



REPRESENTING AUSTRALIA'S OIL AND GAS INDUSTRY

YEAR IN REVIEW

2010–2011



AUSTRALIAN PETROLEUM PRODUCTION & EXPLORATION ASSOCIATION



APPEA The voice of Australia's oil and gas industry

The Australian Petroleum Production and Exploration Association (APPEA) is the peak national body representing Australia's upstream oil and gas industry.

As at 30 June 2011, the association had 87 full member companies. All of these companies are oil and gas explorers and producers active in Australia — together they account for about 98 per cent of the nation's petroleum production.

APPEA also represents more than 230 associate member companies that provide goods and services to the upstream oil and gas industry.

APPEA works with state and Commonwealth governments to advocate and develop policies that promote investment and facilitate the safe and sustainable development of Australia's oil and gas resources.

The association seeks to increase community and government understanding of the upstream petroleum industry by publishing information about the sector's activities and its economic importance to the nation.

APPEA also provides its members with several forums for exchanging ideas and contributing to the development of association policy positions.



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APPEA thanks its member companies for contributing images to this publication.

Front cover: LNG tanker at North West Shelf.
Photo courtesy Woodside Petroleum.

Back cover: Bayu Undan. Photo courtesy ConocoPhillips

Photo this page: CSG worker at wellhead. Photo courtesy QGC.

From the Chairman

The petroleum industry in Australia has been transformed in the last decade.

There has been huge investment in new liquefied natural gas projects and Australia has seen the first coal seam gas-to-LNG projects in the world.

One of these new LNG projects—the huge Gorgon development on Barrow Island off Western Australia—also includes one of the largest carbon geosequestration projects in the world.

In conjunction with these projects, the shale and tight gas sectors are also beginning to emerge as a potentially major part of the Australian scene, and could soon add to a truly remarkable suite of new development.

The Australian oil and gas industry has become prominent in the economic and political landscape and this means it is now exposed to increasing community and political scrutiny.

This attention means APPEA's job has also been transformed, and we must now deal with a vastly more complex and wide-ranging set of issues.

A new political landscape

In addition, the political environment has also changed dramatically.

Australia has a new minority government, something it hasn't seen for more than 70 years, so it has certainly not been "business as usual" for APPEA over the past year.

In 2010–11, APPEA and the industry had to deal with a diverse range of issues.

These include: the proposed extension of the Petroleum Resource Rent Tax (PRRT) to onshore operations; the design of a carbon pricing regime and the timetable for its introduction; local content; skills shortages; and changes to offshore regulations and operational systems in the wake of the Montara incident.

The APPEA executive has constantly engaged federal and state governments to press the industry's case during the year through a constant process of attending hearings, of making submissions and of responding to the endless round of queries.

Climate change and gas

The federal government has been clear that it intends to finalise a national climate change policy, with the first step being the imposition of a carbon tax.

APPEA has consistently said that any climate change policy must deliver abatement at least cost and must be consistent with there being an international price on carbon.

APPEA has vigorously made the case to government that climate change policy should encourage expansion of both the domestic and the export gas industries.

To be effective, policy must recognise that selling our gas to the world is one of the most practical and meaningful things Australia can do to reduce global emissions.

For every ton of greenhouse gas we emit from the production and transport of Australian LNG, there are up to nine-and-a-half tons saved when this export gas is substituted for coal in electricity generation.

This substitution will do more to reduce the world's greenhouse gas emissions than any carbon tax in Australia is likely to do.

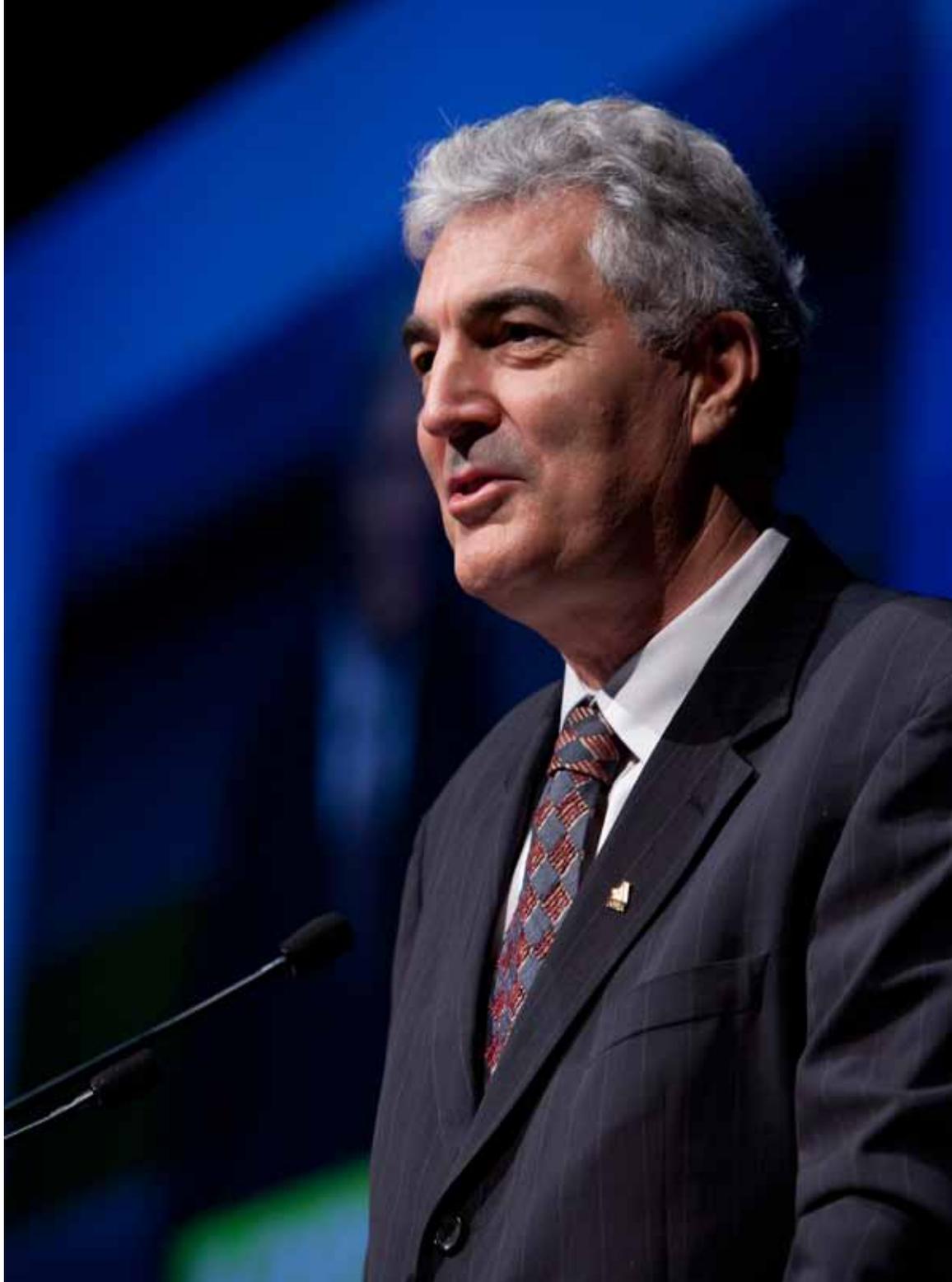
Coal seam gas

Clearly, gas has a key role to play in fighting climate change. And the fastest-growing area of gas production in Australia is CSG.

This industry is relatively new, it's onshore, it has a large footprint and it is very visible. So it's not surprising that CSG has attracted a lot of interest from the community and the regulators.

There are concerns that politicians and bureaucrats may be tempted to make the regulatory framework more onerous than it needs to be in order to assure the public that the industry is operating under very strict conditions.

APPEA is devoting considerable resources to make sure we get these settings right and they work effectively.



Thanks to the APPEA family

I thank APPEA's Board for their support for me during my term as Chairman, which will come to its end during this year.

I also thank the loyal, hard-working, enthusiastic APPEA secretariat team for their efforts during the year, often in very trying circumstances.

But above all, I thank Belinda Robinson who became APPEA's Chief Executive in 2005 and has done extraordinary things during her six years at the helm of the organisation.

Under Belinda, the organisation has doubled in size and achieved a true national and now an international profile, and has become well respected in the halls of government.

Belinda has decided it is time for a fresh challenge. She is respected by her staff, by the Board, by the industry in general, and by politicians and bureaucrats. On behalf of the Board, I wish her well for the future and thank her for leaving APPEA in such good stead.

Eric Streitberg
APPEA Chairman

From the Chief Executive



Belinda Robinson
Chief Executive

Carbon pricing, CSG and regulatory reform were the big issues of 2010–11.

APPEA has never been so busy in working to influence public policy, the industry's regulatory framework and the fiscal settings across jurisdictions. In some cases this has meant shaping policy as it is developed, in others it involves reviewing, reforming—even reversing—existing policies and settings.

Australia's minority government is challenging for policymakers and for those seeking to work with them. We all struggle with the conflicting positions, ideologies and policy objectives within the governing alliance of Labor, the Greens and independent MPs.

In working with governments and those that influence them, on policy, regulatory and fiscal matters, APPEA's objective, at all times, has been to protect the bottom line of our member companies so they can continue to maximise value for shareholders.

The big issues

At the federal level, APPEA's work in 2010–11 was dominated by debate over carbon pricing.

Over the last three years, APPEA has been vigorously arguing that Australia's policy response to climate change must be national, fair, environmentally effective, and able to deliver abatement at least cost.

Australia's substantial natural gas reserves can deliver significant economic, environmental and social benefits to the nation and to Asia. Therefore a sensible policy would recognise how Australian gas can reduce the growth in greenhouse emissions both domestically and overseas.

Unfortunately, the carbon pricing system agreed upon by the participants in the Multi-Party Climate Change Committee and announced in July could have been better. But the result was not surprising. Given the current political climate, APPEA and the industry did well to retain the treatment that liquefied natural gas was to receive under the Carbon Pollution Reduction Scheme developed by the Rudd Government in 2009.

APPEA will continue to argue for a credible carbon price regime that lets natural gas significantly reduce Australia's carbon intensity and does not compromise the LNG industry's international competitiveness and its ability to mitigate global greenhouse emissions.

APPEA has also been busy dealing with the extension of the Petroleum Resource Rent Tax (PRRT) to onshore oil and gas. Much must still be done to rectify many of the PRRT's design flaws, ensure that small and midcap companies are not adversely affected, and make sure that transitional arrangements do not disadvantage existing projects and projects approaching final investment decisions. APPEA has been working with the Policy Transition Group and Treasury in an effort to minimise the difficulties involved.



Sensible policy would recognise how Australian gas — including CSG — can drive economic and regional development while also mitigating carbon emissions.

Putting safety first

At the national level and in WA, significant progress was made in reforming offshore regulation and in enhancing operational practices in response to the Montara and Macondo incidents.

In 2010–11, the industry developed new procedures and guidelines that apply the lessons from the Montara and Macondo incidents to well design, operational procedures, reporting, competency and regulation of offshore wells. The industry also continued to work to improve oil spill response preparedness and strategies.

Maintaining and enhancing our reputation and our social licence to operate is the key to a strong, enduring and growing industry. The industry is determined to make the changes needed to assure governments, communities and our workforce that Australian upstream oil and gas consistently meets global standards.

The hard work done in 2010–11 will become clear in 2011–12 as the industry releases new guidelines and procedures to ensure that Australian offshore oil and gas operations adhere to the highest safety and environmental management standards.

Coal seam gas

2010–11 was a major turning point for eastern Australia's oil and gas industry with the sanctioning of three coal seam gas-to-LNG projects with a total investment value of more than \$45 billion.

CSG is perhaps the most exciting growth story in Australian business today. But numerous challenges must be addressed if its full potential is to be realised. Industry must do all it can to engage with local communities, secure their support and bring them with us as we build a track record of world class environmental and safety performance.

The CSG industry's rapid expansion has been controversial and posed particular challenges. Many have been caught by surprise at the industry's growth and have raised legitimate concerns.

But others have seen this as an opportunity to engage in misinformation, intimidation and fear-mongering. These people have no interest in a constructive debate or in understanding and addressing the real issues. Most Australians would be appalled at the unethical behaviour and tactics of those purporting to represent the environmental interest. They actually do no such thing and must be held to account for their unsubstantiated statements and dishonest campaigning.

APPEA has dedicated substantial resources to promoting the industry to the public policymakers,

and other interested parties. The Brisbane secretariat, which handles issues in Queensland and NSW, has been expanded. It is working in tandem with the Canberra office to counter the misinformation being spread on issues such as fracture stimulation, water management and CSG's greenhouse abatement potential. APPEA has been discussing CSG-related issues via community forums, traditional media and social media, and has also embarked on a well funded community education campaign to counter the negativity and misinformation being advanced by the industry's opponents.

Western Australia

In Western Australia domestic gas reservation and possible local content quotas for major projects were key concerns. To some extent, the WA oil and gas industry has been a victim of its own success, prompting lobby groups to call for measures that they believe would help them share in the industry's growth.

APPEA has been adamant in opposing the continuation of the domestic gas reservation policy and introducing any form of local content quotas. Such measures interfere with normal market operations and impose unnecessary costs and restrictions on very expensive projects with tight profit margins.

Although the WA Government is committed to retaining the gas reservation regime, APPEA is pleased with the government's flexibility and resolve in dealing with calls for local content quotas. Local content remains a live issue that will continue to demand APPEA's attention in 2011–12.

An eventful year

In April 2011, oil and gas professionals gathered in Perth for the largest-ever APPEA National Conference and Exhibition. Shortly after the successful staging of this event, it was announced that APPEA had won the national conference award for best government/association conference for the 2010 event held in Brisbane.

APPEA's annual conference has long been very well regarded and the event's reputation continues to grow. Delegate feedback indicates that the 2011 conference was every bit as good as the award-winning 2010 event. APPEA will continue raising the bar and will aim for even higher standards for 2012.

Belinda Robinson

APPEA Chief Executive

Industry Strategy

Australia needs a policy framework that delivers real gains in industry competitiveness, energy security and national wealth creation.

Policy and regulatory reform across a range of portfolios is needed to address the challenges created by a rapidly expanding and changing industry.

APPEA's *Upstream Oil and Gas Industry Strategy* is a policy advocacy document aimed at maximising the value of Australia's oil and gas resources to the Australian people, delivering petroleum energy security and ensuring long-term sustainability of an Australian oil and gas industry.

To be released at APPEA's annual general meeting on 24 November 2011, *State of the industry 2011* will provide an update of developments within Australia's oil and gas industry and outline the progress towards implementation of the 2007 Upstream Oil and Gas Industry Strategy, *Platform for Prosperity*.

The report notes that Australia's upstream oil and gas industry is in transformation, changing in nature and expanding rapidly to meet growing local and overseas demand for clean energy. The industry is expanding into new areas of operation and is using new technologies to tap into unconventional forms of oil and gas resources.

An unprecedented wave of investment is now under way—about \$100 billion worth of new gas projects are under construction. Many thousands of skilled workers are being mobilised on construction sites and in workshops around the country.

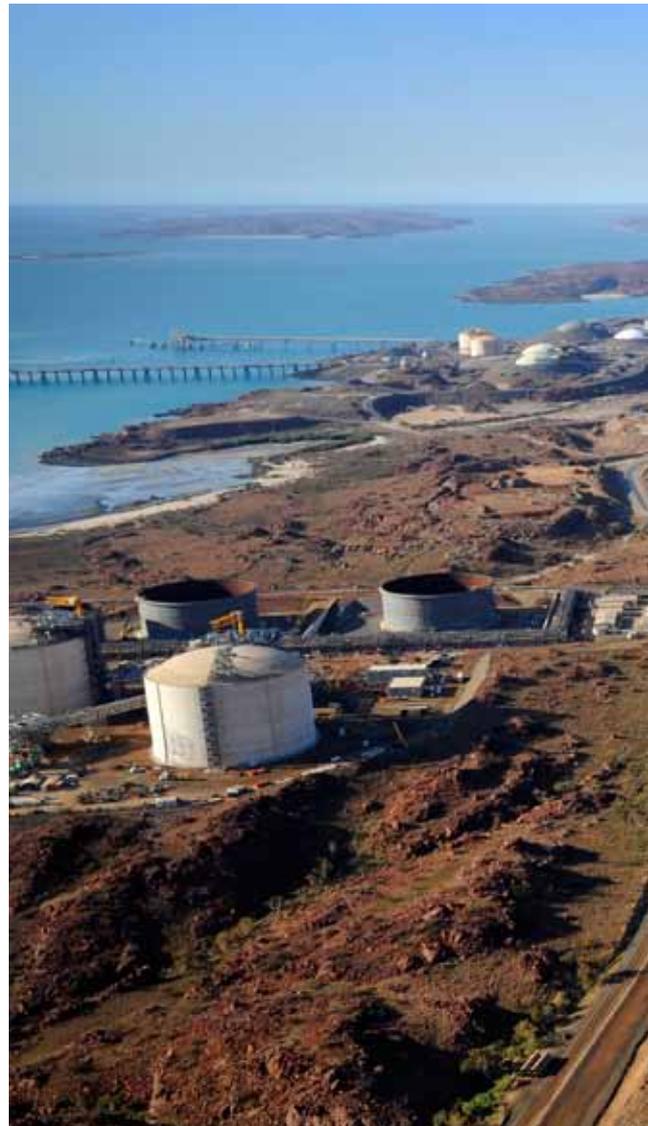
State of the industry 2011 points out that while these trends are positive for the industry and the nation, high levels of growth and activity are creating some significant challenges. If not addressed, these could significantly reduce the benefits flowing from the current wave of expansion and jeopardise future growth opportunities.

The industry's "social licence to operate" is under threat as parts of the community question the industry's commitment to safety and environmental performance.

In 2010, the number of exploration wells drilled was the lowest in at least 27 years of recordkeeping. This only adds to the ongoing decline in Australia's production of oil and natural gas liquids. The national oil import bill continues to escalate while 80 per cent of the country's petroleum basins remain unexplored. Over the past five years, Australia's consumption of refined petroleum products has been five times higher than discoveries of crude oil and natural gas liquids.

Increasing costs and declining labour productivity are threatening the viability of new and proposed projects and reducing returns that oil and gas development deliver to project developers, the community and governments.

International investors continue to regard Australia's approvals and regulatory processes as being a significant deterrent to investment.

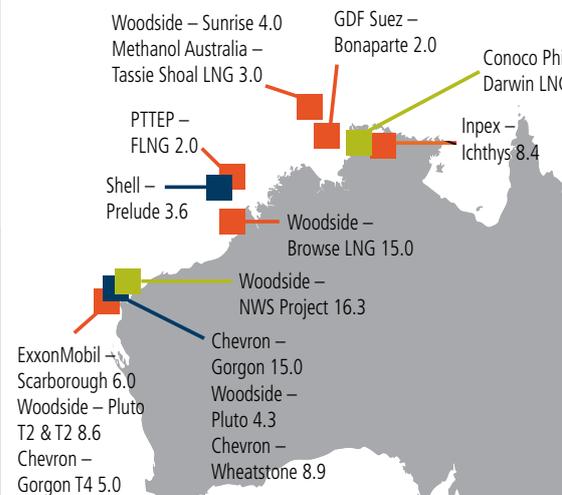


An industry in transformation: Australian LNG projects

Conventional gas

■ Operating

■ Under construction



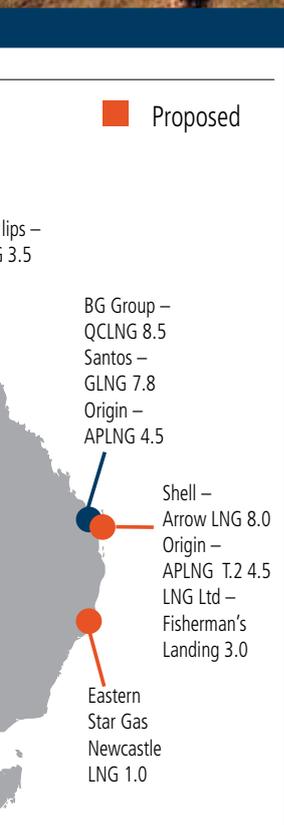
CSG-LNG

● Under construction

● Proposed



Construction at Woodside Petroleum's Pluto LNG project.



Numerous reviews and changes to regulatory agencies have yet to deliver any real improvement in service delivery.

These challenges to the industry's competitiveness and growth must be addressed if the strategy's objective is to be achieved for the benefit of all Australians.

Policy must be reformed to deliver a more balanced approach to wealth distribution and wealth creation and give priority to the changes needed to improve industry and energy market competitiveness.

This will require a cross-portfolio approach similar to the Australian Government's approach in developing a National Energy White Paper.

Current policy positions in key areas such as tax reform, climate change and industrial relations will require both fine-tuning and substantial changes.

Australia needs an internally consistent and effective policy framework that delivers real gains in industry competitiveness, energy security and national wealth creation.

Exploration and access

APPEA engages with all levels of government and with the community to advocate fair and efficient access regimes for petroleum activities and to increase recognition of the benefits of exploration.

Coal seam gas

CSG operations—including exploration and land access issues—have become controversial over the last couple of years and APPEA has been very active in policy and advocacy work aimed at developing effective, workable regulation of this sector and at improving understanding of CSG's many benefits.

APPEA was involved in a long policy development process for the Queensland Government's new land access regime, which began operating in late 2010.

In Australia, the state owns sub-surface resources (including groundwater resources) and issues the rights to explore and produce to third parties. A return to the community is then provided through secondary taxation arrangements such as royalties.

Petroleum companies seeking to explore for or produce oil or gas on privately owned land must enter into a land access and compensation agreement.

Access agreements negotiated with landholders are comprehensive, and cover matters such as when access is permitted, the activities to be undertaken and their location, and conditions to be observed by proponents.

With more than 1800 access agreements in place in Queensland alone and no companies seeking compulsory access, APPEA is vigorously arguing that there is ample evidence that private landholders, agriculture, and the CSG industry can, and do, co-exist successfully.



Geoscience

APPEA has continued its advocacy for well funded government pre-competitive programs, primarily through the Federal Government's Strategic Review of Geoscience Australia.

This review affirmed the importance of precompetitive geoscience data in promoting exploration. It likened this work to developing an investment prospectus for a complex asset and said it was the role of government to prepare precompetitive data packages.

The report also advocated further assessment of Australia acreage management systems, including consideration of the reconnaissance exploration permit model that APPEA has long advocated.

Australia offers excellent precompetitive geoscience data, but approvals processes should be streamlined to improve timeliness and efficiency and to ensure that the country remains attractive to explorers. On several occasions during 2010–11, APPEA's Exploration Committee and Data Working Group met with Federal and state regulatory authorities to discuss exploration-related approval processes.

The consolidated Resource Management and Administration Regulations, promulgated in April 2011, reflect detailed advocacy aimed at improving Australia's data submission and release processes.

This completes a major regulatory reform begun more than a decade ago. These regulations will now be more objective-based and for the first time they have consolidated all aspects of reservoir and resource management that were previously contained in the Schedule of Specific Directions. The various offshore regulations have also been merged into three main streams — resource management and administration; safety; and environment.

In 2010–11, APPEA also provided comments on various amending legislation. These included the proposed national regulator, offshore legislation and some state-based legislation including proposed amendments to the Victorian three nautical mile mirror regulations for the offshore.

APPEA also launched two exploration-related studies during the year — *Exploration in Australia 2000–2010: Reviewing a Decade of Growth* (Deloitte) and *An analysis of the value of petroleum exploration to the Australian Economy* (ACIL Tasman). These reports help underpin continuing advocacy to focus federal and state governments' attention on the importance of exploration investment for further economic growth in Australia.

Irrigation with CSG production water. There is ample evidence that CSG and agriculture can co-exist successfully. Photo courtesy Santos.



Security

APPEA is continuing to engage with key government and industry stakeholders to ensure that Australia's oil and gas security regulatory regime supports infrastructure critical to the Australian and global economies.

Through bodies such as the Energy Sector Group and the Offshore Oil and Gas Security Forum, APPEA members and government collaborate to identify and mitigate potential threats to oil and gas facilities.

Towards the end of 2010, the Minister for Infrastructure and Transport, Anthony Albanese, announced a review into the offshore oil and gas industry's security.

This review is being led by the Inspector of Transport Security, Mick Palmer.

It is understood that the review will assess areas of potential vulnerability, as well as the capabilities of resource operators and government to respond to security incidents.

APPEA has provided Mr Palmer with two liaison representatives — both of whom are senior security personnel employed by APPEA member companies — to facilitate communication between him and the industry.

Member companies also gave the review team site familiarisation tours and facilitated introductions to colleagues and government agencies in North America and Europe to assist international benchmarking.

The industry hopes that the inquiry will lead to more coordination of activities within and between state and federal governments.

Oil and gas fields and associated infrastructure are national assets developed under license from national and state governments.

As the caretakers of Australia's vast offshore jurisdiction and inherent resources, governments have the scope and expertise to safeguard such assets in the national interest.

The inquiry is now underway; a draft report is due to Mr Albanese by mid-2012.

Exploration and production activity

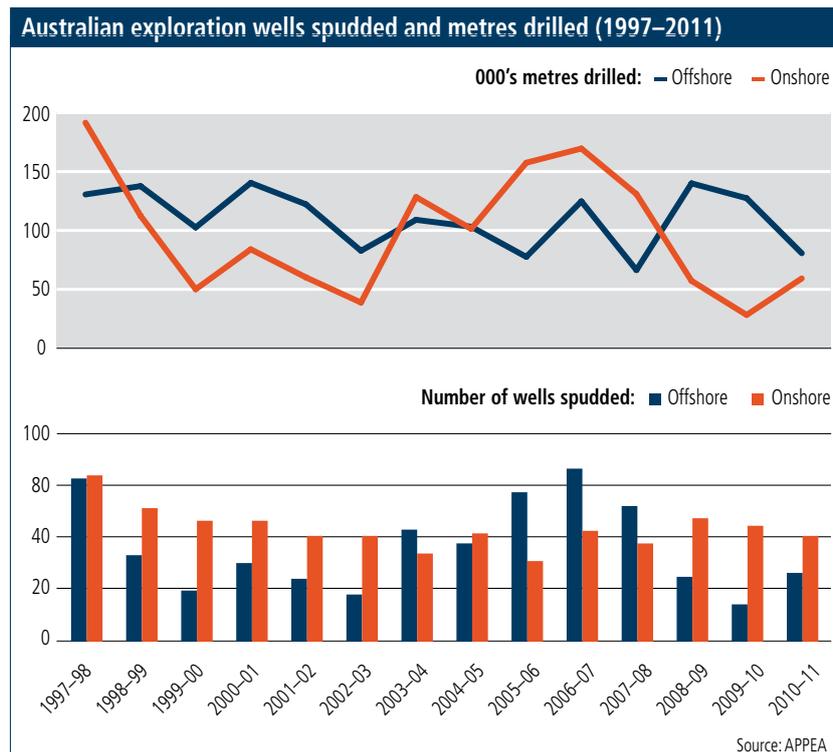
Rising gas production is not enough to offset the cost of importing more oil to offset declining petroleum liquids output.

Australia's gas production — for domestic and export markets — continues to increase every year. But petroleum liquids production is still falling. In 2000–01 Australia produced 272.4 million barrels (MMbbl) of petroleum liquids. By 2010–11 this had fallen to 183.7MMbbl. This ongoing decline is dramatically increasing the nation's trade deficit.

Finding and developing substantial new reserves of oil and condensate should be a national economic priority. Unfortunately, exploration and appraisal drilling declined in 2010–11. Given the continued growing demand for petroleum liquids, Australia cannot afford to allow this to continue.

Drilling

- There were 42 offshore exploration wells drilled in 2010–11. This is down from 46 the previous year and is the second consecutive year of decline.
- The number of offshore appraisal and development wells declined for the second running from 57 in 2009–10, to 40 in 2010–11.
- The number of onshore exploration wells (excluding coal seam gas) doubled from 19 wells in 2009–10 to 38 in 2010–11.
- There were 36 onshore appraisal and development wells (excluding coal seam gas) in 2010–11, down from 41 the previous year. This is the fourth consecutive period of decline seen in conventional onshore appraisal and development activity.

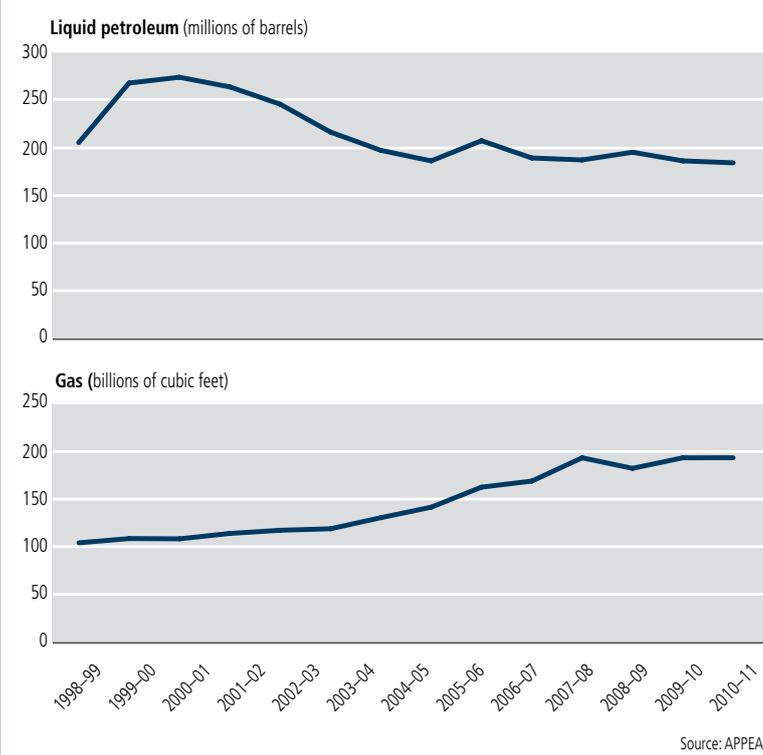


Finding and developing substantial new reserves of oil and condensate should be a national economic priority.



Outside the coal seam gas sector, onshore appraisal and development drilling continues to decline.

Australian production liquids and gas 1998–2011



Production

- Australian gas production (LNG, conventional and coal seam gas) was 1.95 trillion cubic feet (tcf) in 2010–11. This was a similar level to the previous period (1.94 tcf).
- Australian liquids production (crude, condensate and LPG) was down almost 2 per cent to 183.7 million barrels. Ten years ago (2000–01) Australia produced 274.4 million barrels.
- Crude oil production declined almost 2 per cent, down from 105.7MMbbl in 2009–10 to 103.6MMbbl in 2010–11.
- Condensate production remained steady at 55.1MMbbl in 2010–11.
- LPG production declined almost three per cent to 25MMbbl in 2010–11 from 25.7MMbbl in 2009–10.
- LNG production increased by more than 7 per cent from 0.87tcf in 2009–10 to 0.932tcf in 2010–11.
- Conventional domestic gas production continues to decline, down almost 11 per cent in 2010–11 to 0.791tcf.
- Coal seam gas production continues to increase year on year, offsetting the decline from conventional sources. CSG production increased by almost 18 per cent in 2010–11, up from 0.189tcf in 2009–10 to 0.222tcf.

Skills, education and training

Workforce development strategies

The Australian oil and gas industry's growth depends upon competitive and timely access to sufficient skilled labour.

Labour and skills shortages can significantly delay project timetables and add greatly to project costs, so the industry has been closely working with governments to expand training programs and to reform skilled migration schemes.

In the short-to-medium term the area of greatest concern is the supply of trades and skilled labour for constructing new projects over the next five or so years. In the medium-to-long term, the industry must also find more adequately trained and experienced technical staff to operate new and existing projects.

NRSET

In July 2010, the National Resources Sector Employment Taskforce (NRSET) estimated that new LNG trains in operation by 2015 could potentially create between 1800 and 3200 professional and trade jobs in gas operations and there will be a further 2000 replacement job opportunities in oil and gas each year as workers retire or shift to other industries.

In May 2011, Skills Australia estimated that the number of short-term project construction jobs in the resources sector could range from 154,400 to 287,000, compared to previous NRSET projections of 103,000 to 255,000.

Labour supply has tightened. National unemployment has declined by 53,200 since NRSET reported and temporary business visa grants and skilled migration visa grants declined by 31 and 13 per cent respectively in 2009–10.

Actions

The oil and gas industry, other parts of the resources sector and governments have been working to develop, implement and further refine strategies to meet the projected short and long-term skilled labour requirements. These have centred on:

- regularly updated studies to better define skilled labour requirements for building and operating new gas projects
- identifying and providing training resources needed for gas project construction and operations
- developing strategies for promoting oil and gas careers and increasing participation among under-represented groups, particularly women and indigenous Australians
- ensuring skilled migration programs more effectively meet labour requirements that cannot be met from within Australia.

During 2010–11, APPEA modified its workforce strategy to more clearly focus on providing strategic direction in workforce capacity development. Priorities include:

- helping Skills Australia identify the industry's labour requirements for both construction and operations
- developing a contractor engagement strategy for workforce planning
- developing a petroleum production and operations training strategy
- liaising with governments to ensure that workplace relations, employment, education, training and migration policies reflect the industry's skills needs
- promoting the oil and gas industry to other stakeholders, including through presentations at major training and skills events
- working to improve community understanding of the industry's employment opportunities and career pathways.

Stronger training focus

In 2010–11, the industry and the Australian, Queensland and Western Australian governments have initiated or expanded training programs. These include:

- a \$200 million Critical Skills Investment Fund to form training and employment partnerships in the resources, construction, renewable energy and infrastructure sectors
- a National Workforce Development Fund (which embraces the Critical Skills Investment Fund), offering \$585 million in government funding over four years, to be matched by industry, and expected to support up to 130,000 new training places
- accelerated apprenticeships with progression based on competency (\$100 million) and apprenticeship mentoring support (\$101 million)
- other measures in the Building Australia's Workforce program within the 2011–12 budget such as reforms in vocational education and training (\$1.75 billion over five years) and help for mature age workers with trade skills but no formal qualifications (\$30 million over three years)
- a Coal Seam Gas Drilling Skills Program funded by the Australian and Queensland Governments for entry-level positions in the CSG drilling industry
- the Gladstone Workforce Skilling Strategy, funded by the Australian and Queensland governments, to train more than 200 people for jobs associated with CSG-LNG plants
- additional funding for vocational education and training in WA with the 2011–12 budget including \$33 million to create an additional 12,000 training places and \$110.6 million over four years to priority areas of training in regional areas
- new industry contributions towards regional training facilities such as the new Larrakia Trade Training Centre in Darwin (\$3 million by Inpex and Total E & P)

- a National Apprenticeship Program to recruit skilled but unqualified people to undertake a robust, 18-month fast-track apprenticeship program in areas of skills shortage
- proposed expansion of the Australian Centre for Energy and Process Training (ACEPT) training and learning environment to incorporate engineering training construction training with the possible inclusion of camp facilities to provide experience of camp life.

Skilled migration

The oil and gas industry has been working with the Australian Government to introduce a new Enterprise Migration Agreement (EMA) Scheme, a new temporary migration initiative intended to help address resources sector skills needs. The EMAs are limited to resource projects costing more than \$2 billion and requiring a peak construction workforce of more than 1500 people. To be able to use this scheme, companies must demonstrate effective and ongoing local recruitment efforts and show how the project will invest in training Australians to meet future skill needs.

Perth was deemed eligible for the Regional Sponsored Migration Scheme and the family-sponsored regional General Skilled Migration programs because of WA's general skills needs and specific resource sector demand for skilled labour. The state government introduced the WA Skilled Migration Strategy to deliver a more integrated approach to skilled migration, provide information and migrant settlement services. It is also intended to promote dialogue with the federal government to help develop a more flexible and responsive skilled migration program for the state's oil and gas industry.

Promoting the industry

Industry is engaged with schools and universities across Australia. As part of a new Coherent Career Pathways Program, APPEA has developed an Oil and Gas Careers DVD to promote industry careers pathways. Work is also underway to develop programs to increase participation and career

paths for young people, women, indigenous Australians and mature-age workers.

Each year at the APPEA Conference, young students can attend a full-day interactive workshop, visit the oil and gas industry exhibition, and meet industry professionals who share their experiences and career insights. The students undertake a team-orientated problem solving exercise, and develop a model petroleum platform.

New scholarships

APPEA introduced new engineering scholarships in 2011 to support students starting or undertaking an engineering degree or qualification relevant to the petroleum industry. One of the scholarships is aimed at encouraging indigenous students to take up an engineering qualification, and offers an additional incentive for providing mentoring to other Aboriginal students or colleagues. The scholarships offer university undergraduates linkages with APPEA member organisations, ongoing mentoring and opportunities for paid vacation work experience and work-based projects.

RITC

The Resources Industry Training Council of Western Australia (RITC) is a joint venture between APPEA and the WA Chamber of Minerals and Energy identifies the resources sector's workforce development and challenges. APPEA sits on the RITC's Board of Management, and both organisations work closely to progress the petroleum industry's skills and training. APPEA's membership and staff have worked collaboratively with RITC to provide workforce planning advice to the state government in 2010–11, including:

- environmental scans and workforce development plans for the industry
- skilled migration occupation lists
- a report into the critical skill requirements for the WA resources industry, prepared for the Department of Training and Workforce Development.

Construction at the Gorgon LNG project. LNG projects are driving a huge increase in the number of construction and operational workers needed by the petroleum industry. Photo courtesy Chevron.



Approvals and regulation

The length and complexity of Australia's multi-jurisdictional approvals processes continue to concern petroleum explorers and producers.

Inconsistent regulations and administrative processes across jurisdictions contribute to an international perception that Australia is a difficult place to invest for oil and gas explorers and developers.

Regulatory inefficiency diminishes returns to investors and the community from resources development, reducing tax revenues, employment, investment in infrastructure and the purchase of local goods and services. Improving regulatory efficiency could cut costs for governments and the industry, while also significantly increasing Australia's attractiveness for oil and gas investment. In 2009, the Productivity Commission estimated regulatory reform of Australian oil and gas could add billions of dollars to the present value of petroleum resource projects.

Western Australia, South Australia and the Northern Territory were considered to be in the top quartile of world performance for costs of regulatory compliance but in most of the other 29 jurisdiction/factor combinations, performance was considered to be little better than average. In more than 50 per cent of cases, Australian jurisdictions were considered to be in the bottom half of world performance in relation to these four factors.

Offshore regulatory reform

In May 2011, the Commonwealth Government released its final response to the *Productivity Commission's Review of the Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector* (released in April 2009) and the *Montara Commission of Inquiry Report* (released November 2010).

The Productivity Commission proposed measures for making petroleum industry approvals processes, assessment practices and regulations more efficient, consistent and transparent. The *Montara Commission of Inquiry Report* contained 100 findings and 105 recommendations addressing:

- the likely causes of the incident
- the regulatory regime's adequacy and effectiveness for offshore petroleum (including safety and environmental management)
- compliance with legislative obligations
- adequacy of governments' and industry's incident response
- environmental impacts of the incident.

Both of these reports highlighted disconnects and duplication in the existing regulatory system relating to

safety, integrity, environment and reservoir management. These findings led the government to proceed with the establishment of a single offshore regulator for Commonwealth waters (the National Offshore Petroleum Safety and Environmental Management Authority or NOPSEMA) and a single titles management agency (the National Offshore Petroleum Titles Administrator or NOPTA).

Under these arrangements, by 1 January 2012 NOPSEMA would replace the National Offshore Petroleum Safety Authority (NOPSA) to become the regulator of occupational health and safety, integrity of facilities and wells, environmental management of petroleum activities in Commonwealth waters. NOPTA would administer titles and data and impose cost-recovery levies on the industry.

APPEA has spent much of 2010–11 working with governments to implement these reforms while seeking to ensure that the new regulatory agencies:

- have the capability to provide robust and professional oversight of the offshore industry
- deliver greater regulatory efficiency
- remove duplication within and between jurisdictions
- are subject to appropriate accountability and governance arrangements.

Ongoing onshore regulatory issues and legitimate concerns of the states must also be addressed.

Streamlined regulations

A four-year project to consolidate and streamline regulations under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* was completed in April 2011 when the third and final set of regulations (covering resource management) took effect. Developed in consultation with industry, the revised regulations have removed several areas of duplication, streamlined processes and reduced the compliance burden on the industry and regulators.

Approvals reform in WA

Reviews of approvals processes and regulation undertaken during 2008 and 2009 have resulted in a number of process reforms and changes to administrative arrangements.

A lead agency framework for major projects responsible for coordinating all approvals for the resources sector has been established with the Department of Mines and Petroleum. DMP has begun an approvals tracking project that comprises several measures to help streamline resources approvals.

These measures include online systems such as the Environmental Assessment and Regulatory System (EARS) and the Petroleum and Geothermal Register, together with quarterly reporting of key performance indicators.

As a part of EARS for example, Program of Works applications for environmental assessment can be lodged and tracked online.

Introducing these systems has reduced application and processing times and allows companies to track progress on their applications. DMP is also working with other agencies to progress reforms in other approvals such as native title, environment and Aboriginal heritage.

The WA Government has also created an independent Office of the Environmental Protection Authority and several improvements have been made to environmental impact assessment processes.

Land clearing approvals have long been a source of frustration. Changes that would streamline the process and reduce timelines are being discussed but progress to date has been limited.

Queensland approvals reform

Queensland has also completed several reforms of approvals processes and regulation of relevance to the oil and gas industry over recent years.

A working party formed to consider an internal government report titled Streamlining Approvals Project — Mining and Petroleum Tenures Approval Process, made a number of recommendations to make Queensland's approvals processes more efficient.

The Department of Environment and Resource Management is progressing an initiative to identify and implement measures that streamline and reduce the burden of environmental regulation on business.

The oil and gas industry is represented on the Business Advisory Group.

Somewhat paradoxically, the industry is in discussions with the department about a draft Biodiversity Offsets Policy to be applied in addition to existing requirements for matters of national and regional environmental significance.

Harmonising work health and safety across Australia

For information on the Model Work Health and Safety Act see page 23.

Fraser Institute Global Petroleum Survey

The Fraser Institute's 2011 Global Petroleum Survey produced some disturbing results concerning global investors' perceptions of Australia's regulatory performance.

The 502 respondents considered Australia's offshore and seven onshore jurisdictions generally ranked poorly in regard to four factors related to approvals and regulation. These were 'costs of regulatory compliance', 'environmental regulation', 'uncertainty concerning protected areas' and 'disputed land claims'.



Photo courtesy
Beach Energy.

EPBC Act review

In 2008–09 former senior public servant and diplomat Dr Allan Hawke undertook a review of the Environment Protection and Biodiversity Conservation Act that concluded the legislation needed a major overhaul and modernisation. The government has fully or partially accepted 56 of the Hawke Review's 71 recommendations.

Throughout 2010–11 APPEA has pointed to the need for reforms that streamline processes, reduce uncertainty and complexity, and avoid duplication with other federal and state regulatory arrangements. In particular APPEA has pressed the view that the establishment of NOPSEMA provides the opportunity for all critical elements of the environmental management and operations of the industry to be overseen by world-class, highly experienced regulators. This would improve regulatory efficiency and address a key finding of the Montara Commission and could be achieved by streamlining processes that are covered by both NOPSEMA and the EPBC Act.

To provide further certainty to companies making referrals under the EPBC Act, the Commonwealth Department of the Environment has been working with APPEA to develop two guidance documents on drilling (including spills) and seismic. APPEA has sought to ensure that conditions on approvals, restrictions on offshore activity and guidelines on how such activity should be conducted are science-based and do not impose costs for little or no environmental benefit.

The industry is also seeking the development of a national approach to the use of environmental offsets. In recent years there has been increased use of conditions on environment approvals requiring environmental impacts to be offset by other measures to protect or benefit the environment. But there remains a real lack of clarity and consistency among government policies as to when these are required and how they should be applied.

Shortly after the end of the 2010–11 financial year, the Commonwealth Government released its response to the Hawke Review. This response included a suite of reforms to Australia's environmental law framework, including an offsets policy. APPEA and the industry are still appraising the details of these changes. But much of the government's response appears to reflect many of the points that APPEA raised during the public consultation phase.

In 2011–12, APPEA will continue to work with the government on the proposed reforms and related issues.



The production platform at Woodside's Pluto field. Streamlining processes covered by both NOPSEMA and the EPBC Act would improve regulatory efficiency.

Environmental offsets

- Every environmental offset comes at the expense of an economic or social benefit that a project would otherwise have generated.
- Expensive environmental offsets, while delivering an environmental value, result in a cost and value leakage that reduces the economic return of a project to taxpayers at a state or national level.
- Without any form of cost/benefit analysis, an environmental program of potentially low environmental value could be prioritised over hospital beds, teachers or other social services to which the industry's taxation and royalty payments would have contributed.
- A national approach on offsets, agreed by the Commonwealth, state and Northern Territory Governments, would make a real difference to Australia's business environment.

Environmental performance

Environmental performance is a key factor in how the oil and gas industry is judged and in its capacity for future growth.

Montara and Macondo

The Montara oil and gas leak in the Timor Sea in 2009 and the Macondo (or Deepwater Horizon) oil spill in the United States in 2010 have affected government and community confidence in the industry's ability to operate safely and sustainably in sensitive environments.

2009–10 was a time of learning for the industry. The Australian industry had not had an incident like Montara in more than 25 years—a period in which about 1500 wells were drilled. In US Gulf of Mexico waters, 42,000 wells—including more than 2000 in deep and ultra-deep water—had been drilled before the unprecedented Macondo incident occurred. The industry strongly supported the investigations into these incidents, providing testimony and evidence to the Montara Commission of Inquiry and working to implement the findings of the Independent Review of Offshore Safety Regulation and the lessons from Macondo.

In 2010–11 the industry continued acting on the findings from both investigations, reviewing all elements of its operations and practices, as well as its response capabilities.

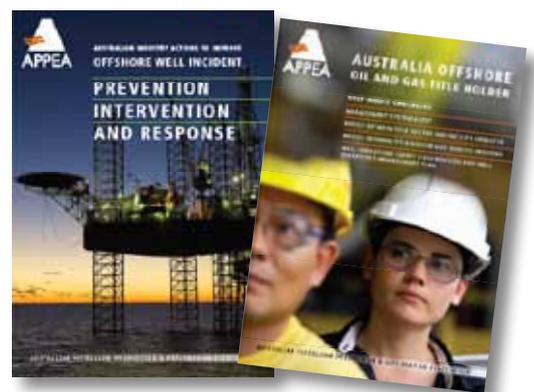
During the year, the Australian industry worked within individual companies, nationally through the APPEA Montara Taskforce and the Australian Marine Oil Spill Centre, and internationally through the International Association of Oil and Gas Producers (OGP). At all three levels the industry focused on prevention, intervention and response capability.

Australian well-capping solution

In 2010–11 the Australian industry worked closely with OGP and the international industry on developing an international well-capping strategy. APPEA and the local industry have been leveraging this work to identify the optimum approach for Australia. Given the complexity and timeframe required to achieve international agreement, the Australian industry has also begun scoping and designing a local well-capping solution suited for Australian conditions.

Self-audit tool

The Montara Inquiry Report emphasised that the title holder has the primary responsibility for well operations but also identified the importance of effective and verified communication between title-holders and contractors in planning, preparing and executing well activities.



In 2010–11 the industry developed a self-audit tool to systematically assess a title-holder's management system and clarify responsibilities between the title-holder and the facility operator. This self-audit tool covers critical areas in well planning, preparation, execution and operations.

This document does not replace or supersede any formally required documentation and has not been written with the intention of fulfilling binding regulatory requirements. While not explicitly proposed for managing collaboration between the title-holder and service-provider, many aspects of this self-audit checklist may be readily adapted to bridge between their respective systems as well.

The self-audit tool is a recommendation or guideline only, but it will assist and complement good bridging processes between title-holders and contractors. The industry has identified many of the shortcomings that led to the Montara and Macondo incidents, and the self-audit tool asks leading questions of operators and title-holders that should help improve well operations.

Mutual Aid Memorandum of Understanding

In 2010–11 the Australian oil and gas industry also worked on a Mutual Aid Memorandum of Understanding to set up a framework for "best endeavours" mutual assistance arrangements in drilling relief wells. This memorandum was signed in August 2011.

From time to time, emergency conditions arise that require drilling one or more relief wells. This would necessitate an urgent response and mutual assistance by companies to minimise adverse impacts. To facilitate timely response, the general principles of the memorandum form the basis for arrangements with the drilling operator, drilling unit(s) and contractor personnel, equipment, materials, consumables and other well-site services.

Environmental performance

Research

The industry is strongly committed to environmental research to further improve its environmental performance and further reduce its operating environmental footprint. Substantial progress has been made towards this goal, with the industry initiating several new areas of environmental research.

In 2010–11 APPEA and its members established the APPEA Collaborative Environmental Research Initiative (CERI) in which companies collaborate in research to build environmental knowledge while avoiding costly duplication of studies. Several research pre-proposals have already been instigated by this new initiative.



The oil and gas industry is engaged in a wide range of environmental research programs. Photo courtesy Santos.

Environmental performance — statistical database

APPEA holds a range of information on the industry's environmental performance that allows industry to track itself over time and identify areas for improvement. Sharing relevant information among APPEA members can include:

- sharing the lessons learned from environmental incidents
- contacting other companies with similar operations to discuss problems
- working with other industry members to resolve common problems
- sharing environmental management solutions.

A reportable environmental incident is defined as any incident that impacts on, or may impact on, the environment or any activity that causes the specific conditions or limitations of a licence or permit to be exceeded.

Throughout 2010–11, 77 environmental incidents were reported to APPEA, a reduction from 125 from the previous year. This represents a significant drop in the number of negligible and low-impact incidents reported, particularly from onshore operations.

| Jurisdiction | 2009–10 | 2010–11 |
|--------------|---------|---------|
| Offshore | 29 | 22 |
| Onshore | 96 | 59 |

| Impact of incidents – 2010–11 | | | |
|-------------------------------|-----|------|---------|
| Impact | No. | % | 2009–10 |
| Negligible | 25 | 32% | 54 |
| Low | 47 | 61% | 68 |
| Medium | 5 | 6% | 2 |
| High | 0 | 0% | 1 |
| Total | 77 | 100% | 125 |

Of the total reported incidents in 2010–11, the vast majority (96%) were in the negligible or low environmental impact categories. One high-level incident — the Montara incident — was reported in 2009–10 and no high-level incidents were reported in 2010–11.

In general, the amount of reported incidents has been steadily declining despite the industry's ongoing high levels of activity. This further highlights the industry's strong commitment to improving environmental performance.

Incidents by facility

The number of reported incidents in onshore operations (at production and processing facilities and during construction activities) showed the most significant reductions between the two financial years. Overall, the only increases occurred onshore, with slight rises of incidents at logistic support bases, onshore drilling and other operations. Given the record amount of activity onshore throughout 2010–11 this slight increase still represents a significant achievement for the industry as it indicates a fall in incidents per total hours of work performed in the industry.

Mechanism of incidents

The mechanism of incidents refers to the most obvious cause or point of failure, but should not be used to identify the root cause of the incidents.

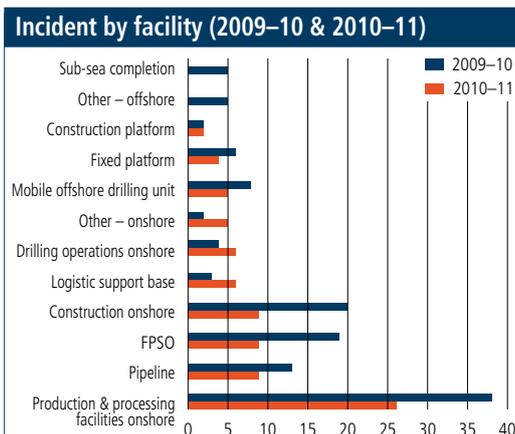
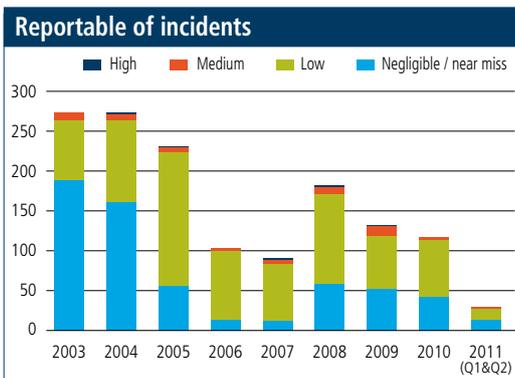
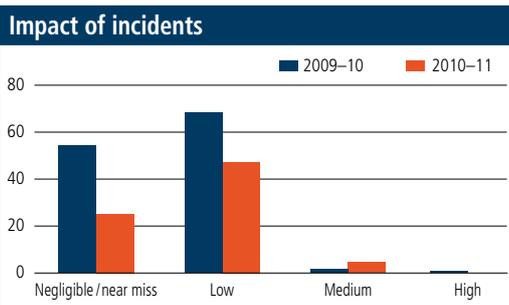
Across the board, most identifiable mechanisms have remained stable over the past two financial years.

| Mechanism of incident | 2009–10 | 2010–11 | Change |
|--------------------------------|---------|---------|--------|
| Mechanical / electrical | 30 | 36 | 6 |
| Other | 30 | 14 | -16 |
| Planning failure | 3 | 4 | 1 |
| Design factor | 19 | 11 | -8 |
| Human intervention | 10 | 9 | -1 |
| Inadequate process / procedure | 2 | 2 | 0 |
| Corrosion | 13 | 4 | -9 |
| Failure to Implement | 10 | 1 | -9 |
| Natural Hazard | 7 | 0 | -7 |
| Total | 124 | 81 | -43 |

The occurrence of mechanical and electrical incidents is the notable divergence from this trend. Corrosion continues a long-term decline as a mechanism of incidents. Corrosion has been a concern to the industry for many years and the significant continued reduction in these incidents shows that the developments in research and technology have been increasingly effective.



An Origin Energy reverse osmosis facility. The CSG industry is making substantial investments in environmental research and water management.



Coal seam gas

In 2010-11 APPEA represented the CSG industry on various water management and monitoring bodies, including the Great Artesian Basin Coordinating Committee, Queensland Great Artesian Basin Advisory Council and the Namoi Water Study Ministerial Oversight Committee.

APPEA also took a very active role in the media to counter widespread misinformation and anti-industry propaganda. APPEA was also involved in numerous community forums and in June 2011 it ran its first CSG Water Forum. This event in Brisbane canvassed issues and developments in CSG and water management and had a strong focus on research and evidence-based approaches to managing development.

The CSG industry is undertaking large-scale baseline water monitoring in the regions in which operates. As CSG operations expand, extensive monitoring bore networks are being installed and all landholder bores are being surveyed. The industry's monitoring and testing activities will add significantly to the already considerable body of knowledge about the Great Artesian Basin.

CSG companies are also investing in projects such as plantations fed by CSG production water and in reverse-osmosis water treatment plants to make CSG production water fit for range of beneficial uses.

APPEA environmental management events

For information on the 2010 APPEA Environment Conference and the 2011 CSG Water Forum see page 35.

Health and safety performance

The oil and gas industry's safety record is better than those of the construction, transport, manufacturing and mining sectors.

The Australian petroleum industry's efforts to develop a safety culture that is led by senior management and engages every member of the workforce have delivered a steady improvement in safety performance.

In 2010, hours worked across the industry significantly increased, yet a 23 per cent improvement in lost time injury rate (LTIFR) was achieved (0.94 hours per million hours worked).

The industry also improved the total recordable injury frequency rate (TRIFR) by 13 per cent (5.2 injuries per million hours worked).

The industry's safety performance has been the subject of intense scrutiny following the Montara and Macondo incidents.

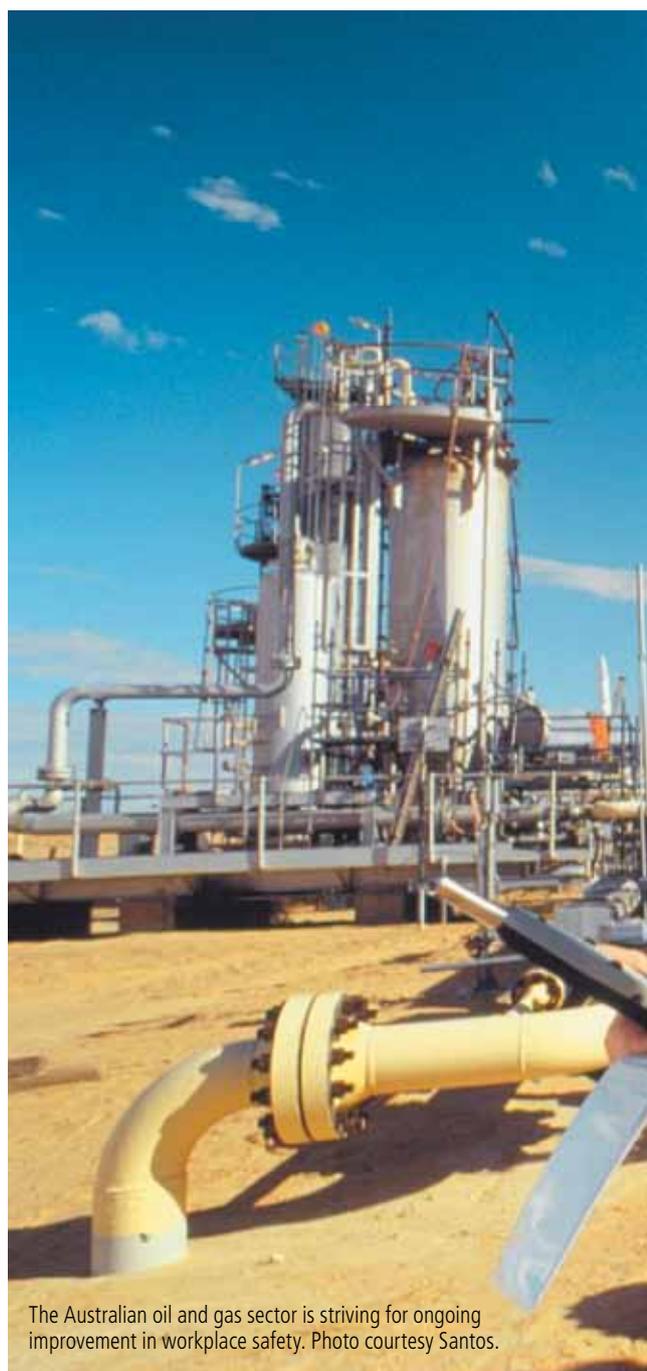
The industry is also facing enormous challenges as the Australian LNG sector in Australia goes through game-changing growth.

The number of onshore drilling contractors has increased rapidly to meet the needs of Queensland's CSG-LNG projects. The industry, in Queensland, Western Australia and the Northern Territory, is experiencing an unprecedented surge in construction activity.

Clearly, an ongoing focus on safety is required.

The Upstream Oil and Gas Industry Strategy advocates:

- maintaining a strong commitment to identifying and addressing factors that detract from safety performance and to developing and implementing new collaborative safety initiatives;
- ensuring that contractors share this commitment to performance and improvement and are fully engaged in developing solutions; or
- further expanding the range of methods used to collect data and share experiences about safety performance and management.

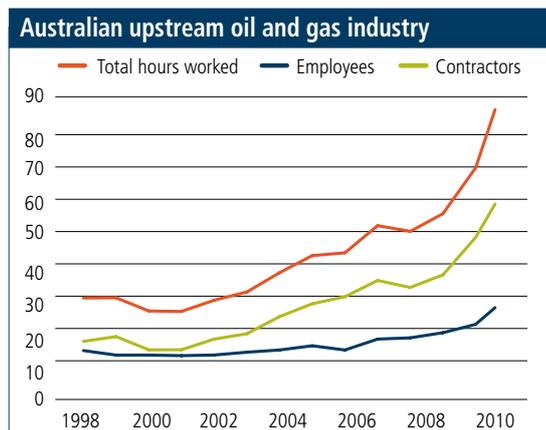


The Australian oil and gas sector is striving for ongoing improvement in workplace safety. Photo courtesy Santos.

Safety events and awards

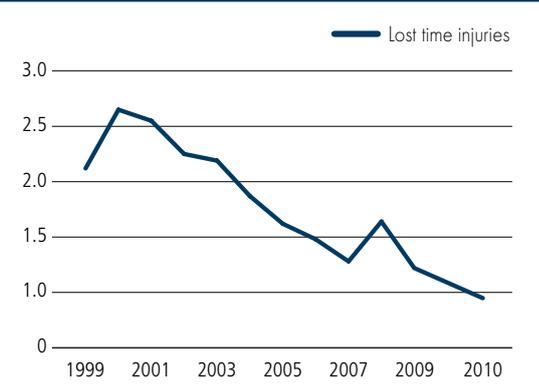
For details of the 2010 HSR Forum and National Oil & Gas Safety Conference see page 35.

For details of the 2010 APPEA Safety Performance Awards and Safety Innovation Award see page 36.

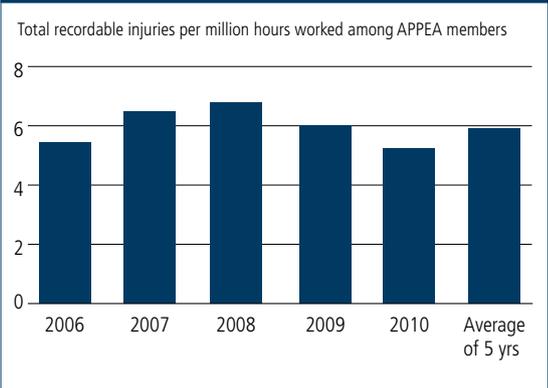




Lost time injury frequency rate



Year-by-year comparison of lost time incidents



Safety programs



The industry's approach to safety management continues to be led by the CEO Safety Leadership Forum established by APPEA in 2007. Programs include:

CSTP

Introduced in November 2010, the Common Safety Training Program has had a significant effect on safety across the Australian offshore oil and gas industry. As one of the few behaviourally based benchmark safety programs in the world the program continues to gather attention nationally and overseas.

The CSTP is an industry requirement for everyone working in Australian oil and gas production and drilling. While the early effort focused on new starts the industry now also includes experienced workers in the program.

Experienced workers can now undertake the program, receive a CSTP card and have their details registered on the national CSTP database. This enables individuals to provide evidence that they have been observed demonstrating safe behaviours in the workplace. Unlike the program for new starts, experienced workers can receive recognition of prior learning for the CSTP off-the-job component and move straight to the demonstration of the required safe behaviours.

Stand Together for Safety

Stand Together for Safety is a stop-work safety event held annually across the Australian oil and gas industry. The third annual Stand Together for Safety was held in May 2011. The event provides a designated time for CEOs, executives, and senior managers to talk about safety issues directly with frontline workers.

About 26,000 workers from operators and contractors across the Australian oil and gas industry participated in the Stand Together for Safety 2011.

This year's theme "From the boardroom to the frontline encapsulated the key message that safety is everyone's responsibility. Stand Together for Safety supports the industry's commitment to improving safety and reflects that success relies on everyone — managers, supervisors, employees and contractors — working together to bring about significant and sustained safety improvement.

High-potential incident alerts

In 2009, APPEA introduced a new requirement for members to report high-potential incidents as part of the safety performance reporting process. APPEA distributes high-potential incident alerts to members to highlight lessons from incidents. A high-potential incident is an accident or occurrence of a serious nature that: results in a major accident event performance standard not being met; causes a loss of containment (escape of fluids or gases); or could cause one or more fatalities.

Search and rescue study

Through APPEA, the industry has also initiated a search and rescue capability study and a consideration of issues and challenges facing service providers, facility operators and regulators in relation to aviation safety. The search and rescue survey was limited to operators of oil and gas projects in Western Australia and the Northern Territory. It aimed to identify opportunities for improving search and rescue efficiency and capability through increased cooperation or potential sharing of search and rescue resources.



The CSG sector has made big improvements in workplace safety. Photo courtesy Origin Energy.

Strategic Safety Program

In November 2010, APPEA's HSO Committee developed a new safety strategy to deliver a highly targeted program of risk-based projects in the areas of process safety, ageing facilities, fatigue management and motor vehicles. This new strategic program is to go to the 2011 CEO Safety Leadership Forum for consideration and commitment.

In 2010–11, the HSO Committee has also sought to achieve an appropriate balance in focusing efforts on both process safety and on personal safety.

Process safety involves the prevention of leaks, spills, explosions, corrosion and other equipment malfunctions. It also involves ensuring facilities are designed and engineered properly and systems are in place to control and monitor hazards, people and equipment.

Personal safety hazards involve incidents such as slips, trips and falls which usually affect one individual worker. However, process safety hazards (involving the release of potentially dangerous materials or energy) often lead to major accidents that can cause multiple injuries and fatalities.

In 2010, APPEA and the National Offshore Petroleum Safety Authority (NOPSA) held a joint workshop with industry to share and apply systems, experiences and learnings to address process safety across the industry. A Sharing Safety Solutions document and DVD on process safety have been developed and the industry is currently developing reporting systems around this issue.

National OHS Harmonisation

Currently all Australian states and territories are responsible for making and enforcing their own work health and safety laws. Although these draw on a similar approach for regulating workplaces, there are some differences in the details and application of the laws.

In December 2009, the Commonwealth, state and territory governments agreed that a standard approach to work health and safety laws would improve productivity and consistency and reduce the administrative burden on industry. The governments endorsed the *Model Work Health and Safety (WHS) Act* and agreed to enact mirror legislation in each jurisdiction.

A model Codes of Practice and a nationally consistent compliance and enforcement policy are now being developed. It was intended that the Model Work Health and Safety Act, model WHS Regulations and Codes of Practice would begin operating around Australia in January 2012.

NSW and Queensland have already passed mirror legislation and South Australia is working towards passing the national WHS Bill, if agreed by parliament, by this date. But it is not clear when the other jurisdictions will be introduced

mirror legislation. Western Australia has asked the Commonwealth to reconsider the implementation date, and Victoria is seeking a more detailed analysis of the impacts and benefits of the proposed changes.

In its submission on the Model WHS Regulations, APPEA made it clear that the oil and gas industry supports a harmonised approach to OHS legislation but that the offshore petroleum industry must retain its own performance-based safety regulation regime, which is based on higher safety standards than general OHS regimes across Australia.

But other parts of the industry will be affected. States and Northern Territory legislation applies to sections of the oil and gas industry, including onshore petroleum, coal seam gas and major hazard facilities. In addition, construction of LNG projects is covered by the state and territory regulations.

APPEA sees potential confusion in interactions between the Model WHS reforms and the many state-based Acts and regulations that will continue to operate. The Model WHS reforms will also affect existing electricity safety, dangerous goods and pipeline regulatory regimes, as well as industry specific WHS regimes in various jurisdictions. APPEA's key concerns with the content of the Model Regulations are: the increased level of prescription and administration imposed by the regulation; the lack of clarity and guidance available about the relationship of the regulations with existing state and territory hazard specific legislation; and the impractical nature of some of the regulations.

Industry has not had enough time to appraise and respond to the draft regulations. Companies have been unable to accurately determine the initial costs of implementing significant regulatory change or the ongoing compliance costs associated with what remain highly prescriptive regulations. However, APPEA estimates that at least two years will be needed to implement and roll out the necessary changes across industry.

Queensland CSG

A leadership group of Queensland CSG chief executives has initiated several key programs.

A contractor safety forum held in May 2011 attracted 300 participants, increasing awareness of the tips and tools to implement best practice safety standards. Work on fatigue management and vehicle and bushfire safety was initiated and completed soon after the end of the financial year. Further CSG contractor safety work will be undertaken in 2011–12.

Results to date have been encouraging with the CSG sector reducing the lost time injury frequency rate from 3.47 in the first quarter to 1.8 in the fourth quarter of 2010.

Tax and commercial

Progress has been made on the implementation of PRRT but more work remains to be done.



Resource taxation

The 2010–11 financial year began with the Australian Government announcing several important changes to its earlier resource super profits tax initiative.

These changes include extending the scope of the offshore petroleum resource rent tax (PRRT) to cover all oil and gas production in Australia, with effect from 1 July 2012.

In addition, a high level forum—the Policy Transition Group (PTG)—was created to oversee the new regime’s technical design.

APPEA appeared before the PTG on three occasions and lodged a detailed submission.

Following extensive consultation with APPEA and other groups, the PTG prepared two reports:

- *New Resource Taxation Arrangements* dealt with the extension of the PRRT regime and the introduction of the minerals resource rent tax for selected mining activities; and
- *Mineral and Petroleum Exploration* addressed a range of exploration-related matters.

Key recommendations in the *New Resource Taxation Arrangements* report included:

- Providing transitioning projects with three options to determine the critical starting base values (based on market, accounting book or look-back values).

- Making starting base amounts immediately and fully deductible.
- Making all current and future resource taxation payments creditable against future PRRT liabilities.
- Widening in the definition of what represents a ‘project’.
- Using additional methodologies to determine taxable values for more complex projects.

In March 2011, the government announced it had accepted all the recommendations in the PTG report. The PTG also provided other comments and advice on improving the PRRT regime’s provisions and administration, but the government deferred consideration of these proposed changes.

In the final quarter of 2010–11, APPEA worked closely with representatives from several member companies and key government agencies to help draft amendments to the PRRT legislation to implement the PTG’s recommendations. It is expected that the legislation will be debated in Parliament in late 2011 or early 2012.

Fiscal exploration incentives

The PTG’s *Mineral and Petroleum Exploration* report stated that:

- Petroleum exploration levels are consistent with previous cycles in the industry, although there is now an increased focus on CSG exploration.



The extension of petroleum resource rent tax to cover onshore oil and gas operations will create administrative problems for many companies. Photo courtesy Santos.

- An increasing percentage of funds are being directed overseas, reflecting both the higher prospectivity in other countries and the higher costs of doing business in Australia.
- There is little compelling evidence that Australia's capital market cannot generate investment funds for exploration.
- Time-consuming, duplicative and contradictory regulatory practices are making it harder for smaller companies to undertake exploration, particularly in greenfields areas.
- The current tax treatment of exploration costs does not assist smaller companies in generating improved after-tax value for exploration activity, but the benefits of the Canadian flow-through shares scheme are dated and at times contradictory. If a fiscal incentive was to be introduced, it should be based on an exploration refundable tax offset mechanism (a direct rebate to the company) rather than a flow-through shares mechanism.

The government responded to the report by announcing it had deferred further consideration of the introduction of a flow-through share regime until 2015.

Enhanced Project By-law Scheme

In early 2011, the Federal Minister for Innovation, Industry, Science and Research released the executive summary of an Access Economics report into the operation of the Enhanced Project By-law Scheme (EPBS). The report supported continuing the EPBS regime as it provides an important means for reducing the impact of highly inefficient and costly tariff duties on project economics.

Echoing many of the arguments that APPEA and industry had put forward, the report indicated that:

- The EPBS, operating in tandem with other duty concession schemes, helps project proponents to legitimately access concessions from customs duties in cases where local industry cannot offer an alternative product.
- The scheme has some key advantages over other duty relief systems in that it encourages Australian project developers to liaise with local suppliers, promoting links between government, project proponents and local industry.
- Access Economics found that the system's design was fundamentally sound and eligible proponents should be encouraged to use the scheme.

APPEA is continuing to work with the Australian Government to further improve the EPBS scheme.

PRRT and Production Excise changes

The May 2011 Federal Budget introduced some retrospective changes to petroleum taxation.

In relation to PRRT, the government indicated an intention to amend the law (with the stated objective of providing greater certainty) around how the taxing point is determined.

The announcement worries the industry—it pre-empted litigants' appeal rights and casts doubt for current taxpayers already operating under PRRT as well as companies needing to undertake starting base valuations for projects transitioning into the extended PRRT.

The change follows the outcome of a Federal Court case and will apply with effect from 1 July 1990. The announcement was not accompanied by any draft legislation.

The government also aims to make technical amendments to ensure that condensate production is subject to crude oil excise (as announced in the 2008–09 Budget).

The amendments include changes to the *Excise Tariff Act 1921* and will take effect from 13 May 2008 in a manner that the government argues is consistent with the original 2008–09 Budget measure.

PRRT litigation

Several Federal Court decisions relating to key aspects of the PRRT regime were handed down in the first half of 2011.

A key decision (*Esso Australia Resources Pty Ltd v The Commissioner of Taxation [2011] FCA*) dealt with aspects of the deductibility and eligibility of costs under the PRRT regime and found largely in favour of the taxpayer.

This decision has significant implications for interpretations of rulings that were being prepared by the Australian Tax Office.

In particular, it casts significant doubt on the technical basis for a number of amended assessments in recent years that have been disputed by the industry.

APPEA has sought the removal of the rulings and has lobbied to work with the government to improve administration of the PRRT legislation.

Energy policy

Decisions on fuel inputs should be based on a fuel's intrinsic economic and technical merits, not on political considerations.

To meet national energy needs, policy frameworks must recognise the importance of commercial incentives.

Investment decisions made by APPEA member companies help provide Australians with reliable, competitively-priced energy produced under rigorous environmental and safety management regimes.

To encourage continued investment that will underpin energy security, Australian energy policy must address:

- the projected decline in Australia's self-sufficiency of crude oil and condensate supply
- the need to increase the proportion of energy produced by natural gas
- fiscal, greenhouse policy and other issues affecting the competitiveness of Australia's liquefied natural gas exports.

A level playing field for gas

APPEA is striving to ensure that market conditions exist to allow natural gas to compete effectively as the fuel of choice for power generation and process energy in Australia.

APPEA maintains that any final decision on fuel inputs should be based on a fuel's intrinsic economic and technical merits, not on political considerations.

Developing national energy policy

In 2010 the government announced it had resumed work on developing an Energy White Paper.

This document is aimed at setting durable policy directions that will ensure Australia has sufficient supplies of clean, reliable and affordable energy to meet growing energy needs and ensure long-term economic prosperity.

A draft White Paper is due to be released in late 2011; the finalised White Paper is expected in 2012.

During 2010–11, the APPEA Chief Executive participated in a high-level consultative Business Roundtable that was set up to provide advice for the Energy White Paper's development and for various direct consultations with the Department of Resources, Energy and Tourism.

Towards a better gas market

2010–11 saw the establishment of the Short-Term Trading Market, a market-based wholesale gas balancing mechanism based around defined gas hubs in Sydney and Adelaide.

The STTM began operating on 1 September 2010, but work on its development began in 2005 when the Ministerial Council on Energy (MCE) Standing Committee of Officials set up an industry-led Gas Market Leaders Group to prepare a Gas Market Development Plan that was delivered in June 2006. This plan focuses on developing a competitive, reliable and secure natural gas market to increase transparency, promote further efficient investment in gas infrastructure and facilitate efficient management of supply and demand interruptions.

The STTM uses bids, offers and forecasts to determine schedules for deliveries from the pipelines transmission users and the hubs. The market sets daily market prices and settles each hub based on schedules and deviations from schedules.

The Australian Energy Market Operator (AEMO) operates the STTM but asset owners continue to operate the pipeline and network assets. The existing retail gas markets in South Australia and New South Wales continue to operate in conjunction with the STTM wholesale gas market in each state. The Victorian wholesale gas market also continues to run in parallel with the STTM.

Queensland

In 2011–12 AEMO, the Queensland Government and APPEA will work to extend the STTM to include a Brisbane hub. Expected to be completed in December 2011, this will be yet another milestone in Queensland's rapidly changing gas sector.

In the first half of the 2010–11 financial year the Queensland Government delivered two major gas-related reports. In October 2010 it updated its *Blueprint for Queensland's LNG Industry with Queensland's LNG Industry—a once in a generation opportunity for a generation of employment*. In August it released the inaugural *Queensland Annual Gas Market Review (AGMR)*.

The AGMR was developed by the Queensland Gas Commissioner. APPEA was deeply engaged in this process, lodging detailed submissions in May and June 2010.

The AGMR is used to inform Government decision-making on security of domestic gas supply, more effective resource management and the development of a more competitive Queensland gas market.

Following the release of the AGMR, the Queensland Government announced it had decided that developing a Prospective Gas Production Land Reserve to secure domestic gas supply would not be warranted.



An Apache Energy gas plant.

Western Australia

Western Australia has been reconsidering gas-related policy in recent years.

Security of gas supply has prompted considerable debate in WA. This has been triggered partly by the disruption to gas supplies from Varanus Island in 2008, as well as by higher gas prices and a tightness in the gas market brought about a surge in resources-driven gas demand. In a market-driven response, the petroleum industry has invested heavily in new gas projects and WA's gas supply capacity is set to increase rapidly over the next few years.

To provide a clearer picture of WA's long-term energy market and guide policy decision making, the WA government initiated the development of a Strategic Energy Initiative in late 2009. In May 2011 APPEA lodged a submission on the SEI Directions Paper lodged in May 2011 and had several discussions with the WA Office of Energy. The SEI is expected to be launched in early 2011–12.

The WA Legislative Assembly's Economics and Standing Committee also conducted an inquiry into domestic gas prices, examining the WA gas market and its relationship with the LNG sector. Its report, tabled in March 2011, included a conclusion that the state's experience since 2007 is inconsistent with a 'well-functioning' market with adequate competition. The

committee recommended a range of policy responses, including retaining domestic gas reservation, establishing an independent Gas Market Monitor modelled on the Queensland Gas Commissioner and the establishment of a Gas Market Bulletin Board (GMB) and Gas Statement of Opportunities (GSOO).

The industry has responded that government interventions are themselves inconsistent with the overall push towards a 'well functioning' market and the market-based policy principles espoused in the SEI. The government's response to the Standing Committee's report was tabled in August 2011. The government favoured retaining the domestic gas reservation policy (applied 'flexibly') over more market-based, investment-friendly alternatives such as the establishment of an independent Gas Market Monitor.

APPEA is disappointed that the government has chosen to support options that distort the market and will continue to advocate an end to the domestic gas reservation regime, especially in light of the considerable potential held by unconventional resources recognised by the Standing Committee. However, APPEA is pleased that the WA Government is moving to implement other measures — such as the GMB and GSOO — that are market-based and will improve the state's gas market.

Greenhouse policy

To realise the full economic and environmental potential of gas, Australia must remove barriers to its development.

The national response to greenhouse gas emission issues remains one of the key issues facing the Australian upstream oil and gas industry.

APPEA continues to work to ensure that the international competitiveness of Australian industry is maintained and that any government climate change policy does not hinder the sector's growth. In November 2010 APPEA finalised and released its *Climate Change Policy Principles* document to provide a framework against which policy proposals could be assessed.

Carbon pricing

The Australian Government's work on further developing the Australian carbon price mechanism has been one of the major issues facing APPEA in 2010–11.

Following the August 2010 Federal Election, the Gillard Government announced the formation of a Multi-Party Climate Change Committee.

The MPCCC was set up to consider issues around the possible introduction of a carbon price mechanism from 1 July 2012. It comprised representatives from the government and the Australian Greens, as well as two independent Members of Parliament.

The MPCCC met regularly and established a Business Roundtable, whose members included several APPEA member companies, to advise on key issues. APPEA was also involved in consultations around the development of a framework for a carbon price mechanism, which the MPCCC released on 24 February 2011. The MPCCC was dissolved in July 2011 when the carbon pricing framework was announced.

APPEA looks forward to continuing to contribute to the development of a national greenhouse policy response that moves Australia to a cleaner energy future. In its advocacy and policy work, APPEA emphasises that any policy approach to reduce global greenhouse gas emissions must be:

- national
- environmentally effective
- economically efficient
- fair.

APPEA maintains that as the world shifts to a preference for cleaner burning fuels, the substantial strategic value of Australia's natural gas assets can only increase. To realise the full economic and environmental potential of Australia's natural gas, government and industry must identify and remove impediments to developing this resource.



Australian LNG offers global environmental benefits.

By 2030 the world will need 40 per cent more energy and the energy needs of China and India will account for half the growth in world energy needs. Seventy-eight per cent of China's electricity and 69 per cent of India's electricity is generated from coal.

Electricity generated using natural gas emits 50–70 per cent fewer greenhouse gases than conventional coal-fired power stations. Although producing LNG is emissions-intensive and adds to greenhouse gas emissions in Australia, natural gas exports contribute substantially to reducing global greenhouse gas emissions.

When natural gas is used in place of coal to generate electricity in customer countries, 2½–9 tonnes of carbon dioxide emissions can be avoided for every tonne produced to export LNG. This was confirmed by research that WorleyParsons conducted on CSG-LNG developments underway in Queensland and LNG exported from the North West Shelf Venture.

This means natural gas is the key to the world moving to a lower greenhouse emitting future and any credible policy measure must have this front and centre of its policy approach. Therefore, a carbon reduction policy framework must maintain the international competitiveness of Australian industries that are the key to shifting the world towards a lower emitting future.

Future greenhouse policy developments will be a key area of focus for APPEA in 2011–12.



State-based activities

APPEA has been involved throughout 2010–11 with the states and territories on greenhouse policy issues.

APPEA contributed to considerations of the Queensland Government's climate change policy arrangements and the implementation of the Northern Territory Climate Change Strategy.

A key area of focus has been to ensure that states do not duplicate policy approaches that are in place at the national level and that arrangements are in place to remove policies that do not complement a national carbon price mechanism once that mechanism is introduced.

The Australian Industry Greenhouse Network

APPEA is also actively involved in the Australian Industry Greenhouse Network, a group of industry associations and individual businesses that contribute to the climate change policy debate.

AIGN sees value in joint industry action on climate change policy issues in order to promote sustainable industry development and provide input to numerous submissions, including the development of the proposed domestic emissions trading scheme.

The APPEA Chief Executive was a member of the AIGN Board throughout 2010–11.

Greenhouse reporting

Reporting of greenhouse emissions is fundamental to understanding how best to address climate change.

APPEA has long supported the development of a national, consistent greenhouse reporting scheme. This position was endorsed by the government and resulted in the *National Greenhouse and Energy Reporting Act 2007* passing through the Parliament in 2007.

The National Greenhouse and Energy Reporting System (NGERS) began operating on 1 July 2008.

In 2010–11 APPEA continued to engage with the government to develop its approach to NGERS ahead of the second reporting deadline, which occurred on 31 October 2010.

Several key changes advocated by APPEA were accepted by the government and reflected in amendments to the scheme.

APPEA will continue to focus on the treatment of energy reporting in 2011–12.

As the world shifts to cleaner-burning fuels, the substantial strategic value of Australia's natural gas can only increase.

Membership — APPEA proudly represents

At 30 June 2011, APPEA had 87 full members and 236 associate members. This is five more full members and 44 more associate members than at the same time in the previous financial year.



Full members as at 30 June 2011

| | | |
|-----------------------------------|---|--|
| Adelaide Energy Ltd | Exoma Energy | OMV Australia Pty Ltd |
| Advent Energy Ltd | ExxonMobil Australia | Origin Energy Ltd |
| AGL Energy Ltd | Finder Exploration Pty Ltd | Ormil Energy Ltd |
| Apache Energy Ltd | Galilee Energy Ltd | Orion Petroleum Ltd |
| Apex Energy NL | GDF Suez Bonaparte Pty Ltd | Osaka Gas Australia Pty Ltd |
| Arrow Energy Ltd | Hess Exploration Australia Pty Ltd | Pangaea Resources Pty Ltd |
| Bass Strait Oil Company Ltd | Hindustan Petroleum Corp Ltd | Petronas Australia Pty Ltd |
| Beach Energy Ltd | Icon Energy Ltd | PTTEP Australasia |
| Benaris International Pty Ltd | Innamincka Petroleum Ltd | QGC — a BG Group Company |
| Bengal Energy Ltd | INPEX | Roc Oil Company Ltd |
| BHP Billiton Petroleum Pty Ltd | ITOCHU Minerals & Energy of Australia Pty Ltd | Santos Ltd |
| Blue Energy Ltd | Japan Australia LNG (MIMI) Pty Ltd | Senex Energy Ltd |
| Bounty Oil & Gas Ltd | Japan Energy E&P Australia Pty Ltd | Shell Development (Australia) Pty Ltd |
| Bow Energy Ltd | Karoo Gas Australia Ltd | Sinopec Australia Pty Ltd |
| BP Developments Australia Pty Ltd | KUFPEC Australia Pty Ltd | Somerton Energy Ltd |
| Bridgeport Energy Ltd | Lakes Oil NL | Stanwell Corp Ltd |
| Buru Energy Ltd | Latent Petroleum Pty Ltd | Strike Energy Ltd |
| CalEnergy (Australia) Ltd | Magellan Petroleum Australia Ltd | Stuart Petroleum Ltd |
| Carnarvon Petroleum Ltd | Marubeni Corporation | Sun Resources NL |
| Central Petroleum Ltd | MEO Australia Ltd | Talisman Oil & Gas (Australia) Pty Ltd |
| Chevron Australia Pty Ltd | Metgasco Ltd | Tap Oil Ltd |
| Comet Ridge Ltd | Mitsubishi Australia Ltd | Tokyo Gas Australia Pty Ltd |
| ConocoPhillips Australia Pty Ltd | Mitsui E&P Australia Pty Ltd | Tokyo Timor Sea Resources Pty Ltd |
| Cooper Energy Ltd | Nexus Energy Ltd | Total E&P Australia |
| Cue Energy Resources Ltd | Nido Petroleum Ltd | Tri-Star Petroleum Company |
| Dart Energy Ltd | Norwest Energy NL | Vermilion Oil & Gas Australia Pty Ltd |
| Drillsearch Energy Ltd | Octanex NL | WestSide Corporation |
| Eastern Star Gas Ltd | Oilex Ltd | Whicher Range Energy Pty Ltd |
| Eni Australia Ltd | Oil Search Ltd | Woodside Petroleum Ltd |

Associate members at 30 June 2011

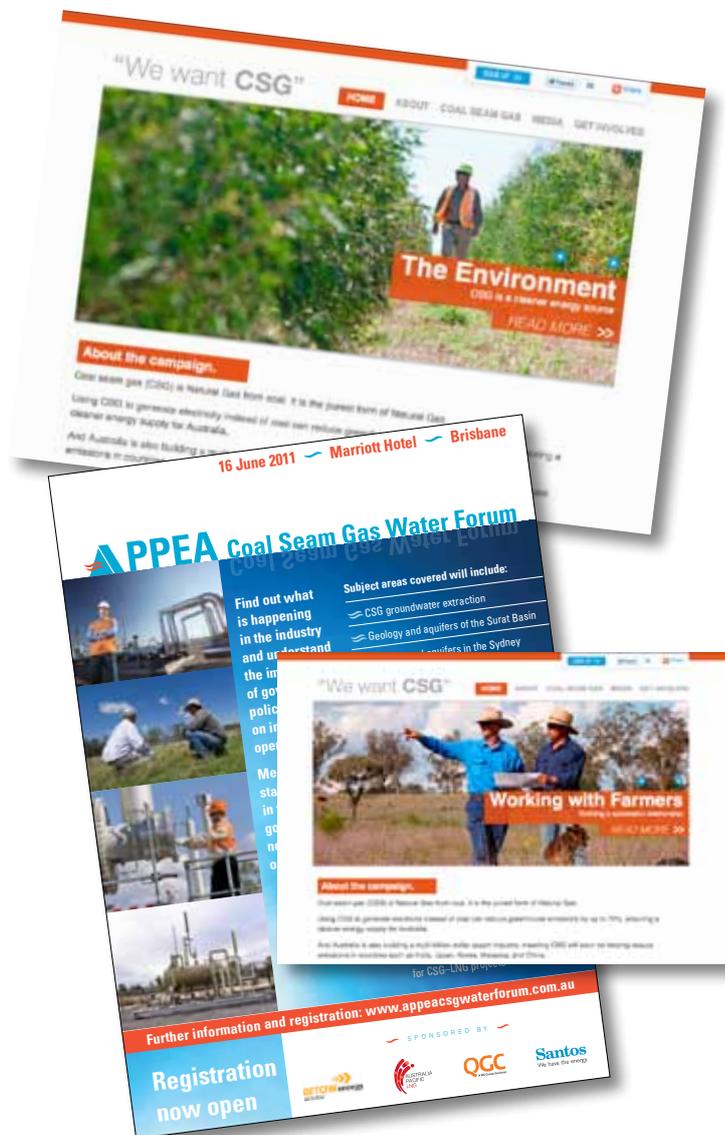
| | | | | |
|--|--|--|--|---|
| Accenture | Chubb Fire & Security | Farstad Shipping (Indian Pacific) | Laing O'Rourke Australia | S2V |
| Access Analytic Solutions | Cityriver Business Travel | Ferguson Seacabs Pty Ltd | Leighton Contractors | Safety Leaders Group Pty Ltd |
| Accrete Pty Ltd | Clayton Utz | Finlaysons Lawyers | Liquefied Natural Gas Ltd | Schlumberger Australia |
| ACCEPT — Challenger TAFE | Clough Ltd | Fircroft Australia Pty Ltd | M Squared & Associates | School of Petroleum Engineering, University of NSW |
| Aceryg Australia Pty Ltd | CNC | Fragomen Global | Macssgroup Pty Ltd | Searcher Seismic Pty Ltd |
| AECOM Australia Pty Ltd | Coffey Natural Systems | Freehills | Maersk Drilling Australia | Sealink |
| AGR Asia Pacific | Competentia Pty Ltd | FrOG Tech Pty Ltd | Mallesons Stephen Jaques | Sedco Forex International Inc |
| Air Energi | CO2CRC | Fugro Holdings (Australia) Pty Ltd | McConnell Dowell Constructors | Shorelands Group Pty Ltd |
| AJ Lucas Group Pty Ltd | Core Energy Group | Fugro-TSM Pty Ltd | McDermott Australia Pty Ltd | Sinclair Knight Merz |
| Allens Arthur Robinson | Corporate Incident Management Associates (CIMA) | Fyfe Pty Ltd | McKinsey & Company | Solar Turbines Australia |
| AMC Management (WA) Pty Ltd | Corrs Support Services Trust | Gaffney Cline & Associates Pty Ltd | Mermaid Marine Australia Ltd | Solidtech Engineering Services |
| Apprenticeships Australia Pty Ltd | Crockford Migration Pty Ltd | Gardline Marine Sciences Pty Ltd | M-I Australia Pty Ltd | Songa Offshore Pty Ltd |
| Archimedes Financial Planning Pty Ltd | CSIRO Australian Resources Research Centre | Georgiou Group | Michael Johnson & Associates | Sparrows Offshore Services |
| Arup Pty Ltd | Curtin University of Technology | Geotechnical Services Pty Ltd | Minter Ellison | SRK |
| Asia Edge Pte Ltd | Dare Contract Services | Gioenco Industries | Miro Advisors Pty Ltd | Strategic Human Resources |
| Aspen Medical Pty Ltd | Decmil Australia | GL Industrial Services (GL NobleDenton) | Modec Management Services | Subsea 7 |
| Aspermont Ltd | Deloitte Touche Tohmatsu | Go Marine Group Pty Ltd | MRC Transmark Pty Ltd | Supplybase VRS |
| Atwood Oceanics Australia Pty Ltd | Digital Core Laboratories Pty Ltd | Golder Associates Pty Ltd | MTU Detroit Diesel Australia | Sustainability Pty Ltd |
| Australasian College of Health & Safety | Dockwise Shipping Australia Pty Ltd | Group Training Northern Territory | Muhringer Asia Pacific | SVT Engineering Consultants |
| Australian Drilling Associates Pty Ltd | Don Sanders Consulting | Halliburton Australia Pty Ltd | National-Oilwell Pty Ltd | Swift Technical (Australia) |
| Australian Energy Insurance Brokers | Doric Engineering Pty Ltd | Hatch Energy Australasia | Negotiation | Talbot Olivier |
| Australian FPSO Management | DownUnder GeoSolutions Pty Ltd | Health Safety Environment Australia Pty Ltd | Ocean Nourishment | Talent2 Pty Ltd |
| Australian Helicopters Pty Ltd | Drillstralis | Hill International (Australia) Pty Ltd | Offshore Marine Services Pty Ltd | TCA Partners |
| Aventus Consulting | Dupont Australia Ltd | Holding Redlich | Oil & Gas Australia (Energy Publications) | Technip Subsea 7 Asia Pacific |
| Baker Hughes Australia Pty Ltd | Dynapumps | IBM | Oil & Gas Gazette | Teekay Marine Services |
| Barrel Chasers Pty Ltd | Easternwell Group | IDM Partners Pty Ltd | Opeam Pty Ltd | Tenaris Global Services Australia Pty Ltd |
| Baseline Training Group | Ecofund Queensland | IFAP (Industrial Foundation for Accident Prevention) | Optimus Seventh Generation | TGS-NOPEC |
| Basis Risk Pty Ltd | EIG Global Services | IIR Executive Development | Oracle Corporation Australia | Tidewater Marine Australia |
| Bell Recruitment | EM & I (Australia) Pty Ltd | Imdex Ltd | Oracle Risk Consultants | Toll Energy Logistics |
| Beyond the Break Pty Ltd | Emission Assessments Pty Ltd | Immediate Assistants Pty Ltd | Orion Engineering | Total Depth Pty Ltd |
| BDO Tax (WA) Pty Ltd | Enerflex Process Pty Ltd | Independent Data Services (Australasia) | P&R Geological Consultants | Tox Free Solutions Ltd |
| BJ Process & Pipeline Services (Aust) | Energy & Mining Training Solutions | International SOS Australasia Pty Ltd | PGS Australia Pty Ltd | Tracerco |
| Blake Dawson | Energy Power Systems Australia | InterStaff Recruitment | Piper Alderman | Training & Safety Consultants |
| Blakiston & Crabb | Energy Process Services Australia | ISA Group Pty Ltd | Pitney Bowes Business Insight | Transfield Services (Australia) |
| Bristow Helicopters Australia Pty Ltd | EnergyQuest | ISN Software Australia Pty Ltd | PKF Chartered Accountants | TS Marine Pty Ltd |
| Broome International Airport | EnerMech Pty Ltd | JOGMEC - Japan Oil, Gas & Metals National Corporation | Plan B Consulting | UCL School of Energy and Resources, Australia |
| Broome Port Authority | Enesco Australia Pty Ltd | John Holland Energy and Resources | Platinum Polytechnic West | University of Western Australia |
| Brunel Energy Pty Ltd | Ensign International Energy Services | JTA Australia | Predrill Stresses International | URS Australia Pty Ltd |
| Bullivants Pty Ltd | Enterprise Risk Management Solutions | Jubatus Consulting Pty Ltd | PricewaterhouseCoopers Services | Vanguard Solutions Pty Ltd |
| Burdock (Australia) Pty Ltd | Environmental Resources Management Australia Pty Ltd (ERM) | KBR | Prime Health Group Ltd | Velseis Pty Ltd |
| Bureau Veritas Australia | ERGT Australia Pty Ltd | KJM Contractors Pty Ltd | Rare Consulting Pty Ltd | Veritas CGG Australia Ltd |
| Cadet, Reserve | Ernst & Young | KPMG | Resource and Land Management Services | Veritas Engineering |
| Cameron Australia | ESD Simulation Training Pty Ltd | Kvaerner | Resource Law International | Voith |
| CHC Helicopters | Export Finance and Insurance Corporation (EFIC) | Labrador Petro-Management | Rider Hunt International (WA) | WA Energy Research Alliance |
| China Resource Fund Pty Ltd | Exterran (Australia) Pty Ltd | | Rig Safegear | WDS Ltd |
| Christopher Beck Books/Media Dynamics | | | RISC Pty Ltd (Resource Investment Strategy Consultants) | Westpac Institutional Bank |
| | | | RobSearch Australia | Wood Mackenzie (Australia) |
| | | | RPS Energy | WorleyParsons Services |
| | | | RSM Bird Cameron - Chartered Accountants | Xodus Group Pty Ltd |
| | | | Rubicon Offshore International | Yokogawa Australia |
| | | | | Zektin Engineering |

Communications

APPEA is the voice of Australia's oil and gas industry and the main contact point for media, policymakers and the community for information and analysis of issues affecting our industry.

Media activity

APPEA's media activity supports our advocacy goals and provides industry and policy information for the news media. In 2010–11 issues such as coal seam gas, carbon pricing, resource taxation, and the release of the Montara report were major stories. In addition there was continuing growth in major project activity. This meant that APPEA had a very busy year and media engagement increased significantly.



Coal seam gas

Coal seam gas has become a major issue and APPEA has put a lot of effort into countering the misinformation being spread by opponents of the industry. This work has included media releases, opinion articles, participation in community forums, staging a CSG Water Forum, political advocacy and submissions to parliamentary inquiries, and developing a series of web pages and online fact-sheets detailing the industry's operations and its economic and environmental contributions.

APPEA has also been much more active in the media and representing the industry at community events on CSG throughout Queensland and New South Wales. The aim is to ensure that a more balanced perspective is presented through all forms of media, including social media. APPEA and industry representatives have also been available to debate industry critics and to discuss CSG-related issues with landholders and the community in general.

As we enter 2011–12, APPEA and member companies are further increasing their efforts in this area.

APPEA websites

- **www.appea.com.au** is the association's main website—it provides information about APPEA, our members, latest news, activities, events and policy submissions.
 - **www.appeamembers.com.au** is a dedicated site for members only that offers information about new policy developments and industry news, including the *Monthly Report*, *Information Bulletins* and the *Members Directory*.
 - **www.appeaconference.com.au** is the website of Australia's premier oil and gas industry conference—a one-stop shop for registration, latest program details, exhibition and sponsorship information plus delegate-only access to conference proceedings.
- Other APPEA conference websites also provide events details such as program, sponsorship details and delegate-only access to conference proceedings. These sites include:
- APPEA National Oil and Gas Safety Conference
www.appeasafetyconference.com.au
 - APPEA Environment Conference
www.appeaenvironmentconference.com.au
 - APPEA Taxation and Finance Conference
www.appeataxconference.com.au
 - APPEA Coal Seam Gas Water Forum
www.appeacsgwaterforum.com.au



Leading journalists from around the world converged on Perth in April for the 2011 APPEA Conference and Exhibition.

Publications

Flowline continues to deliver APPEA's views on key policy issues to industry stakeholders and to government. Available both electronically and in hard copy, each issue of this quarterly publication reaches more than 3000 key individuals.

Advocate is a four-page supplement carried each month in *Oil & Gas Australia*, and *Oil & Gas Gazette*. It gives industry the latest news in APPEA's advocacy, research, policy and industry promotion work.

The annual *Key Statistics* card, APPEA fact sheets on topical issues and APPEA reports are updated and released throughout the year. These provide a ready source of factual information for policymakers, the media and industry.

The *Monthly Report* is a key communication tool through which the APPEA secretariat advises members of the Association's activities and key issue developments. It is released in the first week of each month in an electronic format and is issued exclusively to members as a source of confidential information.

APPEA also distributes *Information Bulletins* to members providing important updates on current and emerging issues for their companies. These are distributed electronically and can also be found on the members' website www.appeamembers.com.au

Leading journo cover APPEA 2011

About 60 journalists attended the annual APPEA Conference, which was held in Perth in April 2011. As well as specialist business reporters, some political journalists also covered the conference.

As always, the media room was well organised and the event delivered a strong flow of policy and industry news.

Media organisations represented at the event included:

- television and radio stations
- Australian and international newswire services
- metropolitan and national newspapers
- rural newspapers
- Australian and international industry publications.

Many speakers from the conference program followed presentations to delegates with press conferences or one-on-one media interviews.

Speakers in the press conference room included Western Australian Premier Colin Barnett, Federal Minister for Resources and Energy Martin Ferguson and Federal Shadow Minister for Resources and Energy Ian Macfarlane.

APPEA 2011: Tomorrow's energy today



Major policy debates, emerging industry issues and new technical developments took centre stage at APPEA's record-breaking 2011 Conference and Exhibition.

APPEA 2011 broke several records. Held at the Perth Convention Centre on April 10–13, the event drew more than 3400 delegates from 28 countries, giving it the largest attendance for any APPEA conference. It also had the largest-ever exhibition area and the largest media contingent to date.

In the opening address, West Australian Premier Colin Barnett emphasised the state's importance in Australian oil and gas production.

He was followed by Federal Resources Minister Martin Ferguson who told delegates he was optimistic that the federal and WA governments would reach an agreement on establishing a national offshore petroleum regulator. Mr Ferguson also called on unions to show restraint in their wage demands and rejected a union push for government to mandate a minimum level of Australian goods and services to be used in resources projects.

Shortly after their speeches, Mr Barnett and Mr Ferguson addressed a packed press conference room. More than 60 journalists and photographers registered with the media room, and additional TV and radio crews were also coming and going from the event.

On the conference's final day Opposition Resources and Energy spokesman Ian Macfarlane spoke of the Coalition's commitment to developing Australia's petroleum industry and warned that a carbon tax would hinder growth in the LNG sector

Throughout the conference International energy experts and industry leaders gave keynote addresses. BP Chief Economist Dr Christof Ruhl, Deloitte Energy and Sustainability Independent Senior adviser Dr Joseph

Stanislaw, and McKinsey & Company senior leader Pedro Haas spoke on global trends in energy use and production.

Leading oil and gas executives also addressed the conference. These people represented international majors such as Chevron, Shell and ExxonMobil; large local companies such as Woodside and Santos; midcaps such as Beach Energy; engineering and services groups such as Clough and Schlumberger; and juniors such as Drillsearch and Cooper Energy. The speakers delivered insights into Australia's multi-billion dollar domestic and international gas supply prospects and the strategies required to realise the country's potential.

Reflecting the changing business and political environment, the Tuesday plenary session on Risk and Mitigation drew a large and highly engaged audience. Australian National University Professor of Sociology Andrew Hopkins and Vermilion Oil & Gas Australia Managing Director Bruce Lake spoke on learning from Macondo and Montara. Allen Consulting Group Director Geoff Allen discussed community engagement as a form of risk management.

With so much activity across the Australian and international energy landscape, the conference also presented APPEA's largest-ever technical program. Spread over 23 sessions, this featured 80 expert presentations of specialist analysis, technical know-how and case studies.

With numerous petroleum projects advancing, Wednesday afternoon's Project Update session attracted a record audience. Executives discussed planning, development and key challenges at Devil Creek, the Yolla Expansion, the North West Shelf, Ichthys and the Warro Tight Gas Project.



APPEA 2011 (clockwise from above left): The exhibition floor provided a unique opportunity for networking; hundreds attended the glittering *Putting on the Glitz* gala dinner; plenary sessions drew large crowds daily.



Networking and socialising

APPEA's largest-ever exhibition showcased more than 160 companies, offering unrivalled networking opportunities. Over the event's three days, the exhibition hall was a hub of business and social activity.

The conference social events were also well attended. Over 1600 people attended the Conference Dinner. The farewell and opening cocktails also attracted large crowds intent on taking the opportunity to network with their industry colleagues.

Educating students and professionals

More than 70 Perth high school students attended held a workshop at the national conference as part of an industry awareness and communication program. They were addressed by industry professionals and toured the exhibition area and posters exhibition.

In 2010–11 APPEA held Introduction to the Petroleum Industry seminars held in Perth, Brisbane, Sydney and Darwin.

Private seminars were also conducted for government departments and APPEA member companies.

Conferences and forums

2010 HSR Forum & National Oil & Gas Safety Conference — 10–12 August, Perth

More than 400 people attended the 2010 APPEA National Oil & Gas Safety Conference and HSR Forum.

In opening the conference, APPEA Chief Executive Belinda Robinson said the Gulf of Mexico oil spill, in which 11 workers tragically lost their lives, and Australia's 2009 Montara incident showed safety must remain a top priority for the industry.

Dr Jop Groeneweg from Leiden University in The Netherlands said companies must be prepared to tackle difficult but important issues. He urged the industry to carefully manage the balance between operational goals and personal safety.

Record numbers attended the HSR Forum where Margot Halbert spoke about better ways to deliver the safety message. Health and safety representatives also participated in several practical sessions on noise, fatigue and the promotion of health and fitness.

2010 Environment Conference — 31 August–1 September, Coolool Qld

The 2010 APPEA National Environment Conference drew almost 200 delegates.

The event included a dedicated session covering the Montara incident and incident response planning.

There was also extensive discussion of the use of precompetitive geosciences data in environmental approvals to better inform policymakers, regulators and applicants. Speakers said existing data could be more effectively used not only to improve environmental assessments, but also to fill in gaps in baseline monitoring and provide a sound foundation for science-based policy.

The conference included keynote addresses from two Australian environmental icons—Dr Harry Butler, who has worked with Australia's oil and gas industry for more than four decades, and Ian Kiernan, founder of Clean Up Australia.

2011 CSG Water Forum — 16 June, Brisbane

Industry, government, landholders and community representatives came together at the recent APPEA Coal Seam Gas Water Forum in Brisbane to exchange information and ideas on water management.

Feedback from attendees was overwhelmingly positive. The speakers and information were well received. The audience was highly engaged, asking the presenters and members of the concluding panel discussion plenty of questions.

This event showed that hard facts and open-minded dialogue can pave the way to healthy co-existence between gas production and agriculture.

Awards and scholarships

*APPEA
Awards
recognise
industry
excellence.*

ConocoPhillips and Beach Energy play it safe

ConocoPhillips and Beach Energy have shown that demanding work programs and improvements in safety standards can be successfully delivered in tandem.

Presenting the awards at the APPEA 2011 Conference, APPEA Chairman Eric Streitberg noted that in 2010, the Australian oil and gas industry recorded its lowest-ever lost-time injury frequency rate, posting a 23 per cent improvement from 2009.

"This makes our industry one of the best safety performers in Australia," Mr Streitberg said.

The APPEA Safety Awards are offered in two classes:

- Category A for operating companies that recorded, jointly with their contractors, more than five hundred thousand working hours for the calendar year; and
- Category B for operating companies that recorded, jointly with their contractors, fewer than five hundred thousand working hours for the calendar year.

ConocoPhillips won Category A for the second year in a row.

ConocoPhillips was very busy in 2010. As well as successfully completing drilling campaigns, the company implemented a world-class 35-day shutdown at its onshore Bayu-Undan production complex and Darwin LNG facility.

In the shutdown, more than 1300 people—five times the normal daily workforce, worked on the facilities—yet recorded injuries were reduced by 50 per cent compared with the previous shutdown.

ConocoPhillips developed a detailed shutdown health, safety and environment (HSE) management plan and included dedicated safety observers in the shutdown program.

The company also formally integrated a behaviour-based safety process to identify and remove 213 barriers to safe work and behaviour. In addition, a workplace engagement process aligned and coordinated operator and contractor practices at Bayu-Undan and Darwin LNG.

The Category B award was won by Beach Energy, which finished 2010 without a single significant HSE incident. Beach achieved this landmark in a year of extraordinary flooding in the Cooper Basin, coupled with the company's largest-ever total work-hours.

With rising flood waters about to cut off access roads to a Beach camp, the company evacuated all equipment, supplies and personnel to a new temporary camp 20 kilometres to the west. This was done while maintaining production at other fields and achieved without injury or incident.

The company's senior management participated in various HSE initiatives, including APPEA's Stand Together for Safety campaign, which was supported and attended by Beach senior management and directors. The senior management also conducted field visits to discuss HSE performance and deliver key messages.

Safety Innovation Awards

Roc Oil Company won both the overall award and the industry choice award for its Confined Space Remote Inspection System, which eliminates the need for saturation divers to work four-day shifts at a depth of 150 metres. Roc's solution (designed by AGR Asia Pacific) engineers out risk and can be applied across the rest of the industry.

Chevron safeguards Barrow

Chevron Australia won the APPEA Environment Award for a producing company for its quarantine program at the Gorgon liquefied natural gas project.

Announcing the awards in Perth at the APPEA 2011 Conference & Exhibition, APPEA Chairman Eric Streitberg said Chevron—the operator of the Gorgon project—had set what could be a new standard for excellence in quarantine management.

"The oil and gas industry has had a proud record of excellence in environmental management at Barrow Island—a Class A Nature Reserve—for 45 years," Mr Streitberg said.

"The scale of the Gorgon project presents new challenges—Chevron has responded to these challenges by developing an extremely rigorous and comprehensive quarantine system."

Introduction of non-indigenous plant or animal species can cause significant loss of native species through predation, competition or change of habitat. With the substantial increase in the mobilisation of personnel and goods associated with Gorgon it was clear a more robust quarantine system was required.

The Barrow Island Quarantine Terrestrial and Marine Quarantine Management System is the world's largest non-government quarantine initiative. The Western Australian Environmental Protection Authority has said it is "likely to be world's best practice".

The program incorporates all activities associated with the movement of goods, materials, equipment and personnel to Barrow Island—all individuals and all items are screened. Despite all of the activity on Barrow, there have been no introductions or proliferations of non-indigenous species to the island or its surrounding waters.

APPEA scholarship supports geology research

APPEA has awarded its 2011 Tony Noon Memorial Scholarship to an outstanding young carbonate geology researcher.

Ashleigh Hood is a PhD student at the University of Melbourne who is studying the formation of sedimentary dolomite, particularly in Cryogenian reef complexes in South Australia's northern Flinders Ranges.

Awarded in April 2011, the Tony Noon Memorial Scholarship was used to help Ms Hood travel to Europe to present her research at two major conferences in July 2011.

APPEA Vice Chairman John Dashwood presented the scholarship and congratulated Ms Hood on her research work.

"The Tony Noon Scholarship is one of several scholarships that APPEA offers on behalf of Australia's oil and gas industry to support the invaluable work of outstanding students and researchers," Mr Dashwood said.

Awarded annually, the scholarship is a one-off grant to a maximum value of \$3000.

It is aimed at helping students aspiring to, or considering, a career in the Australian petroleum exploration and production industry in any discipline directly related to the industry.

APPEA invites applications from honours, Masters or PhD students at Australian universities. Applicants must be attending a university in the year of application and be an Australian resident or citizen.



Chevron has a proud history of environmental management on Barrow Island.



Harry Butler receives his APPEA Gold Medal from APPEA Chairman Eric Streitberg at the 2011 National Conference.

Industry honours pioneering environmentalist

APPEA has awarded veteran environmental consultant and advocate Dr Harry Butler a Lewis G Weeks Gold Medal for his outstanding contribution to petroleum exploration.

Announcing the award at the APPEA 2011 Conference dinner, APPEA Chairman Eric Streitberg said the medal recognised Dr Butler's major contribution to the industry's environmental management practices.

"For almost five decades, Harry has worked closely with oil and gas companies, helping us take a holistic view of environmental and conservation management and to understand the value that this brings," Mr Streitberg said.

"His groundbreaking work on Barrow Island has established a model for environmental management in areas of high conservation value that is used successfully by petroleum companies throughout Australia and around the world.

"Harry has been largely responsible for preserving the ecosystems and species of Barrow Island, which has become a global showcase for the co-existence of petroleum development and environmental conservation.

"He has helped the industry maintain the ecological integrity of many significant areas, protecting thousands of plant and animal species.

"His early work was very much ahead of its time. It did much to drive the adoption of high environmental standards in oil and gas exploration and production."

Dr Butler has also facilitated significant partnerships between industry, government and community groups, Mr Streitberg said.

Harry Butler is one of Australia's most recognised and respected environmental conservationists. An author and former host of the popular ABC TV series *In the Wild*, he is also an Australian of the Year award-winner.

Management

Governance

APPEA's mission is to:

- advocate and achieve a legislative, administrative, economic and social framework in Australia that efficiently and effectively facilitates safe, environmentally responsible and profitable petroleum exploration, development and production; and
- provide a forum for technical, commercial and social interaction, as well as education and the facilitation of effective research and development on issues affecting the upstream petroleum industry and the Australian community.

APPEA's objectives are to:

- be nationally recognised as the representative of Australia's petroleum exploration and production industry
- promote a legislative, administrative, economic and social framework in Australia that efficiently and effectively facilitates safe, environmentally responsible and profitable petroleum exploration, development and production
- educate and inform the community about the industry's activities, operations and performance and of the benefits to be derived from developing and producing oil and resources in Australia
- provide a forum for technical, commercial and social interaction and for facilitating effective research and development activity on issues affecting both the industry and the community
- promote and maintain close working relationships with and among members and their employees and with other business and industry associations.

This is done through information exchange and research. APPEA works with governments, government agencies and regulators as well as with members and other stakeholders to influence policies and regulations and to establish advocacy positions.

Corporate governance

APPEA's Board is responsible for the company's business planning and strategic direction as determined by the association through board and other meetings. The Board's governance obligations are defined under the *Corporations Act 2001*.

In addition, the APPEA Corporate Governance Charter defines the respective roles and responsibilities of the board, the directors, and senior management in setting the direction, management and control of the association. This provides structure and clear guidelines for board processes, decision making, company policy and strategies that support good governance and control practices.





The APPEA Board at the annual conference in April 2011.

Directors

Under APPEA's Constitution, the APPEA Board comprises at least six and no more than sixteen directors who are elected by full members of the association. Half of the board's members will resign at each annual general meeting.

In 2010–11, the APPEA Chairman was Eric Streitberg, Executive Director, Buru Energy Limited. The Vice-Chairman was John Dashwood, Chairman, ExxonMobil Australia.

At 30 June 2011, the other members of the APPEA Board were:

- Robin Antrobus, General Manager External Relations, ConocoPhillips Australia Pty Ltd Australia Pty Ltd.
- Antonio Baldassarre, Managing Director, ENI Australia Ltd (elected on 14 October 2010 at the AGM).
- Colin Beckett, General Manager, Greater Gorgon Area, Chevron Australia Pty Ltd.
- Robert Cole, Executive Vice President, Corporate Centre and General Counsel, Woodside Energy Limited.
- Hector Gordon, Executive Director, Somerton Energy Limited.
- Adrian Hodgson, General Manager, Total E&P Australia.

- Dr Philip Home, Managing Director, BP Developments Australia Pty Ltd.
- Aidan Joy, Commercial and Business Development Manager, Apache Energy Limited.
- Michael Kelly, Country Manager, BHP Billiton Petroleum Pty Ltd.
- Grant King, Managing Director, Origin Energy Limited.
- David Knox, Chief Executive Officer and Managing Director, Santos Ltd (replaced Peter Wasow, Executive Vice President and Chief Financial Officer, Santos on 11 February 2011).
- Bruce Lake, Managing Director, Vermilion Oil and Gas (Australia) Pty Ltd.
- Ian McKenzie, Vice President Sunrise, Shell Development (Australia) Pty Ltd.
- Michael Sangster, Managing Director, Total E&P Australia (elected on 14 October 2010 at the AGM).
- Peter Stickland, Managing Director and Chief Executive Officer, Tap Oil Limited.

Directors who retired from the board during the year included: Shaun Scott, Chief Executive Officer (Australia), Arrow Energy Limited; Adrian Hodgson, Managing Director, Total E&P Australia; and Peter Wasow, Executive Vice President and Chief Financial Officer, Santos.

Management and administration



In 2010–11 the Australian oil and gas industry showed increased confidence as the worst of the global financial crisis appeared to abate.

But by the end of the financial year, renewed concerns over the global economic environment had emerged and it was becoming apparent that skills shortages were having significant financial impacts on project costs.

Nevertheless some major projects were approved during the year and project proponents made it clear that other final investment decisions were expected before the end of the 2011 calendar year.

The industry as a whole is planning for growth and confidence is relatively high, despite the uncertain global economic environment.

By the close of the financial year, APPEA had 87 full members and 234 associate members.

That is five more full members and 42 more associate members than at the same time the previous year.

This increase in membership reflects expanding activity in the Australian oil and gas sector as well as the industry's recognition of APPEA's importance in providing strong advocacy representation and in linking the industry to government and to the community.

APPEA's work is vital in ensuring that the industry continues to have a social and regulatory licence to operate and that government understands the industry's contribution and its needs.

Throughout 2010–11, staff in APPEA's three offices continued their research, policy formulation and advocacy efforts, working with governments, government agencies and regulators, as well as with APPEA members and other stakeholders.

From an operational perspective, the APPEA Secretariat continues to enhance its already experienced and well respected team.

With growing demands in the coal seam gas sector and an ever-increasing communications workload, new positions were created in the Canberra and Brisbane offices.

The secretariat team is proud to represent the Australian oil and gas industry and is pleased by the strong support provided by the association's members.

From a financial perspective, APPEA is pleased to report that the very positive financial result for the year places the Association in a strong position leading into the 2011–12 fiscal year.

APPEA provides strong advocacy, research and policy development, and links the industry to government and the community.



Perth



Brisbane

The APPEA team AT 30 JUNE 2011

Canberra

Belinda Robinson

Chief Executive

Mark McCallum

Deputy Chief Executive – Policy & External Relations

Noel Mullen

Deputy Chief Executive – Commercial & Corporate

Michael Bradley

Director – Communications

Damian Dwyer

Director – Energy Markets & Climate Change

Ranga Parimala

Director – Exploration & Access

Cath Sutton

Company Secretary & Director – Support Services Coordination

Keld Knudsen

Senior Policy Adviser (Environment & Greenhouse)

Maira Lawler

Manager – Events Administration

Nicole Minifie

Executive Assistant & Office Coordinator

Tracey Pinto

Part-time Accountant

Steve Rotherham

Journalist/Communications Coordinator

Lynne Thornton

Part-time Finance Officer

Casey Topp

Senior Officer: Administration & Events (ACT)

Perth

Stedman Ellis

Director – Western Australia

Miranda Taylor

Director – Skills & Safety

Steven Gerhardy

Consultant Adviser

Leanne Drewitt

Senior Project Officer – People Strategies

Adam Welch

Senior Analyst – Statistics & Policy

Sandy Main

Administration Coordinator (WA) & Membership Officer

Brisbane

Matthew Paul

Director – Queensland & New South Wales

Ross Dunn

Director – CSG

Julie Hood

Director – Events

Clare Valence

Senior Policy Adviser – Greenhouse, Energy Policy & Environment

The following personnel left the secretariat during 2010–11:

- Tom Baddeley
- Lynda Clarke
- Elizabeth Hood
- Kelly Lamperd
- Jennifer Lee



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