



RE-ENERGISING THE INDUSTRY WITH NEW IDEAS AND YOUNGER TALENT

BY PIERCE RIEMER
DIRECTOR GENERAL, WORLD PETROLEUM COUNCIL

Many would agree that three critical challenges for the oil and gas sector going forward are innovation in technology, the environment and geo-politics. Key to finding solutions for each of those challenges are strategic alliances and closer cooperation among governments, industry and other relevant stakeholders. This is even more important in times of political or financial crisis.

Economic growth and liberalisation of markets throughout the world have spurred significant demand for oil and gas over the last decade. In the past year, however, the global financial crisis has resulted in a steep worldwide recession which, along with unpredictable energy prices, has significantly impacted the oil and gas sector.

The effect has not been the same on all companies. Particularly small and mid-market capitalisation companies have been hurt by the reduced availability of capital and tougher credit terms that have followed the world financial crisis. Although the recession has resulted in a slowing down in oil and gas activity, in some parts of the world overall there is little change, and the long term fundamentals for future demand from the sector remain positive. Progressive companies now have the opportunity to position themselves to benefit from future growth.

As we are coming out of the global economic crisis new opportunities open up for international oil companies (IOCs) to partner with national oil companies (NOCs) on a long-term, sustainable basis. Those NOCs that have been affected most by lower prices and the economic recession may now welcome the IOCs' technological and operational expertise and access to capital. The downturn can therefore be a good time to focus on forming and strengthening strategic alliances, particularly with NOCs.

Although cooperation between IOCs and NOCs is not without its challenges, the potential rewards of enhanced cooperation are significant for both parties and indeed, there are many examples of successful partnerships. The World Petroleum Council (WPC) can facilitate the building of important bridges for the two sides to find ways to work together. Strategic alliances enable businesses to gain competitive advantage through access to a partner's resources, including markets, technologies, capital and people. Teaming up with others adds complementary resources and capabilities, enabling participants to grow and expand more quickly and efficiently. Many fast-growth technology companies use strategic alliances to benefit from more-established channels of distribution,

marketing, or brand reputation of bigger, better-known players. Companies might also consider cooperating with other firms by outsourcing the cost of non-core functions, freeing them to focus on key areas.

Technology will be a key to the future and in particular as we head into an unconventional future. Conventional reserves of oil and gas that are easy to access and inexpensive to produce are largely gone. Accordingly, industry is exploring in ever more challenging new frontiers where large oil and gas discoveries are being made. The development of such new discoveries will require deployment of cutting edge technologies. Some examples include the huge pre-salt discoveries offshore Brazil, at water depths of 2,000m to 3,000m, total reservoir depth of approximately 5,000m to 6,000m, located over 300 km from the shore. Other very challenging environments include Lower Tertiary of the Gulf of Mexico, also in ultra-deep waters, the deep gas-bearing reservoirs of Siberia and the sedimentary basins of the Arctic Circle.

Enhanced oil recovery is still one of the more promising areas to increase, in the fairly short term, the reserves and production of existing fields. The development of new technologies are significantly increasing recovery factors and prolonging the life of mature oil and gas fields. In particular the "Reverse Resources" strategy of utilising CO₂ both technically and financially in mature fields is creating a lot of interest.

Unconventional oil and gas resources, such as the oil sands of Canada and Venezuela, and the gas-bearing Barnett shale of Texas, are quickly becoming technically feasible and economically very attractive. Advanced technologies, particularly in the completion of gas-bearing shale, steam assisted gravity drainage of heavy oils and minimisation of the environmental impact of oil sands mining and processing are key to the further development of these resources. With all these activities we see close cooperation between IOCs and NOCs. So the future for the oil and gas industry is looking quite bright.

However, we will need a dedicated and experienced workforce to deliver these increases in our energy supply. Aggressive cost-cutting should try to avoid making wholesale cuts in the workforce, as the workforce in the oil and gas sector is rapidly ageing and talent is increasingly scarce. Forward-thinking companies should consider moving in the opposite direction – taking advantage of the downturn to strengthen their workforce in key parts of the world and forming strategic alliances with educational and academic institutions.

Addressing the youth and involving young people in the design of our future energy solutions is therefore one of the key issues for the 66 member countries of the World Petroleum Council (WPC).

In many countries the number of young people joining the industry or even graduating in related areas has been steadily decreasing. Therefore, the global petroleum industry is now on the edge of a demographic cliff with an ageing workforce shortly to retire, while not enough young people are finding the industry attractive enough to join. This growing skills gap may impede the industry's very ability to operate, especially with respect to major exploration and production projects. This challenge is particularly significant in the context of the world's rapidly growing demands for energy and calls for greater adherence to responsible social and environmental practices.

CRAFTING THE FUTURE

It is in response to this challenge, that the World Petroleum Council created its Youth Committee, with young representatives from its member countries, to bring a higher profile to the issue of the serious shortage of talented young employees and form an alliance with young people themselves in order to find possible solutions to our challenges. We feel that it is important that young people are at the forefront of resolving this issue, as they are the ones who will inherit this industry, and should be involved in crafting its future.

The WPC Youth Committee is intended to promote a realistic image of the petroleum industry among the youth, together with its challenges and opportunities. It is also initiating the creation of a collaborative and global forum for young people to be heard and new ideas to be championed. This is done both at our triennial World Petroleum Congress and at the WPC Youth Forums.

Many of our Youth Committee members bring their experience from the global level to the national level. With the support of their National Committees they build local networks, and promote closer interaction between young people and those involved at all levels of the petroleum industry in their country.

Thanks to social media and tools like Facebook, Twitter and LinkedIn, young people that join the National Youth Committees can tie into a local network of the country to communicate with each other, find job information or special education programmes in the leading national oil and gas companies and together launch new initiatives, in a way that was never before

available to older generations.

We hope that through the National Youth Committees our young members and senior people will find common ground and be inspired to work together on finding new strategies for the future 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, more just, cleaner, and better place to live.

In order to deliver energy to all, we need an injection of youth energy. You can do so through three key factors: the sharing of knowledge, choosing and adapting technological solutions and by challenging conventional wisdom and thinking outside the box.

One of the greatest challenges we face as an industry is to enhance our reputation and credibility with our many stakeholders. We represent a major part of the solution in meeting the world's future energy demand. We must respond to this challenge in a way that is economically viable, environmentally sound and socially responsible. In order to maximise our contribution to this debate, we need to build trusting relationships with our stakeholders. We also must level the playing field within our industry, so that all companies recognise and respond to pressing global issues in a clear and consistent manner.

Organisations like the IEF and WPC play a significant role by providing a forum for stakeholder dialogue. In fact, our recent Congresses in Madrid and Doha were designed to do just that. The Doha Congress concluded that there are still ample reserves and resources of oil and gas to be developed, both in mature basins and new frontiers. We have more than enough petroleum to meet demand for many decades for the benefit of all mankind. However, in order to earn a societal licence to operate and to be profitable, the industry must invest responsibly and ensure the sustainability of the environment for the next generations. In addition, communities that are impacted by oil and gas activities must enjoy a fair share of the benefits associated with that development.

Companies that adopt corporate social responsibility as part of their core business strategy and adhere to principles of transparency, business ethics and respect for human rights will gain the licence to prosper and be profitable for the long term. This IEF forum provides an excellent opportunity for networking among those key stakeholders and for expanding and strengthening international links in this region along with the global energy sector, and we welcome being part of it. ■