The background of the entire page is a photograph showing the silhouettes of several oil rigs and power line towers against a bright, orange-hued sunset sky. The rigs are dark, skeletal structures with various platforms and ladders. The sun is low on the horizon, creating a strong backlighting effect on the clouds and the structures.

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Challenges and solutions for
Middle East Energy & Resources
Deployment of nationals in
a post-oil economy

In the Middle
East since
1926

Foreword

Never before have national oil companies (NOCs) in the Middle East faced such a range of challenges as they seek to increase their output, efficiency and contribution from a corporate as well as a country standpoint. How do they recruit, retain and develop the most diverse range of talent available in competition with other employers? How do they deploy technology in a way that serves the business and extracts the greatest value from the large volumes of data generated within the organization? How do they broaden their corporate strategy to take account of the wider stewardship role that is demanded of them by their host governments – to grow the private sector in a post-oil economy?

In a series of three whitepapers, three Deloitte Middle East contributors, each a specialist in their own field, will examine specific challenges and possible solutions that affect Middle Eastern national oil companies in the areas of human capital, technology and strategy. These challenges and solutions are not theoretical; the challenges are drawn from real life experience, the solutions do exist and are capable of deployment to a greater or lesser degree, although the investment in people, processes and technology are substantial.

It is a virtuous coincidence that all three of our contributors are women, each with a passion for their specialism. The role and influence of women in Middle

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Eastern national oil companies are increasing, not only out of necessity but out of desire. It no longer makes sense to exclude a substantial part of the population from thriving in the most important industry in the region. In other parts of the world, the corporate and institutional benefits of female leadership are clearly proven – the Middle East is realizing this too.

Kenneth McKellar

Partner

Energy & Resources Leader

Deloitte Middle East

The challenges

The energy and resources industry has been the backbone of the Middle East's economic development in recent years as a result of an increase in the global oil and gas demand and rising prices. The MENA region accounted for around 50 percent of the world's global oil reserves and around 40 percent of the global natural gas reserves in 2013, which makes the region a key player in the oil and gas industry worldwide. The abundance of these precious commodities in the MENA region brought several advantages to the oil and gas-rich countries as oil and gas exports were a major catalyst for economic development and wealth accumulation. Oil and gas companies operating in this region also benefited from the increase in oil and gas demand over the years, a situation that has presented them with challenges as well. The challenges that we address in this whitepaper include an ageing workforce in an oil and gas industry already grappling with an underweight qualified junior talent pool, as well as nationalization pressures from governments to reduce

heavy, costly reliance on expatriates. The long term sustainability of the oil and gas industry will largely depend on the ability and willingness to embrace these challenges through corporate and governmental initiatives. The oil and gas industry in the MENA region and the world is facing a shrinking talent pool as older, more experienced oil and gas employees retire or leave the industry, while a more junior workforce lacks the technical, vocational and soft skills required by the industry. The Society of Petroleum Engineers estimates that up to 50 percent of skilled engineers could retire within the next five to seven years, presenting an immense human capital and talent management challenge to the oil and gas industry. Moreover, oil rich countries in the MENA region lag behind their global counterparts in the number of engineering and science university students that graduate every year. Only 6 percent of GCC students graduating in 2012 majored in engineering and science, compared to 24 percent in Malaysia. Despite being a highly automated industry, the human capital element remains critical as oil and gas jobs require a wide array of skills ranging from highly technical to operational and commercial. Acquiring expertise in these areas requires years of training and experience in ambiguous and challenging situations, and such training and experience is lacking in the more junior workforce.

With companies in the MENA region facing nationalization challenges, oil and gas companies continue to face a dilemma of reducing their heavy dependence on expatriates in the wake of a shortage in skilled and qualified nationals. What can be done to deploy national talent in the MENA region's oil and gas industry?

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The solutions

There are a series of company-specific strategies and programs that can be developed and implemented to relieve the pressure on oil and gas companies and provide short- to medium-term solutions regarding the deployment of national talent. These include:

Graduate programs: aimed at national undergraduate students. These typically last between two and four years, offering the chance to gain diverse experience through systematic job rotations in different sectors within oil and gas, in upstream, midstream and downstream. This program exposes candidates to a variety of challenges that develop their core, technical and soft skills. At the end, candidates choose a sector to specialize in, and are equipped with the required skills, gained through multiple rotations, to perform a job successfully. International oil and gas companies that employ graduate programs to hire and train graduates include Shell, Exxon Mobil and Statoil.

Women's integration programs: aimed at taking advantage of an underexploited female talent pool by finding creative ways to attract women to the oil and gas industry and developing their skills. For example, the Women Building Futures (WBF) program in Alberta, Canada was founded in 1998 to provide women with theory, technical training and workplace conditioning tailored to the construction and oil and gas industry. International oil and gas giants Shell and Suncor Energy Inc. have been key supporters of the WBF and offer program participants the chance to pursue careers in non-traditional, but much needed, roles. In addition to the conventional training methods used to enhance industry-specific skills, such as workshops and on-the-job training, a recent survey by NES Global Talent found that 95 percent of female respondents said that the

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presence of mentors and female role-models was essential for career advancement. So, by establishing mentorship schemes to guide female nationals during their career in addition to training, national oil companies (NOCs) will be able to attract and nurture female talent in a male-dominated environment.

Coaching programs for leaders: aimed at developing technical, commercial, and general leadership capabilities of NOC executives to help them navigate their companies through the dynamic and ever-changing nature of the oil and gas industry. Coaching programs can even be extended to include middle managers of the different functional areas in order to groom next generation leaders, and ensure the smooth transition and hand-over from retiring executives to their up-and-coming replacements. Leadership coaching sessions take the form of workshops and/or one-on-one sessions with a coach with the objective of unlocking leadership potential that might otherwise go untapped.

Partnering with universities: NOCs are partnering with and/or sponsoring local and regional universities to receive a steady stream of qualified national graduates. For instance, the Petroleum Institute (PI), a university in Abu Dhabi, is sponsored by Abu Dhabi National Oil Company (ADNOC), one of the biggest NOCs in the MENA region. All national students attending PI are given full scholarships and are guaranteed a job in one of ADNOC's group of companies upon successful graduation. Another example is Saudi Aramco which has a long history of partnering with King Fahd University of Petroleum and Minerals for research purposes, in addition to attracting talented Saudi engineering and science students.

Strategies and programs discussed above would help NOCs individually. Nevertheless, a sustainable and nationwide solution needs to be created. Accordingly, there is a need to build an ecosystem that enables the deployment of national graduates in the oil and gas industry. Possible ways to achieve this include, but are not limited to:

Revising the education system in high schools and universities in an effort to meet society's demand in the MENA region and to support countries' economic visions. In other words, the conventional instructional model has to be changed from one based on memory to one based on application and initiative. With an increased focus on laboratory sessions and workshops, students will be able to apply the theoretical knowledge they have been taught to real-life situations, thus

developing their vocational skills and entrepreneurial spirit. Moreover, career guidance and counseling sessions should aim at attracting school students at an early age into science, engineering and technology education and careers to meet the ever-growing demand for a skilled labor force in the oil and gas industry.

Funding scientific research and development initiatives to spur innovation. Research and development spending in the MENA region is far behind those of the developed countries around the world. For example, the United States of America spends 2.8 percent of its GDP on scientific research and development compared to 0.2 percent in the Kingdom of Saudi Arabia. The aim of scientific research and development funding will be to educate and support engineers and scientists to advance oil and gas exploration and production technologies in the most effective and environmentally responsible manner, in addition to pioneering projects related to clean and sustainable energy technologies. Positive strides have already been made in the MENA region such as Masdar Institute, established in Abu Dhabi as an independent, research-driven, graduate-level university that is focused on advanced energy and sustainable technologies. To date, scientists and engineers at Masdar Institute have completed several projects in the region and around the world aimed at reducing carbon footprints and implementing green technologies.

Developing human resources initiatives that cater to the industry's increasingly critical requirements. Governments in the MENA region are responsible for funding these initiatives which aim at attracting and retaining nationals in the oil and gas industry and ensuring the establishment of succession plans to replace the current leaders with skilled and qualified nationals. In addition to this, governments could fund and sponsor technical trainings and leadership programs to fill the skill gap that currently exists in the industry.

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Concluding remarks

Implementing nationalization is quite an ambitious mandate across the MENA region. Deploying nationals in a post-oil economy in particular is not going to be an easy assignment. However, as Chinese philosopher Lao Tzu once said: "The journey of a thousand miles begins with one step."

The challenges have been uncovered, thus allowing for a better way to plan for solutions. It is true that results will not be immediate as the solutions take time and effort, and challenge the status quo. In fact, designing, recruiting for and executing a graduate program takes up to 36 months for an organization to start measuring its impact.

Nevertheless, oil and gas companies are impactful and they can set the ground for new human capital and talent management practices. Furthermore, they have a strong employee value proposition. Accordingly, they can influence educational institutions that are interested in sending their graduates for employment opportunities or for internship purposes.

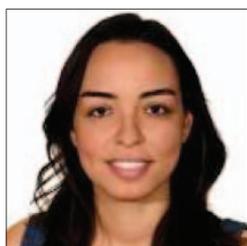
Sometimes, we do not have to look at developed countries for lessons learned and best practices. Many companies in the MENA region have led by example; their stories need to be told through their leaders, HR directors and successful women.



Kenneth McKellar
Partner
Energy & Resources
Leader

Deloitte Middle East
kmckellar@deloitte.com

Kenneth McKellar MA CA is a Deloitte Partner and Middle East Energy & Resources Leader. He has 30 years of experience in oil and gas, gained from working across professional services, investment banking and industry, and has been active in oil-and gas-related techno-economic projects in the Middle East for the past 10 years. Kenneth's career at Deloitte has included leading Deloitte's Petroleum Services group for eight years, managing 60 people in seven worldwide locations. Prior to joining Deloitte he held executive positions in finance, including Executive Director at UBS Zurich, specializing in oil and gas privatizations in Central and Eastern Europe and the Former Soviet Union, and Director at Noble Grossart Limited, Scotland's leading independent merchant bank, based in Edinburgh. Kenneth McKellar is a graduate of Cambridge and Strathclyde Universities in the UK, a member of the Institute of Chartered Accountants of Scotland and Member of the Society of Petroleum Engineers. Kenneth's areas of expertise are Strategy and Operations, Corporate Finance Advisory, Transaction Support, Risk Consulting and Management, and Corporate Governance.



Joana Abou Jaoude
Manager
Human Capital

Deloitte Middle East
jaboujaoude@deloitte.com

Joana Abou Jaoude is a manager with Deloitte Middle East based out of Abu Dhabi. She works in the Human Capital service line across industries and is particularly interested in Energy and Resources. Her focus is on talent management matters as well as on rewards and performance. She is a certified human resource professional via international institutions such as the Chartered Institute of Personnel and Development (CIPD, UK) and the Society for Human Resource Management (SHRM, USA). She has developed national graduate programs in the Middle East and worked with large organizations in the United Arab Emirates and across the Middle East for the past eight years. She would like to thank Sami Kahale for his valuable help and contribution to this piece of work. Sami is an analyst in the same service line with Deloitte Middle East, Abu Dhabi office.

Deloitte in the Middle East

ME Regional Office

Gefinor Center, Block D
Clemenceau Street
P.O. Box 113-5144
Beirut, Lebanon
Phone +961 (0) 1 748 444
Fax +961 (0) 1 748 999

Consulting

Regional office

Deloitte & Touche (M.E.)
Building 3, Emaar Square
Downtown Dubai
P.O. Box 4254 Dubai,
United Arab Emirates
Phone +971 (0) 4 376 8888
Fax +971 (0) 4 376 8899

Enterprise Risk Services

Regional office

Deloitte & Touche (M.E.)
Building 3, Emaar Square
Downtown Dubai
P.O. Box 4254 Dubai,
United Arab Emirates
Phone +971 (0) 4 376 8888
Fax +971 (0) 4 376 8899

Financial Advisory Services

Deloitte Corporate Finance Limited - Regional office

DIFC, Currency House
Building 1
P.O. Box 112865
Dubai, United Arab Emirates
Phone +971 (0) 4 506 4700
Fax +971 (0) 4 327 3637

Tax Services

Regional office

Currency House
Building 1
P.O. Box 282056
Dubai, United Arab Emirates
Phone +971 (0) 4 506 4700
Fax +971 (0) 4 327 3637

The Deloitte ME Islamic Finance Knowledge Center (IFKC)

Al Zamil Tower, Government Avenue,
Manama, Kingdom of Bahrain
Phone +973 (0) 1 721 4490 Ext 2018
Fax +973 (0) 1 721 4550

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Blog: deloittemiddleeastmatters.com

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LinkedIn: Deloitte Middle East company profile

Bahrain

Manama

Al Zamil Tower
Government Avenue
P.O. Box 421
Manama, Kingdom of Bahrain
Phone +973 (0) 1 721 4490
Fax +973 (0) 1 721 4550

Egypt

Cairo

95 C, Merghany Street,
Heliopolis 11341, Cairo, Egypt
Phone +20 (0) 2 2290 3278
Fax +20 (0) 2 2290 3276

Alexandria

Madinet El Sayadia
Building No 10,
Smouha, Alexandria
Phone +20 (0) 3 426 4975
Fax +20 (0) 3 426 4975

Iraq

Erbil

Vital Village, No. 42
Erbil, Iraq
Phone +964 (0) 66 257 6200

Jordan

Amman

Jabal Amman,
190 Zahran Street
P.O. Box 248
Amman 11118, Jordan
Phone +962 (0) 6 550 2200
Fax +962 (0) 6 550 2210

Kuwait

Deloitte & Touche Al-Wazzan & Co.

Kuwait City
Dar Al-Awadi Complex
Ahmed Al-Jaber Street, Sharq
P.O. Box 20174
Safat 13062, Kuwait
Phone +965 2240 8844
Fax +965 2240 8855

Lebanon

Beirut

Arabia House,
131 Phoenicia Street
P.O. Box 11-961
Riad El-Solh, Beirut
1107 2060 Lebanon
Phone +961 (0) 1 364 700
Fax +961 (0) 1 367 087

Libya

Tripoli

Tripoli Tower
P.O. Box 93645
Tripoli, Libya
Phone +218 (0) 92 370 1049

Oman

Muscat

MBD Area
Muscat International Center
P.O. Box 258
Ruwi, Postal Code 112
Sultanate of Oman
Phone +968 (0) 2481 7775
Fax +968 (0) 2481 5581

Palestinian Territories

Ramallah

Al Mashreq, Insurance Building
P.O. Box 447
Ramallah, Palestinian
Controlled Territories
Phone +970 (0) 2 295 4714
Fax +970 (0) 2 298 4703

Qatar

Doha

Al Ahli Bank Building
Sheikh Suhaim Bin Hamad Street
P.O. Box 431
Doha, Qatar
Phone +974 (0) 4434 1112
Fax +974 (0) 4442 2131

Saudi Arabia

Deloitte & Touche Bakr Abulkhair & Co.

Riyadh

Prince Turki Bin Abdullah
Al-Saud Street
Sulaimania Area
P.O. Box 213
Riyadh 11411, Saudi Arabia
Phone +966 1 282 8400
Fax +966 1 282 8428

Al Khobar

ABT Building, Al Khobar
P.O. Box 182
Dammam 31411, Saudi Arabia
Phone +966 (0) 3 887 3937
Fax +966 (0) 3 887 3931

Jeddah

Saudi Business Center
Madinah Road
P.O. Box 442
Jeddah 21411, Saudi Arabia
Phone +966 (0) 1 2 657 2725
Fax +966 (0) 1 2 657 2722

South Sudan

Juba

Deloitte Complex, Plot No.160,
Block 3K-South
2nd Class Thong Ping
Residential Area
P.O Box 511
Juba, Republic of South Sudan
Phone +211 92 000 1024

Syria

Damascus

9 Fardos Street
P.O. Box 12487
Damascus, Syria
Phone +963 (0) 11 221 5990
Fax +963 (0) 11 222 1878

Rawda

38 Rawda Street
P.O. Box 12487
Damascus, Syria
Phone +963 (0) 11 331 1212
Fax +963 (0) 11 332 2304

United Arab Emirates

Abu Dhabi

Al Sila Tower
Sowwah Square
P.O. Box 990
Abu Dhabi,
United Arab Emirates
Phone +971 (0) 2 408 2424
Fax +971 (0) 2 408 2525

Dubai

Deloitte & Touche (M.E.)
Building 3, Emaar Square
Downtown Dubai
P.O. Box 4254
Dubai, United Arab Emirates
Phone +971(0) 4 376 8888
Fax +971(0) 4 376 8899

Fujairah

Al-Fujairah Insurance Co. Building
P.O. Box 462
Fujairah, United Arab Emirates
Phone +971 (0) 9 222 2320
Fax +971 (0) 9 222 5202

Ras Al-Khaimah

Ras Al-Khaimah, Insurance
Building, Al-Nakheel,
Ras Al-Khaimah, UAE
P.O. Box 435
Ras Al-Khaimah,
United Arab Emirates
Phone +971 (0) 7 227 8892
Fax +971 (0) 6 574 1053

Sharjah

United Arab Bank Tower
Al Buhairah Corniche
P.O. Box 5470
Sharjah, United Arab Emirates
Phone +971 (0) 6 517 9500
Fax +971 (0) 6 517 9501

Yemen

Sana'a

Sana'a Trade Center Eastern
Tower, Algeria Street
P.O. Box 15655
Sana'a, Yemen
Phone +967 (0) 1 448 374
Fax +967 (0) 1 448 378

Deloitte

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