Scientific curiosity and technical innovation have been part of the Schlumberger culture for more than 80 years. Today, these characteristics lie at the foundation of our vision of helping customers improve performance and reduce technical risk in oil and gas exploration and production, water resource development, and carbon dioxide storage.

With more than 140 nationalities represented among our 110,000 strong workforce, our technology development is backed by a vital cultural diversity to bring the many viewpoints that come from every person, every region, and every talent. Just as importantly, this force is connected to a powerful knowledge network of 27,000 people from 26 scientific and engineering disciplines collaborating in more than 175 communities of practice.

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Youth is a critical factor in the sustainability of our industry. Addressing the youth and involving young people in the design of our future energy solutions is therefore one of the key issues for the more than 65 member countries of the World Petroleum Council (WPC). WPC recognises their significance to the future of the petroleum industry and the importance of giving the young generation scope to develop their own ideas, talents and competencies to create viable solutions for the future of our world. We believe that young people are our industry’s greatest spokespeople and must be involved in crafting the future, not just inheriting it. Investing in youth now ensures that we will all benefit from their innovations in the long term and helps to solve our future energy challenges.

We congratulate our Youth Committee on putting the Youth Magazine together and wish you all an enlightened read on how young people see their future in our industry.

Céline Rottier

As the editor, I am proud to present you the first edition of the WPC Youth Magazine, especially because this magazine started as an initiative from the WPC Youth Committee. Convinced by the outline of the idea, the WPC decided to support us for its publication. They soon announced that no fewer than 6,000 copies of the first WPC Youth Magazine would be printed and distributed at the 20th World Petroleum Congress in Qatar.

This was the start of an enriching experience for a dedicated group of young persons involved in the oil & gas sector. They have prepared several articles that present their points of view on the energy industry and its future with the intention to stimulate debate. During this process, they have been able to bridge differences in educational backgrounds, cultures and geographical locations. They have even been able to engage senior energy leaders to participate in this dialogue in person, including José Sergio Gabrielli, CEO of Petrobras, who received our Youth Magazine representative at his office.

The result of all this hard work has been compiled into this first edition of the WPC Youth Magazine. As such, I think that it represents well the essence of the WPC Youth Committee: the engagement of youth in the design of a sustainable future of the petroleum industry.

I would like to give special thanks to Catherine McGregor, Sara Akbar and José Sergio Gabrielli for agreeing to be interviewed; to ExxonMobil and Schlumberger for their sponsorship of the magazine and to Ulrike von Lonski and our other contributors for their time and dedication in making it happen.
Although it will only celebrate its 5th anniversary in Qatar, the WPC Youth Committee (WPC YC) has already been involved in the organisation of six international events, gathered over six thousand young people from all over the world and millions of posts on the internet about a variety of topics related to the petroleum industry. Over the past few years, the Youth Committee has truly developed itself as the link between the Council and the next generation of the petroleum industry.

The WPC Youth Committee was established in 2007, with an ambitious objective: to engage the youth of the petroleum industry to design a sustainable future. It is this aspiration that motivates more than 20 Youth Committee members from the different member countries to contribute to the different taskforces, lead by the 4 Vice-Chairs of the formal board, including: Events, Member Relations, Students & Gender, Communication and Strategic Planning & Innovation.

The Youth Committee intends to achieve its objectives not only by championing new ideas, but also by promoting a realistic image of the petroleum industry. In order to bridge the generation gap, in 2011 the Committee has launched a pilot group as a first step in creating a mentorship network. Most remarkable are the global Youth Events that the Committee has been able to setup for young people (under 35) to be heard.

Not only has the Youth Committee organised youth activities at the 19th WPC in Madrid and the 20th WPC in Qatar, but it has also delivered three global Youth Forums, including: China (2005), France (2009) and India (2010). Such events have been so successful that they have been able to gather over a thousand delegates: attracting bright young men and women from all over the world, with different educational backgrounds and cultures, to share their ideas. Through these events, the YC has been able to create a permanent global network between its members, to exchange ideas and to apply the shared lessons learned.

Anna Illarionova
PhD student, Russian
Foreign Trade Academy,
WPC YC Taskforce member, Russia

Jaime Turazzi Naveiro
Petrobras E&P Project Manager,
Vice Chair Brazilian YC, WPC YC Taskforce member, Brazil

Céline Rottier
Offshore Engineer, Repsol, Spain;
WPC YC Vice Chair for Communication
After such a global success, the Youth Committee is keen to reach out to the youth that are more involved on a national level. So, as a next step, the Youth Committee has decided to go local! At present the different Youth Committee members are looking for opportunities in their countries to promote interaction between young people involved in the petroleum industry and to build local networks, with the support of all the experience gained by the WPC YC members.

As a result of these efforts, some remarkable initiatives have taken place at national level. Together with countries such as Canada and Brazil, Russia is at the forefront of this development. Anna Illarionova explains: “At the beginning of 2011, Russia organised a special youth programme during the 1st Russian Petroleum Forum in Moscow (14-16 March) aiming to build a real dialogue at a national level between young experts and senior colleagues from government, leading petroleum companies, local communities and organisations. The programme included a Youth Forum: Energy Solutions Through Innovation, a contest for the prize in the petroleum industry: Youth Choice and a platform to exchange youth innovative projects: Open Dialogue. Over 100 young Russians from the key national universities and oil companies joined the event. In the near future they can be fully engaged in the WPC youth activities on a national level and as such have the opportunity to express their opinion and demonstrate their skills.”

Brazil has been one of the first countries to set up a National Youth Committee, in 2007. This was an initiative of the Brazilian Petroleum, Gas and Biofuels Institute (IBP), that is also involved in the WPC as a representative of the Brazilian National Committee. “Since then”, Jaime Turazzi Naveiro explains, “we have attracted young professionals from all sorts of institutions to join the YC (NOCs and IOCs, service companies, universities, government agencies, independent institutes, consultants, etc), in order to create awareness among young Brazilians of oil industry themes, attract and engage them with the sector, making sure the generation of tomorrow is ready to face the challenges of today. Some of the greatest achievements include an annual Young Professionals’ event, where IBP’s 200-seater auditorium is packed for lectures and networking opportunities. Also, the YC has helped to organise a bi-annual event, called Professionals of the Future, which is held during the Rio Oil & Gas show, Brazil’s main oil conference. In 2010, this event gathered about 2,000 students, from 25 different universities and technical centres, over four days, to listen to industry executives and learn from their experience. It is also important to highlight that during Rio Oil & Gas 2010, a prize for the best young author was given for the first time, another initiative to promote the engagement of young people.”

Furthermore, Anna Illarionova adds: “Whereas members of the global WPC Youth Committee act as ‘ambassadors’ in their native country, young people that join the national initiatives in their own country can derive various benefits from such participation. Thanks to online communications tools such as e-mail, Facebook, Twitter and LinkedIn, young people from different regions can tie into a local network of the country so that they can communicate with each other, find job opportunities or special education and internship programmes in the leading oil and gas companies, and finally, carry forward initiatives never realised before by our senior colleagues. This is even more true for a country with such a vast territory as Russia.”

The WPC Youth Committee hopes that, through the widespread creation and consolidation of National Youth Committees, both young and senior people will feel inspired to join forces and work together on new strategies for the future development of the oil and gas sector. This will allow them to pursue the common goal of creating a more sustainable petroleum industry and making the world, a safer, cleaner, more just and better place to live, for our generation and the next. Several countries are already showing us the way through their National Youth Committees. The WPC Youth Committee wants to encourage all member countries to do the same.

That is why we appeal to you, dear colleagues, to support this youth initiative in your own country. All of you are entitled to a say now!
The World Petroleum Council’s (WPC) Youth Forums are a veritable gathering of young and veteran, fresh and experienced, seasoned and budding. Being one of the few truly global platforms of its kind, where the young minds of the hydrocarbon industry coalesce to focus on the future of youth and discuss contemporary issues and concerns, the Youth Forums are the experience of a lifetime for the energy leaders of tomorrow.

WPC Youth Forums provide students and professionals with a fantastic opportunity to have a say in defining and resolving current and future industry challenges, elaborating on social and environmental issues and contributing to finding potential solutions to problems. The way WPC Youth Forums are organised is quite unique. Firstly, the initiative of organising these events comes directly from the youth! Secondly, it is the students and young professionals who constitute the Programme Committee for the Forums, formulate their content and key points for discussion, choose the distinguished speakers and communicate with them on stage. Have you ever seen or heard of such a thing happening before? Finally, each Forum has a distinctiveness that makes it completely different from previous ones.

For instance, the 1st WPC Youth Forum Youth and Innovation – the Future of the Petroleum Industry held in Beijing (China) from 17-20 October 2004 was the first of its kind in which young people played a leading role in the WPC’s 71-year history. This Youth Forum laid the foundation for international exchange and cooperation between students, young professionals and senior colleagues from oil and gas companies and academia, and that became the
genesis for the creation of the WPC Youth Committee in late 2006. Since then, young professionals and students have been on the World Petroleum Council’s agenda as one of its most significant, foremost concerns.

The 2nd WPC Youth Forum Energise Your Future held from 18-20 November 2009, in Les Pyramides, Paris (France) pioneered the use of a special on-line platform “Energise Your Network” as a new, interactive communication tool that helped young participants from all over the world engage in straight talking about a broad range of critical and sometimes controversial issues: Where is the energy market heading? How should all stakeholders work better together to build an ethical and sustainable future? What kind of leadership is needed to navigate this fast-changing environment? And much more besides. The plenaries gave young people the opportunity to discuss these issues on stage with senior colleagues. Following the plenaries, workshops were held where young people had a chance to discuss solutions to the industries’ challenges, contributing by presenting creative ideas. In addition to this, during the event 1,200 young professionals, students and experts from 110 countries got together to enhance their knowledge of the oil and gas industry and exchange their opinions at the ‘Knowledge Cafés’; areas exclusively earmarked for the purpose.

Carrying forward the legacy of the two previous Youth Forums, the 3rd WPC Youth Forum FuEL The Youth: Future Energy Leaders, held from 1-3 November 2010, in New Delhi (India), on the sidelines of Petrotech-2010, a biennial International Oil & Gas Conference, was the first carbon neutral event in India and first such event held under the aegis of the WPC. The highlight of the forum was the debut of various competitive on-line events, the finale of which was held live during the main Forum on 2nd Nov, 2010. Competitions like “Corporate Ranneeti” – a contest aimed at achieving corporate supremacy in a fiercely-fought virtual business battle; “Energy Extempore” – interactive debate with the objective of stimulating office, college and informal arguments towards common platforms for finding solutions to the world’s energy problems; “Mind Odyssey” – a free-wheel Creative Odyssey of seeking that one gem of an innovative idea that has the potential to revolutionise the Energy Industry and “Bizethics” – a High-on-Ethics event to present one’s comprehension of how a company can balance its social, ethical, environmental and profit-making concerns, not only witnessed overwhelming participation from across the globe but were instrumental in mainstreaming several issues critical to industry through a unique approach. Competition finalists were fully sponsored by the organisers for participation in the main Forum and attractive prizes were up for grabs by the competition winners. Further, the young panelists for Theme Sessions were on the stage during the Forum, who were identified through extensive online discussions on the youth forum web portal.

As reflected by these past Forums, our aim is to continue organising the WPC Youth Forums in different geographical locations, providing an arena for youth to be heard, promoting a realistic image of the industry amongst the youth, and trying to attract more talented young people to work towards a sustainable energy future. We stand for Fuelling the Youth and Energising our Future and encourage Innovation by Youth! So come and join us at our next Youth Forum!
How would you define the role of young people in the energy industry? What is the greatest contribution that the younger generation of today has to offer the industry of the future?

Today’s generation has this formidable ability to connect to other people wherever they might be: they travel a great deal more and of course they use the Internet and social networks fluently. If you look at our industry, it is faced with ever-growing technical challenges and projects of massive scale, where multidisciplinary and geographically dispersed teams have to collaborate in order to meet these challenges. I really think that these requirements will play to the strengths of the younger generation.

Why is it, do you think, that some good ideas from young people do not get the chance to penetrate the organisation of a company? How is your company structured to absorb and implement new ideas contributed by young professionals?

Our industry has a reputation for being conservative: new ideas tend to be confronted with statements such as “but we’ve always done it that way.” However, much can be done to ensure that good ideas reach the right level of every organisation.

Giving responsibility to young people at an early stage of their career is a very effective way: if you have responsibilities, you can make things happen. An informal and accessible style of management is also very important to create an environment open enough for people to express their opinions and propose new ideas.

In my company we have a tradition of organising “InterChange Forums”: Every year, promising young employees are invited to spend
three days with senior managers; interacting with them in a relaxed environment; working on specific business issues and proposing solutions. It is rare that impactful business decisions are not made by the management team as a result of the feedback received from the participants.

**How were you able to make an impact as a young professional in your organisation?**

I held my first line management job fairly early on in my career. As a front-line manager you not only impact your customers but also the people working for you: their motivation, their view of the company and their professional ambition. Even on a small scale, this is very rewarding.

In the last few decades the oil industry has expanded massively, adding new technologies, countries and resources to the continuing challenge of extracting oil and bringing new products to market. Looking ahead, what do you think your generation has not achieved or could have done differently that should be the focus of the young professionals joining the industry today?

I think we must pursue faster new technology adoption... In turn, we must reduce technology development and testing times to deploy future game changers more quickly.

**Which young person that you have met has most impressed you, and why?**

I am often impressed by the young people I meet in my travels. The ones who stand out have often demonstrated an incredible adaptability when assigned to a new country, having overcome not just the professional challenges but also the language and cultural barriers. I can think of an American engineer who spent his first field years in remote Siberian locations, where he was forced to quickly learn Russian in order to perform his job; or again a young Indonesian manager in Mexico who had earned the respect of her customers and her own team through her professionalism, her energy, and her ability to communicate with them in Spanish.

The oil industry is widely perceived as an old and traditional industry, not only because of its long history but also because it demands such a long learning period to master as a subject. At the same time, we have seen in the recent past the blossoming of new industries that are more dynamic, with faster career trajectories, more appealing and with many big companies led by young professionals. How do you think it is time for the oil industry to adapt to this new world order? If so, how should it do this?

In fact, I believe it has already adapted to a certain extent! Most companies suffer a shortage of key technical skills and respond by taking more risks on people, developing them faster than in the past. I truly believe the industry has fantastic careers to offer young professionals, careers that are dynamic, challenging and diverse. And, indeed, I see this trend continuing in the future.

**Please, formulate one question that you would like to see answered by the youth.**

Do you think we should better utilise social networks in our industry? How, to what intent, and what would be the impact, in your opinion?
there is no substitute for experience; that we know. Experience cannot be taught or Googled, it is the knowledge that can only be acquired from living and getting older. Experience is a valued commodity. It is why we have Boards of Directors, service awards and a corporate ladder. But, in the mindset that the experienced know best, the value of diversity of experience can easily be underestimated. Instead the courage, unique perspective and energy inherent in youth should be considered a resource to be used to address the challenges that the oil and gas industry faces. The Canadian Association of the World Petroleum Council (CAWPC) Youth Committee is out to prove that youth can, and should, play a leadership role when it comes to shaping the future of energy.

The CAWPC Youth Committee has brought together the best and the brightest young minds, within the Canadian oil and gas industry, to demonstrate the value of youth participation. They have branded their Youth Committee with the tagline “Let’s Talk About Energy,” which is the foundation of their vision: to listen and be heard in the energy debate.

The young professionals that sit on the Board range from ages 20-35, and represent all facets of the industry – from engineers to investment bankers, students to managers, multinational corporations to entrepreneurial ventures. This cross section of people ensures that a broad range of issues are brought to the table, and different viewpoints are represented.

For the Canadian oil and gas industry, having an engaged youth delegation encourages a more proactive approach to the future of energy. They have done this through research, events and an interactive website. The results have been amazing. By listening instead of telling, and focusing on the future rather than the past, they have cultivated a whole new way to look at energy. Some of the youth’s concerns align with what old generations worry about, but others are unique to them.
Recently, Dan Zilnik, a Canadian Youth Committee Board Member wrote a paper titled *Youth, Energy and the Age of the Impossible*, (available for download at wpccanada.com). The goal of the initiative was to raise awareness of the challenges presented by a growing industry with an ageing work force and provide insight for companies and governments to tackle these challenges. He chose this topic due to the relevance of youth in Canada, and abroad. As young professionals think about the future of their careers, they want to know what is in it for them. If the energy industry cannot meet their needs, they will face problems of turnover or a brain drain. This would result in inefficiency and a lack of strong leadership going forward. Regardless of the challenges we will face in the next five, ten or fifty years, if you do not have the right people in place the best solutions will not be reached.

In his report, Zilnik conducted a global survey of young professionals to better understand the key factors driving youth attraction and retention within the oil and gas sector. His two findings are that due to increased global uncertainties young professionals are unlikely to spend their entire career at one company and that compensation and personal-value alignment are tied as the top priorities for attracting and retaining young professionals. The paper was presented to a large, international audience as one of plenary sessions at the 2011 World Heavy Oil Congress in Edmonton, Alberta, Canada. The presentation struck a cord with people, regardless of their age or nationality. For the youth, they saw it as a great forum for people to realise that they are not a mystery generation that is impossible to understand. They simply have different needs than past generations. For others in the room, it was an awakening to the concerns of young professionals and the magnitude of implications that would result if they do not get what they are looking for.

This topic was further investigated at the North American Oil and Gas Expo, but approached in a different way. This time the CAWPC Youth Committee hosted a case competition for students. The task was come up with solutions for oil and gas companies to engage young professionals. The solutions the student participants presented included: revitalising the way the industry is perceived, having strong corporate training programmes in place for young professionals, cross-generational mentoring and engagement through communication strategies that are relevant to how young people communicate, by using technology like social media and blogging. The format of a case competition proved to be a great way to engage youth because no assumptions are made. You hear, directly from the source, what their issues, and more importantly, their solutions, are.

The CAWPC focus on youth and workforce planning is just one of the many initiatives they have been working on. Through the brainstorming of their Board of Directors they have never had a shortage of ideas. But, to further build on their philosophy that identifying issues that are relevant youth is the first step to leading change, they have recently reached out beyond their Board to include youth from all around the world using the web. They have dedicated substantial time and resources to set up a cutting edge website that enables blogging. The platform for discussion allows all youth, regardless of their age or where they live, to have a voice. Discussion topics include diversity/gender, the environment, social responsibility, human resources, technology, long-term supply and global business. The CAWPC is excited for the potential of their site. They are excited for the conversations that will be had, and the site’s ability to be a powerful education tool to promote positive change in the industry.

Using both traditional and non-traditional tactics, the CAWPC Youth Committee has been able to grasp the issues that concern youth about energy. Their ability to bring multiple perspectives to the energy discussion has allowed great things happen. Join them to talk about energy at wpccanada.com.
How would you define the role of young people in the energy industry? What is the greatest contribution that the younger generation of today has to offer the industry of the future?

Rest assured that young people have a role in every profound event, change or breakthrough that occurs in a business industry, from culture, to technology, or the arts. This is the reason why involving our youth in the energy industry ensures that our business will remain vibrant, relevant and on the cutting edge of technology. The youth are more in tune with technological advancements, human rights and social responsibility. I read recently about a business group, Equilibrium, established by a group of Year 12 students in the UK. They managed to raise thousands of pounds for a charity that builds schools in rural parts of India. It is crucial that the younger generation promote ethical and sustainable business practices, and have room to test their ideas.

Why is it, do you think, that some good ideas from young people do not get the chance to penetrate the organisation of a company? How is your company structured to absorb and implement new ideas contributed by young professionals?

It is natural for business leaders to turn to experienced professionals in order to execute strategies and business decisions. However, this should not be at the expense of new ideas by fresh recruits. At Kuwait Energy, we have a highly successful internship programme where young professionals receive mentoring by senior staff. The interns get to work with us, join us in our meetings, and are even challenged to produce original research or develop projects during their time at the company. At the end of the programme, the interns are asked to present their outcomes to the management. I've been impressed many a time with the analysis and presentation styles of these professionals-to-be. You would be surprised to know that there have been times when our business decisions were influenced by our interns and new recruits.

How were you able to make an impact as a young professional in your organisation?

There is no secret in building a progressive and successful career. Anyone can tell you that it is based
on hard work, commitment, and making sure you are on the top of your game at all times. Now I know that might sound somewhat repetitive and even cliché, nonetheless, it is true, and I can’t help but use myself as a case example. I have always believed that it is important to challenge myself and not to be afraid from stepping out of my comfort zone… even as a young engineer fresh out of college seeking a job opportunity. Allow me to share two examples of where this has paid off:

I graduated college in 1981 with a petroleum engineering degree. Luckily, I was able to join the Kuwait Oil Company (KOC), where I knew that there were some career paths within the company that were secure, comfortable, and safe, but I also knew these paths were to be very limited in real career development and growth. On other hand, I also knew that if I wanted to flourish career-wise, I needed to get real, hands-on, field experience. In Kuwait, this means working tirelessly out in the desert under Kuwait’s scorching 50-degree sun, and I pursued it. But it wasn’t as easy as it sounds. At first my request was rejected, as it was – and still is – unusual for a woman to become a field engineer, but I was persistent. Eventually, I was granted this opportunity and became the only woman in my team at fieldwork, day in and day out. It was tough, excruciating, incredibly demanding both mentally and physically, but I have absolutely no regrets, and would not have wanted it to be any less demanding. Those years developed my skills and even helped me acquire a whole new set of skills that paved my career path to where I am today… and I still look to the future.

The second example was my experience in putting out what is now known as “the oil fires of Kuwait.” Shortly before Kuwait’s liberation in February 1991 from the seven-month occupation of the country by the former Iraqi regime, the occupying forces ignited over 700 of Kuwait’s oil wells, creating smoke clouds thick enough to block sunlight and turn middays into midnights. It was a major environmental catastrophe that required the help of dozens of fire fighting teams experienced in oil fires from all over the world. I was appointed to join in this global effort as part of the Kuwaiti oil fire fighting team, and I jumped in immediately to serve my country and what was, at the time, my work place; ie. the oil field. For seven months, “our office” was a fire zone and our job then was to put out the massive oil fires taking over Kuwait. I cannot describe what we went through as a team, and the challenges we faced during those months, but I can say that the experience, the challenge, the pressure, and exposure I acquired as a result were priceless, especially when taking into account that I was the only woman out of all the teams who took part in putting out the fires.

In the last few decades, the oil industry has expanded massively, adding new technologies, countries and resources to the continuing challenge of extracting oil and bringing new products to market. Looking ahead, what do you think your generation has not achieved or could have done differently that should be the focus of the young professionals joining the industry today?

During my career I have seen huge progress in health, safety and environmental protection efforts in the oil industry. Today this has become an expected part of the business, but it wasn’t always so and it goes without saying that progress in these areas will continue in the future. On the other hand, Corporate and Social Responsibility was rarely on the agenda prior to 1990, and has only risen in importance year on year since then. I expect future oil and gas professionals to continue in their drive towards making the oil industry a leader in social responsibility and sustainability across the world.

Which young person that you have met has most impressed you, and why?

I am constantly meeting young people who astonish me with how insightful and industrious they are. There are just too many young talents that have impressed me, and it would be unjust to point out just one. Kuwait Energy is a co-founder of a maths and science competition in Kuwait, the Kuwait Science Fair, which sees the participation of hundreds of high school students each year. Even at that young age, participants have shown great visions they would like to share. After all, with every new generation there will be different ways in which to view the world – and that is the value every new generation brings to the table, which us older professionals need to be able to utilise positively. Young generations have great imagination, and are ambitious; our role is to help them in developing their abilities to the fullest and provide them with the platform to turn their ambitions and goals into reality.
The exploration and production (E&P) sector has a history of boom-or-bust cycles when it comes to managing its people. The economic crisis in the mid-1980s saw a mass shedding of jobs while from 2004 to 2008, recruitment into the industry soared and most companies struggled to fill vacant positions. The latter has been a wake-up call for an historically conservative industry that had naively ignored the importance of people, especially in the technical disciplines such as geoscientists and petroleum engineering, and suddenly faced unprecedented growth in oil prices, demand for oil and gas and the need for new projects. The latest economic downturn led merely to a brief pause, and the need for upstream technical talent remains one of the biggest challenges facing the industry today.

Two major occurrences will likely make the shortage of experienced technical personnel even more acute – the Macondo oil spill and its consequences on operational regulations, and the nuclear disaster at Fukushima and the after-effects in terms of project cancellations or permanent shutdown of nuclear plants. The resulting impact of these events is still too uncertain to be able to quantify in numbers of additional headcount required by the oil and gas industry. There is no doubt, however, that reinforced safety and security measures will require more people, and the number of gas projects – especially for shale gas in Europe – will increase to offset the loss of nuclear-based energy.

However, there is a trend that is clearly measurable: the retirement of an entire generation of senior petrotechnical professionals (PTPs) – geoscientists and petroleum engineers – from the E&P industry in the coming five years. The concept of “a big crew change” is no longer simply the idea of employment and management consultants. It is now a reality: it has begun and is intensifying.

In March 2011, the SBC Energy Institute released the results of its 2010 Oil & Gas HR Benchmark survey based on the responses of 29 oil and gas companies and 77 universities. The results highlighted two major trends. First, that the major demographic shift now underway will markedly alter the age and experience profile of the E&P industry,
and second, that technical talent is a strategic enabler for delivering production and future growth. I would now like to examine both of these.

In terms of demography, the most common structure of E&P companies in the last decade will soon no longer exist. By 2015, the typical major or independent will have moved from a demographic profile where seniority prevailed to one in which young PTPs are in the majority. This is a major shift for many companies in Europe, and in North and South America. Companies in emerging regions such as Asia, the Middle East and Africa already have a majority of young PTPs in their talent pools. The trend in demographics is not primarily driven by differences between national oil companies (NOCs) and international oil companies (IOCs), but is more regional. South American oil and gas companies are among the most "ageing" companies and are largely NOCs, while NOCs in the Middle East have much younger demographics.

This demographic shift will have consequences in terms of management. The new generation joining the industry is different from its predecessor with career perspectives, the image of the oil and gas industry, and lifestyle considerations being at least as important to newcomers as compensation and benefit packages. Upstream companies will need to adapt to the highest requirements of the new generation in terms of career management and mobility. Universities report rising numbers of students willing to join the energy sector, but to work in the green technology industry – not in fossil fuels. This image problem may have been compounded by Macondo and Fukushima, and will lead to even greater challenges in the recruitment of young talent into the E&P sector. In this context, companies that succeed in appealing to the younger generation will have a big competitive advantage over their peers.

The approach to leadership will also have to adapt. Younger CEOs will emerge at the top of large oil and gas companies where traditionally top-level jobs were awarded more on seniority. On a global basis, a quarter of PTPs currently employed by E&P companies are over 50 years of age and the vast majority will retire in the next five years. They represent the generation of professionals who joined the industry during the late 1970s and early 1980s at the peak of the oil and gas expansion cycle. The crisis of 1986 marked the brutal end of this expansion and the beginning of a long period of anemic recruitment that lasted nearly two decades and created an irreversible void in the ranks of today’s mid-career professionals. The vigorous up-cycle of 2004-2008 triggered a rapid and important rise in graduate recruitment amounting to a three-fold increase between 2004 and 2008. This also shaped the sector’s demographic profile with a recognisable double-hump of young and senior PTPs surrounding a gap of mid-career professionals (see Figure 1).

The right-hand hump of this will soon disappear. Detailed demographic statistics obtained through the Oil & Gas HR Benchmark survey provide an insight into the mechanisms at play; from a quantitative perspective, the total number of autonomous PTPs (autonomous in the sense of capable of making decisions without supervision) will decrease by about 6 per cent (i.e. -5,000 PTPs) by 2014. This is a relatively small loss that hides a much larger outflow of about 27 per cent of the current pool of experienced PTPs (i.e. ~22,000 PTPs), which is partially offset by the inflow of younger PTPs that are reaching autonomy (i.e. 17,000 PTPs). Upstream companies should already have transfer provisions in place to ensure that the transition between the 22,000 veteran PTPs and the 17,000 less experienced PTPs does not result in a huge loss of knowledge and experience from the industry.

On the left hand-side of the demographic profile, we start to see other challenges facing the industry – finding, recruiting and developing the growing number of young PTPs needed to address the challenges of producing more and more complex hydrocarbons.

Three positive signposts emerged from this year’s benchmark survey for which action and planning today will bring sustained success later.

First, graduate recruitment targets are rising. This year, E&P companies reported recruitment targets for 2011 up by 15 per cent compared with the same targets reported in the 2009 survey.

Second, the global supply of graduates in both geosciences and petroleum engineering disciplines
exceeds the total demand from operators. Even when removing the high percentage of the graduates not intending to join the upstream sector – more than half of geoscience graduates in North America – there is still an adequate supply to cover demand. The difficulty arises around quality. The supply of graduates from the subset of higher-ranked universities that have traditionally provided the oil and gas industry young talent barely covers demand (see Figure 2).

This apparent global balance of supply and demand hides alarming regional imbalances. For example, Angola produces approximately 100 PTP graduates per year but local demand is tenfold higher.

Collaboration with educational institutions and channeling the best PTP graduates towards the oil sector should be one of today’s top priorities for policy-makers and companies.

The third positive sign is that females represent a pool of untapped talent. While companies employ on average 15 per cent of women PTPs, the proportion of female students in geosciences and petroleum engineering is higher at more than 40 per cent in Asia – which represents a large pool of young talent in absolute numbers, more than 35 per cent in Latin America, but less than 20 per cent in North America.

Turning now to technical talent as a strategic enabler, E&P companies have long felt the impact of a paucity in technical talent, yet few have recognised this as a strategic issue that will curb their development ambitions. The “big crew change” means it will become increasingly important to develop and maintain internally the right number of PTPs to deliver current production and to enable future growth.

The 2010 SBC Oil & Gas HR Benchmark survey explored the notion of PTP Intensity, the ratio between the number of PTPs and the number of operated barrels of production. At the first level, this ratio reflects a relatively good correlation between production and PTP headcount. There is a strong correlation between PTP Intensity and operated production growth. Faster-growing companies have a higher PTP Intensity than those with slower growth.

By comparing companies with similar a PTP Intensity, four distinct groups emerge: (1) Western independents have the highest PTP Intensity and the highest growth rate; (2) majors and (3) international NOCs have a lower PTP Intensity and lower growth rates, and (4) NOCs with the lowest PTP Intensity have relatively stable production. A more careful analysis of these four groups shows that they share more than just similar PTP Intensity and growth rates, they also tend to have similar demographic profiles, similar HR challenges and comparable HR practices.

PTP Intensity can therefore be used as a leading indicator of the growth potential of each group. The forecast trend for the next five years suggests that Western independents will be in a position to reinforce their growth leadership and NOCs will regain some growth capacity, while majors will lose some growth capacity.

Being aware of the need for change is a step in the right direction. Implementing changes will require strong involvement from top management and a drastic review of HR practices in critical sectors.

Developing local talent in emerging countries and preparing them for an international as well as national career should probably be a top priority for management as it will become more and more a non-negotiable condition for operating companies.

Changing perceptions of the E&P industry at the school and campus level will be imperative to attract students towards oil-related disciplines. A different language and mindset will be needed as well as a clear map for career opportunities. The industry must take heed of the concerns of the new generation in both business practices and life style. These concerns range from the reduction of carbon emissions and of water consumption, to the importance of life style, dual careers, modern training, and the acceleration of time to gain responsibility.

Dealing with a very stretched mid-career talent reservoir will put pressure on compensation and benefits packages but the key differentiator will be the quality of career opportunities. Being able to offer technical talent a credible career with management-level rewards, such as in many technology driven industries, is becoming a serious issue.

Complex projects involving several companies and a large variety of technical disciplines will demand a full review of fundamental behaviours such as teamwork and accountability. The resistance to change will not come from the new generation but from the old guard and it is the most critical test for today’s management in the oil and gas sector.
Ensuring reliable and affordable energy supplies to support human progress, safely and with minimal environmental impact, is one of the greatest challenges facing the world today. Leaders across the energy industry and in government, business and civil society are working to meet this challenge with new sources of energy and new levels of energy efficiency.

At ExxonMobil, we believe that innovation is fundamental to satisfying the world’s growing and evolving energy needs. This is why we place the utmost importance on developing our high-quality, motivated and diverse workforce – our greatest asset – to drive our company and industry forward.

It begins with empowering our young employees. We aim to provide fulfilling career opportunities for our young employees – we believe the most fulfilling of any company, in any industry. From the start, we offer intellectual challenge, personal responsibility and opportunities for innovative thinking.

We take a disciplined, structured approach to developing all of our employees to their fullest potential. This includes everything from technical and non-technical training, to robust mentorship programmes, to exposure to cutting-edge technology and tools. We constantly strive to cultivate diverse and accomplished employees who bring passion and initiative to their jobs.

We also foster the next generation of scientists and engineers. Globally, the demand for science, technology, engineering and mathematics (STEM) professionals is rapidly expanding, yet fewer and fewer students choose these important career tracks. For many years, ExxonMobil has encouraged students to study math and science through programmes such as the National Math and Science Initiative.  

As ExxonMobil Production Company Vice President for the Middle East and Russia, I am reminded every day that the company’s success is driven by the achievements and ingenuity of our employees – like young engineers Yine de la Cruz and Ali Al-Mana. We know that you are the future leaders of the energy industry and the source of future scientific and technological breakthroughs.

Together, we can take on the world’s toughest energy challenges.

ExxonMobil is proud to support the World Petroleum Council in its efforts to highlight the importance of young professionals in the energy industry.
How would you define the role of young people in the energy industry? What is the greatest contribution that the younger generation of today has to offer the industry of the future?

I see the impact of the younger generation on the industry in two ways: the first problematic, the second beneficial.

Firstly, the oil and gas industry is old, with a generation gap in almost all areas, so the transfer of knowledge and experience is always going to be problematic. Young professionals arrive with a different world view from that of the older generation. The young person arrives looking for challenges, wanting to do things and to apply the knowledge that he or she learned at university; the older one thinks he knows everything and doesn’t acknowledge the contribution of the young person, which creates a problem, namely: how to manage the transfer of knowledge and speed up the training of younger people.

Secondly, young people arrive with a different set of values to those already in the industry, including a greater environmental and social conscience, introducing a series of new components into an industry traditionally associated with little concern for some of these issues.

These two elements will gradually be incorporated into the industry as the younger generation rise through the hierarchy to become managers and directors, thereby transforming it over time.

Why is it, do you think, that some good ideas from young people do not get the chance to penetrate the organisation of a company? How is your company structured to absorb and implement new ideas contributed by young professionals?

The energy industry is generally very procedure-based and therefore tends to be somewhat conservative. There isn’t much innovation in
procedures and standards because they are already tried and tested and need to be followed in order to maintain operational discipline, which is paramount in this industry. Young professionals enter the industry highly motivated, with a basic knowledge of how the industry works but without the necessary experience to recognise smells, sounds, processes and the adrenalin that comes from hazardous situations.

On the other hand, that young person has a much greater capacity for giving quick answers, thinking ‘outside the box’ and coming up with ideas that are, in many cases, more productive.

At Petrobras, we mix teams from the older and younger generations together, so that on a day-to-day basis the best aspects of each can influence and complement the work of the other. In this way the end result is greater than the sum of its parts.

How were you able to make an impact as a young professional in your organisation?

I began my professional life at university, as a professor, so I have had a long relationship with young people, which I maintain to this day. If there is one thing you learn as a teacher it is that every year you receive an intake of the same age while you become increasingly older and more remote, so I tried to take that into consideration in my teaching, to encourage greater interaction in the classroom. But while the rebelliousness and indiscipline of youth can be a positive thing at university, in industry that indiscipline has to be reconciled with the operational structure and the company hierarchy. This was a shock to me as well, coming from a university structure, which is horizontal, to an industry which is vertically structured, as it has to be.

Young people are by nature rebellious and iconoclastic; they have ambitions and think they know everything. But the reality is that they are not as rebellious as they think they are, nor as iconoclastic as they imagine, so the industry has to combine these qualities in order to get the best out of them.

In the last few decades, the oil industry has expanded massively, adding new technologies, countries and resources to the continuing challenge of extracting oil and bringing new products to market. Looking ahead, what do you think your generation has not achieved or could have done differently that should be the focus of the young professionals joining the industry today?

The oilfield worker of the past was a strong, courageous person – one might call him a ‘rough neck’ – who took too many risks and didn’t give much thought to safety procedures. Today’s operator uses a joystick, works with computerised controls, has to be careful with safety and needs to understand the processes he or she is controlling. Similarly, the geologist used to work with manual drawings, doing everything by hand, whereas now he or she has the benefit of virtual reality simulation, which requires a different skill set.

In the past, the industry depended on the sensorial experience of the professional. Today, he or she has the benefit of machines, software and advanced information capturing instruments. But the problem with these innovations is that they risk fetishising the technology, making people think that software and models offer the answer to everything, which is not necessarily the case. One also has to live through different situations in order to gain the analytical experience to correctly interpret all this information.

Today, we have better instruments but we run the risk of falling in love with the technology and forgetting that it is just a tool to help you interpret what you are doing. The young person has an aptitude for using the tools but the older person has the capacity to interpret the results.

There are things that the previous generation was not able to do because the necessary tools to accomplish them did not exist at that time, so the generation of today should not blame them for this.
Which young person that you have met has most impressed you, and why?

The decision-making process inside Petrobras is quite harsh on young people because most of the important decisions are taken by senior management, who are all senior professionals and who have only minimal contact with their younger colleagues. I try to have regular breakfast meetings with non-managerial workers, who are mostly young professionals and the impression I get from these meetings is that young people are extremely motivated and – contrary to what I expected – also have a high level of technical expertise.

I think the greatest challenge that we face is how to combine the values of our young professionals with those of the company – which prioritise career, the long term, professional development, relations with society and so on. Some of the young people that have impressed me most include those involved in the WPC Youth Committee initiative and its Best Author competition, which reveals interesting talents. Here at Petrobras we have an Inventor’s Award (coordinated by the company’s research and development institute, CENPES), as well as programmes and meetings where young professionals get to present the results of their work, and these help us to identify and promote young talent. This is not always easy because the Petrobras qualification exam is heavily over-subscribed.

Young people, by nature, want immediate answers to the challenges they face and if they don’t get these they can become frustrated and this can hide their true potential. We have noticed that there is a high departure rate among young professionals in their first four years at the company, after which period the turnover decreases rapidly.

The oil industry is widely perceived as an old and traditional industry, not only because of its long history but also because it demands such a long learning period to master as a subject. At the same time, we have seen in the recent past the blossoming of new industries that are more dynamic, with faster career trajectories, more appealing and with many big companies led by young professionals. How do view this discrepancy and do you think it is time for the oil industry to adapt to this new world order? If so, how should it do this?

The oil industry is extremely diverse. It is one thing to produce oil onshore in a frontier basin; it is quite another matter to produce onshore from a mature basin, and something else again to produce shale gas, oil sands, or heavy oil. All these examples, which are land-based production methods, are well-established, proven techniques, with relatively little need for technological innovation. It is a completely different discipline altogether to produce offshore, from deepwater fields. In this instance innovation is imperative, involving robotics and other cutting-edge technologies without which production at such immense depths and extreme pressures would be impossible. It also involves extremely rigorous procedures, as the stakes are much higher.

Petrobras is an offshore operator; technological challenges and innovation are absolutely fundamental to this company and very much present in our day-to-day activities. So, in our case I don’t think we are associated with an old industry or one that is being left behind, but rather one that is constantly evolving through the development of advanced technologies.

Please, formulate one question that you would like to see answered by the youth.

I would like to put a question to the younger youth, the fully connected “Generation C” – the young person who lives on social networks, on wi-fi, who is constantly relating to different sources of information and segmenting his relationships of interest. And that question is: How can you combine that diversity and possibility of access with an industry that requires concentration, procedures and discipline?
As our Chairman and CEO Rex W Tillerson has said, education today is the key to energy tomorrow. Any ExxonMobil employee will tell you that this philosophy is ingrained in our company culture: We are committed to increasing the number of students pursuing degrees in science, technology, engineering and mathematics.

I know this firsthand.

As a high school student back in 2003, I applied for and received ExxonMobil’s national Math and Engineering Award from the Hispanic Heritage Foundation, an organisation that identifies, supports and develops emerging Latino leaders. At that moment, my years of rigorous math and science classes – I took every single one available at my school – had finally paid off.

I used the scholarship toward my education at Manhattan College in New York, where I studied civil engineering. Shortly before graduation, I ran into the president of the Global Organisation for the Advancement of Latinos (GOAL), who encouraged me to interview for a full-time job with ExxonMobil. With his support and mentorship, I landed a job as a project manager in ExxonMobil’s Fuels Marketing division. I’ve now been here for four years.

I am proud that my employment with ExxonMobil serves as a direct reflection of the company’s commitment to investing in the next generation of scientists and engineers. But I am more proud that it is a reflection of ExxonMobil’s belief that one of the keys to building a strong workforce is to seek and support diversity.

Immediately after joining the company, I became involved with the GOAL programme, and I will remain involved throughout my career. I know ExxonMobil is an industry leader in the energy sector because it benefits from the rich variety of knowledge, skills and perspectives of its employees.

I’ve learned in my four years with the company that ExxonMobil rigorously builds on this blend of knowledge, skills and perspectives with extensive development processes. My favorite quote is “Knowledge is power,” and as a young employee, I feel constantly empowered by the tools, training, mentors and experiences available to me. Understanding how to approach problems in an organised way, follow processes, and arrive at productive conclusions can get you through any job at this company.

As I move forward in my career with ExxonMobil, I hope to gain the experiences and skills required to develop into a future leader with the company. I know that I will be joined along the way by the next generation of scientists and engineers, on whose ingenuity and innovation we will depend to help meet the rising global demand for energy.
The World Petroleum Council is committed to involving young people in the oil and gas industry and recognises the importance of attracting and retaining young talent. It has formed the WPC Youth Committee with over twenty young representatives from the World Petroleum Council’s National Committees to gain their input to the Council’s strategy of addressing youth around the world.

A range of activities is being organised by the WPC Youth Committee for students and young professionals to encourage them to attend the 20th World Petroleum Congress and its exhibition and to provide a fruitful platform for engagement with the high-level experts attending from the industry.

The young people agreed on an overall theme for the youth activities for the Congress which will take place under the motto:

**Youth in the Energy Future**

Through a range of activities and projects young people will get an opportunity to network with each other and discuss some of the key issues for the future before and during the Congress, namely:

- Tomorrow’s Energy Picture
- Sustainable Energy Industry
- Tomorrow’s Leadership

**Youth Stand**

The Youth Stand will be a gathering place for young people to share their thoughts and ideas and also to network. Daily presentations, job profiles and discussions will be held around the scenarios that were discussed on the online discussion platform (wpcYOUTHconnect). There will also be daily technology showcase tours that will commence from the Youth Stand.

**ACTION:** Come, network, learn and participate!

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Mishal Jabor Al-Thani
Acting Manager, Energy Policy and International Relations, Qatar Petroleum; WPC YC Vice Chair for Strategic Planning & Youth Lead for 20th WPC
**Special Session on Youth**
A special session in the Congress programme is dedicated to youth. Designed and developed by members of the WPC Youth Committee, the session will bring together industry leaders and young people to address the issues discussed on the online platform under the theme of “Youth in the Energy Future.”

**Have your say at WPC Youth Connect!**
www.wpcyouthconnect.com

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**Youth Party**
Party time in the desert! The Youth Party will be held on the night of the 7th of December in the middle of the desert with an Arabic setting and many activities that reflect the Qatari culture. This is to show appreciation to the youth for their involvement in the 20th World Petroleum Congress.

**Pick up your invitation from the Youth Stand at the exhibition!**

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**Women in Industry Breakfast**
This activity will allow female industry representatives to meet and network with other women in the energy industry. The WIB will be hosted at the Ritz-Carlton for 150 guests. There will also be an interactive round table discussion and debate with senior female industry leaders.

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**WPC Excellence Awards for Youth**
The World Petroleum Council recognises the importance of youth contribution to the energy industry by rewarding the best young authors of the Congress.

This year the 20th World Petroleum Congress Organising Committee has pledged an award of exceptional value for the best abstracts submitted by young people under 35. Over US$10,000 in prize money will be awarded to the best youth presenters, with the winner receiving US$5000, while second and third place will be granted US$3000 each.

**Find out how young people’s excellence can change the industry.**

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**About the 20th WPC Congress: The Youth Aspect**
Qatar WPC National Committee was the first national committee to establish an official “WPC Youth National Committee” in 2006. The goal of the youth committee was to involve Qatari youth in WPC activities and to run Qatar’s bid to host the 20th World Petroleum Congress.

The first Qatari WPC National Youth Committee was chaired by Mishal Jabor Al-Thani. The committee was heavily involved with Qatar’s campaign; in fact, most of the planning for the campaign was carried out by the youth. Thankfully, Qatar’s WPC National Committee had faith in the youth and their ideas for running the campaign.

Qatar winning the bid was considered a youth success, since youth involvement played a key role in the outcome. As soon as Qatar was announced as host for 20th WPC Congress, the Youth Committee was given a bigger role within the 20th WPC Organising Committee. Mishal was appointed as the Team Leader for Youth Activities in the organising committee while the Vice-Chair of the Qatari WPC National Youth Committee Ali Salatt was appointed as Deputy Team Leader for Youth Activities.

The 20th World Petroleum Congress in Qatar involved youth early in the bidding process, and it is still heavily relying on youth at the organising stage. Furthermore, youth will play an even bigger role during the event itself. Being part of the event has given all the young people involved renewed enthusiasm as they feel that they have been given a real opportunity to be part of the industry and this has given them the feeling of belonging to the industry.

Both Mishal and Ali, along with other youth in Qatar have been heavily involved in the event, which for them is considered a unique experience. Beyond the event, both Mishal and Ali are heavily involved in the energy industry in Qatar and both feel strongly committed to the industry.

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Hands up: who wants a greater say in the industry?
While young people prepare themselves for a career in the oil & gas industry, they will read in the newspapers about the decisions of their seniors. "Major oil & gas company decides to invest in green energy," "Oil & gas companies limit CO₂ emissions," these are only a few examples of the headlines that they will encounter. Following these publications gives young people insights into the topics that are being discussed at the top level of major oil and gas companies.

However, do young people agree with the current progress of the industry? Would young people make the same decisions and have the same priorities if they would were the CEO? The WPC Youth Committee has been looking for answers.

"Young professionals in the industry are unburdened by past successes and failures and are unrestrained by the traditional ‘how things are done’ mentality”

Julia Belosokhova (Russia)

If I were a CEO I would...

1. Boost the industry talent pool through scholarships in petroleum-related degrees:
The industry offers major challenges for the future of society and hence demands more people to think and develop solutions to its problems. As seniors retire, skills gaps occur. Is providing scholarships the best way oil firms can close this gap?

2. Develop strategies to increase petroleum reserves through investments in unconventional sources and support for energy efficiency programmes:
As major oil and gas fields begin their long decline, would the CEOs of the future favour investment in unconventional sources over renewables?

3. Improve work-life balance for employees in the industry:
The general perception of many outside the petroleum industry is that employees in the industry are generously compensated and enjoy good work-life balance. Do young professionals share this view, or are there changes they would like to see in this area? Also, does safety of offshore personnel need improvement? (The Macondo explosion in 2010 makes this an important question.)
If I were a CEO I would...

1. Convert Oil and Gas Companies into Energy Companies; Invest in alternative energies, increasing R&D Budgets:
The oil and gas industry has never been the only source of energy. Therefore, wouldn’t it be best to convert oil and gas companies into energy companies, keeping in mind clean technologies for future energy needs? Can investing in alternative energies by increasing R&D budgets be seen as a first step?

2. Cooperate with educational institutions/universities/high schools to help students understand the oil and gas industry:
The oil and gas industry is seeking talented young people. Therefore, besides providing scholarships and designing competitions, wouldn’t it be better to cooperate when the students are still about to choose their profession? It might be an effective way to increase awareness of the talented people on the industry, the opportunities and the challenges ahead.

3. Design national and international mentorship programmes:
Mentorship programmes help to get use of the national and international industrial technical experience as well as learning different perspectives and challenges faced, work-life balance and other social considerations. Would it make a difference to organise employee exchange programmes, besides using the communication platforms such as conferences, calls, etc.

4. Let young people have their say in shaping future strategies for the company:
Having invested in human resources through numerous programmes (scholarships, awards, mentorings, etc), would fresh ideas be welcomed by senior management in shaping future strategies?
2. Get out ahead of issues:
By the time some issues reach the corporate boardroom, it is too late to come up with a proactive solution. In today’s fast-paced communication environment, where facts, misinformation and opinions can spread instantly and affect a company’s share price, reputation and regulatory environment, it is critical to try to get ahead of issues before they spiral out of control. The debate around the Canadian oil sands was largely led by anti-development activists and galvanised public and political opinion well before industry reacted with a counter-strategy. As a result, the industry is still playing catch-up and trying to dispel misinformation. A similar public and political debate is already beginning with unconventional sources such as shale gas and coal bed methane, and could influence the way these resources are regulated, taxed, managed and perceived. It is important to get out ahead of these public and political debates in order to manage repercussions, shape the dialogue and minimise misinformation.

3. Be willing to take risks and be an industry leader:
As the world’s resources become more expensive and more challenging to extract, it is critical for the development of the world’s energy supply and the success of the industry to have companies that are willing to take risks on unproven technology, plays and energy sources. Without innovation and risk-taking, the industry will stagnate and security of supply will be at risk. Industry leaders have already transformed the industry in the past decade with the development of the Canadian oil sands and US shale gas – other game changing innovations are yet to be discovered, and only companies willing to take on the risks will be rewarded.

4. Know the company’s strengths and weaknesses:
Just as any employee knows his or her talents and shortcomings, every CEO should be constantly aware of the company’s strengths and weaknesses and should be factoring these into major business decisions. Companies cannot be all things to all people, and within the industry it is important to leverage strengths, whether that is physical assets, research & development or talent, and minimise exposure to weaknesses. Recent major divestitures and company splits, such as Marathon and ConocoPhillips highlight this importance and emphasise that it is better to excel in a few areas than be mediocre in many.

5. Use your employees as ambassadors:
Energy companies have built-in ambassadors for their company and their industry: thousands of dedicated employees and contractors. Leverage this natural advantage by ensuring that employees are educated and knowledgeable about the entire company (not just their area of work), their operations and industry issues. Employees will have hundreds of daily contacts with people outside of the industry; this is the best opportunity to promote a company’s reputation, track record and dispel myths and misinformation about the company and the industry. If properly leveraged, a company can have thousands of spokespeople endorsing the company and the industry on a continuous basis.

JOIN US!

The WPC Youth Committee is looking to engage young professionals and students from around the world to discuss, debate, challenge and shape the future of the oil and gas industry. We are cultivating the best ideas from the future leaders of the industry and in short, we’re looking to engage brilliant and thoughtful readers like yourself!

By reading this inaugural issue of the WPC Youth Magazine, you’ve taken the first step at getting involved with our organisation. Hopefully, you’ll have some time to visit the Youth Stand and the Special Session for Youth here in Doha and meet some of the passionate committee members.

Depending on your country of origin, there may be a local WPC Youth Committee already in place and there may be opportunities for you to become involved with various events, projects and committee positions. There may also be local WPC Youth events that you can attend, where you will have access to leading industry speakers, valuable networking opportunities and a compelling forum for debate and discussion. Visiting your country’s WPC website will be the best way to find out about these events. As an example of the type of events and projects that you can get involved with, visit the Canadian WPC Youth Committee’s new website at www.wpcyouthconnect.com.

We are also eager to hear your thoughts, opinions and ideas on the future of the oil and gas industry. Visit www.wpcyouthconnect.com to read and participate in the online discussion. There will also be future opportunities to have your research and ideas published through various WPC Youth Forums. Feel free to send us your submissions and/or abstracts for research. One of our key mandates is to provide young professionals a platform for dialogue and debate.

Please contact your local WPC Youth Committee Chair or the WPC Youth International Committee with any questions, ideas, thoughts or submissions at:

Email: youth@world-petroleum.org
Website: www.world-petroleum.org

We look forward to hearing from you and seeing you at the next WPC Youth Forum in 2013!
Growing up in Qatar, I understood the importance of the energy industry from a young age. It impacted everything around me, from the economy to the culture to the people. I knew I had to play a role in this industry.

After graduating from Pennsylvania State University with a degree in petroleum and natural gas engineering, I searched for a multinational energy company that could provide me with two things: global experiences and a platform on which to build my technical skills.

ExxonMobil has given me this and more. The company has not only offered me a breadth of challenging experiences in regions that span the globe, but it has trusted me from day one with substantial responsibilities. I quickly learned that ExxonMobil takes its young employees’ potential very seriously: high performers are recognised as future leaders. This is invaluable.

In my five years with the company, I’ve worked in three different parts of the world – Texas, Norway and now Qatar – and tackled three different parts of the upstream business, from reservoir engineering to my current role in RasGas facilities engineering. Each role has afforded me unparalleled opportunities to work in unique fields with diverse workforces.

As a young employee, ExxonMobil expects me to take ownership over my projects and ideas, and I like that. I’m expected to defend my proposals – like drilling new wells to increase production – in presentations to senior managers. It’s not uncommon for managers to question me, but this keeps me sharp and allows me to build trust and credibility. These experiences have proven rewarding on both a professional and personal level.

But experiences and responsibilities alone will not develop me to my fullest potential, and ExxonMobil knows this. Young employees need to understand how to apply the theories and skills learned in school to practical, real-life situations. To aid in this, the company has offered me both on-the-job and structured technical training. This ensures that I master the right skills for my specific job.

And perhaps most importantly, I received a mentor as part of the company’s early career mentorship programme. My mentor was a crucial part of my early development: He provided me with the tools I needed to do my job, taught me to think critically about problems, and put me on the right tasks at the right time. With his help, I was able to better understand my strengths and weaknesses and how to work with them to maximise my potential.

Looking back on my five years with ExxonMobil, I feel encouraged about where I am and where I could be going. I am confident that the company is paving the way for me to develop into a global technical leader, and I am excited to play a part in ensuring the availability of energy resources for the world.
Setting the stage for their energy future.

20th World Petroleum Congress

A proud sponsor of the 20th World Petroleum Congress