposedly available in many countries. But we have not seen yet the success that was achieved in the United States replicated in other places for many reasons. Now whether Oman will be able to overcome these obstacles, which for example is stopping China, one of the countries that supposedly has huge deposits of unconventional, from being successful. But it's not working so far. We think Oman will work. We have many challenges. But time will tell.

SE: As Oman is building up its expertise in the area of unconventional gas developments in partnership with international partners, it has a unique opportunity to become a technology center, a center of expertise for unconventional gas development – Agree or Disagree?

As Oman is building up its expertise in the area of unconventional gas developments in partnership with international partners, it has a unique opportunity to become a technology center - Agree?

- 1) Agree
- 2) Disagree

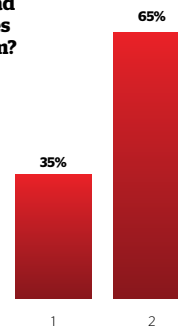


DR. MOHAMMED AL-RUMHY: Agree of course!

SE: Shale and tight gas developments rely heavily on water, a resource that's in short supply in Oman -- will this prevent the widespread development of these resources in the long-term?

Shale and tight gas developments rely heavily on water, a resource that's in short supply in Oman - Will this prevent the widespread development of these resources in the Sultanate in the long term?

- 1) Agree
- 2) Disagree



DR. MOHAMMED AL-RUMHY: I think there are many factors in order to be able to answer this scientifically correct. But probably my answer will be No. But if the oil price, oil and gas price, really declines, this will be a big source of discussion. But if the oil price is quite high, over \$100, no one will worry about water -- we will be able to find solution for water. And in my opinion, the price will be good enough to make water, or the scarcity of water, a non-issue for development of shale. ■



Calling on the Energy Industry to Fulfill its Central Role in Building Oman's Future

BY ENG. ISAM AL ZADJALI, CHIEF EXECUTIVE OFFICER, OMAN OIL COMPANY

The issues we face today in Oman pose challenges to our shared commitment to develop the country and create a vibrant civil society that participates in it. We in the energy industry can help to overcome such obstacles but only if we work hand in hand with the government and not only follow, but lead. We know what we have to do. Oman needs to stimulate the In-Country Value initiative (ICV) to retain as much benefit as possible inside Oman from its natural resources wealth. We need to push forward with the Omanization program to see the creation of a strong and skilled Omani work force participating in our energy industry. Not least, facing the rapid development of our country and honored with the steady growth of Oman's population, we must secure sustainable energy sources for our future generations.

As a whole the energy industry in Oman has made progress in promoting the right environment for ICV and the new labor law which is currently being

developed but not enough has been accomplished towards meeting our socio-economic goals. For a long time, we have needed the government to tell us what to do, to take the initiative and we have followed and implemented their plans. The problem is that nobody takes the lead until the government does. We may talk and preach but we don't do. I don't criticize our industry but it is clear that we as a group need to do more. And the problems are not insignificant. Our young people need skills to find a role for themselves in the future of Oman's energy industry. And these are technically-challenging fields. Accumulating such knowledge is not an easy task.

Taking a different approach, such challenges are opportunities. The government has done much to ensure the investment environment in Oman is improving year in, year out. It makes the sector one of Oman's most attractive for investors. And looking back, we have benefited from the experience of international investors.

“ For a long time, we have needed the government to tell us what to do, to take the initiative and we have followed and implemented their plans. The problem is that nobody takes the lead until the government does. We may talk and preach but we don't do.”



Now is the time for them to be creative to express their opinions and demonstrate how we can meet our goals. And we must listen. How can we progress if we do not listen?

As far as OOC is concerned, we are ready to play an instrumental role in progressing ICV and the developing the country's small and medium sized enterprises (SMEs) in Oman, the creation of which are crucial to meet our goals. Government bodies are poised to join the campaign, not least the Ministry of Oil and Gas. We must ensure that we stop talking about our goals and start putting them into practice. And we must ensure that the message to the Omani business community is loud and clear. We stand by you and offer initiatives to help you but this is not a charity. This is not an opportunity for you to make quick profits and exit the stage. The vision here is for Omani companies to set up sustainable businesses to contribute to our national goals and improve the prospects of all Omanis.

Secondly, we must address the technical issues we have in Oman's energy sector. Our power needs are surging and we face major technical difficulties in our oil and gas fields. We are already familiar with enhanced oil recovery (EOR), tight gas, shale gas and other extractive challenges which to many countries represent severe obstacles. The easiest decision is to dodge such big issues but let me be clear: we will never do that. We will never abandon anything. What we need to do instead is set our sights on the role of Research and Development. Technological advances have already contributed hugely to our oil output in recent years and will do so in the future. But we lack a sustained focus on R&D.

The answers get more complex the more the oil price sinks. And what if oil hits \$50 a barrel? What technological advances do we turn to then? The point of this is to emphasize the key focus on R&D for Oman, not on a narrow and individual basis geared towards specific projects but an energy-wide strategy to ensure the whole industry can benefit. No company, no organization has all the answers and so we need to work together. And so I challenge you – before we look to government to take the lead – to offer your ideas and thoughts on how our industry can lead the way in making R&D a reality.

Lastly, we need to address the issue of transparency and accountability. It is clear that the government has made recent strides in this area. Make no mistake,

its actions so far are deeply serious and have been recognized globally. But that is not all. What about governance? We think we may know how to run our affairs but there is little we can improve. Take for example where OOC is right now. It is clear to me that the role of the board and its relationship with the management has to be clearly identified. Representatives on the board need to be able to state their opinions and represent companies they come from and yet right now such relationships are not well defined and the blurred lines lead to confusion.

FROM THE GOVERNMENT SIDE, what we need is more clarity on the country's laws and on proposed legislation. A case in point is the new labor law that we are eagerly anticipating. We need to know what the outline of it will be and how it is going to affect us. Once it has become law, it is too late to introduce amendments and we will have to face the consequences. I hope the various government agencies and the Ministry of Manpower realize this is something they need to attend to before it is too late. Equally, we need to balance our needs with that of the labor force in Oman. The fact of the matter is this: there are some companies who strive to look after their employees. But other companies have a very different approach. The bottom line is an employee in Oman has rights and we need to encourage good employment and protection of those rights.

Finally, interested corporations often ask me how they can get involved in current or future projects in Oman. The answer is simple. If you have been a partner in the country for a long time, Oman will ask you what you have done for it lately. Your past work will be considered but it's not just about the past. I want partners that understand the country's needs now and in the future. We are not going to partner simply for financial reasons. We want to make sure that our international partners are here for the long-haul – not to make a profits and leave. And I say to our Omani partners, this is their country and they need to have guts and take some risks. Our priority is long-term relationships. Oman has always valued the relations and friendship we have with organizations, institutions and other countries that have built up over time and that has not changed. ■

Source: Welcome Note from Eng. Isam Al Zadjali, CEO, OOC at the Oman Energy Forum 2014



Eng. Isam Al Zadjali,
Chief Executive
Officer, Oman Oil
Company



Obtaining a Social License to Operate: How to Get it, How to Keep It?

PARTICIPANTS:

- H.E. Nasser Bin Khamis Al-Jashmi, Undersecretary, Ministry of Finance, Oman
- Dr. Faouzi Bensarsa, Regional Development Adviser, European Commission
- Jonas Moberg, Head of Secretariat, Extractive Industries Transparency Initiative (EITI)
- Clare Woodcraft-Scott, CEO, Emirates Foundation

Moderator: Dyala Sabbagh, Partner, Gulf Intelligence

DYALA SABBAGH (DS): Your Excellency - how much of an emphasis is being placed on the adoption of a “social license” in Oman and do you see it as being a strategic priority in company strategies, or is it still in the early stages?

HE NASSER BIN KHAMIS AL-JASHMI: I think the social license concept is rather new in Oman - it has only been talked about in the last few years in a broad context, although it may be at more developed stages within individual companies. The need for a social license came in 2011 after the impact of the Arab spring, when the need to be seen as a valuable member of a community became stronger - to be accepted, to be respected.

DS: Do you see this being demonstrated in practice by international oil companies operating in Oman, through social initiatives for example in local education, in healthcare?

HE NASSER BIN KHAMIS AL-JASHMI: I believe it's already embedded in their strategies; it's now a business need to obtain this license and particularly in the oil and gas sector because it's not a clean business. We pollute, we are noisy, dusty, etc. and so you need to be a good neighbor. Social license has different elements and in-country value and training Omanis is one of them - I think energy companies have done well on this front with Omanization in most organizations now above 80 percent.

DS: Clare - His Excellency says it's become a business need to have a social license. Is it now in the consciousness of private oil and gas companies that this is no longer just a corporate social responsibility PR initiative or even philanthropy? That having and retaining a social license actually helps companies mitigate future risk by incorporating this into strategy from day one.

CLARE WOODCRAFT-SCOTT: I think when we talk about social license to operate, we perhaps overlook the fact that for a long time we've been talking about sustainability and increasing the non-technical risk. And when you start to put it in a different vocabulary, it fundamentally sits underneath your business strategy. We can't in the 21st century think that our commercial operations can be purely driven by our immediate stakeholders, so it's no longer about the client or the shareholder – it's absolutely about the entirety of your stakeholder base.

If you are looking at longevity of operations and looking to understand the country that you operate in, particularly if you're a multi-national and not actually from that country, you need to understand your local constituency. And this means engaging with the community, understanding local concerns, understanding and having a relationship with civil society.

That's something that perhaps in the oil and gas sector we didn't see 10 to 15 years ago but now we see a lot of energy companies really trying to build partnerships in the third sector.

And this is essentially what we do at Emirates Foundation - it's a public-private partnership, established to create a mechanism whereby companies in the private sector can engage and invest in the community for a social return on that investment.

We work with a lot of energy companies that work together with us; it often shocks people that we can have competing brands but I think this is an area where competitiveness needs to be put aside for the creation of public good because everybody benefits from that.

DS: So it's an opportunity for companies to collaborate on certain projects.

CLARE WOODCRAFT-SCOTT: Yes - and through that, they get impact and scale. If everybody looks individually at their community engagement license to operate, then you are not going to be able to look at long-term systemic social challenges. The key ones in the UAE, and I'm sure



it's similar here in Oman, are labor force and job creation - getting the right skills to come out of academia so that you can provide the skills for the industry.

DS: And do you see that companies are open to that?

CLARE WOODCRAFT-SCOTT: Absolutely. The value proposition of working with others is that you can create scale of impact. And particularly if we look at skills around science and technology which is of huge interest to the energy sector. We don't do that with just one company, we work with multiple companies.

DS: With these objectives in mind, what obstacles have companies faced in actual implementation? Has cost been an issue at all? And at the moment, it's not a written prerequisite to take these initiatives. Do you think it should be?

CLARE WOODCRAFT-SCOTT: No, absolutely not. I don't think you can regulate or legislate for sustainability. I think companies need to understand the value proposition of managing effectively their non-technical risks and understand that there is a strong social return on their investment.

There's also reputational value; opportunities for innovation; opportunities to create talent in the local communities where they're working; opportunities to create supply chain relationships. So if companies come at it from a business perspective and understand the potential for innovation and return around perhaps non-traditional or non-financial areas, they will naturally want to invest in that area.

“ The need for a social license came in 2011 after the impact of the Arab spring, when the need to be seen as a valuable member of a community became stronger - to be accepted, to be respected.”

HE NASSER BIN KHAMIS AL-JASHMI



“What is important is to recognize the role of all parties and to have partnership and agreement on each player’s role. Governments have responsibilities, the private sector has responsibilities and so does civil society.”

DR. FAOUZI BENSARSA



DS: Jonas - if I can come to you please - the EITI was set up to monitor transparency in payments between companies and governments in the oil and gas industry. Bearing that in mind, do you find that the impetus to join the EITI has been one path by members to obtain a social license?

JONAS MOBERG: We believe that transparency is absolutely an important part of securing that license to operate. But it’s not always so easy to put it into practice, and what we see is that it takes collaboration between different stakeholders; this is where the EITI comes in. We are not an organization that monitors, or an NGO. EITI is a global standard that has brought companies, governments and civil society together to collaborate for more transparency in the industry.

DS: How many members do you have at the moment and is there any reason why a company or a country would not want to be involved in your initiative?

JONAS MOBERG: There are now 48 countries, some with massive governance problems. They all join for very different reasons. It often starts with an enlightened self-interest; wanting to communicate, wanting to make sure that the sector is governed well. And the private sector is strongly supportive of this because they recognize this need to keep earning that social license to operate.

DS: Does it also encourage foreign investment into that member country if they become a member - by showing greater transparency with their finances?

JONAS MOBERG: Absolutely, and more specifically, it helps to attract quality foreign direct investment.

DS: Dr. Bensarsa - you have been in an advisory role in the energy sector for many years - if we look at Africa where oil and gas companies have triggered and then faced very negative social consequences of mismanagement of their operations, can you highlight what lessons have been learned and what change we see now as a result, in company operating practices on the continent?

DR. FAOUZI BENSARSA: What is important is to recognize the role of all parties and to have partnership and agreement on each player’s role. Governments have responsibilities, the private sector has responsibilities and so does civil society. Challenges need to be handled together.

DS: Do you see this collaboration being put into practice?

DR. FAOUZI BENSARSA: The key is transparency on what each party is doing. The government and the private sector each have a separate role to play - the



“We believe that transparency is absolutely an important part of securing that license to operate. But it’s not always so easy to put it into practice, and what we see is that it takes collaboration between different stakeholders; this is where the EITI comes in.”

JONAS MOBERG



“ We can’t in the 21st century think that our commercial operations can be purely driven by our immediate stakeholders, so it’s no longer about the client or the shareholder – it’s absolutely about the entirety of your stakeholder base.”

CLARE WOODCRAFT-SCOTT

private sector has to observe the rules on transparency, on governance, on avoiding corruption, on building skills etc and in emerging countries in Africa like Tanzania, from a government perspective, it is not just a question of transparency, but a matter of a model of security and investment. So it is a big challenge, but one which a global partnership of competencies can tackle.

DS: We’ve seen a lot of investment by Chinese energy companies into Africa over the last few years, and there has been criticism that China has not adopted a favorable “social license” model - that companies have come in, completed operations, and then left with very little value added to the indigenous societies where they have operated.

Your Excellency - taking this into account, and also that Chinese companies are increasingly taking part in projects here in the Gulf, is this at all a concern for Oman?

HE NASSER BIN KHAMIS AL-JASHMI: Currently, in Oman there are certain regulations which touch some of the issues on social licenses - you see some of them in the labor law, you see some regulation coming out from the Ministry of Manpower on for example Omanization, and you see it in the tender board or tender law when it comes to secure sourcing goods and services.

DS: Are companies being given a competitive advantage in the tender contract process if they are seen to be contributing to society?

HE NASSER BIN KHAMIS AL-JASHMI:

During the tender process, we specify to companies what our requirements are, such as what we need them to commit to in ICV content - whether it be the number of Omanis who need to be employed, what training programs are needed etc, but this is voluntarily and doesn’t need to be regulated.

AUDIENCE MEMBER 1: I wanted to ask your Excellency - we’ve been talking during this session about how to obtain a social license but I think more importantly perhaps is the question of how to keep it? Is there a strategy from Oman to monitor, to regulate companies in order to keep this social license? And secondly, is there one thing that you would identify that companies are not doing that they should be doing in order to keep their social license, such as for example investing more in vocational training for upgrading of skills?

HE NASSER BIN KHAMIS AL-JASHMI: It depends on the company’s perspective of their business in the country. Are they here for the short-term or long-term? If it’s the latter, then they have to take this seriously. When it comes to ICV, this has an element of sustainability - bringing know-how, knowledge transfer, manufacturing locally. Keeping a social license is the responsibility of the companies and not the government. And preferably it should be proactive, not reactive.

AUDIENCE MEMBER 2: I think it’s time to put an agenda, a collective effort to standardize a road map, a strategy for how these companies develop this social license and obtain it. Companies need to talk to each other, need to talk to the community, need to talk to the government. What do they need in order to obtain this social license? Currently, I think it’s reactive and being dealt with on an individual basis. If we target problems only one at a time, they will just keep coming. But if we take the whole issue as one and build a strategy and a road map, then we would eliminate them.

DS: Clare - is there enough clarity between the private and public sectors on what the priorities should be in adding value to society and the economy?

CLARE WOODCRAFT-SCOTT: If you want longevity, if you want to be inside a country for 10 or 20 years, you need to move from tokenist CSR to embedding license to operate in your strategy. And what does it mean? Engage, engage, engage. If you are operating in a country and you are not talking to local communities, you do not understand their grievances, you do not understand the sociopolitical trends because you are not talking to local leaders or local communities or a local third sector. And then there is a huge risk, a non-technical risk that your business operations would be threatened because you haven’t factored in externality. So you have to come at it from a business strategy perspective and I would like to see CSR actually die a death at some point and for it to be totally factored into our operational strategy. It doesn’t make any sense in the 21st century for a commercial organization to think that it can operate blind to the people and the stakeholders that it impacts. It’s that simple. ■

Excerpt from panel discussion during Oman Energy Forum 2014.



New Labor Law in the Making: Addressing the Oil Sector's Specific Concerns

BY ABDUL-AMIR AJMI, EXTERNAL AFFAIRS DIRECTOR, PETROLEUM DEVELOPMENT OMAN

Whether in Oman or other parts of the Gulf, the region has to resolve a wide range of labor market-related issues, ranging from high labor force growth to skill mismatches, labor and product market rigidities, large public sectors, and high reservation wages – the lowest wage rate at which a worker would be willing to accept a particular type of job. All these will need to be addressed to overcome the large and persistent level of unemployment across the Middle East. Unemployment among the region's large and growing youth population in particular has become a pressing issue for governments.

Unemployment, including youth unemployment, is also a priority issue in Oman since protests erupted in 2011 calling for more jobs and fighting corruption. However, at the same time, the country remains heavily dependent on foreign labor. Although private sector establishments account for nearly 60 per cent of the Sultanate's labor market, their impact on national employment is weak.

According to official estimates, only about a third of employed Omanis are in the private sector. And despite Oman's self-declared goal to strengthen the private sector and diversify the economy away from oil, the state remains the employer of first choice as well as the social guarantor of last resort.

Oman is now gearing up to introduce a new labor law that – among other things – aims to provide more job opportunities and incentives for Omanis to move to the private sector by creating an improved work environment as it seeks to address these issues in earnest.

LABOR LAW

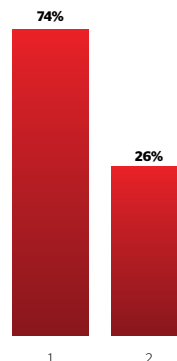
As Omani lawmakers are drawing up a new labor law, concerns are rising in the oil and gas industry that the legislation may not be sufficiently aligned with the sector's specific requirements and, as a result, hamper day-to-day business and operations – and subsequently the labor market.

For the oil and gas sector – a key stakeholder in the Sultanate's economy with oil and gas production accounting for about half of GDP – the prime issue revolves around whether the new law will be consistent with the industry's practices and standards, and supportive of its operational environment.

According to an industry survey conducted among oil and gas experts at the Gulf Intelligence Oman Energy

The oil and gas sector is rightly concerned that the new Labor Law won't be consistent with the industry's practices, standards and operational environment - Agree?

- 1) Agree
- 2) Disagree





“ For the oil and gas sector – a key stakeholder in the Sultanate’s economy with oil and gas production accounting for about half of GDP – the prime issue revolves around whether the new law will be consistent with the industry’s practices and standards, and supportive of its operational environment.”

Forum 2014 in Muscat in October, close to three quarters of all respondents thought that the sector’s concerns over the new law not being consistent with its specific requirements were indeed justified.

With work on the law proceeding, industries are seeking both to provide input and clarification on how the legislation may affect their business going forward.

One of the industry’s main concerns, for example, is linked to the ambiguity that exists in relation to working week and holidays. In an industry where work patterns may be in the form of being on-duty for two weeks for 12 hours per day and then off-duty for the next two weeks, a labor law that doesn’t provide a more flexible code to operate accordingly may present a major obstacle to oil companies’ operations. The same is true for many other industries.

Removing this ambiguity is one issue the industry is keen on having clarified under the new law. Industry experts say not removing this uncertainty would not be in anybody’s interest. It would also be somewhat detrimental to the development of small and medium enterprises active or planning to get involved in the domestic oil and gas sector as they require greater operational flexibility. Moreover, lack of flexibility in the labor law may also be negative for attracting more foreign investment in the oil and gas sector in the future.

A second component that should be addressed by the new law is transferability, or – in other words – the freedom of labor movement between companies without the obstruction of visa or other related issues that may prevent a person from moving jobs. Only expatriates who secure a ‘no objection certificate’ from their employer are entitled to change job without any restriction.

Should the Oil & Gas Chapter be established as independent legislation, rather than being included in the new Labor Law or?

- 1) Agree
- 2) Disagree



Generally speaking, there is a need for the new labor law to be flexible to the nuances and realities of different industries and their operations without neglecting the interest of domestic labor. However, a healthy balance between industry needs and those interests will need to be established.

Despite the oil and gas industries’ concerns, a slight majority of those surveyed at the OEF expressed the view that the new labor law should include an oil and gas chapter, rather than drawing up a different one.

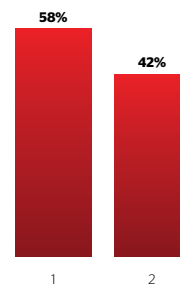
TRADE UNIONS

Work on the long-anticipated new labor law follows a 2006 decree by the Sultan granting private sector workers the right to form trade unions in the country. The Ministry of Manpower subsequently outlined provisions for collective bargaining in the private sector and affirmed the right of private sector – not public sector – workers to stage peaceful strikes. Since then, the number of labor unions in Oman has steadily increased to about 200 today.

While trade unions appear to be making strides in their

Allowing the establishment of trade unions has benefitted the energy sector by bringing about numerous improvements to Omani workers - Agree?

- 1) Agree
- 2) Disagree



advocacy efforts for workers, the new labor law will have to do away with the existing ambiguities related to union activities to achieve greater clarity for both employers and employees on dos and don’ts.

Against this backdrop, a majority of survey respondents expressed the view that the establishment of trade unions has benefitted the energy sector by bringing about improvements to Omani workers. ■

Source: Breakout Session at the Oman Energy Forum 2014, hosted by PDO



Abdul-Amir Ajmi,
External Affairs
Director, Petroleum
Development Oman



THE ROLE OF OMAN'S ENERGY INDUSTRY IN DEVELOPING A SUSTAINABLE LABOR MARKET

BY MULHAM AL JARF, DEPUTY CHIEF EXECUTIVE OFFICER, OMAN OIL COMPANY

Development of the private sector is a core country-wide priority in Oman's long term economic diversification strategy. This focus acknowledges that a thriving private sector will play a greater role as an enabler and policy maker in regards to employment creation and contribution to the GDP. Therefore, we acknowledge the critical role of the energy sector's private enterprises in achieving accelerated growth and more significantly a sustainable one that creates a sound development model, a model that channels resources into socio-economic infrastructure more productively and efficiently by offering access to diverse economic opportunities. These opportunities are instrumental in building a dynamic private sector that leads to inclusive growth, and by inclusive, we are referring to developing strategies and investment plans that leverage the potential of private capital as an agent and partner in growth, development and prosperity of the people of the Sultanate.

The Omani private sector contributes about 29.4 percent to the national GDP, while only 11 percent of all jobs in the sector are filled by Omanis based on 2013 figures published by the Central Bank of Oman in June 2014. As for Small & Medium Enterprises (SMEs), they contribute 14 percent to the national GDP and less than 10 percent to all Omani private sector employment. If Oman's economy is to fully

reap the rewards of a government-enabled and private sector-led growth model, then Oman needs to enable private enterprises to thrive by addressing the enterprise-level and the country-level disablers.

Creating more jobs for the younger generation is the most pressing challenge at the 'time' an opportunity for Oman and should top decision makers' priorities, stressing the importance of redefining the role of the government away from being an employer to also becoming an enabler for a dynamic private sector. Omanization has been particularly successful in the public sector, with 85.8 percent Omanis based on 2012 statistics. However, the private sector remains a more challenging prospect as many graduates prefer the benefits of public sector work to making their way in the private sector. Therefore, we must encourage more entrepreneurs to enter the market, provide inspiration for candidates to choose the private sector.

As the major contributor to the national GDP, the oil and gas industry and the energy sector in general are uniquely placed to drive innovation in all sectors of the economy. The private sector is of fundamental importance. For Oman to succeed in its long-term quest of becoming a diversified, knowledge economy that offers high-valued and sustainable employment for nationals and doesn't have to rely on the sale of hydrocarbons, the country will need



“ If Oman’s economy is to fully reap the rewards of a government-enabled and private sector-led growth model, then Oman needs to enable private enterprises to thrive by addressing the enterprise-level and the country-level disablers.”

to establish a much bigger private sector that serves as an economic growth and job creation engine – and provide incentives for Omanis to move into it. To achieve this, there will have to be a much greater focus on producing an indigenous skilled and expert work force that can drive and sustain an expanding private sector, which in turn has the capabilities and capacities to serve the domestic economy, including the energy sector, and – further down the road – international markets.

With oil and gas production accounting for about half of Oman’s GDP, the energy sector plays a crucial role in the Sultanate, not only as a source of government revenues but also as an employer of Omanis and a provider of knowhow and technology. And there can be little doubt that the sector will continue to play – and build on – this role in the future.

Equipping the workforce with the skills required for the jobs of today and those of tomorrow is a strategic concern in the national growth and development outlook. Oman is enhancing the responsiveness of education and training systems to these changes in skill requirements and the overall plan is to encourage more Omanis into the workforce and reduce the reliance on imported manpower by prioritizing Omani nationals. Though, this presents several key considerations, namely that Oman is a predominantly young population and an estimated 50,000 jobs are needed per year to address job seekers. In addition, Oman has been relying on imported labor for so long; the encouragement to enter industries dominated by expatriate workers has not been there. A proposed solution could be implementing a shadowing or mentor system for Omanis to learn from experienced professionals to support educational training and vocational qualifications and provide a background, as well as have a succession plan in place to build a handover strategy.

The energy sector will also support the development of small and medium enterprises (SMEs) in a bid to establish a local energy supply chain. It will add more value to the local economy by setting up research and development

(R&D) facilities, including in areas such as enhanced oil recovery (EOR) technologies for example, which are central to the challenges faced by Oman’s oil sector. If implemented correctly, such initiatives have the potential to turn the Sultanate into a technology leader while also training a new generation of experts.

But there is only so much the energy sector can do. Sure, it will keep on absorbing a significant portion of future university graduates for example; but it will also continue to account for a relatively small percentage of the total labor force. What this means is that, ultimately, Oman will have to place a greater focus on creating jobs in other promising sectors such as services, logistics, tourism and manufacturing through greater private-sector participation.

With this in mind, it will be of particular importance to ensure that the local work force’s skills match labor market requirements. This is seminal in a highly-competitive, globalized world constantly striving to improve productivity, and requires a best-practice approach to education and training as part of a broad ‘skills matching’ strategy.

Equipping Omanis – both male and female – with the right skills, especially in relation to innovation, will be integral to ensuring that the private sector at large will have the foundations to grow and modernize. To do so, all relevant stakeholders – government, companies, academic institutions and trade unions – will have to get together and work towards the common goal of reducing existing skills mismatches, for example by reinforcing links between educational systems and labor markets.

There is no shortage of ideas on what to do – but it needs to be done. It is now time for difficult, uncomfortable decisions in Oman in order to initiate the changes needed to create a sustainable labor market. If pursued consequently now, they will pave the way for a more sustainable economy. ■

Source: Comments from Mulham Al Jarf, Deputy CEO, OOC at the Oman Energy Forum 2014.



Mulham Al Jarf,
Deputy Chief
Executive Officer,
Oman Oil Company

National Industry Leaders Debate: Tackling Oman's Labor Market Challenge



PARTICIPANTS:

- Raoul Restucci, Managing Director, PDO
- Mulham Al Jarf, Deputy CEO, OOC
- Dave Campbell, General Manager & Vice President Operations, BP Oman
- Ishaq Juma Al Kharusi, Deputy Chairman, The General Federation of Oman Trade Unions

Moderator: Sean Evers, Managing Partner, Gulf Intelligence

SEAN EVERS (SE): The question we are facing here in Oman and in the region as a whole is that we're running out of time and the financial cushion - the energy resources cushion - is not available as it is in other countries. We have also seen this issue in the case of the increasing challenges to Oman's reservoirs: the deployment of EOR may be a foresight of what other countries are going to have to deal with.

Turning to Raoul Restucci first, how critical do you think the time factor is here? The energy industry makes up some 50 percent of Oman's GDP and around 90 percent of government revenues. What can the industry do in the short term to tackle critical the social need to create employment?

RAOUL RESTUCCI: We should be increasingly focused not on worrying about the risks but on discovering the opportunities because if you don't turn these challenges into opportunities, the solutions won't be sustainable. This is not an exercise in risk mitigation. It is about aligning internal drivers - what the company needs to compete and succeed - with external drivers - what the community needs to succeed. If you can align those drivers, you build up a long-term, sustainable program.

SE: What is the top priority driver of an industry from the point of view of PDO, the biggest energy company in Oman? Would you agree that one of the most important goals is the development of technical skills and education?

RAOUL RESTUCCI: Our priorities are productivity, competitiveness, efficiency, job creation, sustainability. Certainly, technical skills and education are key. You mentioned the complexities of geology and reservoirs. We have an incredible opportunity to exploit a major resource. We have enormous support from government, international players and domestic talent which we have to nurture.

SE: I'd like to bring in Ishaq Juma al Kharusi. Are you satisfied with what industry is doing to develop the skill set of the labor forces you represent?

ISEHAQ JUMA AL KHARUSI: Right now, yes. It is clear that we have to develop more people in the private sectors, especially in the oil and gas sector. We have to develop non-skilled workers into skilled workers and see their transformation into professionals in high positions. But currently we only have a few companies who have a strategy or have training programs.

SE: If 70 percent of the audience thinks that vocational education and technical skills is a key vehicle, it would indicate not enough is being done. Mulham Al Jarf, given your role at OOC, what specifically needs to be done do you think?

MULHAM AL JARF: I think the industry has done relatively well. But it's tough. We are not talking about big numbers. I think what's happening is we have labor arbitrage. What I mean by that is we have access to low-cost skilled labor from

Asia. What they've done there to equip them and skill them is not rocket science. I'm sure we could do the same. But that provides shortcuts for investors who use the threat of uncertainty in their arguments, for instance: what if such a project is delayed by five years because of the labor issues?

SE: Do you think it is unreasonable to expect the industry to act as an educational facility? Isn't it enough to be grappling with technical issues rather than providing education?

MULHAMAL JARF: We have so much potential in Oman. Yes, we are going to run out of oil one day. But we will continue and our people constitute our biggest asset. As Raoul said, this is not a liability but an opportunity. Investing in people is our basis for our businesses and not just in numbers. You get that right and the rest will follow.

SE: BP has taken on a large opportunity here in Oman. I'd like to turn to David Campbell. Is the 80 percent Omanization target an unrealistic burden. Should it be lowered?

DAVE CAMPBELL: BP has a training technician center to actually build a capability rather than attract it from other operators. I don't think the target is unrealistic. We're around 70 percent now. But we need to accomplish this in the right way. We could hit 80 percent by hiring low-skilled Omanis but we don't want to do that. We want to train Omanis to become senior-level leaders. Sometimes targets are dangerous, they can drive an adverse reaction. And actually what we're pursuing is highly qualified Omanis.

SE: Raoul, what's your recommendation in the area of mismatch of talent? There's a lot of education available – Sultan Qaboos University for example – but difficulties in transforming that into a wider professional Omani workforce.

RAOUL RESTUCCI: A lot is going on but the challenge is less about the higher skilled educational side. Establishments like Sultan Qaboos University, are role models and produce talented graduates, many of which come to PDO and elsewhere. The issue is more about school leavers, the less educated. Every year there are around 50,000-60,000 young players joining the job market. That's a very large community. And so the task here is about aligning vocational training with industry needs.

We have some great examples that show real commitment. If you take the well engineering community, 95 percent of that community is Omani at all levels of the company. So, where that passion and commitment and alignment on vocational training and support is in place, it works. But in other areas we haven't found that combination. Today the In Country Value initiative (ICV) is part of the DNA. It's no longer a philanthropic social investment that is in the external affairs department, it forms part of our operations.

SEANEVERS: Mulham, what are your thoughts on the mismatch? What needs to be done to close it? Is OOC sufficiently engaged with universities?

MULHAMAL JARF: We can continue debating it and I don't think we'll find an answer. One option perhaps is for the employers to take over these institutions and run them so they can integrate the output into their organizations. But we don't have the luxury of time. Economic security



is paramount. If you ask Raoul today, he takes kids out of colleges and has to put in two or three years of training. So he's just wasted two years for someone who has only turned 18, when he could have taken him on at 18 and made him productive by the time he's 20 or 21. What's happening now is insanity.

RAOUL RESTUCCI: What I'm trying to say is that a lot is going on. We've got great examples with the Minister of Education, Minister of Manpower and the oil and gas companies working together. Is it enough? No. We have to take those opportunities in the oil and gas sector and replicate them in tourism and commercial opportunities, logistics and transport.

SE: What we're talking about here is upgrading skills. The point isn't to make everyone a petroleum engineer. If anyone in the audience wants to join in please put up your hand

AUDIENCE MEMBER 1: Regarding your point about closing the mismatch, I think there should be coordination between the Ministry of Manpower and the companies themselves to set a program of vocational training for the required skills. They should focus on where the weaknesses are and then set a sophisticated training program to plug the gap.

AUDIENCE MEMBER 2: Much has been said about ageing population of the oil and gas industry. As per the Independent Petroleum Association of America, 71 percent of the workforce in oil and gas are over 50 years old and 50 percent of all geophysicists and engineers will retire by the year 2018. Looking at the high percentage of young that Oman is blessed with we all know that young population is more technology savvy. How do you collectively answer that?

SE: A huge gap: the retiring talent vs the young talent and a big gap in between. Raoul, how are you addressing that at PDO?

RAOUL RESTUCCI: I think we can build on the talent pool available. Based on that, we can enhance the training and upscale the organization to meet the demands. When I joined the oil and gas industry 35 years ago my colleagues asked why, given that oil will be finished in 20 years. The reality is, whether it is oil or renewable energy or some other activity, those skill sets are very, very similar. Oman has a large community of young job seekers, many of whom

“ I think skills and talent development is one of the top priorities of every participant in the industry. It is also time to transfer some of that experience we have had to date into other sectors and not work in a silo as we do today. There’s more to the debate than just oil and gas.”

MULHAM AL JARF



can be redirected into the oil industry for a very, very exciting future. Will we have shortfalls of geophysicists? We’ve always had them and we will continue to have them. But we have the talent pool to be able to address some of those gaps.

SE: Mulham, can technology come in to save this gap?

MULHAM AL JARF: We need to make the offer more attractive. Kids today use sophisticated technology all the time. We need to come up with innovative new approaches harnessing technology. Instead of conventional ways of having employees doing two weeks on and two weeks off, are there ways to run some operations remotely?

AUDIENCE MEMBER - SYHAM BENTOUATI, PDO: We have links with academia, particularly with Sultan Qaboos University. In my view, sometimes, academia needs to think with an industry hat. We have funded many laboratories in Sultan Qaboos University for our research but also to build capacity for the university. But the alignment is important. At university you grow by publishing papers. Our industry goals are different. So it’s very important we coordinate on milestones for projects and academia has to be able to cater for that.

SE: Do you find that academia is receptive to specific guidance?

AUDIENCE MEMBER - SYHAM BENTOUATI, PDO: It’s getting better. At PDO we have senior directors who work on addressing issues that help the university and us. It’s a link that works in both directions. Also, we now recruit a lot more graduates from Sultan Qaboos University. We have a state-of-the-art training center and anybody who has been there lately will tell you about the buzz you feel when you go there.

AUDIENCE MEMBER 3: In recent years, the government has created committees to look at the requirements that we have in the industry. And they came up with the percentages that they thought were right. Those committees included representatives from the private sector, from the oil and gas companies, from ministries and they came up with percentages they believed could be achieved. But even major operators like PDO cannot reach them.

SE: Do you think it would be helpful to lower those targets?

AUDIENCE MEMBER 3: The issue is bridging the gap between the supply and demand. In the banking sector, for example, the Omanization percentages reach or approach 98 percent. We need to ask the oil and gas industry, what was done in that sector to reach the target? First of all, there was a central regulatory authority established by the government to look at that industry and what that sector needs. The proposal I want to put forward is having a central authority that looks at what the industry needs and



“ Sometimes targets are dangerous, they can drive an adverse reaction. And actually what we’re pursuing is highly qualified Omanis.”

DAVE CAMPBELL



“ Many graduates are recruited but how many continue in oil and gas? Most of them gain experience but then move into other sectors. What is needed is a career path for each graduate employee.”

ISEHAQ JUMA AL KHARUSI

putting the right curricula or the right education or training programs for the energy industry. I think that will help us to have a long-term planning and should help us to resolve this issue.

SE: Clare, could I ask you to just comment on that. What are you guys doing in terms of aligning society stakeholders?

CLARE WOODCRAFT-SCOTT, EMIRATES

FOUNDATION: At Emirates Foundation what we are trying to do is create a link between government institutions, notably academia and the private sector. It's about creating those strategic relationships. We have academics coming to us, say we are not aware what industry is looking and we have private sector companies asking us how to access Emirati talent. I think there is a disconnect which you don't see in other parts of the world. If I look at the UK you see technical universities that are absolutely embedded inside industry and there's a constant exchange.

AUDIENCEMEMBER 4: I formed my company three years ago after working at PDO for 17 years. We're progressively trying to move into manufacturing, because we believe that's the best way of sustaining the labour market. The question is to BP and other companies. Are you moving into that direction? Do you find it beneficial to put the focus on ICV?

DAVE CAMPBELL: Yes. We have an ICV manager, Khalid Al Kindi. He pools together procurement and HR. As you say, we're just starting in Oman. But just going back to the last point, along with the Ministry of Oil and Gas, I sit with Raoul and Oxy and the other companies and Oman Oil on the ICV committee, and what we're trying to do is pull together what the industry needs are. For me the next step is joining it up with the Ministry of Manpower and the Ministry of Education and focusing on school leavers but that will take a bit of time.

AUDIENCEMEMBER 5: I think we're giving undue pressure to the oil industry. Of course it is the prominent industry in Oman. But there should be a reality check. We're talking about a highly technological industry. And how many people does PDO employ versus the graduates we get every year? I think there's more value in transferring the experience from the oil industry into other sectors which can employ heavily. If we talk about tourism, a billion dollars in tourism can employ perhaps tens of thousands vs a billion dollars in building a refinery which can employ

250-300 people. I think we've built so much expectation that this will solve our problems. The reality is I don't think it will.

SE: Any more views from the audience?

AUDIENCEMEMBER 6: I have a different opinion about matching the education with the market. I believe that education should be for the sake of education. The problem is not matching the education with the vacancies on the market: you need people who can fit anywhere.

SE: Thank you. I'm going to ask panelists for a brief closing point.

ISEHAQ JUMA AL KHARUSI: I don't think we have a problem at the low level, our problem is at the middle level and it is how to promote those upwards. Many graduates are recruited but how many continue in oil and gas? Most of them gain experience but then move into other sectors. What is needed is a career path for each graduate employee. Each person into this organization, they should understand their career path in the future.

DAVE CAMPBELL: I think there's a huge opportunity here. We may be talking about it negatively, but it will turn positive. BP wants to be here for many years and wants to do the right thing and do it sustainably.

MULHAMAL JARF: I think skills and talent development is one of the top priorities of every participant in the industry. It is also time to transfer some of that experience we have had to date into other sectors and not work in a silo as we do today. There's more to the debate than just oil and gas. As I said earlier, oil will run out one day or another, but people will still be around.

RAOUL RESTUCCI: The alignment of what it takes to win is critical in understanding internal and external drivers. I agree with the point made about the relative lack of jobs available in the oil and gas business. Nevertheless in the next 8-10 years, we can create 50,000 high quality Omani jobs. I'm not talking about the high skilled levels but about more junior roles with considerable growth potential who can have a fulfilling future in what can be a very exciting industry. ■

Excerpt from panel discussion during Oman Energy Forum 2014.



Reversing the Sultanate's Feedstock Fortunes: No Longer Wishful Thinking

BY EDER LIZCANO, MIDDLE EAST VICE PRESIDENT OF RESERVOIR DEVELOPMENT, HEAD OF SUBSURFACE DEPARTMENT, BP

Oman's tight and shale gas reservoirs present a challenge as much as they present an opportunity. Demand for gas is rising sharply in the Sultanate, driven by power requirements, industrial usage, domestic needs and export commitments in the form of liquefied natural gas (LNG). Without adding new volumes, Oman may face an increasingly large shortfall of the resource in the future, which would present a major burden on the economy. Developing unconventional natural gas deposits therefore isn't just a costly option – it is a must.

The challenge of developing Oman's unconventional gas resources lies in extracting them from their geologically complex and often remote locations. Doing so isn't possible without applying some of today's most advanced technologies – BP's large-scale Khazzan tight gas development is a case in point. Applying a set of innovative techniques such as drilling horizontal wells and hydraulic fracturing, the project will eventually achieve production of around 1 billion cubic feet a day of gas, or about a third of Oman's total daily domestic gas supply, at plateau level in 2018.

But beyond supplying much-needed gas to help meet the country's long-term future energy and export requirements from domestic resources, developments like Khazzan present other opportunities for Oman that are relevant in particular at a time when the country is seeking to create greater in-country value (ICV): in the short term, the country has the chance to become a leader in applying technologies for the development of shale and tight gas resources meeting specific local challenges; in the medium to long term, it may become an expert, a developer and an exporter of proprietary technologies.

This would add significant value to the national economy in terms of creating local expertise and knowledge in unconventional gas on the one hand; on the other, it would position Oman as a global technology center, raising the country's profile and potentially making it a destination of foreign investment into research and development (R&D) focused on this particular area of expertise.

US UNCONVENTIONALS REVOLUTION

Looking at this scenario, one has to reference the unconventional revolution that has been sweeping through the US energy sector. Less than a decade ago, the idea of US energy independence and exporting domestically produced crude oil and LNG was nearly unimaginable. Today, thanks to the development of unconventional hydrocarbon resources such as shale oil and gas, the US is on the verge of energy independence, having become the world's top oil and gas producer.

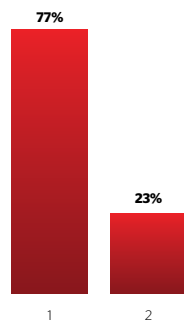
To be sure, the emergence of the US as a global oil and gas powerhouse didn't happen overnight. After all, experimental hydraulic fracturing was first used to extract natural gas from limestone in the US in 1947. It may have taken decades but rapid advances in horizontal drilling and hydraulic fracturing technologies over the past decade combined with sustained high oil prices and a push for greater supply security eventually changed the economics of shale oil and gas developments, and made their recovery feasible. This, together with a business and regulatory environment conducive to investing in shale projects, has heralded a new era for US energy. In short, unconventional have been a game changer for America's domestic oil and gas industry.

As the US is emerging as a new supply center it is not just transforming the global energy landscape; it is also boosting hopes in other parts of the world that billions of barrels of oil and trillions cubic feet of gas in unconventional reserves may become available for extraction and production, potentially driving down the cost of power generation and providing feedstock for industries such as petrochemicals.

Oman isn't an exception. The development of Khazzan is an important first step towards reversing the Sultanate's feedstock fortunes. While the Khazzan development is well under way, other domestic tight gas reservoirs are being evaluated. Meanwhile, potential shale plays are also emerging on the radar. Going forward, tight and shale gas developments could play a seminal role in meeting Oman's future gas needs.

Tight and shale gas developments have the potential to become a real game changer for Oman, just as it did in the US - Agree?

- 1) Agree
- 2) Disagree



In an industry survey conducted at the Gulf Intelligence Oman Energy Forum (OEF) in October, more than three quarters of all respondents expressed the view that tight and shale gas developments have the potential to become a real game changer for Oman, just as it did in the US.

Much will depend on the advancement of existing and the development of new technologies and techniques to better produce tight gas. But there can be little doubt that – as Oman is building up its expertise in the area of unconventional gas developments in partnership with international companies – the country has a great opportunity to place more focus on the development of proprietary technologies.

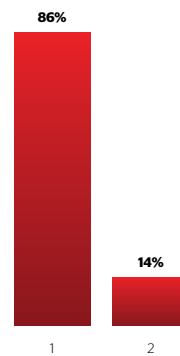
“ There can be little doubt that – as Oman is building up its expertise in the area of unconventional gas developments in partnership with international companies – the country has a great opportunity to place more focus on the development of proprietary technologies.”

COLLABORATION

Oman's oil and gas sector has been built on close collaboration between local oil and gas firms and international oil companies (IOCs). The Khazzan concession, for example, is 60 percent-owned by BP, with Oman Oil Company for Exploration and Production (OOCEP), holding the remaining 40 percent. Going forward such partnerships between local and international companies could be deepened further by establishing joint facilities for R&D into new technologies for the extraction of tight and shale gas reserves.

As Oman is building up expertise in the area of unconventional gas developments in partnership with international partners, it has a unique opportunity to become a technology center - Agree?

- 1) Agree
- 2) Disagree



The same view was expressed by survey respondents at the OEF, with nearly 90 percent agreeing that Oman building up its expertise in the area of unconventional gas developments in partnership with international firms presents a unique opportunity for the Sultanate to become a technology center.

Such initiatives would have to be more than just joint company efforts, however. Collaboration with other sector stakeholders, notably the government and academia, will be crucial to establish platforms for collaboration and knowledge exchange that will ultimately serve as enablers of R&D in Oman.

And, naturally, it will be critical that R&D activities in the country will actually end up producing tangible results, i.e. lead to the development of new technologies that support the Sultanate's goal of creating greater ICV, while also opening up new domestic shale and tight gas reserves for production. This way Oman will turn the tight and shale gas challenge into an opportunity. ■

Source: Breakout Session at Oman Energy Forum 2014, hosted by BP

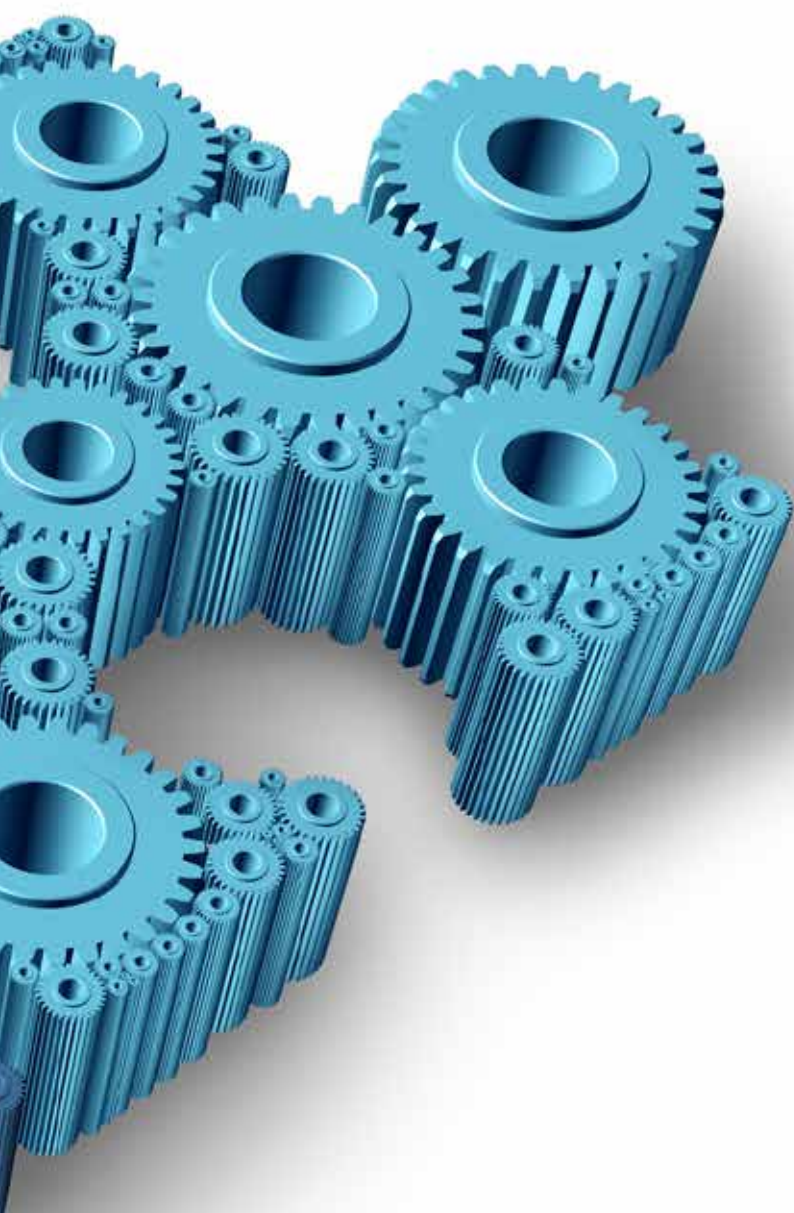


Eder Lizcano, Middle East Vice President of Reservoir Development, Head of Subsurface Department, BP

FOSTERING COLLABORATION TO TURN OMAN INTO AN EOR TECHNOLOGY HUB

BY ENG. NASSER AL RAWAHI, E&D MANAGER, DALEEL PETROLEUM



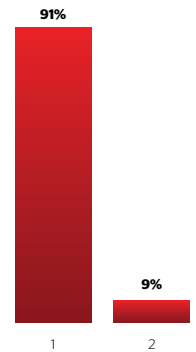


Oman is well placed to become a global center for enhanced oil recovery (EOR) technology in coming years if the country's energy sector stakeholders commit to greater collaboration and knowledge sharing.

A vast majority of industry executives and officials surveyed at the Gulf Intelligence Oman Energy Forum 2014 in Muscat in late October said Oman has the potential to establish itself as a global technology hub for EOR in coming years if industry, government and academia deepen collaboration.

Oman has the potential to become a global technology center for EOR in coming years if industry, government and academia deepen collaboration - Agree?

- 1) Agree
- 2) Disagree



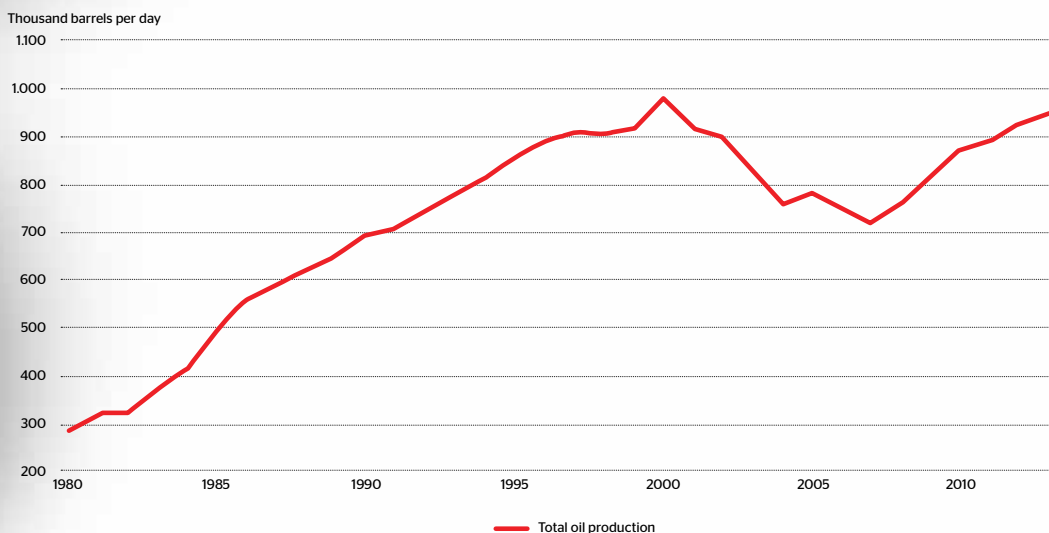
PIONEERING ROLE

The Sultanate has played a pioneering role in the application of EOR methods in the Middle East over the past decade. Thanks to EOR, the Sultanate has managed to stem and reverse a dramatic decline in domestic oil output, introducing techniques such as miscible gas injection, steam injection and polymer flooding in its oil sector, in addition to applying solar thermal EOR, which frees up natural gas, for the first time in the region, also Surfactant Chemicals is also under field trials currently.

The results have been impressive. In 2013, EOR helped pushed up oil production levels in Oman to just above 945,000 barrels a day (b/d), up from 924,000 b/d a year earlier and a 32 percent increase versus 2007, when production hit its lowest in 16 years at about 715,000 b/d, according to Energy Information Administration (EIA) data.

There can be little doubt that Oman's energy sector will have to continue building on its pioneering spirit going forward as the country prepares to tap more of its heavy and complex crude oil reservoirs to sustain and further advance production levels as more easily accessible reserves are going to deplete. This will require both advancing existing EOR techniques and introducing new ones.

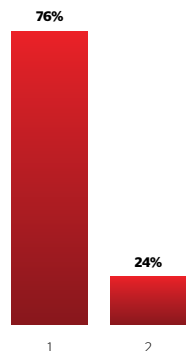
Oman total oil production (1980-2013)



Source: U.S. Energy Information Administration

The potential of EOR is far from being exhausted in Oman as there are many technologies that haven't been applied yet - Agree?

- 1) Agree
- 2) Disagree



According to the industry survey conducted at the OEF, more than three quarters of all respondents expressed the view that the potential of EOR is far from being exhausted in the country as many existing technologies haven't yet been applied commercially in the country .

Chemical EOR, for example, has large potential but contributes only a small share of total global EOR production so far. While thermal EOR techniques account for over 2 million b/d worldwide and gas EOR methods supply around 750,000 b/d, chemical EOR methods produce just 375,000 b/d (just over 300,000 b/d of this figure stem from China), according to UK-based business information provider Visiongain.

Whether in Oman or other parts of the world, ongoing innovations in EOR technology continue to inject new life into many ageing oil fields and have brought the development of many new ones into the realm of economic viability. As the importance of EOR will also increase globally going forward, this could present a unique opportunity for Oman to become a global technology center and for Omani companies to position themselves as global technology leaders in this field.

“In Norway, the biggest income is of course from oil and gas; and the second biggest income by far is they export expertise, knowledge, know-how, technology, which they’ve learned on the back of their oil and gas production. I think there is a tremendous opportunity for Oman to do a similar thing,” said one international

oil executive. “The Middle East region has a great oil industry but has virtually zero support industry and that needs to be exploited.”

EOR developments are technically complex when compared to conventional recovery projects. In addition, the projects are labor intensive and require highly-skilled professionals to execute them. For companies that develop and possess these competencies, implementation of EOR will be easier. Over the years, Omani companies have developed considerable expertise at using a variety of EOR technologies, transferring skills and knowledge to Omanis. This places local companies in a potentially good position to establish EOR centers of excellence and to enhance their capabilities through further research and development (R&D) activities.

However, while Oman has been at the forefront of deploying EOR techniques, including many that haven't been used in other parts of the world, the technologies are imported and not developed locally. Nor are Omani companies with involvement in domestic EOR projects exporting their expertise.

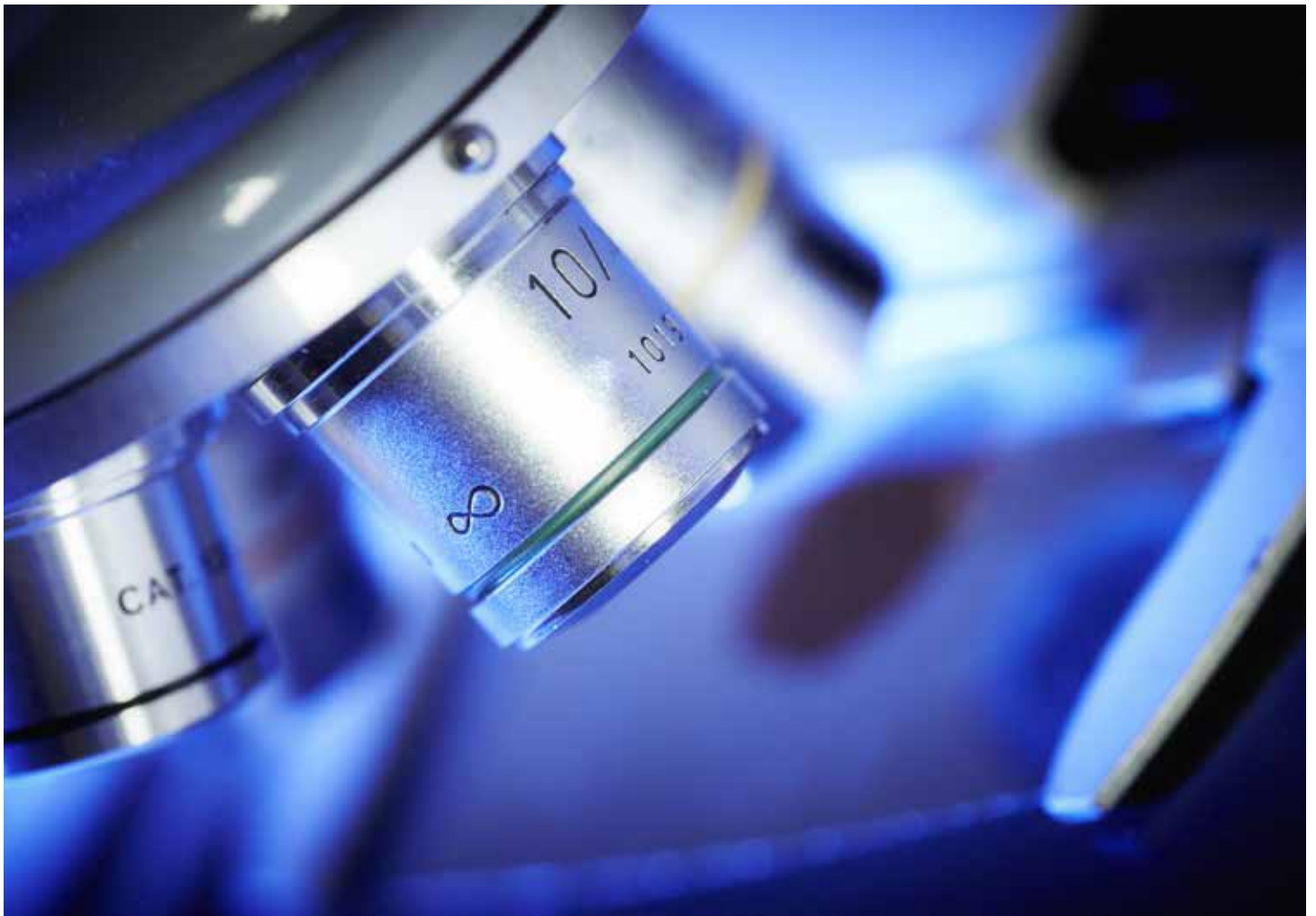
“We need a lot of research and development to be set up in the country. Maybe our Research Council needs to gear up for this and start looking into it, because there is big money to be made. So if our Research Council, our government, our universities can be geared up for this, there will be a lot to be developed within the country to support the EOR industry,” said one Omani oil executive.

There appears to be broad consensus in Oman’s oil industry that, as a first step, collaboration within the sector needs to be improved significantly. New industry platforms will have to be established with a view to enable and enhance knowledge sharing among experts, and building on Oman’s experience in hosting and implementing pilot EOR projects.

“Technology will play a key role with any [EOR] in the future to reduce the cost. Therefore, based on this, it is important we share our knowledge and experience as well as special requirements to talk together between the operators, suppliers, manufacturers and other stakeholders and shareholders. It is very important, for example, to have long-term plans to manufacture [EOR] chemicals in the country if possible,” said another Omani oil executive.

“As the importance of EOR will also increase globally going forward, this could present a unique opportunity for Oman to become a global technology center and for Omani companies to position themselves as global technology leaders in this field.”

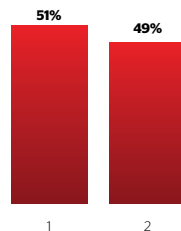




Reducing the cost of applying EOR technology will be of particular importance at a time when oil prices are on a downward trajectory, with Brent crude having dropped nearly 26 percent since June. There appear to be some concerns within the industry that the oil price decline could negatively affect EOR activities in Oman – at least in the longer term. OEF survey respondents were almost split over whether the Sultanate can meet its future EOR targets if oil prices do not recover to levels above \$100 a barrel on a sustained basis, with 51 percent saying it can and 49 percent voting it won't.

Can Oman meet its future EOR targets if oil prices do not recover to levels above \$100/barrel on a sustained basis?

- 1) Agree
- 2) Disagree



Whatever the oil price, there seems to be a broader view in the industry that it would be sensible for Oman to focus its involvement in EOR in the more imminent future at reducing cost by improving existing technologies so that these fit local requirements, while – further down the road – it should also focus on developing proprietary technologies.

Importantly, the government will have to play a leading role in these efforts, with industry experts saying that “the government needs to steer the networking within the industries here, to enhance oil recovery,” and that a key driving force behind and facilitator of greater knowledge sharing and collaboration should be Oman’s Ministry of Oil and Gas. Naturally, the role of the government will be less about the actual R&D but rather about providing the right incentives, and business and regulatory environment to facilitate such research.

These initiatives would be part of a broader effort to create an ecosystem conducive to R&D and would also have to address education capacity building in order to prepare more young Omanis for future careers in fields such as engineering, science and research in the energy sector. In turn, this would require the government to collaborate closely with the other sector stakeholders, namely industry and academia, on identifying ways of enhancing the education system accordingly.

Another important element in building domestic EOR R&D capacity would involve developing and deepening collaboration between industry and universities such as Sultan Qaboos University (SQU). Boosting industry-academia collaboration is seminal because it helps create the kinds of skills locally that are needed to build capacity and sustain local research in the future.

There can be little doubt that improving collaboration among energy stakeholders in Oman will be essential to turning the country into a leading EOR technology center. The potential is there, it now needs to be acted on urgently.

Source: Breakout Session at Oman Energy Forum 2014, hosted by Daleel Petroleum

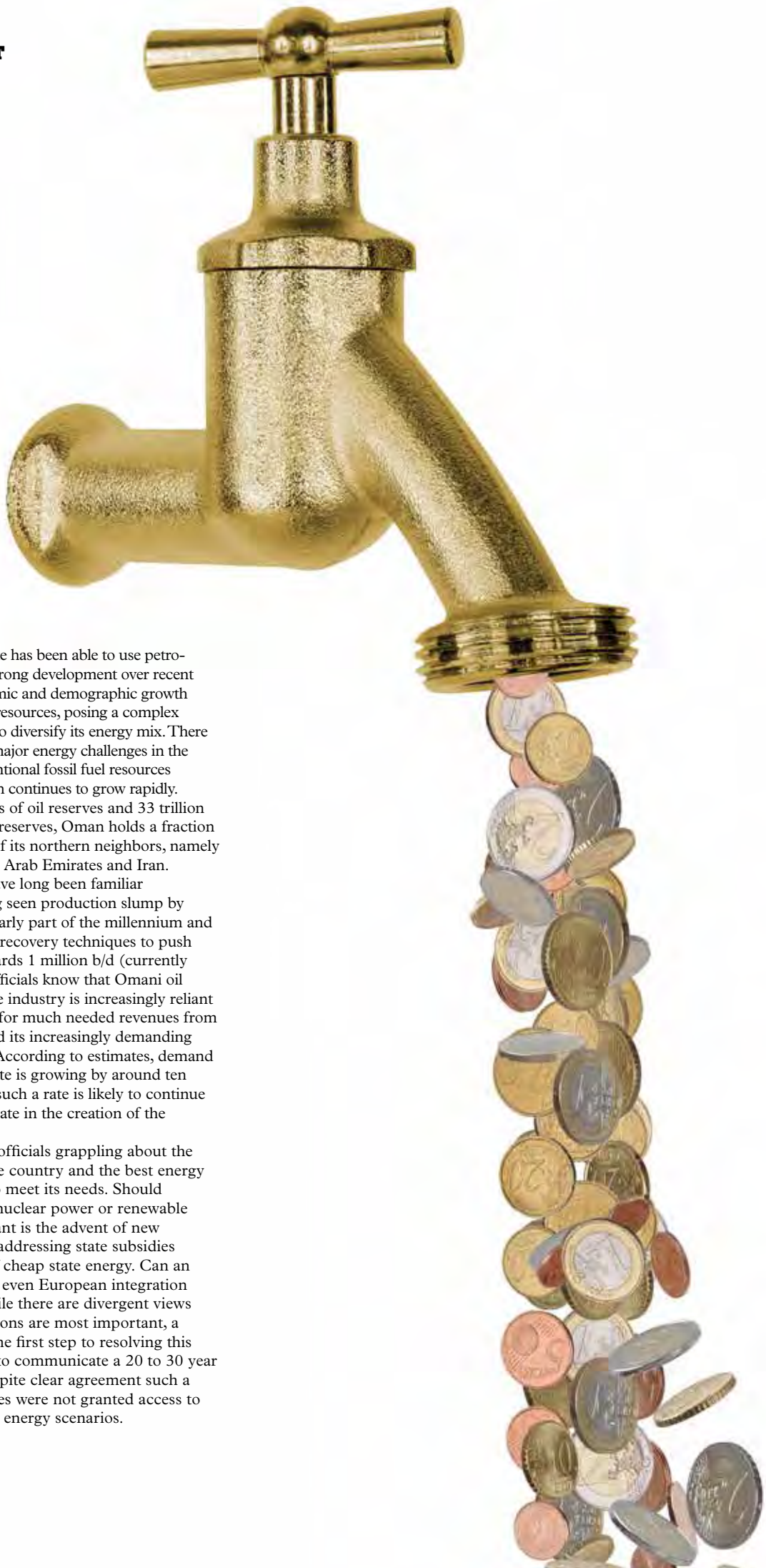


By Eng. Nasser Al Rawahi, E&D Manager, Daleel Petroleum

LOOKING TO THE FUTURE: OMAN NEEDS AN ENERGY MASTER PLAN

BY DR. SALIM AL HUTHAILI, STRATEGY & PERFORMANCE DIRECTOR, DOWNSTREAM BUSINESS, OMAN OIL COMPANY





While the Sultanate has been able to use petrodollars to fuel strong development over recent years, its economic and demographic growth is now poised to outstrip resources, posing a complex question about how best to diversify its energy mix. There is no doubt Oman faces major energy challenges in the coming decades as conventional fossil fuel resources dwindle and its population continues to grow rapidly.

With 5.5 billion barrels of oil reserves and 33 trillion cubic feet of natural gas reserves, Oman holds a fraction of the fossil fuel wealth of its northern neighbors, namely Saudi Arabia, the United Arab Emirates and Iran. Authorities in Muscat have long been familiar with the situation, having seen production slump by some 30 percent in the early part of the millennium and resorted to enhanced oil recovery techniques to push production back up towards 1 million b/d (currently around 940,000 b/d). Officials know that Omani oil won't last forever and the industry is increasingly reliant on gas production, both for much needed revenues from LNG exports and to feed its increasingly demanding domestic requirements. According to estimates, demand for energy in the Sultanate is growing by around ten percent per annum and such a rate is likely to continue as more Omanis participate in the creation of the modern nation state.

Inevitably that leaves officials grappling about the long-term viability of the country and the best energy sources and strategies to meet its needs. Should they pursue clean coal, nuclear power or renewable resources? How important is the advent of new technology, what about addressing state subsidies that risk the frittering of cheap state energy. Can an emphasis on regional or even European integration provide the answer? While there are divergent views on which of these questions are most important, a consensus emerges on the first step to resolving this riddle. That is the need to communicate a 20 to 30 year energy master plan. Despite clear agreement such a plan is required; delegates were not granted access to any long term plans and energy scenarios.

“Oman has for decades relied on heavily-subsidized basic goods and fuel to drive its development but such a policy benefits the rich and poor alike and there appears to be increasing acceptance that the era of subsidies has to end for the country to succeed in its energy goals.”

It is evident that the country is unlikely to effectively configure the way forward without a strategic board to sift the best long-term options from the worst. Such an organization would also set clearly defined targets for Oman's energy industry to meet, whether through upping the percentage of energy created through renewable sources or targets on lowering energy waste, a key part of Oman's bid to become a highly efficient, technically innovative and environmentally-friendly Gulf nation. Such a body would provide the framework for targets and would focus on the role of new technology, provide industry-specific training and financial support to new initiatives to help the industry meet those targets. Beyond that, such a step would be decisive in creating the bedrock of Oman's future development, say advocates.

At which point all the other questions about the future energy mix come thick and fast, one of the first being whether Oman should halt its LNG exports – currently bringing in around \$5 billion a year in revenues – when current contracts run out, what are the best economic options to utilize the LNG? Oman has ambitious plans to for industrial projects and further refining capacity to power its overall development but some ambitions appear to be dependent on the availability of price advantaged feedstock. The Khazzan tight gas project is due to start production in the next three years yielding up to 28 million cubic meters (mcm) when completed, but one Khazzan project is not enough to meet the competition between industries. With Oman's oil industry already using up around a quarter of Oman's gas output and likely to require an ever larger proportion to feed into EOR projects over the coming years, the competition is going to get more intense. LNG exports makes up a further quarter of gas output.

There is precious little appetite in Oman to halt or reduce its LNG exports. With the good global relationships, Oman could bolster natural gas availability in future through imports from gas-rich countries... Qatar already exports a limited amount to Oman via the Dolphin pipeline and Oman and Iran recently signed agreements to export Iranian gas to the Sultanate. Should Oman use such sources to secure its own gas needs? The reality comes down to cost and sources say the route is likely to be expensive and economically not viable.

Many inside and outside the industry are concerned about Oman's dependence on gas. How then should it bridge its energy gap without becoming dependent on the energy resources of other countries? There are options, not least a concerted drive towards renewables. With an abundance of sunlight, Oman has considerable potential to harness the power of solar energy. Several solar projects have been announced as part of an \$800 million program of investment in renewable energy. As technology improves, industry sources say solar and wind could make up a significant stake in the energy mix relatively quickly, especially given the small size of the grid. But anything beyond 20 percent of the mix could lead to major disruptions and destabilize the current grid system. Beyond

those drawbacks however, Oman has already started to apply solar power to cut the volume of gas required in EOR projects and it appears such a pioneering project has seen some success. Not only could it serve the oil industry but reduce the volume of gas needed to feed combined cycle power plants through solar-steam production.

Coal-fired power stations have been mooted as a further alternative in the past. While dismissed over environmental reasons, clean coal technology seems to be a wide subject of discussion in the industry. But questions remain over the commercial viability of the technology with unknown costs featuring alongside practical matters such as where coal shipments would come from. Given such issues, coal doesn't offer the solution but may at least have a small role in diversifying Oman's future energy mix. Nuclear power is a different story and remains off the table due to the technical and financial complications it poses. While offering considerable possibilities but is simply too political, especially in the post-Fukushima world. Again, it may be unpalatable right now but both coal and nuclear could play a role in the longer term development of the economy.

By no means least is the challenge of cutting public energy usage in Oman - the low-hanging fruit - that can offer considerable progress if the right decisions are made. Oman has for decades relied on heavily-subsidized basic goods and fuel to drive its development but such a policy benefits the rich and poor alike and there appears to be increasing acceptance that the era of subsidies has to end for the country to succeed in its energy goals. It is clear that efficiencies are needed. Until subsidies are brought under control, Oman will be forever playing catch up with its flagging resources. It is a question of changing the mentality of the population towards energy and currently no one needs to pay much attention to the amount of energy consumed. And it is evident that wealthy individuals use much more power to air conditions their larger homes and to power all their electrical goods. Why should the state pay for that? It is an obvious place to start but reducing subsidies also represents an extremely sensitive issue and one that needs to be handled with care to ensure that those at the sharpest end of the economic equation aren't isolated from the development drive.

In the longer term, greater regional energy integration is likely to prevail, offering Oman and other GCC countries combined energy security. If progress is made soon on optimizing regional needs and capacity then all the better but that is not the priority right now. In the short term, Oman must ensure the lights stay on. It may sound dramatic but that is the challenge through identifying and securing sustainable new energy sources for the coming decades. It is a major challenge but it represents a golden opportunity. If we get it right, Oman could become a regional leader in technical innovation in the energy sector which could in turn yield major successes for the wider development of the country.

Source: Breakout Session at the Oman Energy Forum 2014, Hosted by Oman Oil Company



Dr. Salim Al Huthaili,
Strategy &
Performance Director,
Downstream
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