

# THE EMERGING TALENT POOL IN **RUSSIA**



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**I**t has been more than a decade since McKinsey and Company, the international consultancy, famously and presciently coined the phrase the “War for Talent,” predicting the dearth of “smart, sophisticated, technologically literate, globally astute, and operationally agile” business people required by firms over the following 20 years.<sup>1</sup>

While this message did not particularly resonate through the oil and gas sector at the time, today it is virtually impossible to pick up an oil and gas industry magazine or journal that does not contain an article lamenting the short supply of both young and experienced people alike entering the industry.<sup>2</sup> McKinsey’s prediction certainly appears to have proved accurate.

## BUSINESS CONTEXT AND THE CHALLENGE

The business context for the oil and gas sector has changed radically since McKinsey concluded its study. The oil price then was testing USD 10/bbl and the industry was set to embark on a major phase of consolidation (e.g., Exxon/Mobil, BP/Amoco/Arco, Chevron/Texaco, Total/Elf/Fina, Conoco/Phillips) often aimed at achieving global reach and accessing economies of scale. Inevitably, the depressed oil price environment and the merger activity led to many experienced staff leaving the industry through early retirement schemes, and graduate recruitment was significantly curtailed.

How different the context seems today. The oil price has soared past USD 100/bbl, service contractors are fully occupied, hydrocarbon resources are increasingly in the hands of states rather than the majors, and there is fierce competition for technically gifted people. Recent evidence suggests that the employment market is working once again, with enrollment in petroleum engineering programs in the developed world on the increase (they have doubled in the last 4 years) and retirement often being deferred, with many employers providing flexible working arrangements for people who would probably have exited the job market in the past. Starting salaries for petroleum engineers from Texas A&M University rocketed to USD 78,000 in 2007, up 33% in 4 years, with several students also receiving signing bonuses exceeding USD 20,000. Texas Tech reports that its 2008 graduating seniors will receive an average salary of USD 110,000, up 66% in 4 years and, according to the American Geologic Institute, the average starting salary for a geologist fresh out of school in the current academic year is USD 81,300, up 48% in five years.<sup>3</sup> Increasingly, oil companies are targeting undergraduates for summer intern programs, offering exciting and well-paid vacation work in the hope that they can hire the best on graduation.

Despite these trends, many industry observers still believe that there is a structural problem with so many experienced hands leaving the industry and insufficient new graduates. These trends were confirmed in a recent joint survey<sup>4</sup> of the energy sector by the UK Energy Institute, Norman Broadbent, and Deloitte. The principal findings of this survey show

- » A belief that there is insufficient leadership talent to meet the future challenges.
- » A steadily decreasing pool of new entrants to the labor market.
- » A decline in the scientific, engineering, and technical skills of new entrants.
- » Increasing competition from other industries for skills in short supply.
- » Decreasing number of scientific, engineering, and technical graduates choosing to enter manufacturing industry.
- » Rapid strides toward large-scale retirement.
- » Lack of experienced hires for key roles in an expanding industry.

Furthermore, a recent study<sup>5</sup> found that leading UK companies were able to fill only one third to one half of graduate vacancies in 2007 despite record numbers leaving the university. Several companies, including some from the energy sector, have turned to overseas recruitment to find the very best talent available. Ernst & Young have similarly confirmed<sup>6</sup> that a lack of skilled workers is the "top strategic threat" to the oil and gas industry. Most of these issues were also summarized in a recent article<sup>7</sup> in *Talent & Technology*, which went on to propose a focus on continuing executive education.

A recent report<sup>8</sup> attempted to quantify the cost to the oil and gas industry of the shortages in the workforce. It estimated that it is a nontrivial USD 5 billion per annum arising from direct employee costs; hiring and replacement, training, and compensation increases in tight labor-supply market; and lost profits



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from labor shortages and operational inefficiencies. To this could be added an unquantified cost from lost strategic opportunities.

### RESPONDING TO THE CHALLENGE

The challenge is being addressed. SPE now publishes *Talent & Technology* magazine and 2007 SPE President Abdul-Jaleel Al-Khalifa convened a summit, which was attended by many industry leaders, on this topic last year. Many worthy initiatives came from the summit, including

- » Establishing an SPE Industry Talent Council to address the quality and quantity of petroleum engineering and technical graduates.
- » Piloting an improvement in undergraduate programs in a non-OECD country.
- » Building an accurate database of the industry's talent needs.
- » Examining global certification issues.

In support of these initiatives, the summit concluded that, among other things, the oil and gas industry should realize that its center of gravity is shifting from OECD countries to non-OECD ones, and that the talent supply chain should be globally connected. This theme was reiterated in a recent *The Wall Street Journal* article<sup>9</sup> reporting Schlumberger data of the expected 12,000 petroleum engineering and geoscience graduates in 2008 from nations outside traditional "Western" countries, double the roughly 6,000 that will come from the US, Canada, and Europe.

### THE RE-EMERGENCE OF RUSSIA

Toward the end of the Soviet era, in the period from 1986 to 1988, Russia, with daily oil production around 11 million BOPD, was responsible for 19% of annual global oil output. From the late 1980s, Russian production went into a steep decline until, by the mid-1990s, production had reached about 6 million BOPD

(8–9% of global production). The re-emergence of the oil industry in Russia after the 1998 financial crisis has been remarkable, with production building back to more than 9 million BOPD today (11–12% of global production).<sup>10</sup> Russia's reserves position is enviable—6.6% of the world's proven oil reserves and 26.3% of the world's proven gas reserves; the respective

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reserves-to-production ratios are more than 22 (oil) and 77 (gas).<sup>10</sup> Most commentators also believe that there are substantial deposits of yet undiscovered oil and gas resources in Russia.

Russia's oil and gas resource potential is thus immense. The question is whether the human potential of Russia, often overlooked in the past, can also help the oil and gas sector achieve the demands of society. We believe that it indisputably can.

### SPE IN RUSSIA

Ten years after the 1998 crisis, Russia has become a strategic frontier for SPE. The Moscow Section was formed in 1992 by a handful of Russian enthusiasts with previous experience as SPE members while working in other countries around the globe. For an organization with the globe as its logo, establishing a first SPE



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McMorran has served on diverse governing bodies, from the International Well Control Forum to global business schools. He continues to lead initiatives in building professional and leadership capability across the industry, and serves as Secretary of the SPE Moscow Section.

presence in a country of 11 time zones and uniquely vast natural resources was a milestone of more significance than many realized at the time.

From modest beginnings, the section gained traction, notably when SPE President Steve Holditch spoke at a 2001 Moscow conference on oil and gas education. This first trip to Russia by an SPE President set a precedent for visits by almost every president since, catalyzing a period of dramatic growth for the Society in Russia. Significantly, it also highlighted the value SPE places on developing young professionals.

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From 71 paid members in 2001 to 300 in 2005, the Moscow Section has grown rapidly and has won SPE’s global membership contest three times in 4 years. Attendances of more than 200 at monthly technical meetings became the norm, with Distinguished Lectures and other material delivered simultaneously and interactively in both the Russian and English languages. The diversity of background and experience at these events is remarkable.

A first Applied Technology Workshop in 2003, and a flourishing series since, confirms Moscow as a hotspot for technical interchange. Growing cooperation between SPE and the state bodies responsible for oilfield development and reserves assessment provide an important and innovative forum for parties from diverse backgrounds to share ideas of mutual interest.

But Russia’s capital city is only part of the story. Thriving sections in regions from the Volga to Sakhalin, and increasing integration and optimization of resources between them, attest to an organization that has matured as well as grown. The inaugural SPE Russian Oil and Gas Conference and Exhibition in 2006 was successful, and preparations are now well advanced for the 2008 version as it will become a new bi-annual fixture on the major conference schedule.

Establishing a permanent SPE office in Moscow in 2007 underlined the Society’s long-term commitment to Russia, and it seemed entirely appropriate that 2007 should also mark the election of Sergei Kolbikov, founding member and early Chairman of SPE Moscow Section, as Russia’s first SPE Distinguished Member.

Perhaps our greatest success, yet paradoxically the greatest challenge ahead, is the creation and cultivation

of student chapters. Russia has a unique and long-established infrastructure of oil and gas universities. Connecting these campuses (virtually and by personal contact) to SPE’s global knowledge network, and developing a global outlook among students and graduates, are opportunities we have only just begun to address. Russia has 12 student chapters and an active community for young professionals, but much more can be done to harness the raw talent these universities unleash to the industry year on year.

## EDUCATIONAL INITIATIVES

Russia’s nationwide network of oil and gas universities is a traditional pillar of its petroleum industry. Located in every major oil and gas center, these typically offer 5-year “specialist” first-degree courses in a range of highly focused majors: from “Geophysical Methods of Well Exploration” to “Design, Construction and Operation of Oil and Gas Pipelines and Storage Facilities.” These courses often have no US or European equivalent at undergraduate level. Building on an extremely strong tradition of primary and secondary education, particularly in mathematics and the sciences, these courses produced generations of engineers and geoscientists, whose “specialist” training addressed the needs of the centrally planned Soviet Union.

Despite economic and structural challenges in recent times, this network of oil and gas universities remains intact and sustains the academic momentum on which Russia’s formidable production infrastructure was built. But therein lies a problem. While oil companies in Russia have transformed over the last 10 years in response to the forces of a global market, the universities from which they recruit future professionals have generally not.

This decade has also seen the emergence of innovative partnerships between Russian oil and gas universities and their Western counterparts, aiming to blend the rigor of Russian specialist instruction with the multidisciplinary teamwork on which global operators increasingly depend.

In 2000, Yukos Oil Company was competing with operators from other countries on upstream prospects outside Russia. It became clear that a lack of petroleum engineers, individuals able to integrate and resolve diverse technical, economic, and other issues, was hampering competitiveness. Delegations of specialists were not the way to tackle data rooms on unfamiliar territory.

After declining offers of places on courses at established petroleum engineering providers in the US and Europe (as too little, too late), Yukos set up a master’s degree program in the Siberian city of Tomsk, based on an established 1-year postgraduate program from the UK. The partnership between Heriot-Watt and Tomsk Polytechnic universities produced its first 39 graduates in 2002, and today enjoys broad support among operators and service companies alike. The

focus on multidisciplinary teamwork set an important precedent in Russia, and the quality of incoming students, recruited from across the country, was extremely high.

Other partnerships have followed, most recently combining the petroleum geoscience expertise of Royal Holloway College, University of London, and the State Oil and Gas University of Tyumen. Tyumen is one of the world's most prolific producers of oil and gas graduates, and this program will induct its first masters' students in September 2008.

First degree courses in Russia are gradually adapting to the changing needs of the oil and gas industry. A current transition away from the 5-year specialist degree to a 4-year bachelor's degree brings Russia closer to international norms on the structure of tertiary education (under the Bologna process, 1999, for standardization of degrees throughout Europe), but does not address the issue of how graduates are prepared for the needs of industry, or certified as professionals. This is where employers, and professional societies, including SPE, have an important role to play.

## GRADUATE RECRUITMENT

One of the uncomfortable truths facing our industry in many developed countries is a negative perception among young people about the careers we offer. Whatever the reality, oil and gas companies are often seen as unfriendly to the environment, unsophisticated in technology, and unable to offer prospects for long-term career development. Our industry in these countries has to compete ever harder to overcome irrational bias and recruit the most talented graduates.

Russia is very different. Oil and gas is the undisputed driver of a dynamic economy, and remains the employer of choice for many. About 15,000 young people graduate every year with petroleum-related degrees from universities across Russia. Industry cycles that ravaged petroleum engineering departments in the US have had little impact here, and applications for places at oil and gas universities are as strong as ever.

The issue with oil and gas graduates in Russia is not quantity, but quality and relevance. Misalignment between what is taught in degree courses and the capabilities that employers seek is neither new nor specific to any country, but the pace of change among oil companies in Russia puts it high on the agenda.

Oil companies have responded with development programs that seek to build on the strong theoretical base characteristic of Russian graduates, adding business skills through corporate initiatives and experience transfer from previous generations, supplemented by technical programs and structured mentoring in regional locations.

Limited resources and faculty demographics mean that Russian universities need, and increasingly receive,

the direct support of industry partners to adapt course content to industry expectations. TNK-BP, for example, established a program of annual university grants, providing financial support for specific university projects selected on the basis of a competitive tender. Selected by merit and business relevance, these projects are impacting the way university faculty and business leaders talk about the young graduates in whom they share a vital interest.

Campuses across Russia are also a significant source of graduates for global operators and service companies. Schlumberger has been hiring Russian engineers to work and develop their careers overseas for a generation. Domestic activity in recent years means that Russian nationals have become one of the largest sectors in its global workforce. In March 2008, Schlumberger opened a major training center near Tyumen, whose facilities illustrate the company's confidence in the role that Russians will play in the global workforce of the future.

## CONCLUSION

Russia has a long, proud tradition as an oil and gas producing country, with production being won from some of the most inhospitable and remote places on earth. Oil and gas developments of the past, present, and the future in Russia often have and will be achieved against overwhelming odds by a Russian industry rich in resilience, talent, innovation, and capability.

Young Russian people are proud to earn petrotechnical degrees and work in an industry that is critical to the future of Russia. It would be foolhardy for any oil and gas company—operator or service company—to turn its back on this rich pool of talent. It was remarked recently at an SPE Moscow Section monthly meeting that "a motivated and committed Russian can achieve anything." We concur. ♦

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## References and Notes

1. See, for example, article by Charles Fishman in *Fast Company*, Issue 16, July 1998, page 104.
2. Quantifying the Workforce Crisis in Upstream Oil and Gas, Christine A Resler, *Talent & Technology*, Volume 1, Number 3, 2007.
3. A Gusher for Oil Grads, *The Wall Street Journal*, 21 February 2008.
4. United Kingdom Energy Institute Media Release, 12 September 2006.
5. AGR Graduate Recruitment Survey 2008, Association of Graduate Recruiters, reported as "Graduates Lacking Skills to Win Jobs" in *The Daily Telegraph* (UK), 31 January 2008. See also [www.agr.org.uk](http://www.agr.org.uk)
6. Lack of Skilled Workers Threatens Industry, *Oil Daily*, 21 February 2008, Energy Intelligence Group.
7. Executive Education for Oil and Gas Professionals, G Berkhout, C Bos, R Weijermars and P Currie, *Talent & Technology*, Volume 2, Number 1, 2008.
8. The Workforce Crisis in the Upstream Oil and Gas Sector, joint report between Bowden, C.T. Bauer College of Business and the University of Houston Global Energy Management Institute, 2007.
9. Oil Grads Find New Opportunities, S Swartz, *The Wall Street Journal Europe*, 4 April 2008.
10. BP Statistical Review of World Energy, June 2007.