Global Gas & Oil Industry: Critical Challenges

GLOBAL EXPERTS ANALYZE THE INDUSTRY'S FUTURE

irc global executive search partners

Globally Connected < Locally Committed

Recruiting experienced, skilled professionals for the oil & gas industries is a challenge, increasingly affected by the changing global economy and the shortage of educated candidates with management potential.

IRC Global Executive Search Partners (IRC) interviewed **key industry executives** from major oil & gas companies worldwide, to find out **what they think the future holds for the industry**, how they view the **global challenges**, and how the **best candidates** may view the industry.

INDUSTRY OVERVIEW:

—The global oil & gas market was worth just over **US$2,640 billion** in 2010, representing almost a 74 billion barrel oil equivalent of consumption[1].

—The oil & gas industry is predicted to grow at a 7% compound annual growth rate, hitting almost **US$3,700 billion** by the close of 2015, according to research from MarketLine[2].

—The growing shortage of **skilled professionals** remains a common concern among industry executives, who say this is endemic across every region, from Australia to Asia and Europe[3].

—In the US, the **key skills shortage** in the critical 35 to 40 age group is 'a direct legacy of the decline in the number of graduates studying geosciences in the mid-1990s, when oil prices last dipped to about $10 (U.S.) a barrel.' [4]

NOTE: All references are on the last page of this document.

INDUSTRY EXPERTS

We talked with key industry leaders from across the world:

- **Australia: Cameron O'Reilly**, CEO, Energy Retailers Association of Australia Limited, and Director of the Australian Gas Industry Trust (AGIT) in Australia, which is the country's representative on the International Gas Union (IGU);
- **Peru: Pedro Martínez**, CEO of PECSA. The company distributes and markets gasoline, diesel, liquefied petroleum gas (LPG) vehicles, and bulk packaging, Natural Gas (CNG) and lubricants. Also, has chain of service stations.

- **South Africa**: the Chief Executive – Country President of a large oil company. He emphasizes that these are his personal opinions.
- **Europe**: the CEO of a major oil company in France;
- **Chile: Víctor Turpaud**, CEO for Metrogas S.A., a private natural gas company with 100% Chilean investors. The company owns and operates a 4,800km natural gas pipe-line, and participated as a partner in the construction and operation of the Chile's first liquefied natural gas (LNG) terminal; and
- **Russia: Vladislav Paulus**, Vice President Business Development and Special Projects, with British Petroleum (BP). BP is an international oil and gas company.

2 http://www.ircsearchpartners.com/global-offices.html

SIX TOUGH QUESTIONS

1. How is the global **economic downturn** affecting the international oil & gas business?
2. Is **shale gas development** reshaping the global energy market?
3. Are we approaching the **'end-of-oil era'** with the 'green' technology development?
4. Are the BRIC countries' national energy companies (Gazprom, Sinopec, Petrobras etc.) **serious competitors** for the international majors?
5. How important is it for a firm to be seen as 'green' to **potential candidates**?
6. The first rung on the **CEO ladder** – is it from the field or the finance/back office?

FUTURE OUTLOOK: THE ANSWERS

How is the global economic downturn affecting the international oil & gas business?

World primary demand for energy will increase by one-third between 2010 and 2035, according to the IEA's[5] New Policies Scenario, which is the central scenario of WEO-2011. (It assumes that recent government policy commitments are implemented in a cautious manner.)

'The dynamics of energy markets are determined more and more by the emerging economies. Over the next 25 years, 90% of the projected growth in global energy demand comes from non-OECD economies; China alone accounts for more than 30%, consolidating its position as the world's largest energy consumer.'

Indeed, **Víctor Turpaud**, CEO of Metrogas S.A., a private natural gas company in **Chile**, believes the economic downturn has not greatly affected the gas & oil industry. However, he believes high fuel prices have contributed to aggravating the more mature economies such as Europe, which depend heavily on fossil fuel.

The CEO of a **France**-based oil company agrees: "There is definitely an effect in Europe, with decreased consumption of both natural gas and oil."

Victor adds: "China and other emergent countries' economies (India, Brazil, South-east Asia) have been, without doubt, important driving forces for the gas & oil industry. Of course, Japan's situation has changed through the closing of its nuclear centers and replacement with fossil fuel (especially gas). The United States (U.S.) is a different situation, and the development of non-conventional gas reserves will guarantee a good place for competitiveness for its economy for many years."

> **"If there hadn't been a global recession, then oil prices could be very high."**

Cameron O'Reilly, CEO of ERAA, and member of the **Australian** Gas Industry Trust (AGIT) agrees that the oil price has held up quite well in the current downturn, compared to other periods of low growth in developed world countries.

He says, "High oil prices are an issue in the U.S. (at present during an election year), in spite of its own subdued growth. This reflects the growing importance of emerging country demand from China and India." He adds that if there hadn't been a global recession, then oil prices could be very high.

Vladislav Paulus, Russia-based Vice President Business Development and Special Projects, with British Petroleum (BP), agrees that the oil business has not been affected in a substantial way.

He believes that any considerable fall of crude price seems unlikely: "crude demand and supply balance is tight, and fear of supply disruptions (due to a variety of political and military risks) supports upward pressure on prices, while OPEC and Russia have high budget revenue expectations from oil, implying a coordinated agenda to sustain current pricing level, and access and E&P [exploration and production] costs keep increasing."

He believes that "$80-90 Brent [Brent crude oil, used as an oil benchmark] seems to be the lowest support level, at which the industry will still feel very healthy."

Cameron adds a comment on liquefied natural gas (LNG), saying that, although gas prices vary across the world, the LNG price remains strong in Asia, "thanks to ongoing demand from Japan where the Fukushima crisis has seen the virtual closure of its nuclear generator fleet."

"We do not foresee a major shift in the short term," says **Pedro Martínez**, CEO of PECSA, one of the four giants in oil sales and distribution in **Peru**. "That belief is based on world demand and supply of oil and gas remaining at the same levels, and current oil price levels continuing competitive and attractive for investors."

The Chief Executive – Country President (CE – CP) of a **South Africa**-based energy company believes that while oil remains a global commodity, gas is more interesting in terms of how market downturns have affected the industry.

> **"... gas is more interesting in terms of how market downturns have affected the industry."**

"New discoveries (i.e. shale gas in the U.S.), and very strongly skewed pricing of gas (cheap in the U.S., very expensive in Asia) mean that it's here that the global downturn has more impact," he says. "Companies (and countries) that are more reliant on gas are paying much more variable prices."

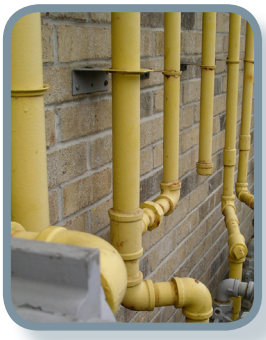
Vladislav comments that gas is a different story (from oil), with natural gas markets (pipeline and LNG) being less consolidated and interdependent. He adds: "Even the great U.S. shale gas revolution did not, for the time being, change the basic setup of world markets, with Europe and Asia maintaining their own gas market models. Things may start changing faster if and when declared new and abundant LNG volumes from offshore Australia, Nigeria, etc. reach the markets."

Is shale gas development reshaping the global energy market?

Shale gas refers to natural gas that is trapped within shale formations. Shales are fine-grained sedimentary rocks that can be rich sources of petroleum and natural gas. Over the past decade, the combination of horizontal drilling and hydraulic fracturing ('fracking' or 'fracing') has allowed access to large volumes of shale gas that were previously uneconomical to produce.[6]

Shale gas and shale oil are not new phenomena, comments Víctor. "Low oil prices meant they were not being developed as they are now," he explains. "The higher fuel prices means they have resurfaced as an alternative, along with the development of cost-efficient technologies that allow their exploitation. The development of shale gas in the U.S. has been particularly favored by the elevated oil prices, becoming a sub product that can be commercialized, thanks to the country's deep gas pipeline." He adds that he considers this reality to be specific to the U.S. and not necessarily replicable in other places, at least in the short run.

"The unconventional gas technology being developed in the U.S. – provided it can overcome concerns about its extraction process or so called 'fracking' – could, if perfected, see a major period of gas supply expansion," agrees Cameron. "If so, gas will be the big growth fuel in coming decades for both electricity generation and potentially transport, and the U.S. may now become an exporter of LNG, rather than an importer of gas.



"Unconventional gas sources such as shale gas and, in Australia, coal seam gas, have the potential to completely change the global

4 http://www.ircsearchpartners.com/global-offices.html

gas situation. The domestic shale gas boom in the U.S. has seen the Henry Hub price [pricing point for natural gas futures on the New York Mercantile Exchange] drop to a decade-long low, and gas is now displacing coal as a preferred fuel for electricity generation."

"Unconventional gas sources ... have the potential to completely change the global gas situation."

However, Vladislav remarks, "The shale gas revolution success in the U.S. is based on access to technology, uniquely favorable regulatory regime (land, water, ecology and taxation) and the high content of liquids in shale gas making dry gas effectively a cheap side-product."
He believes that success story could be replicated elsewhere, only if all three success components are in place.
"Meanwhile," he adds, "We hear that France will not allow fracking, and Exxon is discouraged with the results of drilling in Poland, Europe's largest shale formations."

Pedro adds that, despite shale gas findings' contribution to lower natural gas prices, as measured by the Henry Hub benchmark for the Americas, prices in the Asian markets continue to be high. "Shale gas technology is still incipient and expensive," he comments.
Vladislav adds: "So far, there is no evidence that shale or CBM [coalbed methane] or other unconventional gas resources could be commercialized at large scale outside the U.S. in the next five to 10 years. Thus, the global energy markets are unlikely to be reshaped in the near to mid term."

The CE – CP of the South Africa-based energy company believes that shale gas development is reshaping the global energy market. "There will be fragmentation of the energy market, " he says.
"Environmental issues may persuade some countries to allow shale gas exploitation while others will not. Those who do so will become less dependent on imported liquid fuels. The global strategies will see a lot more change and fragmentation than over the last couple of decades – where there have only been a few significant players, more will enter the market."

As Víctor concludes: "In the medium and long run, even if we think of the U.S. and other countries as gas exporters (which is a supposition and not a certainty), it would be natural that the oil gas finds a new price-equilibrium (like a gas substitute, cleaner than coal).

However, if prices go down, it could also limit the development of shale gas, as a sub product of shale oil. To all of the above we can add the complexity of making a more liquid market for shale gas, since it requires heavy investments and very long terms to support the big development of the infrastructure and transport GNL [Liquefied Natural Gas] from production sources (usually countries with scarce demand) to its destination places (usually countries that depend greatly on energy)."

Are we approaching the 'end-of-oil era' with the development of renewable 'green' energy technologies?

Renewable[7] energy sources, also referred to as 'green', represented 13% of the sources of the U.S.'s electricity supply in 2011,[8] according to the Energy Information Administration (EIA).
This includes wind (23%), solar (<1%), biomass waste/wood (11%), geothermal (3%), and hydropower (63%). The EIA statistics show that other sources are coal at 42%, natural gas at 25%, and petroleum at <1%. Nuclear makes up the remaining 19%.

Víctor believes that rather than approaching the 'end-of-oil era' with the development of renewable 'green' energy technologies, on the contrary, green technologies have been

developed with the supposition that the era of oil is coming to an end. He explains: "The real problem is these technologies are hard to apply in mass production, and offer a limited percentage of solutions for the energetic matrixes." And as he points out, economic challenges can also affect renewable policies: "The economic crisis in Europe has made these countries revise their sometimes excessive will of choosing 'green' over 'non-green' solutions."

Pedro agrees that in markets such as the U.S. and Europe, field crops dedicated to green energy production are generating price increases in food as farmlands are becoming scarce. He believes that "despite theories pretending to demonstrate that we have reached peak oil levels, there is still a long way for the use of fossil fuels. Green technologies are not 100% convincing yet, and their pollution levels continue higher than those they pretend to replace. The use of hydrogen and electricity remain at a low level."

"Peak oil really is a question of price," comments Cameron. "The notion of peak oil has been spoken about for decades, but we are now seeing U.S. domestic production increase due to shale oil, and new deep-water discoveries being made in places such as Brazil. If the price is high, then it's more difficult and expensive to extract, and fields such as the Canadian tar sands become viable."

He adds that the global energy forecasts prepared by British Petroleum (BP) indicate oil and coal will face more subdued growth over coming decades – "but that is in comparison to gas. I believe that oil will still be very much a mainstay of the energy mix," he adds.

"We're closer to the end of oil than yesterday – but that doesn't mean the end is in sight," comments the CE – CP of the South Africa-based energy company. "Demand for oil may not continue to grow at the same pace as economic growth as we start to find substitutes for oil in some applications. That's good – because oil reserves are not growing, either! Green can't do everything – it will displace some fossil fuel, but not all. The mix of technologies is more what we're seeing, and it needs to be driven by a high oil price."

Vladislav comments that access to fossil fuels is as good or better as ever, as are the associated production and utilization technologies. However, he adds: "decades of heavy (even reckless at times) subsidizing of wind, solar and biomass waste/wood did not yet yield break-through solutions to dramatically re-place fossil fuels." He believes such technologies will work only where natural/economic conditions are right: such as windy land or sea areas; sunny areas for industrial generation or house-hold usage; and cheap agricultural land to grow biomass. "All these options are limited, which then limit the potential scope for green energy," he adds. "Further technological breakthroughs are required to drive it. Technologies to use LNG and CNG [compressed natural gas] as motor fuels may be the nearest of large-scale 'green' options to be realized."

"We're closer to the end of oil than yesterday – but that doesn't mean the end is in sight."

The CEO of the France-based oil company points out: "Oil will remain an economic solution for a lot of needs; the development of green technologies is costly."

And, according to a World Economic Forum (WEA) 2012 report, 'Energy for Economic Growth'[9] : "The energy supply will continue to rely mostly on traditional sectors over the coming years, but the current push for innovation and growth in the renewable sector will affect the degree of this reliance."

Are the BRICS (Brazil, Russia, India, China and South Africa) countries'

6 http://www.ircsearchpartners.com/global-offices.html

national energy companies (such as Gazprom, Sinopec, Petrobras etc.) serious competitors for the international majors?

"Since the 1990s, Brics nations have doubled their share in global economic output, and the International Monetary Fund suggests that their GDP will surpass that of the Euro area before 2015. According to the Brics Trade and Economic Research Network, these five countries account for 43% of the world's population, 18% of global trade and attract 53% of global financial capital."[10]

Cameron's answer is to the point: "In short, yes." He believes that as the political power of the emerging countries grows, so also grows the influence of their national oil companies. "If they have the capital and skills to develop fields, then they will rely less on the western majors," he says. "The western majors will, in fact, be more likely to be gas majors in the future, thanks to unconventional gas."

Cameron's opinion is shared by the CEO of the France-based oil company, whose answer is equally succinct: "They don't 'might' – they are."

"These national energy companies will all have to partner with an existing global player (or more) to compete."

Pedro has a different viewpoint, as he believes that the BRICS markets and the national oil companies (NOCs) are different, with each group having its own market.

That's a viewpoint shared in part by Víctor: "Our vision is that as long as the sense of scarcity exists, with the high prices as consequence, oil and gas will be an offer market and not a demand one. Therefore, traditional companies will still have a good positioning." He notes there are limitations: "In the particular case of China and Brazil, which have found resources in their own territories, this implies that export companies will grow, but always with the limitation of their own market. To become relevant exporters or decision makers that affect the rest of the industry, outside their own boundaries, there's a lot of work to do and that needs some time, too."

Indeed, global partnership is seen as an essential component of that growth, according to the CE – CP of the South Africa-based energy company. "The 'Majors' are not major because of their access to oil fields – rather, because of their ability to exploit it. These national energy companies will all have to partner with an existing global player (or more) to compete, and I think they'll have to go 'non-national'," he adds. "Their structure has to go global (ownership) if they want to become big players. So – Gazprom [Russia global energy company], for example – would need to partner with somebody to address the skills they need (i.e. they can't drill in hot water right now), and that would probably mean shifting some ownership to a global partner.

"At the end of it, they won't be a national company any more. Market conditions are not the same as they were when the current big players took prominence – and the international majors will also have to change. They must concentrate on key markets, and develop more partnerships."

Vladislav also believes there will be complementing partnerships: "NOCs and IOCs (international oil companies) will complement each other by operating in different parts of the value chain, with NOCs skewed more towards the natural rent part of it, and IOCs benefiting from their cutting-edge technologies and professional organizations. This will happen as a result of sovereign and self-conscious IOCs' increasingly restricted access to resources, especially conventional ones. In turn, this will push them into service contracting positions with NOCs, and/or development of technologically and economically challenging resources." He believes that scenario will ultimately make them more dependent on the goodwill of host governments, and vulnerable to

major accident and economic downswing risks when operating in ultra-deepwater locations or the Arctic.

Indeed, according to an article in Alberta Oil magazine[11], on venturing into BRICS countries: "not all emerging markets are created equal. It's one reason Klotz at Transparency International says companies embarking on overseas forays should first acquaint themselves with local customs."

Does 'green' matter when recruiting specialized talent?

"Sustainable principles in business were once the preserve of the minority. Over the past decade, these principles have begun moving into the mainstream of business. An increasing number of firms are moving beyond merely cultivating a green image, and are fully embracing sustainability. Many executives see in sustainability opportunities for future growth; some see sustainability as the only option, in the long term. Today, it is businesses that have no ambitions in sustainability that form the minority."[12]

"...energy allows us all to live the lifestyles we aspire to."

"Companies must take a more global role with social responsibility and promote sustainability – including energetic efficiency, people and community development, (both inside and outside the company), and training," says Víctor.

Cameron adds that 'green wash'[13] doesn't work: "Global oil and gas companies are these days scrutinized heavily by global NGO's and local communities so any notion of 'green wash' won't succeed. There needs to be an authenticity to Corporate Social Responsibility (CSR) policies and a commitment to best practice environmental standards. Talented young employees will want to feel comfortable with the values of the companies they work for, and this will be important in the global battle for skilled labor."

Of course, the shortage of skilled key employees is not restricted to the oil & gas sector. As Pedro notes: "It's a fact there is an increasing talent gap for engineering and oil/technical professionals, but this is happening not only in the energy sector – it is surely also present in other high-technology industries."

Indeed, in the PricewaterhouseCoopers 15th Annual Global CEO Survey[14] on the difficulty of hiring (across all industries) 43% of CEOs agreed it was more difficult to hire, 44% said they found the situation unchanged, while 12% found it less difficult.

The CE – CP of the South Africa-based energy company notes, "the problem isn't so much whether PhDs think this way, it's rather whether our university systems produce enough PhDs. There is a very different pattern in skills, as well, and the high-end, core scientific knowledge is what energy companies need. It's an illusion that Google is 'green' and BP is 'dirty' – and I think that when it comes to the high-end skills that oil and gas companies need, there is little worry about the illusion. If you're sensible, you realize that there must be lions and springboks in the same bushveld."

Víctor remarks that while promoting a healthy and pleasant work environment can create good relationships between suppliers, clients and employees, there can also be unsuspected and positive results: "There is no doubt that a good eco system is also great for innovation."

However, as Cameron adds: "The companies themselves still need to explain that the world needs energy, and it will still largely come from fossil fuels. They shouldn't be defensive about this as energy allows us all to live the lifestyles we aspire to."

Vladislav believes that a working CSR program is of utmost importance for the success of a modern corporation, including attracting talent. He adds that the specifics of the CSR will differ by geography, "with the 'green' agenda being more important in some places while being more educational in others."

And, as the CEO of the France-based oil company points out: "Making iPhones might be considered as 'dirty' as drilling for oil – a lot of the top-talented students know that, and, in the end the market law will prevail."

8 http://www.ircsearchpartners.com/global-offices.html

To become an oil or gas company CEO is it better to start your career as a field engineer or in the finance/back office?

New CEOs come from diverse backgrounds, according to a Booz & Company's 2011 annual study[15] of chief executives. It suggests that, increasingly, 'new chief executives are coming to their position from the outside, as boards of directors look for new blood from other companies and other industries, in hopes of introducing fresh thinking into their executive mix.'

Relating specifically to the oil industry, Pedro say that escalating from the field is much more valuable as it's the core of the business. "In my experience," he adds, "I would choose a Field Engineer, as those are the tough jobs."

Víctor agrees that the field of hard engineer, and especially managing projects, is a good entry to the career culminating in a CEO position. "We suggest starting from the bottom – working with people, and experiencing how to motivate them is essential. It's also a unique opportunity to deeply understand the process of the company, its market and the great challenges of the future."

However, Cameron thinks that the global reach of the industry can make it difficult to stereotype the right background for leadership. "I think geographic exposure will matter more," he says. "While it will always be crucial to have field experience, the reality is that many companies are not run by engineers. A respect for the people in the field and an understanding of what they do is probably more important in a leader."

Vladislav believes that maintaining a strategic dialogue with federal and local governments, as well as having strong people and organizational development skills, is what a successful energy CEO must command. "The set of challenges a CEO faces is continuously changing, calling on a varying sets of skills and backgrounds. In Russia, for example, from the early 1990's, companies were mostly run by CEOs with financial backgrounds, reflecting the then need for internal procedures, transparency, etc. It was a time when marketing, operations and strategy backgrounds were favored."

And, as the CE – CP of the South Africa-based energy company notes: "engineering is a commodity – and you can always buy it in (let's face it – whichever energy company you are, at some point you probably use Halliburton!)." He adds that the leadership at an energy company needs to play a strongly legal and political role because of the nature of the relationships and the required influence on legislation (often across multiple territories). "So the technical ability within the camp is important – but at executive level it's more about understanding the government regulatory environment, and being able to advise in a way that influences it. I would say that energy company leadership is more likely a legal or finance background."
The France-based CEO says he has experience of CEO's from both backgrounds: "all have been successful."

As a previous (2010) Booz & Company's study[16] concluded: "No matter where you sit on the corporate core spectrum, the challenges of being the CEO of a major corporation are considerable and growing, while the window you have to address and overcome those challenges continues to narrow. Never has the job been more exciting… or more daunting."

Conclusion

Global economic uncertainty will continue to challenge corporate policy formation in the oil & gas industry – from creating responsibility (CSR) policies and a commitment to best practice environmental standards, to developing global partnerships (including executive search and HR) in key markets.
While global demand for oil & gas continues to grow, the industry demographics are changing. Industry CEOs faced with constantly shifting priorities will need a strong, experienced, globally aware executive team.

Contributors

Víctor Turpaud, CEO, Metrogas S.A. a private natural gas company with 100% Chilean investors. http://www.metrogas.cl
Cameron O'Reilly, CEO, Energy Retailers Association of Australia Limited, and Director of the Australian Gas Industry Trust (AGIT) in Australia, which is the representative on the International Gas Union (IGU).
Pedro Martínez, CEO of PECSA (Peruana de Petroleo S.A.C.). The company distributes and markets gasoline, diesel, liquefied petroleum gas (LPG) vehicles, and bulk packaging, Natural Gas (CNG) and lubricants. Also, has chain of service stations.
Chief Executive – Country President of a large oil company in South Africa. He emphasizes that these are his personal opinions.
Chief Executive Officer of a major oil company in France.
Vladislav Paulus, Vice President Business Development and Special Projects, with British Petroleum (BP) in Russia. BP is an international oil and gas company.

Additional Resources and Further Reading

Petroleum Human Resources Council of Canada
HR Trends and Insights: Q1-Q2 2012 Report.
'The lowest natural gas prices in decades and global economic uncertainty have not reduced the growing need for a skilled workforce according to our online survey of 37 petroleum companies representing over 60,000 employees in the upstream and midstream sectors.'
http://www.petrohrsc.ca/labour-market-information/short-term-hr-trends.aspx

Visiongain
The Oil & Gas Pipelines Market Analysis 2012-2022.
'This report offers an examination of the oil and gas market over the next decade, providing detailed market forecasts for each of the national markets and offering in-depth analysis of the opportunities and challenges facing companies in the oil and gas pipelines market throughout the world.'
http://www.reportlinker.com/p0802473-summary/The-Oil-Gas-Pipelines-Market-Analysis.html

Schlumberger Business Consulting
E&P Magazine: Benchmark Survey Reveals Looming Talent Shortage
http://www.sbc.slb.com/Our_Ideas/Publications.aspx

Photo credits
SXC: Armin Hanisch; Crow Girl; Dani Simmomds; G Schouten de Jel; John Lee; Patrick Moore.

References

[1]Oil and Gas Energy Industry: Market Research Reports, Statistics and Analysis ReportLinker: http://www.reportlinker.com/ci01331/Oil-and-Gas-Energy.html
[2]MarketLine: http://www.marketlineinfo.com/
[3]Roundtable event in Houston held by GL Noble Denton, an independent technical advisor to the industry. The roundtable followed publication of 'Big Spenders: The outlook for the oil and gas industry in 2012', an Economist Intelligence Unit report commissioned by GL Noble Denton; 180+ senior energy executives worldwide surveyed. Recruitment and regulation among the biggest challenges facing the oil and gas industry. Offshore Shipping Online: http://www.oilpubs.com/oso/article.asp?v1=12146
[4]The Globe and Mail, Report on Business: 'Oil sector's unique challenges spawn a new breed of MBAs'. June 06, 2012. http://www.theglobeandmail.com
[5]The International Energy Agency. World Energy Outlook 2011 Factsheet. How will global energy markets evolve to 2035? http://www.worldenergyoutlook.org/resources/factsheets/
[6]U.S. Energy Information Administration. Independent Statistics & Analysis. Energy in Brief – what everyone should know about energy. April 11, 2012. What is shale gas and why is it important?
http://www.eia.gov/energy_in_brief/about_shale_gas.cfm
[7]U.S. Energy Information Administration. Independent Statistics & Analysis. Definition: What is renewable energy? Unlike fossil fuels, which are exhaustible, renewable energy sources regenerate and can be sustained indefinitely. The five renewable sources used most often are biomass, water (hydropower), geothermal, wind, and solar. http://www.eia.gov/renewable//
[8]U.S. Energy Information Administration. Electric Power Monthly (March 2012). How much of our electricity is generated from renewable energy? http://www.eia.gov/energy_in_brief/renewable_electricity.cfm/energy_in_brief/renewable_electricity.cfm
[9]World Economic Forum report, Energy for Economic Growth, Energy Vision Update 2012. Prepared in partnership with IHS CERA. http://reports.weforum.org/energy-for-economic-growth-energy-vision-update-2012/
[10]BBC News, 29 March 2012. Can Brics rival the G7? http://www.bbc.co.uk/news/world-asia-india-17515118
[11]Alberta Oil magazine, online, June 1, 2012: Canadian companies venture into BRIC countries. http://www.albertaoilmagazine.com/2012/06/canadian-firms-fan-out-to-emerging-markets-to-build-businesses/
[12]Economist Intelligence Unit. Managing for Sustainability. A report from the Economist Intelligence Unit Sponsored by ENEL. http://www.eiu.com/site_info.asp?info_name=enel_sustainability&page=noads
[13]Greenpeace. Greenwashing definition: (grēn'wŏsh', -wôsh') 'Used to describe the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service.' http://stopgreenwash.org/
[14]PricewaterhouseCoopers International Limited (PwCIL). 15th Annual Global CEO Survey. Facing the talent challenge. http://www.pwc.com/gx/en/ceo-survey/key-findings/hr-talent-strategies.jhtml
[15]Strategy + Business. Booz & Company's annual study. CEO Succession 2011: The New CEO's First Year. http://www.strategy-business.com/article/12207?gko=00863
[16]Strategy + Business. Booz & Company's annual study. CEO Succession 2010: The Four Types of CEOs. http://www.strategy-business.com/article/11207

About IRC Global Executive Search Partners

IRC Global Executive Search Partners is a market leader in the global executive search industry with a track record of more than 25,000 completed assignments for 1,000+ clients in almost every conceivable industry segment and function.

Our clients range from large multinationals to middle market companies that enjoy the advantage of working with leading local firms around the globe, providing them access to expert local market knowledge, the agility and commitment of owner operated firms and the global reach of a strong alliance.

With a growing roster of leading executive search firms across Europe, the Americas, Africa, Asia and Australia, IRC Global Executive Search Partners has more than 250 accomplished executive search professionals, in 35+ countries, 70+ offices and 40+ member firms.

Ranked as the world's 10th largest retained search alliance, IRC Global Executive Search Partners has been providing consistent and high-performance executive search solutions to its clients for the past nineteen years.

Contact Information:
IRC Global Executive Search Partners
Sylvia MacArthur
sylvia.macarthur@ircsearchpartners.com
1 416 920 0092
www.ircsearchpartners.com