



appea

the voice of australia's oil and gas industry

Annual Report 2014–2015

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From the Chairman and the Chief Executive

2014-15 has been a watershed year for the Australian oil and gas industry.

In January 2015, the world's first coal seam gas-to-LNG development shipped its first cargo from Gladstone. In its first six months, the project exported almost \$1.4 billion worth of LNG. By the end of the year, two more CSG-LNG plants will be exporting. These projects have transformed the Queensland economy and revitalised regional communities.

Elsewhere, large LNG projects – Gorgon, Ichthys and Wheatstone – are nearing the end of their development phases. And the ground-breaking Prelude facility is expected to begin production in 2017, using floating LNG technology to tap previously inaccessible offshore gasfields.

Through these projects, the oil and gas industry is making a lasting contribution to Australia's prosperity. For at least the next 40 years, these LNG projects will generate export dollars, pay billions in taxes and create thousands of highly skilled, highly paid jobs.

Industry's successes in 2014-15 go beyond LNG exports. We have seen continuing onshore exploration and development. About \$6 billion is being invested in the Kipper field in the Gippsland Basin to maintain supply to Victoria and beyond.

While there is much to celebrate, the past year has also been a time for sober reflection and difficult adjustments. Global oversupply and subdued demand growth has combined to trigger a sudden collapse in oil prices. With prices sharply lower, the oil and gas producers in Australia and elsewhere have focused on cutting costs to stay competitive.

The hectic pace of development in recent years inevitably led to some problems. Labour markets have become stretched; costs have risen sharply; and inefficiencies have crept in.

This is a difficult time for our industry, particularly for many of our small member companies and service providers. But companies have reacted quickly and effectively in applying the lessons of previous downturns.

The industry is returning to fundamentals, reducing costs and increasing productivity. It is painful, but it is necessary, and the industry will emerge all the stronger from this period.

The role of APPEA

At such a difficult time, APPEA's role as the voice of the industry is more important than ever. Dealing with the challenges before us requires a coordinated, industry-wide approach. Like the industry it represents, APPEA is focusing more strongly on its key priorities while tightening its financial management. The goal is to deliver clear value for members.

The Board and the Secretariat appreciate members' continued support for APPEA's broad range of activities – events, policy and advocacy work, and our collaborative safety agenda.

On this last point, we have seen significant progress over the last 12 months.

Since 2007, APPEA has coordinated the industry's safety programs and strategy, working with members to improve safety performance. Injury rates in the sector have been reduced despite a threefold increase in total working hours.

At the request of members, APPEA is coordinating a leadership program for process safety challenges. The revamped Stand Together for Safety (STFS) program is engaging industry leaders, employees, contractors, regulators and safety experts to help prevent major accident events and eliminate fatalities. STFS is fostering an industry-wide discussion around process safety. APPEA is proud to play a key role in such important work.

The association continues to advocate to governments policies which will encourage investment and development of the nation's oil and gas resources. APPEA is focused on policies that would lift productivity and reduce unnecessary regulatory costs.

A difficult environment

Unfortunately, APPEA often has to oppose populist policies, such as domestic gas reservation, which would undermine the industry. The most striking cases are the regulatory barriers being erected to onshore gas developments.

In 2014-15, inquiries and reviews in NSW and the Northern Territory found that hydraulic fracturing poses negligible risk and that any concerns about this technology could be addressed through robust regulation and ongoing monitoring. More recently, in November 2015 the WA Legislative Council's Inquiry into hydraulic fracturing for unconventional gas made similar findings.



APPEA Chief Executive Malcolm Roberts
and Chairman Bruce Lake.

Yet NSW and Victoria are restricting access to resources. This is not done on the basis of genuine environmental risks, but is in response to dishonest fear campaigns. Most recently, the opposition parties in Western Australia and the Northern Territory have promised moratoriums on hydraulic fracturing should they win government.

These policy concerns do nothing for investor confidence and long-term planning at a time when Australia must work to enhance its competitiveness.

Excessive red tape, an unbalanced industrial relations system that fosters adversarial behaviour, and high labour costs, particularly in construction, have created a cost gap between Australian projects and international rivals.

Given these very real challenges, it is not surprising that Australia's oil and gas exploration has declined dramatically in recent years. This decline poses a real threat to the nation's future prosperity and energy security. Reducing the industry's costs and enhancing its confidence are essential to fostering the exploration needed to deliver the next generation of Australian oil and gas production.

Big opportunities ahead

However, there are still good reasons to be optimistic about our industry's future. Time and again, we have shown ourselves to be highly adaptable and innovative. Hardship has proven to be a catalyst for new efficiencies.

Long-term forecasts for Asian gas demand remain strong, and Australia remains well placed to serve this dynamic region's needs. By the end of this decade, excess capacity in the LNG sector will have been absorbed and new opportunities will emerge.

Australia is well placed to seize these opportunities.

Our country has vast untapped onshore and offshore gas resources. We are developing new technologies – such as floating LNG – that will let us tap previously inaccessible resources. We also now have world-class gas infrastructure and skills sets that can be leveraged for further growth.

These assets can be a springboard for new LNG trains. But they can also help expand our domestic oil and gas sectors, foster an expansion of our service sector, and drive the exploration needed to underpin our future energy security.

Soon Australia will be the world's largest LNG producer. But we also aspire to be the best.

We must be efficient, innovative and cost-competitive, while continuing to operate responsibly, safely and sustainably. If we achieve this, the industry will grow even more.

APPEA will continue working with governments and its members to further grow this remarkable industry, to the benefit of all Australians.

APPEA 2014-15: Key achievements

APPEA has made significant progress in several areas of advocacy.

Exploration and access

- Worked closely with the Department of Industry and Science on developing the Offshore Resource Management Review to assess whether the framework can be improved. APPEA also assisted in finalising the revised Offshore Petroleum Exploration Guidelines, achieving several improvements, including a three-year bulk primary terms and expanded Good Standing Agreement options.
- Engaged with the Federal Government's marine reserves review to ensure a balanced outcome.

Safety and environment

- Devised a simplified and practical solution to estimate financial assurance for offshore operations.
- Supported the establishment of a one-stop shop for environmental regulation in Commonwealth waters, and continued working with governments to streamline regulation by implementing bilateral agreements on assessments and approvals in various jurisdictions.
- Developed submissions and presented evidence to Western Australia's floating LNG safety inquiry, leading to sensible and workable outcomes.
- Began a cross-industry process safety leadership initiative under the Stand Together for Safety banner, developing new videos and redeveloping the STFS website.

Taxation and commercial

- Continued working closely with the Australian Taxation Office on finalising details for applying the petroleum resource rent tax (PRRT) to onshore production and determining the scope of exploration for income tax and PRRT purposes.
- Worked closely with Treasury on final details of legislation to ensure tax relief applies following project and permit realignments, and agreed on the final terms of legislation addressing farm-ins and farm-outs.
- Negotiated with state and territory governments on aspects of existing royalty provisions.

Energy policy

- Worked with various governments to maintain a market-based approach to energy policy. The Australian Government and the Council of Australian Governments (COAG) have endorsed market-based approaches. All governments, apart from Western Australia, continue to publicly reject market interventions, including gas reservation.

Labour productivity

- Advocated for reforms to Fair Work Act to recognise individual projects' circumstances and foster workforce flexibility and productivity.

Climate change policy

- Continued to promote the low-emissions profile of natural gas and the need to maintain the industry's competitiveness during development of the Emissions Reduction Fund.
- Proposed and sponsored CSIRO research into gas seeps in coal seam gas fields, which provided direct measurements of methane concentrations in an operating Australian gas field.

State-based regulation

- Worked with peak farming bodies in several jurisdictions on draft land access frameworks.
- Developed submissions and presented evidence to parliamentary and government inquiries into unconventional gas and hydraulic fracturing. APPEA also proposed regulatory improvements and made the case for rejecting moratoriums.
- Successfully influenced regulatory reforms in several jurisdictions on transparency, land tenure, resource management, regional planning, water management and environmental offsets.
- Led industry responses to the Western Australian and Queensland parliamentary inquiries into fly-in, fly-out practices.

Vision and strategic goals

APPEA's vision is to achieve a growing and internationally competitive Australian oil and gas industry that makes a vital and sustained contribution to the nation's economy.

APPEA's strategic goals are to:

1. Promote excellence in safety, health, environmental performance and community engagement.
2. Achieve timely and secure access to resources for exploration and development.
3. Facilitate access to capital through a regulatory framework that supports investment and industry productivity.
4. Enable access to domestic and international markets on globally competitive terms without distortionary and interventionist policies.
5. Facilitate the implementation of best practices and core values among members.

Major submissions and reports

Reports and submissions to government play a major role in APPEA's research, policy formation and advocacy work. In 2014-15, APPEA produced and commissioned a wide range of submissions and reports.

2014 (July – December)

Heading North: the importance of labour mobility in developing Northern Australia (a report for APPEA by Creating Communities Australia)

Submission (and subsequent supplementary submission) on the Environment Protection and Other Legislation Amendments Bill 2014 (Queensland)

Submission on the Mineral and Energy Resources (Common Provisions) Bill 2014 (Queensland)

Submission to the Inquiry into Floating LNG Safety (Western Australia)

APPEA comment to the Independent Market Operator on GSI Fee Arrangements – Inclusion of Registered Production Facility Operators

Submission on the Scope of Deductible Expenditure for Petroleum Resource Rent Tax

APPEA comment to the Independent Market Operator on the potential development of a wholesale gas market in Western Australia

APPEA comment on the WA Electricity Market Reform Discussion Paper

Submission on the Water Reform and Other Legislation Amendment Bill 2014

Oil & Gas Industry Cost Trends (an EnergyQuest report for APPEA)

Value-adding: Australian Oil & Gas Industry (a PwC report for APPEA)

Submission on the Competition Policy Review Draft Report

Submission on the Energy Green Paper

Submission on the Review of Part 5 of the OPGGS (Resource Management and Administration) Regulations 2011

Submission on the Agriculture Competitiveness Green Paper

Submission to the Review of Hydraulic Fracturing in Tasmania

Comment on Draft Guideline for Agriculture Impact Statements at the Exploration Stage (NSW)

Submission to the Inquiry into the supply and cost of gas and liquid fuels in NSW

Submission on Regulatory Impacts of Options for Structure of Mining, Petroleum and Major Hazard Facilities Safety Legislation (Western Australia)

Method to assist in estimating appropriate levels of financial assurance

Submissions on aspects of the Queensland Royalty Regime

2015 (January – June)

Submission on the Resource Project Realignment and Farm-Out Legislation (Cth)

Comment for the Offshore Petroleum Resources Management Review



The Wallumbilla gas hub

Comment for Western Australia's Shining a Light on FIFO Mental Health – discussion paper

2015-16 Pre Federal Budget Submission

Submission to the South Australia Tax Review

Submission to the Northern Territory Review of Petroleum Royalties

Powering Regional Australia: The Case for Fuel Tax Credits (a report by APPEA, the Minerals Council of Australia and 10 other peak bodies)

Submission on the Emissions Reduction Fund: Safeguard Mechanism Consultation Paper

Submission on Draft Guideline for Agriculture Impact Statements at the Exploration Stage (NSW)

Submission on the Post-2020 Greenhouse Target Issues Paper

Submission to the Productivity Commission Inquiry on the Workplace Relations Framework

Submission to Senate Inquiry into Landholder's right to refuse (Coal and Gas) Bill 2015 (Cth)

Submission to the Operational Review of NOPSEMA

Submission to the Standing Committee on the Environment: Inquiry into the Register of Environmental Organisation

Submission to the Tax White Paper

Submission to the Independent Pricing and Regulatory Tribunal's issues paper – Landholder Benchmark Compensation Rates: Gas exploration and production in NSW

Submission on Exposure Draft and Explanatory Memorandum on Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulation 2015

Most of these reports can be found on APPEA's website:

apea.com.au/industry-in-depth/apea-submissions-and-reports

Operations and regulation

Regulatory approaches vary widely between jurisdictions.

Reducing red and green tape

With low oil prices, Australian petroleum explorers are struggling to attract investment. They also face significant regulatory barriers. The amount and value of exploration being undertaken in Australia has decreased dramatically. Indeed, in some jurisdictions onshore operations have all but come to a halt.

To ensure exploration continues in tight economic conditions, governments must facilitate access to land; create a flexible, favourable and stable regulatory environment; reduce regulatory costs; and enhance customer service and the ease of doing business.

APPEA continues to advocate for more effective, efficient and streamlined development assessment processes, particularly in environmental regulation.

Policies that undermine the development of energy projects and curtail energy production impose real costs on Australia through lost jobs, forgone economic growth, and higher energy bills. APPEA welcomes the Federal Government's efforts to curb the high costs and inefficiencies associated with project development in Australia.

Australia needs more effective, efficient and streamlined development assessment processes

Offshore Resource Management Review

The Federal Department of Industry and Science (in collaboration with the National Offshore Petroleum Titles Administrator) has been reviewing Australia's offshore management framework. The Offshore Resource Management Review is assessing whether key aspects of the framework can function better as technological and commercial conditions change rapidly. Throughout 2014-15, APPEA has been working closely with the Department on the review's potential outcomes and recommendations. An interim report is expected to be released before the end of 2015.

New offshore exploration guidelines

The Australian Government's new *Offshore Petroleum Exploration Guidelines* – developed in consultation with APPEA and State regulators – were released on 1 June 2015. They supersede three previous guidelines that covered bid and renewal requirements; bid and renewal application assessments; and permit conditions and administration. Key changes and clarifications include:

- increased flexibility in permit management through a combined three-year primary term (rather than three individual years) and other administrative adjustments;
- clarified bidding requirements for work program exploration;
- clarified information on good-standing agreements and how they may be discharged.

Offshore exploration wells and expenditure (real)



Onshore exploration wells and expenditure (real)



Marine Reserve Review

The review into the Commonwealth Marine Reserves arose from the Government's 2013 election policy to "appoint an expert scientific panel to review the science supporting the boundary area for each zone."

The reserves cover about 60 oil and gas permits and several prospective areas.

The review's Bioregional Advisory Panel and Expert Scientific Panel engaged with many APPEA member companies in March-April 2015. The review also held more than 165 smaller meetings with individuals and groups, as well as eight larger multi-sector forums around Australia, and received more than 13,000 submissions and 1,800 online survey responses.

APPEA is strongly advocating for a scientific evidence-based process for determining zoning options. The debate on marine reserves must take into account an area's actual environmental values and whether an industry activity can occur without compromising these values.

APPEA continues to work closely with the Review and Government to ensure marine reserves protect the environment without unnecessarily increasing the regulatory burden.



Hydraulic fracturing

Hydraulic fracturing – or fracking – is a well-established, tightly regulated technology that has been used safely to enhance oil and gas production for 65 years in more than 2 million wells worldwide. Hundreds of studies and decades of industry operations have shown that it can be effectively regulated and used safely.

Yet fracking remains contentious, not only in Australia, but around the world. Unfortunately, this technology is the subject of fear campaigns and misinformation. As Dr Allan Hawke noted in the introduction to the *Report of the Independent Inquiry into Hydraulic Fracturing in the Northern Territory*, “there is confusion or poor understanding within the community about some aspects of hydraulic fracturing.”

Major reports

In 2014-15, two major reports found that the risks associated with hydraulic fracturing can be safely managed.

On 30 September 2014, NSW Chief Scientist and Engineer, Professor Mary O’Kane released the final report of *Independent Review of Coal Seam Gas Activities in NSW*. And in February 2015, the NT Government released the *Report of the Independent Inquiry into Hydraulic Fracturing in the Northern Territory* (the Hawke Report).

Both of these reports found that risks associated with gas operations – including hydraulic fracturing – can be managed effectively under a robust regulatory regime. The Hawke Report explicitly stated that there is no justification for imposing a moratorium on hydraulic fracturing in the Northern Territory. It recommended that its findings and the proposed environmental assessments and approvals bilateral agreements with the Commonwealth should be used to guide a restructuring of the NT Environmental Assessment Act to develop a better regulatory framework for industry operations.

APPEA believes these reports should give the green light to responsible development of natural gas resources in these jurisdictions.

Hydraulic fracturing moratoriums

Following the Victorian State Election on 29 November 2014, the Andrews Labor Government continued the hydraulic fracturing moratorium implemented by the Napthine Coalition Government.

In January 2015, the new government also announced a Parliamentary Inquiry into Unconventional Gas. As APPEA said at the time, Victoria needs more natural gas, not another unnecessary and lengthy inquiry that will delay developing new gas supplies in Victoria for years.

In February 2015, Tasmania decided to extend a moratorium imposed in 2014 for another five years.

In April, the Northern Territory Labor Party’s conference – despite the findings of the Hawke Report – passed a motion supporting a “moratorium on all fracking activities in the NT pending an independent science-based investigation.” APPEA is seeking to ensure that the risks to investment are well understood and that the party considers other options for addressing any concerns.

In August 2015, the WA Labor Party’s state conference also called for a moratorium on hydraulic fracturing.

Western Australian hydraulic fracturing inquiry

Established in August 2013, the WA Legislative Council’s Inquiry into the Implications for Western Australia of Hydraulic Fracturing for Unconventional Gas delivered its final report on 17 November 2015. The Committee received evidence from a broad cross-section of interested stakeholders, and its findings were broadly positive for the industry. It proposed stricter regulation but also found that hydraulic fracturing poses negligible risk and that any concerns about fracking could be addressed through robust regulation and ongoing monitoring.

South Australia Inquiry into Unconventional Gas

In November 2014, the South Australian Legislative Council tasked its Natural Resources Committee with conducting an inquiry into unconventional gas in the state’s south-east. It is focusing on risks to groundwater, impacts on landscapes, the effectiveness of the regulatory framework, and the industry’s potential net economic outcomes. Hearings are scheduled through to the end of 2015. The Committee expects to deliver an interim report by the end of 2015 and a final report by mid-2016.

Much of the evidence provided to-date identifies concerns over whether onshore gas operations can coexist with agriculture and protect the environment. APPEA is working with member companies and the South Australian Chamber of Minerals and Energy on monitoring and responding to the inquiry.

WA and the Northern Territory

Land access and compensation

Australian governments and agencies at all levels have recognised the need to build community engagement systems that facilitate land access while also delivering benefits for landholders.

A Productivity Commission report, *Examining barriers to more efficient gas markets*, (released in March 2015) recommended developing codes of practice for community engagement as well as template agreements for conduct and compensation.

Similarly, the *Report of the Inquiry into Hydraulic Fracturing in the Northern Territory* (or Hawke Report, released in February 2015) also stressed the need for positive land access templates in facilitating coexistence.

In 2014-15, Western Australia and the Northern Territory drew on lessons from Queensland to develop land access agreement templates designed to deliver good outcomes for both parties.

In Western Australia, APPEA and peak farming bodies have produced and released a model agreement for access to private land for petroleum exploration, as well as information guides for companies and landholders.

These are based on similar documents in use across Australia and are intended to deliver clarity to companies and landholders in relation to land access and negotiating an agreement. They were finalised and published in October 2015.

In the Northern Territory, APPEA has participated in a series of discussions with the NT Cattlemen's Association, the Department of Mines and Energy and the Minerals Council on options for improving communication between resources explorers and pastoralists.

The Cattlemen's Association has called for greater government regulation of access agreements, and in June 2015 the Department responded by introducing new communication processes for landholders and resources companies. Discussions with the Cattlemen's Association on access agreements, including a draft Model Access and Compensation Agreement developed in 2014, are continuing.

Western Australia and the Northern Territory are developing and implementing positive regulatory reforms.

Northern Territory regulatory reform

Since the release of the Hawke Report, APPEA has been working closely with the NT Government and Department of Mines and Energy on processes and a timeline for implementing the report's recommendations.

This includes submitting industry comments on the Draft Onshore Oil and Gas Guiding Principles (also released in February), which will underpin the regulatory regime, while the NT Petroleum Act is being reviewed and regulations are being developed.

This work is expected to gather pace during 2015-16, starting with the development of Environment Regulations followed by a review and update of the NT Petroleum Act.

APPEA also contributed to a review of Northern Territory water policy and legislation that began in May 2015.

Its submission supported removing the resources sector's current exemption from the provisions of the NT Water Act, provided administrative arrangements allow for a one-stop shop model for operators.

WA resource management regime

The Department of Mines and Petroleum has introduced new Resource Management and Administration Regulations that use an objective-based approach to well design, field development and data management.

APPEA has welcomed the regulations as the final step for the WA Government in addressing the recommendations from the 2011 review of shale and tight gas regulation in the State.

Guidelines to support implementation of the regulations are available and will remain open to feedback.

Queensland

Well construction and abandonment

An APPEA-led industry working group has developed a new Code of Practice for constructing and abandoning oil and gas wells for the Queensland Department of Natural Resources and Mines (DNRM) to consider and approve. This Code builds on the existing *CSG Code of Practice* but will operate separately. It is based on industry best practice and is significantly better than the original *CSG Code of Practice*. DNRM is now finalising a document that will become a statutory Code of Practice under the *Petroleum and Gas (Production and Safety) Regulation 2004*.

Tenure reform

APPEA worked with members and the Queensland Government to develop an innovative new tenure framework aimed at reducing compliance costs and being more responsive to industry needs. This ongoing work could deliver major improvements to the existing system. One key reform already in place extends tenure terms from four years to six. This recognises the long lead times for oil and gas projects and gives the industry much more flexibility.

Queensland exploration action list

The difficulties of operating in a low oil price environment have prompted APPEA to develop two key objectives and a list of related actions to guide advocacy on Queensland exploration.

Objective one: Securing best-practice geoscience information and services.

- Define a single IT platform for delivering geological information.
- Define requirements for the data that must be placed onto the IT platform in order to improve understanding of Queensland's resources and facilitate more exploration.
- Develop an online user guideline to foster consistent data reporting and enable global access.

Objective two: Improving tenure title provisions and streamlining industry regulation.

- Map the approval process from tenure application to production.
- Conduct risk assessments for each phase and activity.
- Deliver regulatory reform based on issues identified by the mapping and risk assessment processes.

Industry Reporting Reform Project (IIRP)

APPEA's IRRP is intended to standardise reporting requirements and facilitate a single electronic reporting conduit. It has already led to regulatory changes that remove requirements to lodge:

- daily drilling reports;
- a well abandonment report when a well completion report has already been lodged;
- a pipeline transmission report; and
- core, cuttings and fluid samples for CSG production wells unless they are needed by the Chief Geologist.

Petroleum industry water rights

Amendments to Queensland's *Water Act 2000* require petroleum companies to obtain a licence to extract any groundwater not produced as a by-product of oil or gas production. The industry previously had a right to access such water for use in hydraulic fracturing or construction. APPEA successfully argued for a five-year transition period for Surat Basin tenures and two years for other areas. APPEA and member companies are working on a rigorous forecast of the Queensland industry's water demand over the next 10 years.

EPOLA Act 2014

In July 2014, Queensland Parliament passed the *Environmental Protection and Other Legislation Amendment (EPOLA) Act 2014*. This included amendments replacing beneficial use approval provisions with end-of-waste codes/approvals. In their initial form, these provisions would have required suppliers and users of CSG water to register with and pay a fee to government and compelled CSG companies to police the use of treated water. APPEA argued that these provisions threatened coexistence with agriculture. The final Bill did not include them.

Mineral and Energy Common Provisions Act 2014

This is the first of several Acts that will progressively bring all Queensland Resources Acts into one framework. Its legislative reforms specific to the oil and gas industry cover dealings, caveats and associated agreements; land access; restricted land; gas emissions; and overlapping tenures. The Act was amended to remove additional inspectorate powers that would have aligned the gas industry with coal industry health and safety requirements. APPEA argued this was outside the framework's scope and should be subject to further review.

New South Wales

Independent Review of Coal Seam Gas Activities in NSW

On 30 September 2014, NSW Chief Scientist and Engineer, Professor Mary O’Kane presented her final report to the NSW Government. She also released several companion studies on issues of compliance, the management of risk to environmental and human health, fracture stimulation, set-backs and well abandonment. The report found that CSG is a mature industry; gas companies have high standards of engineering and professionalism; and technical challenges and risks posed by the industry can be safely managed. APPEA believes this report should give the green light to responsible development of NSW natural gas resources.

NSW Gas Plan

In November 2014 the NSW Government released its plan for the state’s natural gas industry, which is based on the conclusion that the risks of gas development can be effectively managed with the right regulation, engineering solutions, and ongoing monitoring and research. Key elements of the plan include establishing a Strategic Release Framework to identify localities available for gas exploration, and making the Environmental Regulatory Authority the lead regulator for the gas industry with a broader remit for enforcing environmental compliance.

The Gas Plan will also introduce a set of minimum standards to be used in assessing renewal applications. APPEA believes these standards – which will cover community consultation and technical and financial capability – could create additional hurdles for all explorers operating in NSW. APPEA is working with the NSW Government to establish a regulatory environment that will enable development of the state’s gas resources.

NSW Review on Landholder Compensation

The NSW Government has directed the Independent Pricing and Regulatory Tribunal (IPART) to advise on compensation benchmarks for landholders negotiating with gas companies seeking access to their property. IPART released an issues paper Landholder Benchmark Compensation Rates – Gas exploration and production in NSW for comment.

APPEA’s submission maintains that a gas company’s ability to achieve the right conduct arrangements is critical to the success of a compensation agreement. Sound conduct arrangements build landholder confidence in the negotiation process and a generic compensation calculation would not provide suitable outcomes for all landholders. A business-to-business approach to negotiations achieves better results. IPART’s final report due to the Minister is due by 30 November 2015.



While the Queensland gas industry continues to grow, gas operations in NSW have all but ground to a halt.

Energy policy

APPEA members provide reliable, competitively priced energy for Australia and Asian export markets.

Natural gas must be allowed to compete effectively and on a level playing field for power generation and process energy in Australia. Any final decision on the choice of fuel inputs should be based on a fuel's intrinsic economic and technical merits, not political considerations.

To encourage continued investment that underpins energy security, Australian energy policy must:

- Increase the proportion of energy produced by natural gas.
- Address fiscal, greenhouse and other policy issues affecting the competitiveness of Australia's LNG exports.

A comprehensive national energy policy

In April 2015, the Minister for Industry and Science released the Government's 2015 *Energy White Paper*. In the lead-up to this release, APPEA provided comprehensive written comments on various aspects of the September 2014 Energy Green Paper and associated documents, and had many meetings with the Minister for Industry and Science as well as officials from the Department of Industry and Science.

The *Energy White Paper* recognises the oil and gas industry's critical role in delivering economic growth and energy security for Australia and for our trading partners.

At a time when some interest groups are seeking a return to protectionism and interventionist policies, this commitment to market-based energy policies sends an important signal to investors. Policies that enhance Australia's attractiveness as a place to do business and encourage industry to increase domestic gas supplies can deliver another wave of prosperity that would build on the current pipeline of investment in LNG export projects.

The White Paper's advocacy for establishing effective regulation to enable timely approval of resource projects is also a step forward. APPEA also welcomed the Government's continued commitment to providing high-quality, pre competitive geoscience information that contributes significantly to the science and knowledge underpinning Australia's successful resource industry.

Domestic gas

In all sectors of the economy – not just oil and gas – Australia benefits from maintaining access to open and competitive markets. Australia's gas industry is delivering substantial, economy-wide benefits through investment, jobs, and regional development. To sustain this benefit, governments must resist calls for policy interventions that impose non-commercial outcomes.

In 2014-15, the Australian, Queensland, NSW, South Australian, Victorian and Northern Territory governments all announced or reaffirmed that they would not implement energy market interventions, such as domestic gas reservation. Despite these statements, some domestic gas buyers have continued to press for such policies, citing concerns over tightening supply in eastern Australia as Queensland LNG exports grow.

A gas reservation – in effect – taxes domestic gas production while subsidising domestic gas consumption. Like all taxes and subsidies, gas reservation distorts economic decisions and generates an unequivocal economic loss – one that compounds over time as future investment decisions are affected.

In April 2015, the Government announced the terms of reference for an Australian Competition and Consumer Commission (ACCC) *East Coast Gas Inquiry*, emphasising upstream gas production, gas processing and pipeline issues. An issues paper for the inquiry was released on 4 June and APPEA lodged a comprehensive submission on 2 July. APPEA appeared before the inquiry's public hearing in Sydney on 31 August. Following the public hearings, the ACCC will continue its program of private hearings. Its final report to the Government is due in April 2016.

In July 2015, the Australian Labor Party's national conference rejected a call for a national domestic gas reservation policy. But it also announced that – if elected – it would introduce a "national interest test" on LNG export approvals. APPEA welcomed Labor's rejection of gas reservation and its recognition of the economic and environmental benefits of natural gas. However, industry is concerned that the so-called national interest test could be used to restrict LNG exports.

Western Australia

Western Australia already has a domestic gas reservation. While the scheme's impact is still emerging, experience from overseas indicates that such policies have unintended adverse economic consequences.

In July 2014, the WA Economic Regulatory Authority (ERA) released its *Inquiry into Microeconomic Reform in Western Australia* report.

This recommended that the WA Government rescind the domestic gas reservation policy as soon as possible. The ERA found no evidence of a market failure to justify gas reservation.

In March 2015, a Productivity Commission research paper – *Examining Barriers to More Efficient Gas Markets* – found policies aimed at counteracting pressures from export markets could distort important signals for structural adjustment. Therefore, domestic gas reservation and similar protectionist policies are unlikely to be efficient or effective in the long run.

The Commission argued that governments should recognise that interfering with market signals could undermine incentives to invest in operations that would increase gas supply.

Despite these findings, the WA Government ruled out any changes to the policy.

During 2014-15, WA's Independent Market Operator (IMO) continued its operation of initiatives designed to enhance the security, reliability and availability of the state's gas supply.

The WA Gas Bulletin Board website includes information on the WA gas market's transmission and its short and near-term supply and demand.

The WA Gas Statement of Opportunity (GSOO) is a periodic statement that includes information and assessments on the state's medium and long-term natural gas supply and demand, and its transmission and storage capacity. The December 2014 GSOO report showed WA has more than enough gas and processing capacity to meet a range of demand scenarios.



The Karratha gas plant in Western Australia.

Victoria

Following the change of Government in November 2014, the new Victorian Government tasked the Legislative Council Environment and Planning Committee with an *Inquiry into Unconventional Gas in Victoria*.

Issues the Committee is examining include the operation of the gas market in Victoria and the wider east coast gas market.

APPEA appeared before the Committee in July 2015 to highlight:

- gas market developments;
- the importance of removing the existing moratorium on onshore gas exploration and production;
- the effective operation of the gas market; and
- the need for further supply to put downward pressure on gas prices.

APPEA enlisted the support of various gas user industry groups to also make this case.

The Committee is due to provide its report to the Parliament by 1 December 2015; the Victorian Government is expected to provide a response in early 2016.

New South Wales

For three years, Australia's oil and gas industry has been warning that poor NSW energy policies and regulations would reduce investment in the state's gas operations and lead to higher-than-necessary east coast gas prices.

In February 2015, as part of the *Inquiry into the Supply and Cost of Gas and Liquid Fuels in New South Wales*, APPEA appeared before the NSW Parliament's Legislative Council Gas and Liquid Fuels Supply Committee.

APPEA argued that eastern Australian gas prices are now rising due to several factors, including increased supply costs and restrictions on companies' access to resources.

APPEA reiterated that NSW natural gas exploration and production must be expanded to put downward pressure on rising gas prices.

The Committee's final report recommended improving transparency and openness in the NSW and eastern Australian gas markets. It also recommended that the NSW Government pursue an Australia-wide domestic gas reservation policy.

In August 2015, the NSW Government responded, rejecting gas reservation but supporting in-principle recommendations around transparency and openness.

Northern Territory

In October 2014, the Northern Territory Government started a formal bidding process for building and operating a gas pipeline – the North East Gas Interconnector (NEGI) – to link the Territory's gas resources to the eastern states market.

In November 2014, the NSW and NT governments signed a Memorandum of Understanding, agreeing to work closely to accelerate and promote development of this pipeline.

In April 2015, the NT Government shortlisted four proponents to provide detailed bids by 30 September 2015; and on 17 November 2015, it announced that it had selected Jemena Northern Gas Pipeline Pty Ltd to construct and operate the NEGI.

The pipeline will cost \$800 million to build. It will run for 622km between Tennant Creek, Northern Territory and Mount Isa, Queensland.

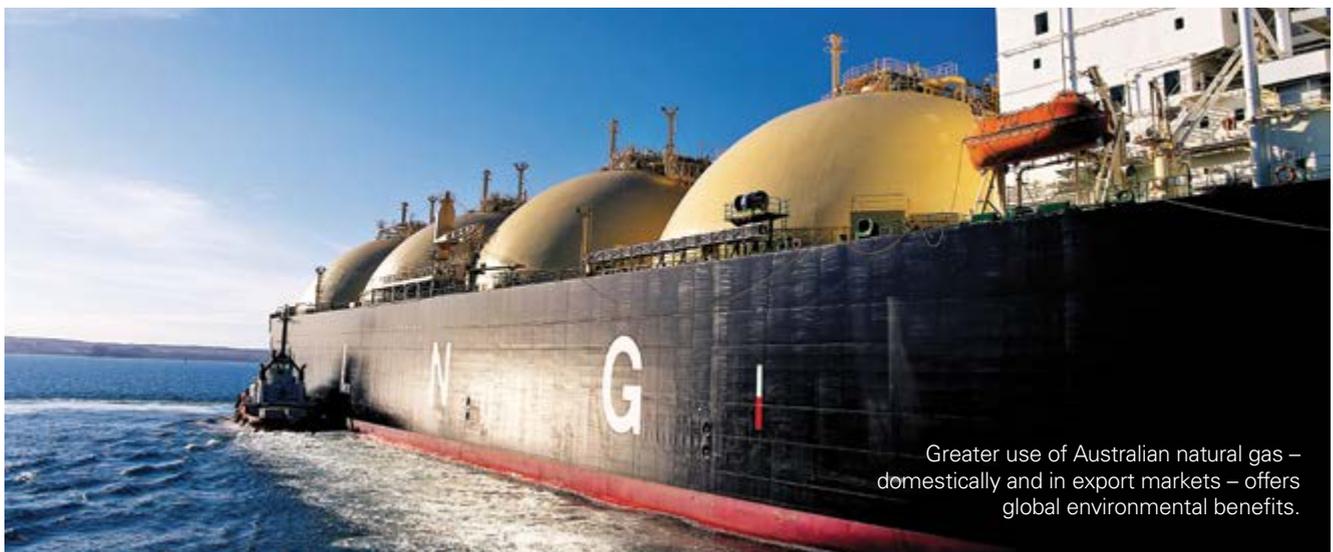
The NT Government said the project would not need to be underwritten by taxpayers. APPEA supports developing infrastructure that will facilitate the growth of Australia's gas markets, providing that such infrastructure is commercially viable.

APPEA notes that governments have an important role to play in attracting investment by eliminating unnecessary costs and regulation and providing timely and efficient approvals processes.

NSW natural gas operations must be expanded to put downward pressure on rising gas prices.

Climate change policy

In 2014-15, APPEA worked with the Commonwealth, the states and the Northern Territory on a range of climate change policy issues.



Greater use of Australian natural gas can significantly reduce greenhouse gas emissions, while also enhancing energy security and delivering other environmental, economic and social benefits, both in Australia and in LNG customer nations.

Climate change policy should deliver carbon abatement at least cost. APPEA continues to work to ensure that climate change policy does not hinder the Australian oil and gas sector's domestic or international competitiveness.

In 2014-15, APPEA worked with the states and territories on a range of climate change policy issues. In particular, APPEA contributed to climate change policy arrangements in Western Australia, Queensland and Victoria.

APPEA advocates that states avoid duplicating national policy approaches and remove policies that do not complement the national approach.

Clean energy legislation

Following the election of the Abbott Government in September 2013, legislation was introduced to repeal the carbon pricing mechanism and to develop and implement an alternative approach, the Emissions Reduction Fund.

In July 2014, Parliament passed legislation to repeal the existing *Clean Energy Act 2011*. This removed a cost imposed upon Australian LNG exporters that was not faced by their international competitors.

Energy Efficiency Opportunities (EEO) program repealed

In September 2014, Parliament passed legislation to repeal the *Energy Efficiency Opportunities Act 2006* and the Energy Efficiency Opportunities (EEO) program. APPEA has long maintained that the EEO imposed a range of unnecessary administrative and compliance costs on participants that did little to enhance energy efficiency. It required large energy-using businesses to assess their energy use and to identify and report on cost-effective energy savings opportunities.

But oil and gas companies already have strong business reasons for minimising their energy use. The industry has a long history of reducing the energy intensity of its activities and making its energy production more efficient. APPEA member companies already have broad-ranging energy management policies, systems and measurement indicators that are integral to their operational performance.

Emissions Reduction Fund (ERF)

The Emissions Reduction Fund is designed to drive private sector investment to achieve emissions reductions. The ERF White Paper, released in April 2014, sets out the Government's positions on the fund's design and implementation and its ongoing development.

The ERF's design has been guided by three principles:

- **Lowest-cost:** the ERF will seek to identify and purchase emissions reductions at least cost.
- **Genuine reductions:** the ERF will purchase emissions reductions that genuinely contribute to reducing Australia's greenhouse gas emissions.
- **Streamlined administration:** the ERF is intended to make it easy for businesses to participate.

Two elements of the ERF – crediting emissions reductions and purchasing emissions reductions – started on 1 July 2014. The first ERF Auction was held in April 2015. The Clean Energy Regulator awarded 107 Carbon Abatement Contracts to deliver a total of 47.3 million tonnes of abatement. The total value of contracts awarded was \$660.5 million. The average price per tonne of abatement was \$13.95. A second auction was held in November 2015.

The third element of the ERF – the safeguard mechanism – is proposed to begin operating from 1 July 2016 (following a delay from the initial starting date of 1 July 2015). This mechanism is designed to ensure that emissions reductions are not displaced by significant increases in emissions elsewhere in the economy. It involves setting emissions baselines based on the highest emissions over the past five years and ensuring that a facility's emissions do not exceed this baseline. According to the White Paper, the mechanism will be restricted to about 130 facilities with direct carbon dioxide emissions of 100,000 tonnes or more per year.

Unless its development is managed carefully, the safeguard mechanism could impose costs on the LNG industry that overseas competitors do not face. In 2014-15, APPEA met with the Minister for the Environment and the Department of the Environment on several times ahead of the passage of legislation in October 2014 to establish the framework for the mechanism.

In March 2015, the Government released a consultation paper seeking feedback on the design of detailed rules to implement the mechanism.

APPEA had discussions with the Government, the Department and other interested parties to ensure the mechanism did not impose inappropriate cost burdens on the industry and that further development of the ERF would make Australia's more competitive in attracting oil and gas investment.

Review of the Renewable Energy Target

In 2014-15, APPEA participated in a review of the Renewable Energy Target (RET). APPEA's submission maintained reiterated that the RET is an inefficient policy that should be discontinued.

APPEA also recommended maintaining the existing exemption from RET obligations for those generating their own electricity on site (such as some LNG facilities) and improving the treatment of trade-exposed industries, such as LNG, that draw electricity from the grid and face RET costs.

After months of negotiation, the Government and the Opposition agreed to a package of amendments to the RET legislation.

Legislation passed in June 2015 reduced the burden of the RET, increased the exemption for existing emissions-intensive trade-exposed industries to 100 per cent, and maintained the existing exemption for self-generation of electricity.

But the Government and Opposition have not yet agreed to an amendment to the definition of LNG production that would ensure all aspects of LNG production, particularly those that do not take place at the LNG plant, are eligible for the exemption. APPEA will continue to advocate for this amendment.

The Australian Industry Greenhouse Network

APPEA is part of the Australian Industry Greenhouse Network (AIGN), a group of industry associations and businesses that coordinates industry action on climate change policy issues to promote sustainable industry development.

In 2014-15, the AIGN provided input to numerous submissions, with a particular focus on the development of the ERF.

National Greenhouse and Energy Reporting (NGER)

A CSIRO report for the Department of the Environment, released in August 2014, found greenhouse gas emissions from Australian CSG production wells were very low, especially when compared to the volume of gas produced from the wells.

CSIRO scientists measured fugitive methane emissions from many production wells in Queensland and NSW. The CSIRO found that actual measurements for identified equipment leaks yield emission factors that are consistent with those used in the NGER methodology for estimating equipment leaks.

In December 2014, the Government released National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No.1).

This proposed minor amendments to the National Greenhouse and Energy Reporting (Measurement) Determination 2008 that would apply to the reporting year 2015-16, which would affect NGER reports to be submitted in October 2016.

The amendments updated Global Warming Potentials adopted by the Parties to the UN Framework Convention on Climate Change and its Kyoto Protocol, and reflected values used in the Intergovernmental Panel on Climate Change's Fourth Assessment Report. They also provided additional methods for estimating emissions from carbon capture and storage.

In May 2015, the Department of the Environment released an exposure draft of National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2).

Schedule 1 and 2 of the National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2) will apply to the reporting year 2015-16 and would affect NGER reports to be submitted in October 2016.

Schedule 1 and 2 of the draft amendments contained in this document aim to refine guidance on applying methods for estimating coal mine waste gas fugitive emissions; include a Method 2 option for estimating fugitive emissions from oil and gas operations; clarify methods for estimating scope 2 emissions from network operators' consumption of purchased electricity; and finalise additional methods to complete NGERs guidance for estimating emissions from carbon capture and storage activities.

APPEA's June 2015 submission on the exposure draft points out several technical errors with the proposed Method 2 for estimating fugitive emissions from oil and gas operations. Following this, the Department has confirmed these errors will be corrected before amendments proceed.

Schedule 3 of the National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2) will apply to the reporting year 2016-17. This would affect NGER reports to be submitted in October 2017.

International developments

In November 2014, the Intergovernmental Panel on Climate Change released its Synthesis Report of the Fifth Assessment Report. This found: "GHG emissions from energy supply can be reduced significantly by replacing current world average coal-fired power plants with modern, highly efficient natural gas combined-cycle power plants or combined heat and power plants, provided that natural gas is available and the fugitive emissions associated with extraction and supply are low or mitigated."

In March 2015, the Australian Government began reviewing its emissions reduction targets in preparation for the UN Climate Change Conference in December 2015, where negotiations on a new global climate agreement will conclude. A UN taskforce released an issues paper for the review in March 2015. APPEA's submission to the taskforce – lodged in April 2015 – highlighted the role of natural gas as a lower emissions energy source and the need to maintain Australia's international competitiveness. APPEA also participated in a May 2015 Ministerial Roundtable that discussed this issues paper.

In August 2015, the Government released its final 2030 emissions reduction commitment – a 26-28 per cent reduction in emissions from 2005 levels. This will require reducing emissions by about 900 million tonnes from 2020 to 2030.

The policies and programs that might be used to deliver this commitment remain a key area of ongoing focus. Now that Australia's 2030 emissions reduction commitment has been announced, focus has turned to the status of international negotiations and the prospects for the upcoming UN Climate Change Conference.

Taxation and commercial

A stable and competitive fiscal regime is essential to underpin oil and gas investments, which can often require decades to generate positive economic returns.

Taxes are significant in determining whether companies will commit the funds needed for ongoing exploration and production activities.

APPEA's 2013-14 Industry Financial Survey found the industry's after-tax profitability has fallen. This partly reflects the recent levels of capital investment in LNG projects.

The industry continues to be a major payer of taxes and governments charges. Over the past five years, payments have exceeded \$8 billion per annum.

Engagement with governments

During 2014-15, APPEA continued working closely with member companies, government agencies and other stakeholders on an increasing number of taxation policy and administration issues.

APPEA is represented on several governmental groups, including the Oil and Gas Taskforce, which provides a formal interface with Federal Treasury; the Australian Taxation Offices' Energy and Resources Working Group, which is responsible for liaising with industry on tax administration and compliance; and the Queensland Office of State Revenue's Resource Consultative Committee, which is responsible for industry liaison on that state's petroleum royalties. APPEA is also represented on a range of other groups.

National Tax Review

In 2014, the Federal Government announced a comprehensive review of the Australian Taxation System. A detailed discussion paper released in early 2015 covered the Australian taxation system, including areas of business taxation.

APPEA's submission to the first phase of the process addressed several issues, including the immediate deductibility of exploration costs, the need for a globally competitive depreciation regime and a proposal to harmonise various state-based charges.

The review will be critical in shaping the tax reform policies that the major political parties will pursue over the coming decade.

Federal Tax Transparency Project

Legislation requires the Australian Taxation Office to publish information about corporate tax entities with annual total income of \$100 million or more.

The ATO must now report these entities' total income, taxable income and income tax payable each year. This includes information about PRRT payments.

APPEA has worked closely with other representative bodies and the ATO to ensure that the final provisions allow for the presentation of material in context and that adequate supporting documentation is in place to allow interested parties to understand the operations of both the income tax and PRRT regimes.

In addition to this project, the broader question of tax transparency is receiving increased attention as governments and non-government organisations seek to increase their focus on corporations' tax affairs.

A series of projects and processes, including a Senate inquiry into corporate tax avoidance, will require companies to assure the community that they are meeting their tax obligations, but they must also ensure that any public disclosure does not undermine confidentiality and commercial considerations.

Cash bidding for exploration acreage

APPEA continues to argue that the work program bidding system should be the basis for the release of all Australian exploration acreage (both offshore and onshore). This system has served Australia well and has helped the nation become a leader in the supply of gas to both domestic and global markets. The results of the first round of offshore acreage released under cash bidding in 2015 support APPEA's concern about the use of this form of tenure allocation. The released areas failed to secure any successful bids. In addition, APPEA remains opposed to both the use of a reserve price system and the complex requirements associated with registering to bid.

Company tax

Definition of exploration – income tax

The scope and definition of exploration for income tax purposes is critical for the industry. Discussions have long been ongoing with the Australian Taxation Office. APPEA is seeking a satisfactory resolution of the issue that provides companies the clarity they need to make informed decisions. APPEA advocates a definition that reflects that exploration is intended to generate commercially recoverable reserves of oil and gas. It is expected this will be largely resolved during 2015-16.

Treatment of realignments and farm-ins

In 2013, a measure was announced to restrict the immediate deduction for the cost of assets first used for exploration, by excluding certain petroleum (mining) rights and information. Since then, there have been ongoing discussions with Treasury on how this would be applied. The first tranche of legislation – passed by Parliament in June 2014 – deals with 'unsuccessful' exploration. The second tranche – released for public comment by Treasury in early January 2015 – deals with the tax treatment of project realignments and revises existing rulings covering farm-ins and farm-outs.

APPEA provided detailed commentary on the proposed measures needed to minimise taxation consequences arising from permit and project realignments and ensure farm-in transactions do not impose distortionary taxation consequences.

The measures have now been passed by Parliament.



The Pyrenees oil project.
Courtesy BHP Billiton Petroleum.

Petroleum resource rent tax (PRRT) and production excise

Taxation ruling – scope and definition of exploration

In December 2014, the ATO released a final taxation ruling on the definition and scope of exploration for PRRT purposes. Following protracted discussions, a final ruling confirmed the ATO's narrow view of what constitutes exploration.

Previously, a range of feasibility activities had previously been accepted as being part of exploration.

Importantly, the new definition applies to expenditures incurred after 21 August 2013 (the date the ATO first proposed the adoption of a new definition).

Some expenditures incurred after this date will no longer be regarded as being exploration expenditure for the purposes of the PRRT Act. They will be subject to different (lower) compounding rates and will not be transferable to other PRRT projects held by a taxpayer.

The change's greatest impact is expected to be upon feasibility costs.

APPEA's key objective is to ensure that the carry-forward rate for such costs reflects the risk of pre-final investment decision feasibility activities and that costs do not become quarantined in projects that do not proceed.

APPEA is now liaising with Treasury on this matter.

Removing production excise obligations is consistent with the Government's commitment to remove unnecessary and duplicative red tape.

PRRT – deductible expenditure

A key area of uncertainty associated with the PRRT regime is the general question of what constitutes 'deductible expenditure'.

This is critical for several reasons, including determining the types of expenditure that are 'excluded' and therefore are not deductible. The definition of 'excluded' expenditure has been unresolved for more than a decade.

The ATO prepared a discussion paper outlining its initial views and circulated this to APPEA in late 2014. APPEA subsequently provided detailed commentary on several important concepts raised in the paper, including the methodology to be used to determine the broad approach to ascertaining deductions under the legislation.

In addition, APPEA provided examples of the types of activities that should be either deductible or non-deductible for PRRT purposes. In 2015-16, further discussions will be held to resolve this fundamental issue.

Extension of PRRT onshore

APPEA continued to work closely with the ATO during the year regarding aspects of the extension of PRRT to cover onshore permits and activities.

The decision to extend the regime has produced a range of complexities that were not anticipated at the time the decision was made in 2010.

APPEA is seeking to resolve a range of technical issues and assist in the provision of guidance to ensure companies (large and small) can operate with the required degree of certainty.

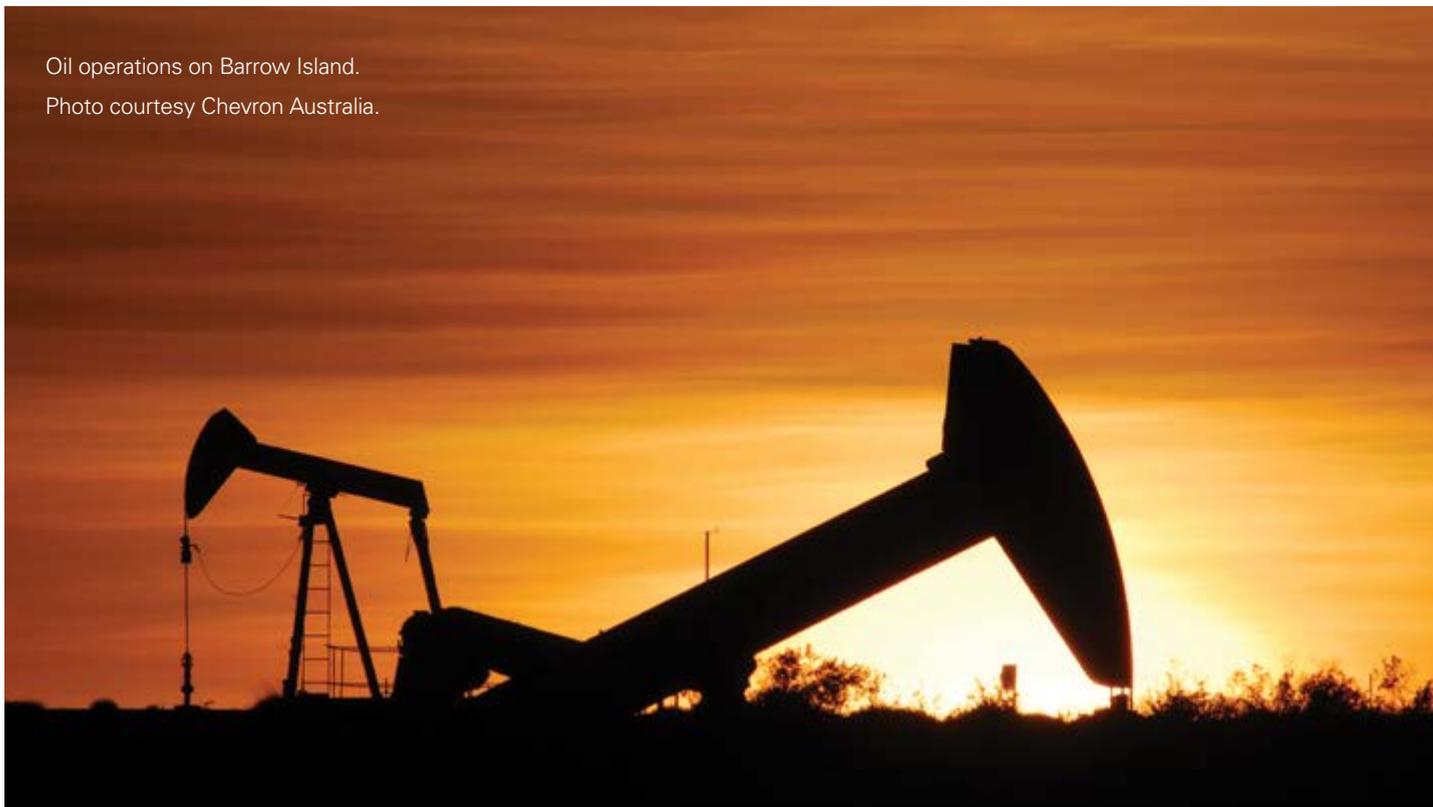
Production excise

APPEA continues to pursue the abolition of the crude oil and condensate excise for production sourced from all areas onshore and from fields within state waters areas.

As the PRRT regime now applies to all upstream oil and gas operations in Australia, it is both timely and appropriate to abolish the excise regime, particularly where no liability exists.

Removing the obligations would also be consistent with the Government's commitment to remove unnecessary and duplicative red tape.

Oil operations on Barrow Island.
Photo courtesy Chevron Australia.



State and territory petroleum royalties

Northern Territory petroleum royalties

In early 2015, the Northern Territory Government approached APPEA and member companies, seeking comment on the possible introduction of an accounting-based ‘profits’ regime to replace the existing ad valorem petroleum royalty system.

It was proposed that the new regime would apply to new projects and existing projects could opt to transition into the regime.

Discussion involving APPEA, several member companies and the NT Treasury covered this proposal as well as aspects of the existing ad valorem petroleum royalty regime which is currently being administered in a way that limits deductions in any royalty period. This effectively introduces a minimum royalty liability regardless of a project’s commercial viability.

At a follow-up workshop in April, industry expressed a general preference for retaining the existing royalty regime over a new profits-based system. Discussions continue.

South Australia petroleum royalties

In February 2015, the South Australian Government released a discussion paper on state taxation reform options. The review covered all forms of taxation and charges within the state, with stimulating investment being a key objective. APPEA’s submission identified several issues regarding petroleum production royalties, including the future application of royalties to unconventional gas production.

Queensland petroleum royalties

In mid-December 2014, APPEA and member companies with operations in Queensland were advised that the Queensland Office of State Revenue (OSR) had agreed to extend an amnesty for penalties associated with previously lodged royalty returns. This will apply for the period until the release of new royalty rulings to allow royalty payers to assess their respective positions. APPEA and members have also been working closely with OSR on several interpretative aspects of the current regime. This process has become increasingly protracted and more complex than originally envisaged. The industry remains very concerned about OSR’s general approach in interpreting key royalty provisions.

Safety and health

APPEA programs support excellence in the Australian oil and gas industry's health and safety performance.

APPEA works with members and key stakeholders to improve the efficiency and effectiveness of regulation, share good practices to address health and safety risks, and develop new programs and initiatives to continuously improve the industry's health and safety performance.

Since 2007, APPEA has worked with the industry to achieve a significant improvement in personal safety performance. Industry-wide and company-specific initiatives have successfully reduced injury rates while work hours have tripled.

The oil and gas industry has one of the lowest injury and fatality rates of any industry in Australia. But the international oil and gas industry's injury rates, reported through the International Association of Oil & Gas Producers (IOGP) set the world standard. APPEA continues working with its members to drive further improvements to match this world standard.

APPEA coordinates several specialist safety network groups. There include the APPEA HSO Committee, the Safety Case Drilling Industry Steering Committee, the Human Factors Subcommittee, the Safety Performance Reporting Subcommittee, and the Aviation/Search and Rescue Working Group.

It also continues to collect and publish data on industry high-potential incidents to foster rapid transfer of lessons between oil and gas industry companies.

Safety databases

Each year APPEA collects safety performance data from its member companies and all of their contractors.

In 2014, APPEA's Health, Safety and Operations Committee agreed to align APPEA's safety performance data reporting with IOGP guidelines in order to better benchmark the Australian oil and gas industry's safety performance globally.

As part of this process, APPEA is now establishing a new online reporting portal system that will be flexible, intuitive, interactive and easy to use.

The portal will let members extract safety performance reports immediately according to their specific requirements.

Members began retrospectively entering data into the portal from September 2015.

APPEA will resume reporting on safety performance data from 2015-16, but will place more focus on high-potential incidents and process safety indicators.

New focus on process safety and preventing major accident events

Australia's oil and gas industry is heavily focused on improving its process safety performance.

Process safety involves the controls or barriers that ensure containment of hydrocarbons and chemicals in plants, pipes or wells and prevent major accidents occurring. It requires the application of sound engineering, design and operating practices.

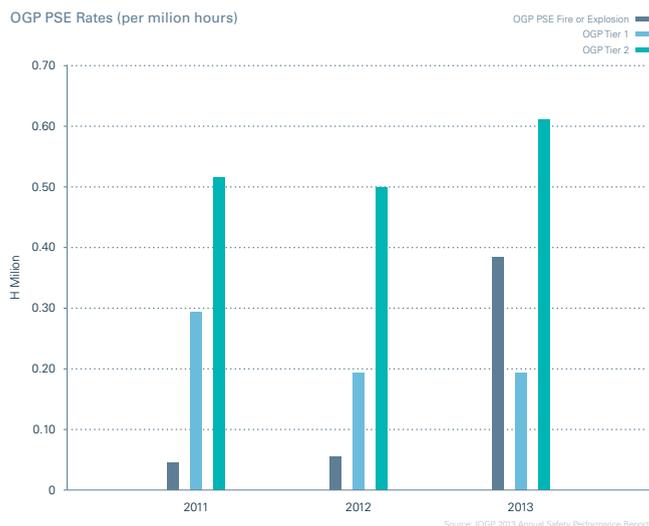
The industry faces some major challenges in this area:

- Critical assets are ageing, requiring decommissioning or plant-life extensions;
- New technologies are being deployed;
- Several new large projects are becoming operational;
- In some locations, construction and production are occurring simultaneously; and
- Cost pressures are mounting.

Industry leaders have agreed that they must take advantage of the lessons and experience gained from the industry's persistent and successful focus on personal safety, and convert this into a leadership program for addressing process safety challenges.

Safety metrics

International oil and gas industry process safety performance data shows no discernible improvement in performance since data collection began in 2011.



The National Offshore Petroleum Safety and Environment Management Authority (NOPSEMA) collects similar data for offshore operations in Commonwealth waters. It also shows a similar lack of discernible improvement over an extended period.



This data captures “lag indicators” in process safety, such as fires, explosions and hydrocarbon releases. From 2015-16, APPEA’s new safety data portal will also collect such metrics.

Lag indicators measure events that have occurred and their consequences (such as lost hours, injuries and fatalities). But using only lagging indicators of safety performance fails to measure how well a company or industry is doing at preventing incidents and accidents.

In contrast, leading indicators focus on future safety performance and continuous improvement. These measures show what people and organisations are doing on a regular basis to prevent accidents and injuries. They indicate proactive systems and behaviours, and they aid risk assessment and prediction of possible events.

Process safety events usually occur as a result of a combination of ‘hard to see’ and often complex factors. The relative rarity of these events means the absence of an incident is no predictor of the risk of an event. Therefore, Australian petroleum industry leaders and regulators have identified that the effective lead indicators must be developed.

In 2014-15, the IChemE Safety Centre (ISC) developed a common set of leading metrics for process safety. These are designed to be qualitative, which enables adoption by a diverse range of companies across multiple industries. See www.ichemesafetycentre.org or www.stfs.com.au for more information.

The Institution of Chemical Engineers (IChemE) is a UK-based organisation that oversees the chemical engineering profession internationally. In 2013, several APPEA member companies agreed to work with IChemE and fund the establishment of the ISC for an initial three years through APPEA. The ISC is broadening its member base and networks around the world to foster leading-edge thinking in process safety on a global basis. This is an opportunity for APPEA members to contribute to global best practice.

Effective lead indicators must be developed for measuring safety performance

Stand Together for Safety (STFS)

At the direction of the 2014 CEO Safety Leadership Forum – which comprises chief executives from exploration and production companies and from major contractors – APPEA’s Stand Together for Safety brand has shifted from being an annual industry-wide stop-work safety event.

STFS is now an ongoing safety leadership program that engages industry leaders, workers, contractors, regulators and safety experts to help prevent major accident events and eliminate fatalities.

Its initial priority is a focus on process safety. STFS is intended to foster an industry-wide discussion around process safety and develop a common understanding of this issue. It emphasises that every worker in the industry has a responsibility to verify the ongoing effectiveness of safety critical controls or barriers. International research shows that this is as significant as engineering solutions in preventing process safety incidents.

An STFS video – *Process Safety – Who’s Responsible?* – was launched in September 2014 at APPEA’s HSE Conference in Perth. This video has been taken up widely across the global oil and gas industry, translated into other languages, and used in university programs for chemical engineers.

The STFS Steering Committee has endorsed the development of Process Safety – a Good Practice Guide – a template and overarching implementation plan for improving process safety performance across the Australian oil and gas industry. This guide will use the proven successes from the personal safety management approach and will define “golden rules” for process safety and the behaviours associated with these rules. It is expected to be released before the end of 2015.

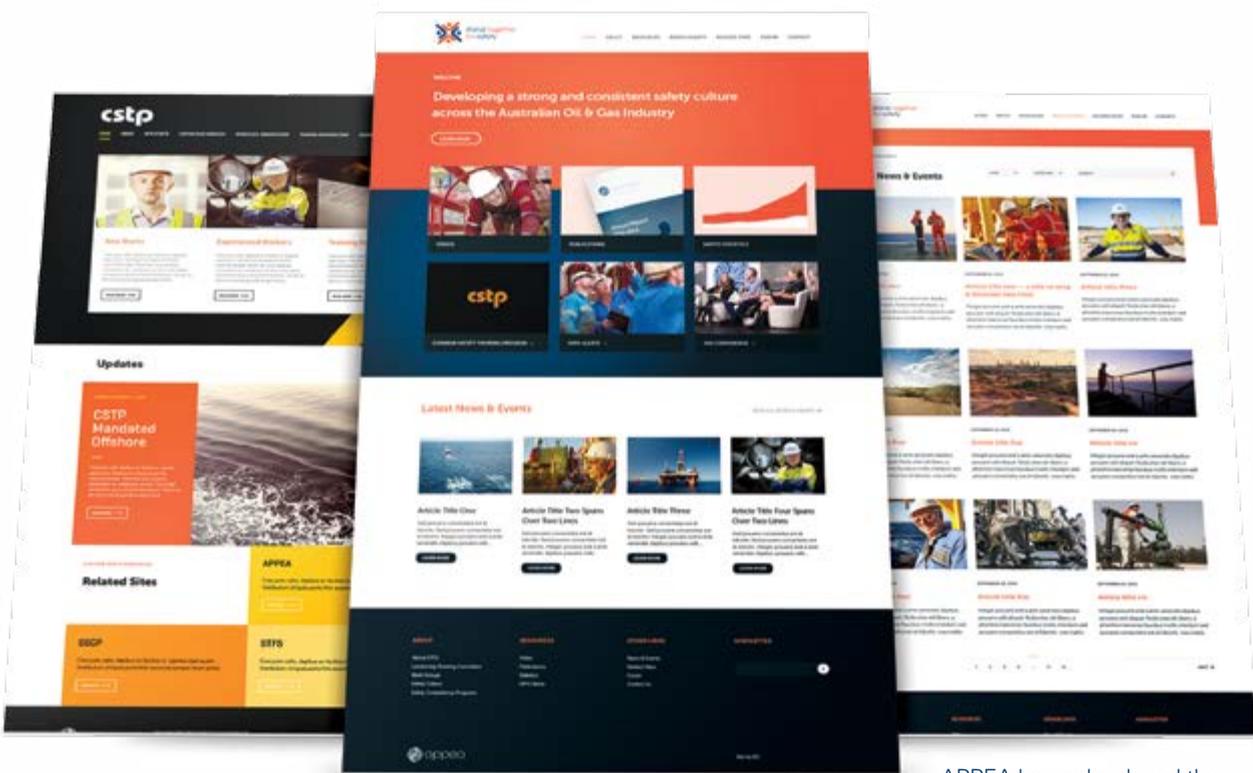
New materials, resources and toolkits are being developed and will be rolled out under the STFS leadership banner. These practical solutions will have industry-wide application.

APPEA redevelops safety websites

The Common Safety Training Program and Stand Together for Safety websites have been extensively redeveloped and relaunched – see www.cstp.com.au and www.stfs.com.au.

These new websites are designed to be more user-friendly, to have distinctive styles appropriate to their subject matter, yet also to be consistent with other APPEA websites.

The STFS website also now acts as a general safety portal with an emphasis on safety culture and process safety.



APPEA has redeveloped the STFS and Cstp websites.

Safety training programs

Common Safety Training Program (CSTP)

In May 2015, the 8000th participant completed the Common Safety Training Program.

CSTP is recognised as a world leader among industry safety training programs.

It provides fully immersive, workplace simulation and a hands-on approach to developing safety skills and establishes a common safety culture from the onset of a worker's career in the oil and gas industry. The immersive learning is then backed up by trainees demonstrating key safety behaviours in their own workplaces and having their supervisors sign off on workplace observations.

Following a 2014 review, changes to the CSTP program were implemented on 1 April 2015.

The safety modules and assessment processes have been updated. The most significant changes are the separation of offshore specific training, inclusion of some process safety awareness, and a streamlining of processes.

Experienced workers no longer need to attend a one-day course. The three-day course has been updated and continues for people new to the industry.

The CSTP national database has been moved into a new data management program, Vantage POB, which is used by 64 oil and gas operators globally, as well by as many Australian oil and gas training organisations.

Using the Vantage POB system has reduced the handling of data; reduced the time between completing training and uploading critical information into a central database; and freed up resources to focus on providing greater industry advice and support. Vantage POB will also ensure complete confidentiality of data while enhancing portability of training records.

The next phase of development for CSTP will focus on integrating new process safety risk awareness content from the Stand Together for Safety program.

Significant changes have been made to the CSTP and SSCP programs.

Safe Supervisor Competency Program (SSCP)

With the offshore oil and gas industry now moving out of the construction phase and into production, in 2014-15 the Industry Advisory Group reviewed the Safe Supervisor Competence Program (SSCP).

Consultation with industry confirmed that:

1. The program's safety leadership content is considered to be excellent.
2. There is demand for a common benchmark for safety leadership skills.
3. SSCP's on-the-job component is far too complex and costly.

Following this review, significant changes will be made to the program and these will take effect on 1 November 2015.

SSCP has been re-established as an entry-level program, providing a benchmark for common safety leadership skills across the Australian oil and gas industry. Companies can also use it to help select personnel best suited to move into more extensive in-house supervisory training.

SSCP remains as a guideline for developing safe and competent frontline supervisors. But is no longer limited to the offshore construction and installation sector. Instead, it is now available to any prospective and existing supervisors or frontline leaders in the oil and gas industry.

To obtain an SSCP card, participants must now demonstrate safety leadership behaviours in a work-simulated training environment with an approved SSCP training organisation. They will no longer have to be assessed in on-the-job-observations. SSCP cards will be issued by approved training organisations rather than by APPEA.

For more information, see www.stfs.com.au

Environmental management

APPEA has coordinated efforts to further improve the industry's environmental performance.

Oil Spill Response Forum

The APPEA Oil Spill Response (OSR) Forum was established in 2013 to support joint industry initiatives and enhance information sharing between OSR specialists. In 2014-15, the forum released a document, *Sharing Environmental Solutions: planning for dispersant use in oil spill response – an Australian perspective*.

It also held three events:

- An operators' workshop on oil spill impact assessment;
- A workshop to consider the use of remote surveillance technologies for oil spill monitoring and response; and
- The first Oil Spill Response Forum seminar, which drew more than 70 participants.

Marine stakeholder engagement

In November 2014, APPEA and five peak commercial fishing and seafood industry associations signed a Memorandum of Understanding. This set out a cross-industry engagement framework aimed at:

- Establishing a cross-industry roundtable;
- Discussing and developing joint policy frameworks; and
- Identifying, developing and delivering joint initiatives.

The major goals include:

- Emphasising common ground shared by the two industries, such as a desire for evidence-based approaches to regulation and public engagement;
- Seeking ways to modify consultation processes so that they are more effective and efficient for both industries;
- Finding a science and researched-based pathway to explore concerns about marine seismic surveying; and
- Pursuing practical solutions to continually improve maritime vessel interactions.

The signatories included the WA Fishing Industry Council, the Commonwealth Fisheries Association, Seafood Industries Victoria, the Northern Territory Seafood Council, Wildcatch Fisheries South Australia, and APPEA.

Marine Environmental Science Program

The industry's Marine Environmental Science Program has commissioned several research projects, including:

- *Underwater Sound and Vibration from Offshore Petroleum Activities and its Potential Effects of Marine Fauna: an Australian perspective* – awarded to Curtin University's Centre for Marine Science and Technology;
- *Understanding the potential consequences of unplanned discharges: the Australian context* – awarded to BMT Oceanica; and
- *An Oil Spill Response Capacity and Preparedness Review of the Australian Offshore Upstream Oil and Gas Industry* – awarded to Social Resources.

These projects will deliver their findings in 2015-16. More projects will soon be considered for commissioning.

IGEM meta-database system

For any data set, there is metadata – or information on where, when and how the data is collected, who owns it, where it is stored, and so on. Sharing environmental data can pose legal, commercial, regulatory and practical difficulties. But sharing metadata is less problematic and still offers significant benefits.

In a 2013 pilot project, several APPEA member companies, marine research institutes and Western Australian government agencies shared key marine environmental meta-datasets online. In 2014 the participants agreed to develop a full system.

The Industry-Government Environmental Meta-database (IGEM) system will enable quicker identification of data sets for environmental planning and spill response following an oil spill. Subscribers will be able to search for relevant environmental studies by: research activity in a specific area; the date it was collected; the organisation that collected the data; type of data; and key words. Seven operator members have signed up through APPEA for IGEM and two others have expressed interest. The WA Marine Science Institution will develop and host the new system, which is intended to go live by early 2016.

Environmental regulation

Throughout 2014-15, APPEA worked with governments to achieve more efficient environmental regulation regimes.

APPEA continues to advocate for the removal of significant areas of overlap and costly duplication between Commonwealth and state/territory jurisdictions. Regulatory reform can deliver significant efficiency changes without impairing environmental outcomes. Achieving streamlined regulation and reducing inefficient duplication and inconsistency between regulators will redirect resources and efforts to actual environmental benefit in place of bureaucratic process. APPEA will continue to advocate in all jurisdictions for this process.

Financial assurances

The Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures No. 2) Act 2013 enshrines the “polluter pays” principle. This compels offshore titleholders to demonstrate an appropriate financial capacity for managing the cost of avoiding, containing or abating potential pollution.

APPEA has worked with the Commonwealth Department of Industry and Science, as well as the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), to develop practical and effective financial assurance guidelines. These enable titleholders to quickly determine the credible costs, expenses and liabilities that may arise from their operations and the financial assurances required by the regulator. NOPSEMA and an independent review process have validated APPEA’s *Method to Assist Titleholders in Estimating Financial Assurance*. On 1 January 2015, NOPSEMA implemented the new financial assurance provisions of environmental regulations under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*.

This development of an industry-led methodology and its independent validation by government shows how government, regulators and the industry can work together to develop robust and efficient regulatory frameworks. In 2016, industry will review the guidelines to maintain their applicability.

NOPSEMA Review

In April 2015, Environmental Resources Management Australia began an independent review of NOPSEMA’s performance in meeting the objectives of the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.

Its report – tabled on 10 September 2015 – found NOPSEMA is a generally effective regulator that has improved safety and environmental outcomes. Further streamlining is proposed by removing duplication between the Commonwealth EPBC Act and State and Territory environmental regimes. This requires negotiating assessment and approval bilateral agreements between the Commonwealth and the states and territories.

Commonwealth Marine Reserve Review

The review into the Commonwealth Marine Reserves began in September 2014 and arose from the Government’s 2013 election policy to “appoint an expert scientific panel to review the science supporting the boundary area for each zone” and to deliver a “more competitive and sustainable fisheries sector”. For more information, see page 8.

Biosecurity Bill 2014

In November 2014, the Australian Government put forward *Biosecurity Bill 2014* to replace the century-old *Quarantine Act 1908*. Federal Parliament passed the bill in May 2015.

Under this legislation, the international waters classification shifts from the Exclusive Economic Zone (200 nautical miles from the coast) to “Australian waters” (12 nautical miles from the coast). There are concerns that without appropriate risk-based regulation, this change would impose unnecessary costs and burden on vessels and aircraft servicing the 66 industry facilities lying outside the 12 nautical miles zone, which were not previously covered by the legislation. These journeys would effectively be considered international voyages, but previously they were treated as domestic.

The Government has given a commitment to APPEA that it intends to establish a system of exemptions and other arrangements to minimise unnecessary impacts and costs on the oil and gas industry.

APPEA continues to work with the Commonwealth Department of Agriculture to identify optimum risk-based options for oil and gas operations, including exemptions.

Safety and environment awards

APPEA HSE Awards

The APPEA Health, Safety and Environment Awards are presented at the annual APPEA National Health, Safety and Environment Conference.

These awards demonstrate how companies are continuously raising the bar in health, safety and environment performance, sharing best practice and providing inspiration to the entire industry.

The HSE Awards are for specific initiatives, which may be collaborative across organisations or projects.

They are open to individuals, teams and companies from across the whole of industry.

Submissions ranged from high-level management and system improvements that affected the whole of an organisation to very practical frontline innovations.

All finalist entries were featured in a poster presentation at the 2014 APPEA National Health, Safety and Environment Conference and HSR Forum.

The winner of the 2014 APPEA Health and Safety Award was Woodgroup for *Improving subcontractor safety performance*.

The Industry Choice Award for Health and Safety was presented to Weatherford Australia and Workforce Safety Products for their initiative, *Hand Safety – Exceeding Industry Best Practice*.

INPEX received the 2014 APPEA Environment Award and the Industry Choice Environment Award for *Ichthys LNG Project Environmentally and Socially Successful Dredging Program*.

Companies are continuously raising the bar in HSE performance.



The Safety Excellence Award and the Environment Excellence Award are given to APPEA full member companies for displaying organisational excellence in a calendar year.

Safety Excellence Award

ExxonMobil Australia received the APPEA Safety Excellence Award at the APPEA 2015 Conference Dinner in Melbourne on 19 May.

The award recognises responsible management of risk based on sound science; application of new technologies; and constructive engagement with the workforce, project partners, government and the wider industry in enhancing workplace health and safety.

The judges noted that ExxonMobil's management, workforce and project partners have collaborated systematically and effectively to minimise risks.

ExxonMobil uses safety training, reporting and audits to learn from minor events, identify priorities for improvement and drive continuous improvement in safety performance.

In 2014 ExxonMobil undertook drilling operations at its Marlin B platform; completed deepwater development drilling on the Jansz-lo fields (as part of the Gorgon venture); began building a new gas conditioning plant at Longford; and undertook major maintenance shutdowns.

This entailed almost 4.5 million work hours across the company's operations. Yet ExxonMobil achieved a new company record for personnel safety with no lost time injuries.

The judges also recognised ExxonMobil's participation in many industry activities, including Stand Together for Safety, the Australian Maritime Spill Response Committee, IChemE Safety and the Safety Case Working Group.

Left: The ExxonMobil Australia-operated Kipper-Tuna-Turrum project. In a very busy year, the company continued to improve its safety performance."

Environment Excellence Award

Woodside Energy was presented with the APPEA Environment Excellence Award at the APPEA 2015 Conference.

The judges found that Woodside had shown consistent excellence in environmental management. This included strategic planning, risk management, monitoring and evaluation.

The company is an industry leader in community and stakeholder engagement, and in developing and implementing environmental projects that deliver public benefits.

Woodside has also shown a strong commitment to environmental research, particularly in marine science. Its marine research projects have involved collaboration with a range of organisations, including: universities, CSIRO, the Australian Institute of Marine Science, the Western Australian Museum, and the Western Australian Department of Parks and Wildlife.

Woodside's flagship research projects include the Scott Reef Maxima Seismic Survey and the Rankin Bank and Glomar Shoals Study.

Initiatives for Woodside's workforce include an environment guide book to support managers and "environment walks" that complement traditional safety walks.

The environmental walk involves leaders walking around work sites, such as the Karratha Gas Plant, and using site-specific environmental management checks and questions to acquire information that can inform environmental risk planning workshops.

APPEA 2015: Fulfilling our Potential

17-20 May 2015, Melbourne

The annual APPEA Conference & Exhibition examined policy issues and industry challenges, as well as the enormous opportunities that the oil and gas industry offers Australia.

Every year, this event features federal and state government ministers, as well as influential experts and industry leaders from across Australia and around the world.

It facilitates networking and the exchange of information and ideas in a fast-moving industry.

It also conveys news about company projects and APPEA's industry advocacy messages to policymakers and media.

The 2015 conference coincided with Australia's emergence as a globally significant petroleum producer.

Queensland's first LNG project shipped its first cargo in January 2015 and another six projects are due to begin production between late 2015 and the end of 2017.

But the event also coincided with a period of low oil prices.

These unprecedented changes made the APPEA Conference & Exhibition more important than ever as a forum for industry, policymakers and media.

Held at the Melbourne Convention and Exhibition Centre, APPEA 2015 drew 2700 registered attendees from 32 countries – a strong result in a tough year.

The conference featured 18 plenary speakers across five sessions and 87 concurrent session presentations spread across 24 sessions.

About 50 journalists covered the event, and several stories made the front pages of major newspapers.

Politicians addressing the conference included:

- Federal Minister for Industry, Ian Macfarlane
- Federal Shadow Minister for Resources, Gary Gray
- Victorian Treasurer, Tim Pallas.

Plenary speakers included:

- Oxford Institute for Energy Studies Natural Gas Research Program Chairman, Professor Jonathan Stern, on the state of play in the global LNG market, including potential impacts on Asian gas markets.
- BHP Billiton President, Petroleum and Potash, Tim Cutt, on the challenge of oil and gas development in a changing marketplace.
- Chevron Australia Managing Director, Roy Krzywosinski on the importance of major capital projects in a national context.
- WorleyParsons Chief Executive, Andrew Wood, on how the services sector is preparing for the shift into operations for mega-projects.
- BP Chief Operating Officer – Exploration, Richard Herbert, on global trends in exploration, including the Great Australian Bight and reaching out to other new frontiers.
- Astronomer and geologist, Dr Jim Reilly, on the need to keep expanding the industry's knowledge base and reaching for new horizons.

The technical program was one of the largest at an APPEA event. The 87 presentations spread across 24 sessions included specialist analyses, technical know-how and informative case studies.

Concurrent presentations covered a wide range of issues, including:

- A review of exploration and production over the past year
- The Australian Government's annual offshore acreage release
- Exploration geoscience
- Unconventional reservoirs and drilling
- Technology and innovation
- Health and safety
- Effective management of environmental risks
- Workforce management, including building diversity
- Tax, commercial and financial management
- Community engagement.

The conference concluded on Wednesday afternoon with the popular Project Updates session.



A plenary session at APPEA 2015.

The Exhibition Hall – industry showcase and networking hub

The Exhibition Hall covered more than 12,000 square metres and hosted 215 organisations.

It also included spacious networking lounges, full catering facilities, charge zones and a technology and business centre.

With numerous stands competing to offer quality coffee and happy hour events at the end of each afternoon, the exhibition area offered plenty of opportunities for delegates to exchange news and ideas with industry colleagues and to simply catch up with old friends.

The conference social events were also well attended. Almost 1800 people registered for the welcome reception; 1150 came to the conference dinner; and 1350 registered for the farewell cocktails.

Delegate feedback

Delegate feedback forms showed that:

- 84% of respondents said they would recommend the APPEA Conference and Exhibition to a peer or colleague.
- 93% said they made new business contacts at APPEA 2013.
- 79% said the APPEA Conference & Exhibition is a key event in their company's strategic planning for the year.
- 92% said the quality of presentations was 'good' or 'excellent'.
- 72% said the APPEA Conference was the most valuable or second-most valuable out of all the conferences they attend.

The APPEA Conference & Exhibition is the largest annual upstream oil and gas event in the southern hemisphere.

APPEA conferences and forums

APPEA National Health, Safety & Environment Conference

1-3 September 2014

In 2014, APPEA combined Health, Safety and Environment (HSE) into one major conference for the Australian upstream oil and gas industry. The inaugural APPEA National Health, Safety & Environment Conference was held at Perth Crown, Burswood on 1-3 September 2014. More than 600 delegates attended.

The event delivered a world-class program of presentations, panel discussions, and key networking events. Top-quality international and local presenters (industry leaders, regulators, safety staff and frontline workers, and technical and other experts) addressed critical issues facing the industry.

RiAus Director Dr Paul Willis – a former ABC TV science communicator (Catalyst and Quantum) – facilitated two panel sessions on the science, perception and communication of risk, and how industry can better engage with the public, communities and stakeholders.

HSR Forum

1 September 2014

The 2014 HSR Forum was held at Crown Perth, immediately preceding the APPEA National HSE Conference. The forum enabled health and safety representatives to share their safety experiences, lessons and good practices, and also focused on helping them develop their safety leadership and representative skills.

OSR Forum

1 September 2014

The Oil Spill Response Forum was held as an adjunct to the APPEA National HSE Conference.

It allowed participants to hear from regulators and to share regional, national and international oil spill response and oil pollution research findings and best management practices, as well as lessons from member company operations.

A diverse group of guest speakers presented on a range of issues, including ongoing lessons for Australian oil spill response from the Macondo (Deepwater Horizon) incident; insights from an offshore regulator's perspective; updates on international joint industry efforts in oil spill response planning and capacity building; and presentations from technical experts.

Introduction to the Oil & Gas Industry Seminars

Delivered nationally, these half-day seminars give participants a broad understanding of the Australian oil and gas industry. Attendees gain an appreciation of the geological, technical and economic aspects of the industry, features of the onshore and offshore environments, as well as the exploration, development and production phases.

Developed and delivered in partnership with Curtin University, these seminars are facilitated by Professor Peter Moore with guest APPEA presenters. This material can also be delivered through in-house seminars. For more information, see the APPEA website.



Chevron Australia Managing Director Roy Krzywosinski addressing the 2014 APPEA HSE Conference.

Scholarships

In 2014-15, APPEA awarded three undergraduate engineering scholarships, as well as the Tony Noon Memorial Scholarship for postgraduate study.

The 2015-16 the scholarship program has been extended to include vocational education and training recipients to help build essential trades skills for the operations and maintenance roles. All scholarships are funded by APPEA's Oil and Gas Industry Training Fund, which has been established with contributions from companies required to offset 457 visas by making payments to a training benchmark to develop local skills.

Engineering scholarships

The award for each scholarship is \$5,000 per year up to a maximum of three years (full-time).

Scholarship winners can undertake paid work experience with an APPEA full member company during university vacation breaks.

The engineering scholarship for an indigenous student was awarded to Shahbaz Rind, who is studying chemical engineering at the University of Western Australia. Shahbaz also accepted an offer of vacation work with INPEX.



The other winners were:

- Tarun Zachariah – Mechanical Engineering, University of Western Australia; and
- Alex Grufas – Petroleum Engineering, Monash University.

Tarun is completing a double degree in Mechanical Engineering and Commerce and is an executive advisor in his university's Society of Petroleum Engineers chapter. He plans to work as an engineer in the oil and gas industry upon his graduation in 2015 and is currently a field engineering intern at Baker Hughes.

Alex is the president of Monash University's Society of Petroleum Engineers Chapter. He undertook paid vacation work with ExxonMobil in the 2014-15 summer break.

Tony Noon Memorial Scholarship

The 2014 recipient of the Tony Noon Scholarship is Shane Morrissy, a PhD student at the University of Western Australia. Shane is undertaking a PhD in Chemical Engineering at UWA's Fluid Science and Resources Division and is keen to pursue an industry career in flow assurance or energy technology.

This scholarship is for students enrolled in honours, Masters or PhD programs at an Australian university.

It provides a one-off grant to a maximum value of \$3,000 and is aimed at assisting students who are aspiring to or considering a career in the upstream petroleum industry. This may include, for example, the disciplines of exploration, geology, safety, engineering, environmental management, economics or law.

Applicants must be attending university in the year of application and be an Australian citizen or permanent resident.

Three of the 2014 scholarship recipients.
From left: Shahbaz Rind, Tarun Zachariah and Shane Morrissy.

APPEA member companies

Full members – 30 June 2015

AGL Energy
 Armour Energy
 Arrow Energy
 AWE Limited
 Beach Energy
 Benaris International
 Bengal Energy
 BHP Billiton Petroleum
 Blue Energy
 Bounty Oil & Gas
 BP Developments Australia
 Bridgeport Energy
 Buru Energy
 CalEnergy Resources (Australia)
 Carnarvon Petroleum
 Central Petroleum
 Chevron Australia
 Comet Ridge
 ConocoPhillips Australia
 Cooper Energy
 Cue Energy Resources
 Dart Energy
 Drillsearch Energy
 Empire Oil & Gas
 Eneabba Gas
 Eni Australia
 ERM Gas
 Esso Australia (ExxonMobil)
 Exoma Energy
 Falcon Oil & Gas Australia
 Finder Exploration
 Galilee Energy
 GDF Suez Bonaparte
 Hess Exploration Australia
 Hydra Energy (WA)
 Icon Energy
 Inpex
 ITOCHU Minerals & Energy of Australia
 Japan Australia LNG (MIMI)
 Japan Energy E&P Australia
 KUFPEC Australia
 Lakes Oil N.L.
 Latent Petroleum
 Magellan Petroleum Australia
 MEO Australia
 Metgasco
 Mitsubishi Australia
 Mitsui E&P Australia
 Murphy Australia Oil
 New Standard Energy
 Nido Petroleum
 Norwest Energy NL
 Octanex NL

Oilex
 OMV New Zealand
 Origin Energy
 Osaka Gas Australia
 Pangaea Resources
 Papuan Oil Search
 Petronas Australia
 PTTEP Australasia
 Quadrant Energy
 QGC (a BG Group Company)
 Roc Oil Company
 Santos
 Senex Energy
 Shell in Australia
 Statoil ASA
 Strike Energy
 Tamboran Resources
 Tap Oil
 Tokyo Gas Australia
 Tokyo Timor Sea Resources
 Total E&P Australia
 Tri-Star Petroleum Company
 Vermilion Oil & Gas Australia
 WestSide Corporation
 Woodside Energy

Aventus Consulting
 Bain and Co
 Baker Hughes Australia
 Barker Wentworth
 BDO Pty Ltd
 BMD Group
 BMT Group
 bnj Consultants
 Board of Professional Engineers of Queensland
 BOC Limited
 Boston Consulting Group (BCG)
 Brunel Energy
 Bureau Veritas
 Cadgile
 Cameron Australasia
 Cardno Ltd
 Cenergy Services Australia
 CGG Services (Australia)
 Chamber of Commerce & Industry WA
 CHC Helicopters
 Chicago Bridge & Iron Company
 Clayton Utz
 Clough Limited
 CO2CRC
 Coffey International
 Competentia Pty Ltd
 Corporate Protection Group
 Deloitte Touche Tohmatsu
 Digibox
 DNOW Australia
 Dockwise Shipping Australia
 DOF Subsea Australia
 DownUnder GeoSolutions
 East Coast Pipe Supplies
 Easternwell Group
 EDG Australia
 EIG Global Energy Partners
 EM&I (Australia)
 EMAS Offshore
 Endress + Hauser
 Enerflex Process
 Energy Power Systems Australia
 Energy Publications
 Ensign International Energy Services
 Enterprise Risk Management Solutions
 Environmental Resources Management Australia (ERM)
 Environmental Strategies WA
 eProject Management Australia
 ERGT Australia
 Ernst & Young
 Esanda
 ESD Simulation Training

Associate members – 30 June 2015

Accenture
 Access Human Talent
 Accrete Ltd
 Accutherm International
 ACEPT - Challenger TAFE
 Achilles Supplybase
 Add Energy Australia
 Advanced Well Technologies (AWT)
 AGR Asia Pacific
 Allens
 AMC Management (WA)
 ANZ Banking Group
 Archimedes Financial Planning
 Ashurst Australia
 Asia Edge
 Aspen Medical
 Aspermont
 Atkins Australasia
 Atwood Oceanics Australia
 Aurecon Australasia Pty
 Australasian International Petro-Consultants (AIPC)
 Australian Maritime College
 Australian Rig Construction Holdings

Export Finance & Insurance Corporation (EFIC)	Kleinfelder Australia	Schlumberger Australia
Exterran (Australia)	KPMG	School of Petroleum Engineering UNSW
Farstad Shipping (Indian Pacific)	Labrador Petro-Management	Sealink International Berhad
Fendley Consultancy	Laing O'Rourke Australia	Searcher Seismic
FKG Group	Link Health	Sedco Forex International
Fluor Australia	LogiCamms Limited	Sharpe Engineering
FrOG Tech	McConnell Dowell Constructors (Aust)	Site Skills Training
Fugro Holdings (Australia)	McKinsey & Company	Skilled Offshore (Australia)
Gaffney Cline & Associates	Media Dynamics	SLR Consulting Australia
Gas Today	Minter Ellison	Solar Turbines Australia
GASCO Pty Ltd	Miro Advisors	SPI (Australia) Assets (Jemena)
GE Oil & Gas Australia	MMA Offshore	Strategic Human Resources
Geosoft Australia	Monash University	Subsea 7 Australia Contracting (was Acergy)
Geotechnical Services	MTG Ltd	Superior Energy Services
GHD	Murphy Pipe and Civil Constructions	SVT Engineering Consultants
GL Noble Denton	Nalco Champion	SWA Water Australia
Global Supply Line	Neptune Marine Services	TIEC (Texas International Engineering Consultants)
Golder Associates	NETZSCH Australia	TCA Partners Pty
Gunggari Energy Services	New Ground Environmental	Technip Oceania
Halliburton Australia	Newpark Resources	Teekay Marine Services
Hart Energy	North Australian Centre for Oil & Gas - Charles Darwin University	Tenaris Global Services Australia
Hatch Associates	Ocean Nourishment Corporation	TGS-NOPEC Geophysical Company
Herbert Smith Freehills	Oceaneering Services Australia	Tidewater Marine Australia
HIMA	OSD Pty Ltd	Titan Energy Services
Honeywell Limited	Ostwald Bros	Toll Energy Logistics
HopgoodGanim Lawyers	P&R Geological Consultants	Toowoomba & Surat Basin Enterprise
HWL Ebsworth Lawyers	Pacific Environment	Total Depth
IDE Technologies	Payne Partners	Tox Free Solutions
IFAP - Industrial Foundation for Accident Prevention	Performance on Hand	Tracerco
IFS Australia	Peroni Pumps Australia	Trackem
IHS Cera	Petroleum Exploration & Production Association NZ	Training & Safety Consultants
Ikon Science Asia Pacific	Petroleum Exploration Society of Australia	Training Prospects
Independent Data Services (Asia)	Petrospection	Transfield Services (Australia)
Independent Oil Tools (IOT)	Petrosys	UCL School of Energy and Resources, Australia
Indra Australia	PGS Australia	UGL Limited
Informa Corporate Learning	Piper Alderman	University of Tasmania (UTAS)
Informia	Pitney Bowes Business Insight	University of Western Australia
Institution of Chemical Engineers	Platform Communications	Upstream Production Solutions
International SOS Australasia	Polarcus	URS Australia
Interstaff International	Quanta Services Australia	Valve Technology Australia
Intertek	R & D Solutions	Velseis
ION Geophysical Corporation	Resource & Land Management Service	Veolia Environmental Services
ISN Software Australia	ResourceLaw International	Veritas Engineering
ITC Global (Australia)	Rigzone	Walker Technical Consultants
Japan Oil Gas & Metals National Oil Corporation (JOGMEC)	RISC Operations	WDS Limited
Jet Financial	RPS	Well Control School
K&I Gates	RSM Bird Cameron - Chartered Accountants	Welltec Oilfield Services
KBR	R-Web Australia	Wood Group Australia
Kentz Oil & Gas	S2V Consulting	Wood Mackenzie (Australia)
Kimberley Port Authority	Safety Leaders Group	WorleyParsons Services
KJM Contractors	Saipem Australia	Yantai Jereh Oilfield Services Group
	SBA Gallagher	Yokogawa Australia

Board

APPEA Board and 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

Under APPEA's constitution, the APPEA Board must comprise at least six and no more than 16 directors elected by APPEA's full members. Half of the APPEA Board's members are required to resign at each annual general meeting.



APPEA Chairman Bruce Lake.

The APPEA Board election was held on 27 November 2014. Shortly after this, APPEA Chairman Rob Cole resigned from Woodside Energy and the Board as he took up a new role as Managing Director of Beach Energy. BP Developments Australia Pty Ltd Managing Director Philip Home also resigned from his company and from the Board.

Following this, on 1 December 2014 the Board Directors were as follows:

- Bruce Lake (Chairman), Vermilion Oil and Gas Australia Pty Ltd
- Robin Antrobus, General Manager, External Relations, ConocoPhillips Australia Pty Ltd
- Peter Cleary, Vice President LNG Markets and Eastern Australia Commercial, Santos Limited
- Ernie Delfos, Managing Director, eni Australia Ltd
- Gerry Flaherty, General Manager – Asset Development, Chevron Australia Pty Ltd
- Warren Ford (Vice Chairman), Deputy Managing Director and Director of Projects, Apache Energy Limited
- Doug Handyside, General Manager Australia, BHP Billiton Petroleum Australia
- Seiya Ito, President Director Australia, INPEX
- Grant King, Managing Director, Origin Energy Limited
- David Mendelson, Total E&P Australia
- Richard Owen, Chairman, ExxonMobil Affiliates in Australia
- Andrew Smith, Country Chair, Shell in Australia
- Peter Stickland, Managing Director, MEO Australia Ltd
- Eric Streitberg, Executive Director, Buru Energy Limited.

On 4 February 2015, Robin Antrobus resigned and was replaced by Frank Krieger Vice-President Exploration and Development, ConocoPhillips Australia Pty Ltd.

On 5 March 2015, Michael Abbott, Senior Vice-President, Corporate and Legal, Woodside Energy Ltd and Claire Fitzpatrick, Managing Director, BP Developments Australia Pty Ltd, joined the board.

After the end of the 2014-15 financial year, Warren Ford resigned on 16 July 2015, following Apache Energy's divestment of its Australian assets. Richard Owen replaced Mr Ford as Vice Chairman. David Mendelson also resigned on 16 July. He was replaced by Petter Udem, Managing Director, Total E&P Australia.

Executive management

Senior management



Malcolm Roberts, Chief Executive

Dr Roberts was previously Chairman of the Queensland Competition Authority. He has held senior roles at several industry associations and has worked as a ministerial policy adviser and in the Department of the Prime Minister and Cabinet.

Noel Mullen, Deputy Chief Executive

Noel manages APPEA's commercial, fiscal and access analysis and policies. He was previously a senior officer in the Department of Primary Industries and Energy's petroleum taxation division.

Stedman Ellis, Chief Operating Officer — Western Region

Stedman leads APPEA's WA, South Australia and NT advocacy and policy development. He has held senior government and industry roles for more than 25 years.

Damian Dwyer, Director — Economics

Damian is responsible for APPEA's economic, trade, climate and energy markets analysis and policies. His 20-year public policy career includes positions as an economist at another industry association and in the Australian Public Service.

Kieran Murphy, Acting Director — External Affairs

Kieran is responsible for APPEA's external communications, media and government relations and stakeholder engagement. He is a former journalist and a former senior media advisor.

Miranda Taylor, Director — Safety, Environment & Operational Performance

Miranda is responsible for advocacy, policy development and collaborative industry projects in environment, safety and operations. She has held senior safety and environment roles in the public sector and industry.

Cath Sutton, Company Secretary & Director — Support Services

Cath heads APPEA's finance and administrative operations. She was previously Chief Financial Officer at the Real Estate Institute.

Julie Hood, Director — Events

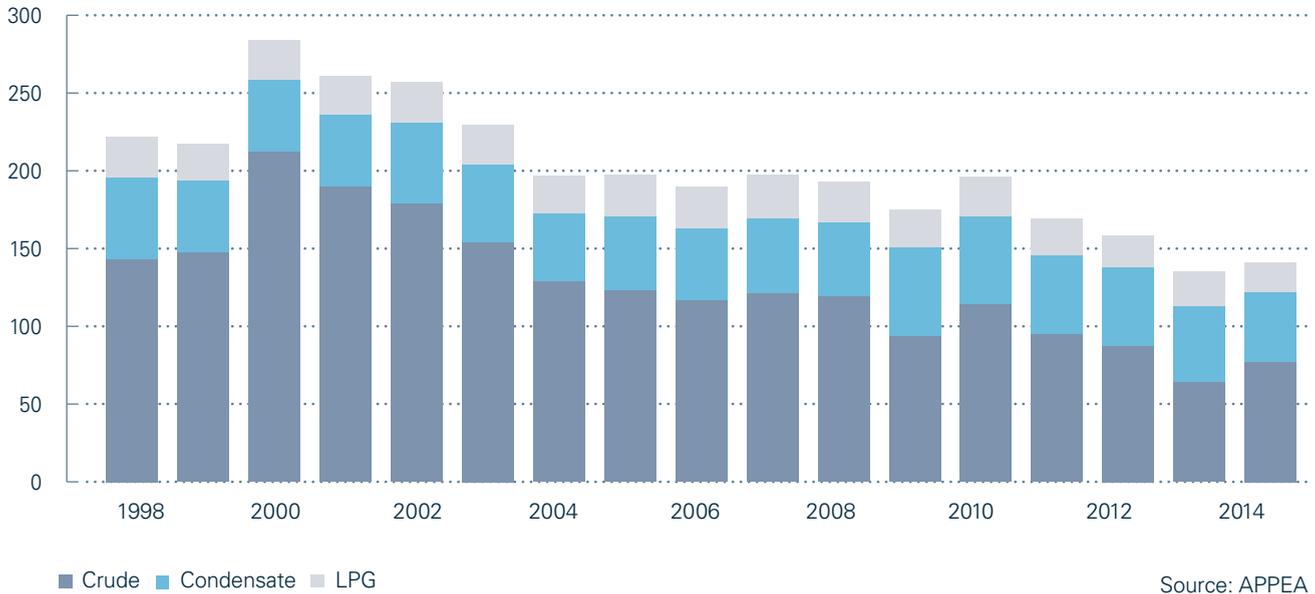
Julie joined APPEA in 2001 after working for several years at the Brisbane Convention & Exhibition Centre. She is responsible for delivering top-quality oil and gas industry events, in particular the APPEA Conference & Exhibition.

Rick Wilkinson, Chief Technical Officer

Based in Brisbane, Rick has worked in the operations, project management and commercial areas of upstream oil and gas for more than 25 years.

Industry statistics

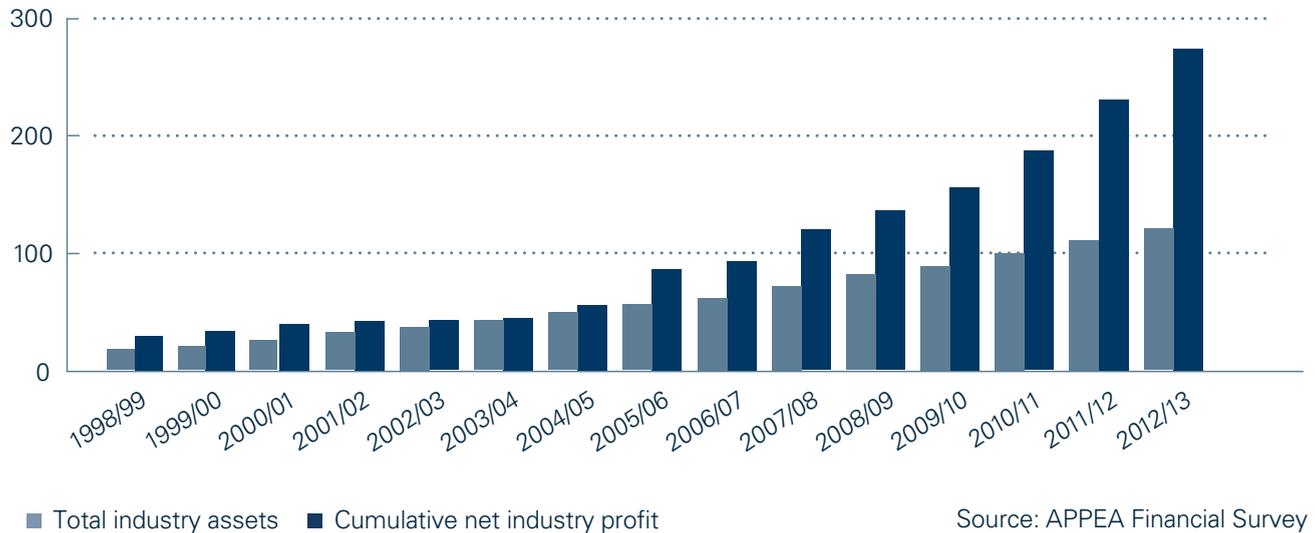
Historical Australian petroleum liquids production (millions of barrels)



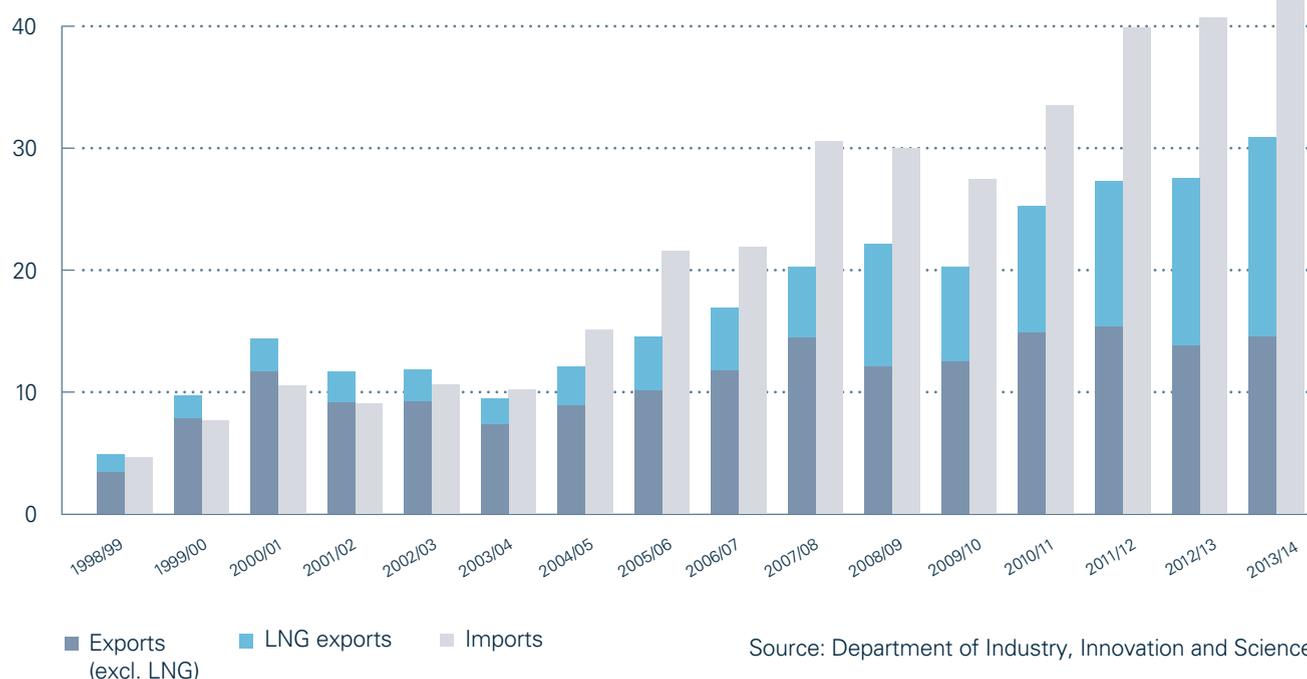
Historical Australian natural gas production (mmcf)



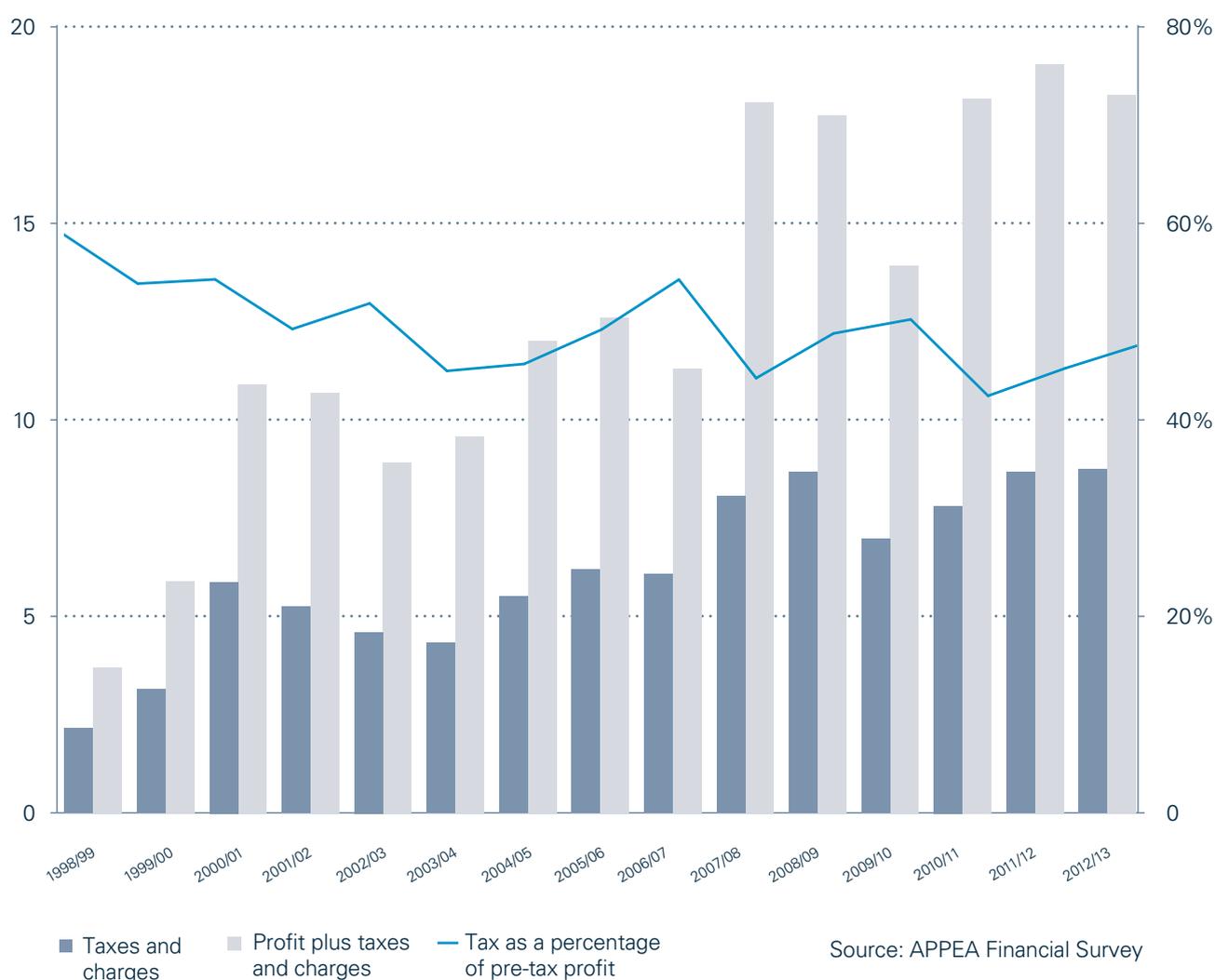
Asset values and cumulative profits (\$ billion)



Imports and exports of petroleum products (\$ billion)



Estimated petroleum industry profit (before tax) and taxation payments (\$ billion)



Financial statements

Australian Petroleum Production & Exploration Association Limited

A.B.N. 44 000 292 713

(A company limited by guarantee)

Statement of Comprehensive Income for the year ended 30 June 2015

	2015 \$	2014 \$
Revenue		
APPEA conference income	6,477,857	7,389,411
Common Safety Training program	256,062	372,016
CSG public campaigns – Queensland and New South Wales	1,180,126	1,233,403
IchemE Process Safety Centre project	546,250	270,753
Interest	303,492	344,908
Marine Environment Science Program	188,120	47,194
Membership fees	6,378,328	6,389,765
Our Natural Advantage project	2,251,962	5,434,858
Publications	10,715	6,893
Seminar income	929,189	1,285,090
Other income	79,679	66,321
	<u>18,601,780</u>	<u>22,840,612</u>
Expenditure		
APPEA conference costs	3,715,178	4,222,366
Communications	143,458	145,064
CSG public campaigns - Queensland and New South Wales	1,213,899	1,233,403
Depreciation of plant and equipment	199,963	212,880
Depreciation of make good allowance	25,000	25,000
Education and professional development	8,886	9,750
IchemE Process Safety Centre project	546,250	270,753
Industry growth strategy costs	185,928	155,529
Industry operations consultancy costs	268,586	287,245
Loss on disposal of assets	(423)	9,480
Marine Environment Science Program (formerly Blue Book 3 Project)	188,120	47,194
Office rental	691,237	664,704
Our Natural Advantage project	2,251,962	5,434,858
Other Costs	1,613,776	554,036
Provision for employee entitlements	10,215	106,111
Publications	42,311	111,118
Running costs	187,929	303,593
Salaries and associated costs	7,071,460	6,643,834
Superannuation	527,390	461,147
Seminar costs	598,193	851,644
Travel and associated costs	335,572	331,872
	<u>19,824,890</u>	<u>22,081,581</u>
Surplus/(deficit) for the year	<u>(1,223,110)</u>	<u>759,031</u>
Total comprehensive income	<u>(1,223,110)</u>	<u>759,031</u>

	2015	2014
	\$	\$
CURRENT ASSETS		
Cash and cash equivalents	524,685	745,243
Trade and other receivables	2,015,878	1,567,693
Other	398,915	350,844
Other financial assets	<u>7,943,348</u>	<u>11,906,698</u>
TOTAL CURRENT ASSETS	<u>10,882,826</u>	<u>14,570,478</u>
NON-CURRENT ASSETS		
Property, plant and equipment	<u>478,212</u>	<u>676,522</u>
TOTAL NON-CURRENT ASSETS	<u>478,212</u>	<u>676,522</u>
TOTAL ASSETS	<u>11,361,038</u>	<u>15,247,000</u>
CURRENT LIABILITIES		
Trade and other payables	981,178	1,151,375
Provisions	711,698	701,483
Other	<u>2,911,652</u>	<u>5,414,522</u>
TOTAL CURRENT LIABILITIES	<u>4,604,528</u>	<u>7,267,380</u>
NON-CURRENT LIABILITIES		
Other	<u>200,000</u>	<u>200,000</u>
TOTAL NON-CURRENT LIABILITIES	<u>200,000</u>	<u>200,000</u>
TOTAL LIABILITIES	<u>4,804,528</u>	<u>7,467,380</u>
NET ASSETS	<u>6,556,510</u>	<u>7,779,620</u>
ACCUMULATED FUNDS		
Accumulated surplus	<u>6,556,510</u>	<u>7,779,620</u>
TOTAL ACCUMULATED FUNDS	<u>6,556,510</u>	<u>7,779,620</u>

	2015 \$	2014 \$
Opening balance	7,779,620	7,020,589
Add: Total comprehensive income for the year	<u>(1,223,110)</u>	<u>759,031</u>
Closing balance	<u>6,556,510</u>	<u>7,779,620</u>

Statement of Cash Flows for the year ended 30 June 2014

	2015 \$	2014 \$
	Inflows/ (Outflows)	Inflows/ (Outflows)
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from members and others	16,912,897	23,752,304
Payments to trade creditors, other suppliers and employees	(21,384,839)	(19,521,315)
Interest received	<u>314,264</u>	<u>382,360</u>
Net cash provided by/(used in) operating activities	<u>(4,157,678)</u>	<u>4,613,349</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Payments for property, plant and equipment	(28,362)	(77,526)
Proceeds from sale of property, plant and equipment	2,132	-
Uplifts/(payments) for investments	<u>3,963,350</u>	<u>(4,246,157)</u>
Net cash provided by/(used in) investing activities	<u>3,937,120</u>	<u>(4,323,683)</u>
Net increase/(decrease) in cash held	(220,558)	289,666
CASH AT THE BEGINNING OF THE FINANCIAL YEAR	<u>745,243</u>	<u>455,577</u>
CASH AT THE END OF THE FINANCIAL YEAR	<u>524,685</u>	<u>745,243</u>