

APPEA Conference 2010: Speakers and Abstracts

Monday 17 May

Opening conference session: Energy for generations



Queensland State Government address

Stephen Robertson, Queensland Minister for Natural Resources, Mines and Energy, and Minister for Trade

Stephen Robertson is Queensland's Minister for Natural Resources, Mines and Energy, Minister for Trade and the state member for Stretton. Robertson was first elected to the Queensland Parliament in September 1992 as the member for the Brisbane electorate of Sunnybank (now Stretton). He served as secretary of the Parliamentary Labor Party from August 1995 to June 1998. In June 1998, he was appointed parliamentary secretary to the deputy premier and chaired the Queensland Small Business Advisory Council, as well as being a member of the Queensland Innovation Council and the deputy premier's representative on the Queensland Food Industry Council. He was first appointed to the Beattie ministry on 16 December 1999 as minister for emergency services. He was sworn in as minister for natural resources and minister for mines on 22 February 2001, as minister for natural resources, mines and energy on 12 February 2004, and as minister for health on 28 July 2005. He was sworn in as minister for natural resources, mines and energy and minister for trade on 26 March 2009. Robertson was born in Aberdeen, Scotland, on 14 February 1962. He has a Bachelor of Arts from Griffith University, graduating with honours from the School of Modern Asian Studies. Prior to his election to Queensland parliament, Robertson was state secretary and national president of the United Firefighters Union of Australia. Robertson's electorate has a significant business migrant community from China, Hong Kong, Taiwan, Singapore, Malaysia and Korea. He has a strong interest in the Asia Pacific and has visited the region on a number of occasions as a participant on trade missions, parliamentary committee delegations, and to attend conferences on political, economic and social developments in the region. He has been a member of the Australian Labor Party since 1978.

Abstract

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An industry with energy for generations

Charles Allen AO

Charles Allen was born and educated in the UK. He served for two years (1955–1956) in the Royal Engineers in Malaya during the emergency there. He joined Shell on graduation and his professional career commenced as an exploration geophysicist in various parts of the world and later in production and general management. He was posted to Australia in 1979 as executive director of Woodside Petroleum and chairman of the North West Shelf Project. He became managing director of Woodside in 1982 and retired in 1996 when the initial project was complete. He was appointed AO in 1990 and received the Centenary Medal in 2003. He received the APPEA Reg Sprigg Gold Medal in 1996 and the Lewis G Weeks Gold Medal in 2002. He was chairman of CSIRO (1996–2001), National Australia Bank (director 1992–2004, chairman 2001–2004), Air Liquide Australia (director 1998–2008, chairman 2005–2008), the Australian Mines and Metals Association (president 1989–92), the Cambridge Australia Trust (1996–2002) and the Florey Neuroscience Institute (chairman 2007–present), and he was a director of Metals Manufacturers (1990–1992), Earthwatch Institute (1995–2005), Amcor (1996–2005), and AGL (1996–2008). Allen was married first to Angela (nee Evatt, December 2001) by whom he had two sons and a daughter. He married secondly Jocelyn Searby (nee Paynter) in 2002.

Abstract

The international oil and gas industry has undergone a massive transformation over the past 50 years and the industry in Australia has been no exception. From a fledgling emerging activity for which major hydrocarbon production was little more than a gleam in the eye, it has matured into being one of the major export earners for the nation. APPEA has played a critical role in this evolution, developing policies for its members often well ahead of government and other industries.

The incredible technical advances made by the industry, and the use of technologies developed by other industries, have enabled the industry to expand to a degree never imagined 50 years ago. This has allowed the industry worldwide to meet ballooning demand, which will probably continue for many years despite the constraints imposed by increasing carbon dioxide levels. In Australia, we have not been as successful to date with oil, but Australia will have a major role to play in the coming years through export gas developments that will require sound long-term stable policies from governments. APPEA and the Australian oil and gas industry can look forward to a challenging and exciting future.



APPEA Chairman's address

Eric Streitberg, Executive Director, Buru Energy

Eric Streitberg is the Chairman of Buru Energy and a non-executive director of Adelphi Energy. He is a professional geologist and geophysicist with over 35 years' experience in exploration and production company management, and has been responsible for the establishment and successful growth of a number of Australian-listed oil and gas companies. He is a fellow of The AusIMM and the Australian Institute of Company Directors, a member of SEG, PESA and AAPG, a certified petroleum geologist of AAPG, a current member and chairman of the APPEA board, holder of the APPEA Reg Sprigg Medal and is chairman of the Marine Parks and Reserves Authority of Western Australia.

Abstract

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Plenary session: A new energy landscape



A new energy landscape—IGU perspective

Abdul Rahim Hashim, President of the International Gas Union

Datuk (Dr) Abdul Rahim Hashim, the President of the Malaysian Gas Association, began his career with Petronas soon after graduating from the University of Birmingham, UK, in electrical and electronics engineering in 1976. Throughout his 32 years of involvement in the oil and gas industry, he has held a number of high profile positions, including: managing director and CEO of Petronas Oil Refinery (Melaka) Sdn Bhd and managing director and CEO of Malaysian Refining Company Sdn Bhd (MRC). During his career path in higher management at Petronas, Datuk Rahim moved on to become the vice president of the human resource management division, then became the vice president for gas business, and then vice president of the research and technology division of Petronas, a post he held until the end of 2008. While serving at Petronas, he also held several key positions in a variety of gas industry organisations, both in Malaysia and at an international level, including the presidency of the Asia Pacific Natural Gas Vehicle Association (ANGVA). On 9 October he was appointed as the president of the IGU for 2009–2012. The IGU is a global, non-commercial and non-governmental organisation aimed at promoting the technical and economic progress of the gas industry. Established in 1931, it currently has more than 100 charter and associate members. Datuk Abdul Rahim Hashim, a professional engineer, is on the Board of Engineers (BOE), Malaysia, and he is also the chairman of the Engineering Accreditation Council (EAC), Malaysia. He is also an associate member of the American Institute of Chemical Engineers. In 1997, he completed the Advanced Management Programme (AMP) at Harvard Business School, Boston, USA.

Abstract

There are many factors favouring the continuing growth of the gas industry worldwide, notwithstanding the recent global financial crisis and economic slowdown. These include the growing world population, enhanced urbanisation, increased focus on climate change mitigation, and the wider access to gas markets through LNG.

The recent technological breakthrough in the development, production and commercialisation of unconventional gas in the USA has created new dynamics in the global gas and energy landscape. Coupled with the softening of energy and gas demand in the aftermath of the global economic slowdown, the surplus gas supplies situation led to the weakening of gas and LNG prices, making it more affordable. Abundant conventional and unconventional gas resources will pave the way for greater utilisation of gas in the energy consuming sectors. The relentless pursuit to reduce carbon emissions and the need to address issues on climate change, nevertheless, call for greater collective efforts to promote wider use of this relatively clean, efficient, versatile and environmental friendly fuel while efforts in commercialising renewable energy are still being actively pursued. This paper will highlight the dynamics of the changing global gas and energy landscape. It will also identify some of the key issues, challenges and opportunities moving forward. The outline of the presentation is as follows: introduction; the global natural gas and LNG industry; the changing gas and energy landscape; key challenges and opportunities; and closing remarks.



The new energy economy: Fuelling growth and prosperity

Roy Krzywosinski, Managing Director, Chevron Australia

Roy Krzywosinski is the Managing Director of Chevron Australia and head of the Australasia Strategic Business Unit, located in Perth, Western Australia. The Australasia Strategic Business Unit is responsible for Chevron's upstream interests and activities in Australia—this includes the oil production operation on Barrow Island and Thevenard Island, interests in the North West Shelf venture, and the development of the Greater Gorgon and Wheatstone gas fields in Australia. Prior to Krzywosinski's appointment in January 2008, he held the position of president and general manager of Chevron Project Resources Company in Houston, Texas. Krzywosinski was responsible for Chevron's project development, providing oversight for the execution of the corporation's worldwide major capital project portfolio. Krzywosinski joined Chevron Corporation in 1981 as a design and construction engineer. He has held numerous positions in various capacities around the world. A native of Bay City, Michigan, Krzywosinski graduated in 1981 from Michigan Technological University with a bachelor's degree in electrical engineering. He received an MBA from the University of Colorado in 1988.

Abstract

The growing demand for cleaner fuels has created a new energy economy that will underpin the growth and prosperity of our planet. Massive investment is required in the energy sector to satisfy this increasing demand.

Reliably supplied and affordable energy is vital to economic development, however, our challenge is to continue to safely and responsibly deliver energy while finding newer, smarter and cleaner ways to power the world. Chevron is developing new technologies to deliver cleaner natural gas and other forms of conventional fuels more efficiently, while cultivating the renewable and alternative energy solutions of tomorrow. In Australia, our industry finds itself in an energy sweet spot, surrounded by abundant natural gas resources, the cleanest of the fossil fuels, and on the doorstep of the world's biggest and fastest growing market: the Asia Pacific region. Projects such as the Chevron-operated Gorgon and Wheatstone natural gas developments in Western Australia are helping drive the new energy economy, creating thousands of jobs and fuelling growth and prosperity for Australia.



Energy challenges for the 21st century

David Eyton, Group Vice President for Research and Technology, BP

David Eyton is BP's Group Head of Research and Technology (R&T), accountable for technology strategy and its implementation across BP. In this role, Eyton oversees the technological capability of the company and also sits on the UK Energy Technologies Institute and science/business innovation boards. Eyton joined BP in 1982 after graduating from Cambridge University with an engineering degree. During his early career, he held a number of petroleum engineering, commercial and business management positions. In 1996, he was named general manager of BP's North West Shelf interest in Australia. Eyton later managed Wyitch Farm in the UK and then BP's gas businesses in Trinidad. In September 2001, he became Lord John Browne's executive assistant at the company's London headquarters. Following that assignment, Eyton was vice president of deepwater developments in the Gulf of Mexico and, prior to his current role, was BP's exploration and production group vice president for technology.

Abstract

The energy landscape is changing over a multi-decade time frame, driven by concerns for security, sustainability and cost. The efficiency of the transformation will depend on the quality of the relationship between businesses, governments and researchers working together towards common goals.

The energy industry is unlike many others, in that it requires companies to take huge capital risks over many years before receiving a return on investments, and its products are largely undifferentiated—hydrocarbon fuels and electrons. Competitively, this places a heavy emphasis on the efficiency of value chains—i.e. accessing resources, converting them into useful products, and getting them to market.

The development and deployment of new technologies, in collaboration with the world's many great research institutions, can accelerate change and reduce the social, economic and environmental costs of the transition.

International energy companies like BP use their technological experience and capability to deliver big, complex and challenging energy projects. Whether it be exploring for giant fields in deep water, unlocking the potential of unconventional gas, or developing next generation biofuels at scale, we are well placed to meet rising demand and support a lower carbon energy future.

The solutions to the world's energy challenges will vary regionally depending on each nation's natural resources; the industry needs clear and consistent policies at a national level, based on an analysis of these resources. It is vital that policy makers recognise the different requirements at each technology readiness level, from initial R&D to field testing and commercialisation. In the short term, this means making the most of proven technologies—such as the use of natural gas for power—as well as developing a clear carbon policy, investing in infrastructure and encouraging innovation. With appropriate policies and partnerships in place, technology will play a pivotal role in meeting the energy challenges of the 21st century.



Australia's role in meeting the global energy challenge

Ann Pickard, Executive Vice President, Australia, Shell Upstream International

Ann Pickard is the Executive Vice President of Upstream Australia in the Shell Upstream International organisation. Based in Perth since March 2010, she oversees the exploration, production and gas commercialisation part of Shell's Australian business. Described by *Fortune Magazine* as the bravest woman in oil and one of the 50 most powerful women in business, Pickard was Shell's regional executive vice president for sub-Saharan Africa, based in Lagos, Nigeria, for five years. In that role she oversaw the company's exploration and production, gas and LNG activities in the region. Before that, Pickard was director, global businesses and strategy, and a member of the Shell Gas and Power Executive Committee, with responsibility for global LNG, power, gas and power strategy. Pickard came to Shell in 2000, leaving Mobil upon the merger with Exxon. She has significant business experience throughout South America, the countries of the former Soviet Union, the Middle East and Africa. Pickard is a graduate of the University of Pennsylvania and the University of California. She is married and has two children.

Abstract

Global energy demand will continue to grow rapidly and sustainable energy supplies will struggle to keep up. The global energy challenge is, therefore, clear.

Australia's role in meeting this challenge is also clear. It has the resources, technology and innovation, the political and fiscal stability, and the proximity to key markets that should see it become a world energy leader.

If, however, we are to fulfil our role, and do so in a sustainable way, we need to get the settings right—both internally and externally.

Industry needs to be brave and invest on an unprecedented scale. It needs to harness technology in a way that provides access to resources we never thought were attainable. It needs to overcome the challenges and realise the benefits of unconventionalism, all the while addressing the low-carbon imperative.

Government needs to make it possible for industry to take the risks required to get to the next level. It needs to provide certainty around fiscal regimes, stability around industrial relations, and constancy when it comes to long-term access to the resources needed to underpin long-term projects.

Having been in Australia for more than 100 years and having contributed to every aspect of the Australian energy sector, Shell is firmly committed to this energy challenge journey. Over the next 10 years, we expect to invest somewhere in the vicinity of \$20 B in this country. We plan to develop the discoveries coming from one of the world's most successful oil and gas exploration programs, harnessing Shell technology and innovation to do so. We plan to do this in partnership with our joint venturers, the Australian community, and all levels of Australian government.

The challenge is clear. The opportunity is clear. I look forward to working with you.

Tuesday 18 May

Plenary session: Australia in context



The role of natural gas in meeting future energy requirements

Grant King, Managing Director, Origin Energy

Grant King was appointed Managing Director of Origin Energy in January 2000 following the de-merger of the energy and building/construction businesses of Boral, where he had been managing director of the Energy Group since 1994. King has extensive experience in the Australian oil and gas industry. He was formerly general manager of AGL Gas Companies, where he held a number of management positions over a 17-year period. Grant has a degree in civil engineering from the University of New South Wales and a masters of management from the University of Wollongong. He is chairman of Contact Energy (since October 2004), a councillor of APPEA, a former director of Envestra, and former chairman of the Energy Supply Association of Australia.

Abstract

Australia is blessed with an abundant supply and range of fuels, and a large number of investors willing to help develop its resources. The investments we make today, and the choices we make between fuels, will live with us for decades.

Governments in Australia and around the world are setting targets for emissions reductions by 2050 that would require very significant changes in the fuel mix. They continue to value security of supply and access to a diverse set of energy sources: but, while governments here and overseas are introducing policies to promote renewable energy, the policies required to encourage a large-scale shift away from coal are proving harder to deliver.

Gas is likely to emerge as a winner in the coming decade in Australia and overseas, whether as a balancing fuel for intermittent renewables, to meet any shortfall to 2020 renewable targets, or as a greater part of the mix for baseload electricity generation.



The energy demands of Southeast Asia

Rajnish Goswami, Head of Gas & Power Consulting, Asia Pacific and Middle East, Wood Mackenzie

Rajnish Goswami is responsible for business development relating to the gas and power sector for Asia and the Middle East. Goswami has been with Wood Mackenzie for 13 years, and prior to joining Wood Mackenzie's Singapore operations he worked in the company's London and Edinburgh offices. Goswami has led a number of assignments for international oil companies and national oil companies relating to strategy development and gas sector development. Across Asia, Goswami has led energy market analysis in Singapore, Indonesia, Thailand, Vietnam, Australia, India and Bangladesh. In the Middle East, he has led a number of advisory assignments relating to gas and power markets in the UAE, Oman, Qatar, Iran, Egypt, Bahrain and Kuwait. Goswami holds an MBA with distinction from the University of Edinburgh and has 18 years' experience in the energy consulting business.

Abstract

The presentation will focus on three key aspects:

1. Energy demand outlook and sector challenges going forward;
2. Discussions of the barriers to investment; and
3. Lessons the region can learn in terms of attracting investments in energy.

While the focus of the paper is on Southeast Asia, the presentation will also touch on the energy sector dynamics in China and India.



Travelling east: the great energy continental shift

Adi Karev, Global Head of Oil & Gas, Deloitte Touche Tohmatsu

A consulting partner with 20 years at Deloitte, Adi Karev has served some of Deloitte's largest energy clients. Karev previously served as the Asia Pacific energy and resources consulting industry practice director. Karev's expertise is in the area of strategic decision making with regard to large capital investments. He has served a number of major energy companies, including SK Corporation, Sasol, Shell, PetroChina, and other energy clients in Asia, particularly in the Chinese energy sector. His expertise lies in facilitating solutions and/or troubleshooting large strategic and transformation initiatives needed to address cultural, economic, technological and operational challenges faced by an organisation's global operations. Projects include large initiatives, such as competitive positioning, mergers and acquisition transition and integration, technology-driven transformations, as well as the development of executive-level relationships and enterprise-wide, executive level insights. Karev is a frequent speaker on issues in energy, LNG, and global oil markets, and has published numerous articles on energy-related topics. Karev was appointed as Deloitte's global leader for oil and gas in April 2009.

Abstract

The global energy industry is in the midst of the great energy continental shift from west to east. Leading this paradigm shift is the consuming power of China and the supply power of Australia. During the decade from 2000–2009, China spent an estimated US\$115 B on acquisitions, and in 2008 alone its investments abroad doubled from US\$25 B to US\$50 B. These acquisitions have provided the fuel that continues to push China's economic growth forward. Based on recent forecast economic growth in the Asia Pacific and slower demand in the West, Australia is competitively positioned to become a leading regional supplier of oil, coal, iron ore and, more recently, LNG.

Australia's LNG sector is being driven in the short term by strong LNG demand from traditional Asian buyers, such as Japanese and Korean utilities, and in the medium term by China and India as part of their rapid industrialisation programs and substitution towards cleaner fuels. If all of the 15 multi-billion dollar LNG projects in Australia come to fruition, the country may supplant Qatar as the world's leading LNG producer by 2020—however, this is a big 'if'. The sector faces several risks and challenges, notably risk of global oversupply of LNG in the Asia Pacific, risk of demand saturation, a critical skills shortage and cost overruns. Those LNG projects with first move advantage—those with long-term binding supply contracts and production infrastructure already in place—are most likely to be successful in the long term.



Going for global growth—the BG approach

Catherine Tanna, Executive Vice President and Managing Director, Australia, BG Group

Catherine Tanna, who reports to the chief executive, joined BG Group in 2009 after a long career with Shell and BHP Billiton. At Shell she was executive vice president of Shell Gas and Power with responsibility for Shell's LNG, gas transmission and power generation interests across Africa. She also held similar roles in Japan, Korea, China, Taiwan and Russia. In the 1990s she worked for BHP Petroleum in Australia, based in Melbourne. She was born in Gladstone, Queensland, and is a lawyer. Tanna leads BG Group's Australian business, QGC.

Abstract

Tanna will present the company's response to the challenge of maintaining strong growth in the current business environment.

BG Group production expanded at a compound annual growth rate of 12% between 1997 and 2009—it has committed to continue that growth at 6–8% over the period to 2020. It has built an industry-leading global LNG business.

Tanna will explain how BG Group has underpinned its success and how it will deliver on its promises to investors. She will set QGC in this context and explore the lessons from BG Group's entry to Australia. BG Group's first investment in Australia was just over two years ago, and it has built a resource position of 17 Tcf in Queensland and is approaching the final investment decision on its Queensland Curtis LNG project.

Wednesday 19 May

Plenary session: Delivering the potential



Federal Opposition address

Tony Abbott, Leader of the Opposition

Tony Abbott was elected leader of the federal Liberal Party on Tuesday 1 December 2009. Prior to this appointment, Abbott held the position of shadow minister for families, community services and indigenous affairs. At a by-election in March 1994, he was elected as the member for Warringah. On the election of the Howard Government in 1996, Abbott was appointed parliamentary secretary to the minister for employment, education, training and youth affairs—in this role he was responsible for the establishment of the successful Greencorps program for young people. Following the 1998 election, he was appointed to the new portfolio of minister for employment services. As minister he oversaw the development of the Job Network and a major expansion of Work for the Dole. In January 2001, Abbott was promoted to Cabinet as minister for employment, workplace relations and small business. Following the 2001 election, he was appointed minister for employment and workplace relations, leader of the house, minister assisting the prime minister for the public service, and was appointed minister for health and ageing on 7 October 2003. He attended St. Ignatius Riverview, graduated from Sydney University in economics/law, is a Rhodes scholar and completed an MA, politics and philosophy at Oxford University. Prior to entering parliament, Abbott was a journalist. He was a feature writer for *The Bulletin* and *The Australian*. He was press secretary and political adviser to the Leader of the Opposition, Dr John Hewson, and he was executive director of Australians for Constitutional Monarchy from 1993–1994. Abbott is married to Margaret. They have three daughters.

Abstract

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Natural gas—Australia's next energy advantage

David Knox, CEO and Managing Director, Santos

David Knox was appointed CEO of Santos in July 2008. He has 25 years of experience in the global oil and gas industry, including his role as managing director for BP Developments in Australasia from 2003–2007. Knox joined Santos in September 2007 as executive vice president, growth businesses, responsible for growth in Santos' emerging new businesses, including LNG, geoscience and new ventures, Indonesia, and other strategic projects. Originally from Edinburgh, Scotland, Knox holds a first class honours degree in mechanical engineering from Edinburgh University, and a Master in Business Administration from the University of Strathclyde. Knox has previously held senior positions with BP in Australia, the UK and Pakistan. He has worked for ARCO and Shell in the US, Netherlands, the UK and Norway.

Abstract

Australia's natural gas resources offer clean, reliable and abundant energy for Australia and the fast-growing economies of Asia. After supplying natural gas to Australia's largest cities for over 40 years, Santos stands on the cusp of a dramatic transformation to a new role as a major domestic gas supplier and a significant LNG exporter. Santos was first to recognise the opportunity to convert CSG to LNG, and the company's GLNG project is at the forefront of an exciting new industry. That industry is set to make Queensland the world's largest exporter of unconventional natural gas. Delivering these projects will require stable fiscal regimes, regulatory certainty and skilled labour. Australian natural gas has a major role to play in generating significant export and domestic revenue, reducing carbon emissions both here and overseas, and maintaining Australia's comparative advantage in energy.



The lucky country—but can we make our own luck?

John Smith, CEO, Clough

John Smith was appointed CEO of Clough on 1 August 2007. He is a chartered mechanical engineer with a degree from Glasgow University and has almost 30 years of international oil and gas experience from bases in Norway, the UK and Australia. He worked for 20 years for various Brown & Root companies in upstream oil and gas engineering and construction, and ran their businesses in Norway and then Australia. Following the Halliburton Dresser merger in 1998, Smith took operational responsibility for Halliburton Subsea and managed the strategic process, which led to

the formation of Subsea 7. He was CEO of that business for the first two years and served on the board until June 2007. He has served on the boards of five other listed companies, has run his own business, and is a past president of the International Marine Contractors Association (IMCA).

Abstract

Global primary energy consumption is forecast to grow by 35% over the next 20 years, driven by population growth coupled with progressive social development.

Current demand is met 90% by hydrocarbon fuels—i.e. oil, gas and coal—with the balance supplied by nuclear, hydro and renewables. Opinion is split as to whether peak oil has, or is, about to occur, however it is clear that the forecast energy deficit cannot be met from that source. Coal is plentiful but environmentally unpopular, as is nuclear power.

Therefore, in the absence of a technological revolution that will propel energy production from renewables at an unprecedented rate, gas is an important part of the answer to the energy gap in the medium and long term.

Since first production on the North West Shelf in the mid-1980s until today, Australia has built up an export capacity of 17 MMt/y of LNG, which when added to the Pluto production represents about 10% of current global LNG capacity. The combined offshore and coal seam reserves of Western Australian and Queensland respectively give the opportunity to increase production, helping to meet that global energy gap for many decades to come.

Australia is once again the lucky country.

While the Australian economy has and will continue to benefit greatly from the tax revenues generated from that production, little has been done to equip Australian industry to participate fully in the domestic investment of LNG developments. Far less has been done to develop exportable skills to participate in the industry on a global basis.

Norway produced its first oil in 1971—18 years after Australia—and began major gas exports about the same time. A comparison of the capacity and capability of its oil and gas service industry with that of Australia is stark.

The platform and opportunity exists for Australia to create many thousands of highly skilled jobs and a sustainable domestic and export oil and gas service industry but it will require vision and long-term thinking.

If there's more of the same, the lucky country could eventually run out of luck.



Reflecting on 50 years, focused on the future

Reg Nelson, Managing Director, Beach Energy

Reg Nelson is an exploration geophysicist with experience spanning four decades in most aspects of the petroleum and minerals industries. He was awarded honorary life membership of the Society of Exploration Geophysicists in 1989 and the Prime Minister's Centenary Medal in 2002 for services to mining. He is Managing Director of Beach Petroleum, which he joined as an executive director in 1992, becoming its CEO in 1995. He was a councillor (later a director) of APPEA from 2002–2009 and was chairman from 2004–2006. He has been a co-founder in numerous other public companies involved in the minerals industries, notably Ramelius Resources (gold and nickel), Monax Mining (base and precious metals, manganese and iron), Marmota Energy (uranium), South East Energy (lithium and uranium) and GTL Energy (coal beneficiation technology). He remains as a non-executive director on many of these companies.

Abstract

Fifty years ago Reg Sprigg, APPEA's first chairman, and his six fellow APPEA founders passionately believed that Australia could supply its own oil and that it was nonsense to say the country was too old, geologically speaking, to have commercial deposits. With extraordinary energy, vision, and a will to succeed, they embraced the challenge and set out to prove their detractors wrong, that imagination can overcome entrenched mindsets.

That vision drove the development of an upstream oil and gas industry in Australia—an industry that today continues to contribute significantly to the nation's economy and growth. Despite this strong contribution to national security, it faced numerous challenges over the years to overcome legislative, fiscal and ideological hurdles. During its first five decades, APPEA fought some epic battles, both internally and with government. In the process, the association moved from an uncoordinated group of crusading explorers to a sophisticated, thoroughly professional and influential body.

Most notable has been the association's lead in the huge changes of mindset in the industry on environmental matters and the approach to health and safety issues. When added to the plethora of technical innovations in the last 50 years, the overall result is an industry that has been a major contributor to Australia's economic wellbeing.

To maintain that position in the future, APPEA and the industry face new challenges that will require the same vision, commitment and passion shown by the early pioneers—perhaps even more so. Oil will still be an important fuel, but the longer-term future lies in natural gas.

Today and tomorrow's explorers still face the challenges of overcoming entrenched preconceptions, both within and outside the industry. The challenges remain of communicating the necessity of a strong, balanced and secure energy mix that can deliver solutions to emission reductions rather than exacerbate them. The challenges in the industry that Reg Sprigg and his compatriots faced in overcoming prevailing thinking on Australian geology remain. With the surge in North America, and now worldwide, on gas in unconventional reservoirs, we must redefine what exactly we mean when we talk of a reservoir.

Certainly over the next few decades, we must learn to revisit Australia's sedimentary basins with a new and bold outlook and pursue technical solutions with the same dogged persistence as the explorers of old.

Would that those who help form the world's financial markets adopt the same approach. ■

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