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WOMEN IN ENERGY – ON THE RIGHT TRACK



QATAR SHELL DIALOGUES AT THE INTERNATIONAL
PETROLEUM TECHNOLOGY CONFERENCE (IPTC)
WHITE PAPER

FEBRUARY 2014

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GULF INTELLIGENCE
We Facilitate Knowledge Exchange



INTRODUCTION

Shell in Qatar led the debate on Women in Energy at this year’s International Petroleum Technology Conference (IPTC) that took place from January 20-22 at the Qatar National Convention Centre.

The panel discussions hosted on Shell’s exhibition stand featured senior company officials, oil and gas executives, as well as leading academics, from Qatar and abroad.

Held as part of the ‘Qatar Shell Dialogues’ series launched in May last year, the debates provided a platform for participants to take a critical look at the role of women in the energy industry today and progress being made in the quest towards greater diversity and inclusion in the workplace.

A series of surveys conducted among panelists and audience during the debates produced valuable insights into what measures and initiatives the industry may want to take to enhance female representation within companies and across the energy sector at large.

The ‘Qatar Shell Dialogues’ are part of a broader Shell initiative aimed at providing a platform for business, government and academia to facilitate the exchange of ideas and knowledge in Qatar’s energy sector. The series will continue throughout 2014.



Leading the debate: Shell hosted two panel discussions on ‘Women in Energy’ at IPTC 2014 in Doha in January.

WOMEN IN ENERGY – ON THE RIGHT TRACK

The energy industry, traditionally a male domain, has made great strides in attracting larger numbers of women into engineering and managerial positions over the past decade. Today, women make up a bigger proportion of the industry's global workforce than at any point in the past, while an increasing share of female university students are entering science and engineering programs that were once a strictly male domain.

While the progress is encouraging, there is a broad consensus that sustained efforts will have to be made to retain and bolster the energy industry's female component in order to create a more inclusive and diverse workforce. This is of particular importance at a time when the industry is stepping up its search for talent amid a looming shortage of engineers, while at the same time being confronted with the challenge of having to meet rising world energy demand by tapping into ever-more complex and remote hydrocarbon reservoirs.

GENDER IMBALANCE

The gender imbalance in the energy industry has been present for decades, but with a whole generation of experienced engineers set to retire over the next 10 years and the number of new entrants limited, building a diverse workforce that includes more women isn't simply a choice; it's essential if the energy industry is to meet the challenges that lie ahead – whether on a global level or in oil and gas rich countries such as Qatar.

At present, women still represent a small share of the oil industry's workforce and even fewer hold engineering or other technical positions. In the U.K., for example, women account for 51 percent of the population but only 8 percent of engineering professionals, according to a recent analysis from the Royal Academy of Engineering¹. A survey conducted by the Centre for International Labour Market Studies shows that female workers make up just 4 percent of the total oil and gas workforce in the U.K.²

While the numbers vary from country to country, the overall trend, however, appears to be slowly changing, with the number of women entering the industry constantly growing. In the U.S., 46 percent of all new jobs in the oil industry went to women in the first quarter of 2013, according to the U.S. Bureau of Labour Statistics – the highest number since the bureau started tracking these figures in 1991.

Globally, more women also hold senior management positions in the industry today. Female executives such as Maria das Gracas Silva Foster, CEO of Petrobras, Jody Freeman, Member of the Board of Directors at ConocoPhillips, Margareth Ovrum, Statoil's Executive Vice President Technology – Projects and Drilling, and Ceri Powell, EVP, Exploration, are only four examples of the changes taking place in the industry globally.

Efforts to attract more women into the energy sector and to overcome the stereotype that the industry is male dominated have sprouted in various places as companies and professional organizations strive to make sure that the upcoming generation of engineers, geologists, scientists and researchers will comprise a larger share of females. Oil companies, including Shell, have launched initiatives and programs aimed at supporting the development of female employees and making the industry a more attractive career choice for women, as well as helping them reach senior management positions.

PROSPECTS

Overall, women have seen their career prospects in the energy industry improve in recent years and an increasing number of females are taking advantage of the opportunities available. But more needs to be done to sustain a continuous and growing flow of females into the energy sector.

¹ See: <http://engineeringforgrowth.org.uk/engineering-diversity-concordat-enter-the-professionals/>

² See: http://uk.opito.com/uk/library/Labour_Market_Intelligence_Survey_Report.pdf

In a survey conducted by Qatar Shell at IPTC, 63 percent of respondents comprising industry representatives and senior academics said mentorship programs led by young women in the energy industry would have the greatest impact on attracting female engineers into the industry after graduating³. Another 26 percent of those surveyed said the industry would need to step up marketing activities to address and change its macho image.



Raising awareness and polishing the industry's image is one thing; addressing the challenges and obstacles women may encounter in a male-dominated environment, in particular out in the field, on a day-to-day basis another.

According to the same survey, 58 percent of respondents believe that, for women to take on more roles in the field (i.e. on offshore drilling rigs), it will therefore be seminal that companies implement strict rules against harassment and discrimination in the workplace, and create an environment that accommodates female requirements⁴.

“ I don't think we fully utilize the tools that we have in the industry to really allow the female population in a company like Shell, but also more broadly in the engineering sector, to be attracted to this industry and to contribute, ”
said Wael Sawan, Managing Director and Chairman of Qatar Shell.

³ See Graph 1 – Survey conducted at Shell panel discussion at IPTC 2014 in Doha on Jan. 20, 2014

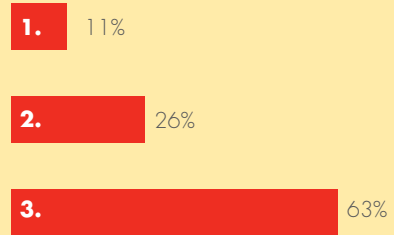
⁴ See Graph 2

Graph 1:

In the U.S. women comprise more than 20% of engineering school graduates, but only 11% of practicing engineers are women.

Which of the following would have greatest impact on bolstering the number of female engineer graduates entering the energy industry?

- 1. One of the super major oil companies appointing a female CEO
- 2. Change macho image of industry through marketing
- 3. Young women in energy mentor programs that target high school students



More efforts will need to be made by the industry. According to the Society of Petroleum Engineers, whose membership of about 100,000 comprises an estimated 20-30 percent women, “the establishment of genuine gender-based diversity policies will require dedicated efforts aimed to appeal to women engineers to join and especially to advance in successful career opportunities in the oil industry all over the world.”

“These efforts need to address the main challenges for professional women in the industry, with a global approach, but with regional solutions, as issues vary from place to place. Answers like flexible work schemes, provisions for maternity leaves, schemes for dual careers support, and special female-focused leadership training strategies are required today, to achieve the goal of increment recruitment and retention; and to reduce female attrition numbers in industry.”⁵

Nisrine Al Kadi, Subsurface Team Leader and President of Qatar Shell Women’s Network (QSWAN), and a petroleum engineer by background, says the industry will have to continue working towards overcoming structural barriers as well as behaviour barriers to bolster the role of women in the industry.

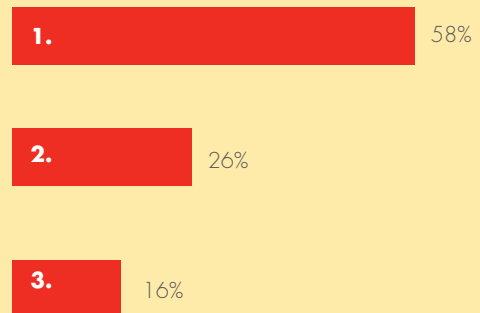
To this end, companies need to focus on introducing better work-life balance policies that allow flexible working hours and shared maternity leave between parents, as well as improving childcare facilities.

Graph 2:

According to SPE, at NOCs, female ratios rose in 2011 to 27% from 19% in 2006 (geosciences) and to 17% from 15% (petroleum engineering).

Which of the following is the most important reform that energy companies need to adopt to facilitate and attract more women in the field?

- 1. Introduce strict rules to deal with harassment and discrimination in the workplace.
- 2. Reconfigure design & layout of built environment
- 3. Accelerated opportunities for Rapid promotion



TECHNOLOGIES

While the numbers of women working in the energy industry are still small, there appears to be consensus that there are few, if any, limitations on the type of jobs female employees can perform in the energy sector today. This is partially due to technological advances.

Over the past decade, the industry has seen the widespread application of new technologies such as computer-assisted exploration and remote drilling that help increase operating efficiencies and boost productivity, profitability and safety – and can be performed from onshore locations.

⁵ See: <http://www.spe.org/career/docs/diveintogenderpool.pdf>

According to the Qatar Shell IPTC survey, 68 percent of respondents believe that these new automated systems and easier-to-operate equipment make field work not only more efficient but also removes the argument that the environment in the field is physically too demanding for women⁶.

The application of new technologies has been a trigger for greater diversification within the energy industry’s workforce already as a new breed of engineers with backgrounds in information technology (IT) and computer sciences are increasingly in high demand. This in turn is also providing new opportunities for women to enter the energy sector.

QATAR

For women in Qatar, the number of opportunities available in the country’s thriving oil and gas industry is increasing.

Given the limited size of its population, the Gulf state -like many of its neighbours - will have no choice but to tap into both its male and female talent pools to source and develop the workforce required to fuel the country’s expanding industrial base on the one hand, and its energy research and

and development (R&D) ambitions on the other. Both objectives are in line with Qatar’s quest towards becoming a knowledge economy and to create new employment opportunities.

The number of female university graduates in Qatar has risen significantly over the past decade, with the share of women entering science and engineering studies also increasing.

“At Texas A&M University 38 percent of our students right now are women. And if you look at the universities in the United States, in engineering, it runs at about 18 percent. So we are producing a lot of female engineers today,” said Dr. Todd Kent, Assistant Dean of Academic Affairs at Texas A&M University Qatar (TAMUQ).

However, there is still a disconnect between females graduating and entering the workforce. According to the United Nations Statistics Division, at 63 percent Qatar has the region’s second-highest percentage of women in higher education.

The labour participation rate for Qatari males aged 15 and above stood at 96 percent in 2012, according to World Bank data⁷. This compares with only 51 percent for Qatari women in the same year⁸. In neighbouring Kuwait, traditionally ahead of its neighbours in terms of gender balance in the labour force, the proportion of 30-34 year-old women in employment stood at 84 percent by the end of 2012.

Qatari female labour force participation rates may still be low when compared to their male counterparts, but last year’s rate is still up from about 40% in 2002. Furthermore, more young women are entering the private sector, if on a very low scale, compared to young men because of their higher educational attainment, which makes them better suited for the sector’s specific requirements.



⁶ See Graph 3

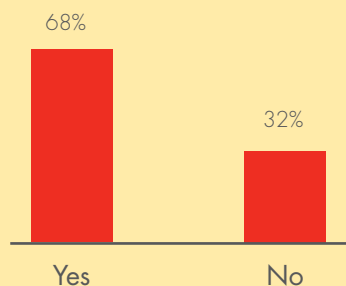
⁷ See: <http://data.worldbank.org/indicator/SI.TLF.CACT.MA.ZS/countries>

⁸ See <http://data.worldbank.org/indicator/SI.TLF.CACT.FE.ZS>

Graph 3:

New technologies are changing the face of oilfield service work.

Will new automated systems and easier to operate equipment make field work more efficient and remove the argument that it is too physically demanding for women?



Still, a majority of participants in the Qatar Shell survey (54 percent⁹) expressed the view that the disconnect between females graduating and entering the workforce will prevent the regional energy industry from attracting and developing the national talent required to manage the industry if women – despite leading in science education – are not incentivised to take up jobs in the energy sector in greater numbers.

One way of pushing up female participation in senior management in particular is via quota setting, which has been a controversially debated topic in recent years.

Norway has actively pursued the introduction of mandatory quotas that require corporations to have a certain percentage of women on their boards and the numbers have increased accordingly¹⁰. Other countries such as Germany are debating similar initiatives to develop and foster female managers.

Opponents of quota setting argue that the goal should be

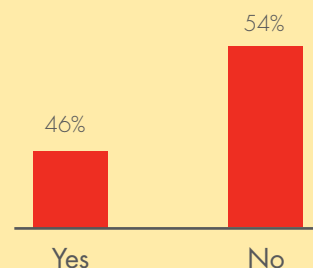
to hire the person with the right skill set and capabilities that match the job requirements.

“As the saying goes, what gets measured gets done. So I do believe in setting gender targets, and measuring and tracking them,” said Al Kadi. “I do believe that coming from the low base that we are at, and with some of Shell’s barriers that we are face in attracting, retaining and developing female talent, this is something that if the industry is serious about achieving then they need to measure it the same way they do their business targets.”

Graph 4:

In a number of MENA countries, women made up well over half the science graduates in 2011, reaching 72% in Saudi Arabia when only 1% of Saudi science researchers are women.

Can the regional energy industry attract and develop the National talent required to manage the industry if women increasingly lead in science education but don’t enter the sector?



To be sure, from high-tech posts to managerial roles to field services, women are gaining a steady foothold in Qatar’s energy industry. Still, if these numbers are set to rise further going forward, energy companies, in collaboration with universities, will have little choice but to lay out clear career paths and objectives for today’s generation of young and ambitious Qatari females.

“What we’re seeing now is these female engineers that are graduating are much savvier than they used to be. They’re looking across industries, and they’re looking for industries that will give them a career development plan that they feel good about,” said Dr. Kent. “Our top female graduates want to know that if they go to work for you that you have a plan for them, and they’re not just a number that a company can report that they’ve met a quota or hired an additional 10% engineers.”

ECONOMIC BENEFITS

Whether in Qatar or in other parts of the world, the benefits of boosting the share of women among the overall labour force are enormous.

⁹ See Graph 4

¹⁰ Norway requires at least 40 percent of public limited company board members to be women

Consultancy firm Booz & Company says women can be significant drivers of economic growth and estimates that raising female employment to male levels could have a direct impact on gross domestic product (GDP) of 5 percent in the U.S., 9 percent in Japan, 12 percent in the United Arab Emirates, and 34 percent in Egypt¹¹.

“Greater involvement from women has an impact beyond what their numbers would suggest,” the consultancy said.

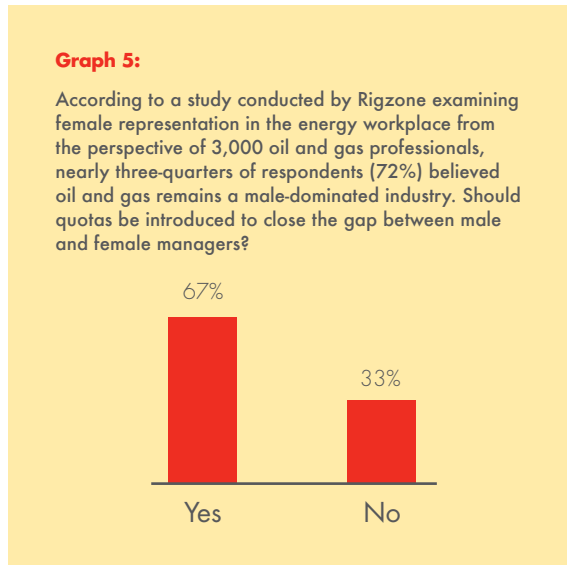
“For example, women are more likely than men to invest a large proportion of their household income in the education of their children. As those children grow up, their improved status becomes a positive social and economic factor in their society. Thus, even small increases in the opportunities available to women, and some release of the cultural and political constraints that hold them back, can lead to dramatic economic and social benefits.”

U.S.- based research house Catalyst stated in an analysis examining Fortune 500 companies that those with the highest representation of women on their board of directors experienced better financial performance on average – in terms of return on sales, return on invested capital and return on equity – than those with the lowest representation of women.

It is now widely recognized across the energy industry, and among the other key stakeholders – governments and academia – that enhancing the role of women as part of broader efforts to achieve greater diversity and inclusion in the workplace do lead to improved business outcomes.

This is equally true for Qatar and other Gulf Cooperation Council (GCC) states, where the potential of the labour force’s female component remains largely untapped, despite important progress being made in

the recent past. However, in light of rising pressures on companies to nationalize their workforce as part of governments’ attempts to bring down high unemployment rates and reduce their heavy dependence on expatriate workers, efforts need to be doubled and accelerated further in coming years.



“Once the oil & gas industry in Qatar truly utilizes & acknowledges their female talent to the point where they become critical decision makers, the industry will then reach a point where they have produced the role models for success the next generation will draw inspiration from.” said Mais Taha, Reservoir Engineer of Qatar Shell.

¹¹ Booz & Co.: Empowering the Third Billion Women and the World of Work in 2012