

Sunday 5 June

CONFERENCE REGISTRATION

7:30am–7:00pm

Main Foyer, Brisbane Convention and Exhibition Centre

PESA DEAL DAY

Registration: 8:15am

PESA Deal Day Brisbane Convention and Exhibition Centre**ROOM
P9**

Seminar:

9:00am–1:30pm

The Petroleum Exploration Society of Australia (PESA) 'Deal Day' Seminar is the annual showcase for acreage and farm-in opportunities in Australia and the neighbouring region in a presented papers format.



CYCLE TOUR

11:30am–3:00pm

Cycle Tour Meet at the main entrance (cnr Merivale & Glenelg Sts) Brisbane Convention and Exhibition CentreSPONSORED BY **INTERTEK**

This 70km cycle tour is a popular activity for experienced amateur riders. Qualified cycle guides will escort the group as they ride out of the city and through scenic areas of Brisbane. Refreshments will be provided during a scheduled break.



WELCOME RECEPTION—'The ICE breaker'

6:00pm–9:00pm

Plaza Ballroom, Brisbane Convention and Exhibition Centre

SPONSORED BY **GIOVENCO INDUSTRIES (A STORK COMPANY), PIPER ALDERMAN AND UGL**

Break the ice in the first week of winter at the first official networking event for APPEA 2016. Cool music and entertainment, stunning seasonal produce from Queensland and drinks, makes this the perfect way to catch up with industry colleagues and create new business contacts as we start the conference in this 'chilled', relaxed setting.



Complimentary to fully registered delegates and registered partners.

\$95 per person to all other registration categories and for additional guest tickets.



Smart casual attire.



6:00am-7:00am **Cycle Ride**—Meet at the main entrance (cnr Merivale & Glenelg Sts) Brisbane Convention and Exhibition Centre

SPONSORED BY **INTERTEK**

7:30am-8:20am **Presenters' Breakfast**
Rooms P1 & P2, Plaza Level, Brisbane Convention and Exhibition Centre | By invitation only

SPONSORED BY **BP DEVELOPMENTS AUSTRALIA**

7:30am-5:00pm **Conference registration**—Main Foyer, Brisbane Convention and Exhibition Centre

8:00am-6:00pm **2016 APPEA Exhibition open**—Exhibition Hall, Brisbane Convention and Exhibition Centre

SPONSORED BY **QUEENSLAND GOVERNMENT**

8:00am-6:00pm **2016 APPEA Poster Presentations open**
Exhibition Hall, Brisbane Convention and Exhibition Centre

SPONSORED BY **BP DEVELOPMENTS AUSTRALIA**

8:00am-6:00pm **Meeting Zone open**—Exhibition Hall, Brisbane Convention and Exhibition Centre

SPONSORED BY **KPMG**

An ideal place to meet for an hour, with two private meeting areas seating up to eight people. Book on site with the reception staff at the Meeting Zone.

8:30am

PLENARY SESSION: COMPETING FOR GROWTH

SPONSORED BY **CLOUGH AND WOODSIDE**

GREAT HALL

CHAIR: Mr Bruce Lake, Managing Director, Vermilion Oil & Gas Australia Pty Ltd

Framed around the conference theme of 'Competing for Growth', the opening session of APPEA 2016 will feature high-level addresses from federal and state political leaders and APPEA Chairman, Mr Bruce Lake. Combined with a lead industry address, this is a 'not to be missed' opening session that will set the scene for three days of in depth discussion and debate in this crucial election year.

Conference Opening Ceremony

Australian Government Address

The Hon Josh Frydenberg MP, Minister for Resources, Energy and Northern Australia

Lead Industry Address

Mr Andrew Smith, Country Chair, Shell Australia

APPEA Chairman's Address—Competing for Growth

Mr Bruce Lake, Managing Director, Vermilion Oil & Gas Australia Pty Ltd

Queensland State Government Address

The Hon Curtis Pitt MP, Treasurer, Minister for Aboriginal and Torres Strait Islander Partnerships and Minister for Sport, Queensland Government

10:15am-11:00am

MORNING TEA IN THE EXHIBITION HALL

SPONSORED BY **AGGREKO**

Monday 6 June

Speaker Dr Jim Reilly—
APPEA 2015



PLENARY SESSION: THE GLOBAL ENERGY LANDSCAPE POST THE PARIS CLIMATE CHANGE CONFERENCE—WHAT ROLE FOR NATURAL GAS?

11:00am

SPONSORED BY TOTAL

GREAT HALL

CHAIR: The Hon Martin Ferguson AM, Chairman, APPEA Advisory Board

The UN Climate Change Conference held in Paris at the end of 2015 set the scene for the world's response to climate change. It will fundamentally change the nature of the energy landscape facing the Australian oil and gas industry. This new landscape creates both challenges and opportunities for the industry. Australian natural gas in particular has a key role to play as we move towards a low carbon economy and it will be vital that global and domestic policy responses recognise and support the key role the industry can play. Not all see a role for natural gas in a clean energy future, and so the ongoing challenge for the industry is to explain the positive role it can play in the post-Paris global energy landscape.

The Paris Climate Agreement: a turning point for oil and gas?

Mr Elliot Diringer, Center for Climate and Energy Solutions (C2ES)

The role of gas in the transition to net zero emissions

Professor Cameron Hepburn, Professor of Environmental Economics, Smith School of Enterprise and Environment, Department of Economics, University Of Oxford

Natural gas: the flexible, reliable and sustainable fuel

Mr Grant King, Managing Director, Origin Energy Limited

12:30pm–2:00pm

Networking Lunch in the exhibition hall

SPONSORED BY JEMENA

All delegates are invited to enjoy lunch in the exhibition halls and view the stands and poster presentations.

12:30pm–2:00pm

APPEA Members' Lunch | By invitation only

SPONSORED BY CLOUGH AND WOODSIDE

ROOMS
P1 & P2

Monday 6 June

CONCURRENT SESSIONS 1–4

2:00pm

CONCURRENT SESSION 1: Answers to reservoir management questions

ROOM
M3

CHAIR: Mr Simon Molyneux, Manager Exploration, Santos

Next steps to crack the code on tight Permian Toolachee and Patchawarra sandstones of the Cooper Basin, southwest Queensland | RL Johnson, Jr. (Unconventional Reservoir Solutions), L Nguyen and T Russell (Real Energy Corporation Limited)

Defining irreducible water saturation using global characteristics envelopes and novel correlations

P Behrenbruch, C Yuan, N Truong, P Do Huu and T Hoang (Bear and Brook Consulting Pty Ltd)

Optimising dynamic CSG production with a single downhole instrument | R O'Halloran (Weatherford)

CONCURRENT SESSION 2: New ideas in old onshore basins

GREAT
HALL

CHAIR: Mr Craig Gumley, Manager Offshore, Finder Exploration

Introducing the Sylvester Graben, a ?Neoproterozoic depocenter on the eastern flank of the Toko Syncline, southern Georgina Basin, Queensland | RJ Willink, NC Palmer* (Central Petroleum Ltd), M Davies, C Woodfull, P Stuart-Smith (SKR Consulting [Australasia] Pty Ltd) and C Verdel (School of Earth Sciences, The University of Queensland)

The Waitsia Field, onshore North Perth Basin, Western Australia

N Tupper, E Matthews, G Cooper, A Furniss, T Hicks and S Hunt (AWE Limited)

Could a structurally controlled, hydrothermal dolomite play be operative in Cambro-Ordovician carbonates of the southern Georgina Basin, Queensland? | RJ Willink, MJ Bucknill and NC Palmer (Central Petroleum Ltd)

CONCURRENT SESSION 3: Diversity and human capital

ROOM
M4

SPONSORED BY EY

CHAIR: Ms Kate Hillman, Partner, EY

Diversity, inclusion and CSG: the challenges and the benefits | S Westgate (AGL Energy Ltd)

Industry partnerships in addressing mental health | C James, B Kelly (Centre for Resources Health and Safety, The University of Newcastle), R Considine (Consan Consulting), R Tynan, J Skehan (Hunter Institute of Mental Health) and J Rich (Centre for Resources Health and Safety, The University of Newcastle)

Gender diversity in the oil and gas industry | C Power (K&L Gates) presented by A Kennedy (K&L Gates)

Changes in labour and safety regulation offshore: the productivity implications | E Taylor (Gadens)

CONCURRENT SESSION 4: Environment matters

ROOM
M2

CHAIR: Ms Tzila C. Katzel, Director Policy, Environment and Community Affairs, BP Developments Australia

Improving environmental performance through ISO 14001 | M Goodwin (S2V Consulting)

Preparing for a carbon constrained economy: managing compliance and cost

F Papon* (EY) and S Smith* (Santos Ltd)

A clean fight: environmental management strategies to drive growth, efficiency and competition in CSG

T Manners (Veolia)

Evolving environmental regulation | C Shaw (Arcadis)

3:15pm–3:45pm

AFTERNOON TEA IN THE EXHIBITION HALL

SPONSORED BY AGGREKO

3:15pm–6:00pm

Meet the Authors—Poster Presentation Area, Exhibition Hall

SPONSORED BY BP DEVELOPMENTS AUSTRALIA

Meet the authors of the poster presentations and discuss their displayed work. See p22–24 for full poster listing.



Monday 6 June

CONCURRENT SESSIONS 5–8

3:45pm

CONCURRENT SESSION 5: New concepts for process safety**ROOM
M2**SPONSORED BY **ROCKWELL AUTOMATION**

CHAIR: Mr Craig Segers, Rockwell Automation, Process Solutions Manager

Simplicity from complexity | H Thomas (TAM Consultants Pty Ltd)**How an integrated multi-discipline approach to ALARP assessments can yield production increases while minimising HSE risk** | J Bonini*, L Muir* and S Blackmore (S2V Consulting Pty Ltd)**Process safety common lead metrics: implementing and learning** | S Fogarty (Quadrant Energy)**CONCURRENT SESSION 6: The interface between CSG and water****GREAT
HALL**

CHAIR: Mr Rick Wilkinson, Chief Technical Officer, APPEA

Determining the impacts of coal seam gas extraction on water-dependent assets

D Post (CSIRO), P Baker (Department of the Environment, Australian Government) and D Barrett* (CSIRO)

Evaluating potential coal seam gas impacts to the Condamine Alluvium: an example of successful community involvement | S Gossmann, S Denner, S Herbert (Arrow Energy Pty Ltd), S Pandey (Klohn Crippen Berger), R Cox, M Gallagher and J Moncrieff (Office of Groundwater Impact Assessment, Queensland Government)**Update of the Surat Underground Water Impact Report**

R Cox and K Phillipson (Department of Natural Resources and Mines, Queensland Government)

CONCURRENT SESSION 7: Safety leadership**ROOM
M3**SPONSORED BY **DUPONT**

CHAIR: Mr Andrew Wilson, Principal, DuPont

Safety leadership and collaboration in the Queensland natural gas exploration and production industry

W Simpson (Drillsearch), M Greene (GD Group), S O'Donnell (Safer Together—Queensland Natural Gas Exploration & Production Industry Safety Forum) and M Zaunbrecher (Arrow Energy), presented by W King (ConocoPhillips) and S Ciccone (Amec Foster Wheeler)

Major accident prevention (MAP): a safety case approach to construction | R Selleck (Clough)**A risk management approach to safe mooring systems in Australia's cyclone seasons: following a major offshore incident** | P Sullivan (Woodside Energy Ltd)**A whole-of-business approach to major accident event preparedness** | PJ Murphy and AP Wilkinson (Noetic Group)**CONCURRENT SESSION 8: Transition to operations: operational excellence****ROOM
M4**SPONSORED BY **LLOYD'S REGISTER ENERGY**

CHAIR: Mr Richard Nott, VP Business & Technical Development, Compliance Services, Lloyd's Register Energy

Upstream CSG: transitioning from project delivery to operational excellence for large-scale upstream assets

R Maney (Partners In Performance)

Performance excellence: the path to becoming a global leader | T Lawrence (Woodside Energy Ltd)**Lean times in oil and gas: frugal strategies for emerging as a stronger player**

K Eberspaecher (Advisian [WorleyParsons Group])

Creating shared value through better management of water and waste in oil and gas | Y Th  lier (Veolia)

5:00pm–6:00pm

HAPPY HOUR IN THE EXHIBITION HALL

SPONSORED BY **YOKOGAWA**

Network and relax with the final opportunity to 'Meet the Authors' of posters in the poster presentation area.



Complimentary to delegates, registered partners and exhibitors



Includes drinks and light refreshments



Business attire



6:00pm onwards

Evening free—An opportunity to enjoy Brisbane or to host clients at individual events around the city.



Tuesday 7 June

- 6:00am–7:00am **Cycle Ride**—Meet at the main entrance (cnr Merivale & Glenelg Sts)
Brisbane Convention and Exhibition Centre
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8:30am

PLENARY SESSION: THE FUTURE OF ENERGY

SPONSORED BY **IDE TECHNOLOGIES**

GREAT HALL

CHAIR: Mr Roy Krzywosinski, Managing Director, Chevron Australia

Around the world, countries continue seeking ways to maintain and expand energy supplies to meet growing demand, particularly in the developing world, where according to the International Energy Agency, 1.3 billion people live without access to reliable energy supplies. At the same time, the future of energy is being shaped by a range of powerful factors—the global shift to cleaner forms of production, new sources of supply, geopolitical shifts and the relentless pressure of global competition. What does the future of energy look like? And what role will the oil and gas industry, both globally and in Australia, play in shaping and responding to that future?

Possible energy market developments

Professor Peter Hartley, Mitchell Chair in Economics, Rice University and BHP Billiton Chair in Economics, University of Western Australia

The shifting demand and supply drivers and the impacts on North American energy

Ms Regina H Mayor, National Sector Leader for Energy, Natural Resources and Chemicals, and the Americas Oil and Gas Leader, KPMG LLP

How Australia's oil and gas sector can contribute to the future energy landscape

Mr Christiaan Heyning, Principal, Australia and New Zealand, McKinsey & Company

The future of energy and the role of Australian oil and gas—a producer's perspective

Mr Peter Coleman, Managing Director and Chief Executive Officer, Woodside

10:30am–11:15am

MORNING TEA IN THE EXHIBITION HALL

SPONSORED BY **AGGREKO**

Tuesday 7 June

CONCURRENT SESSIONS 9–12

11:15am

CONCURRENT SESSION 9: 2016 acreage releases**GREAT
HALL****SPONSORED BY AUSTRALIAN GOVERNMENT DEPARTMENT OF INDUSTRY,
INNOVATION AND SCIENCE**

CHAIR: Mr Bruce Wilson, Head of Division, Resources, Department of Industry, Innovation and Science

2016 Offshore Petroleum Exploration Acreage Release

B Wilson (Department of Industry, Innovation and Science, Australian Government)

The hydrocarbon potential of the 2016 Offshore Acreage Release areas for petroleum exploration

T Bernecker, A Heugh, K Higgins and R Owens (Geoscience Australia)

New insights into the petroleum prospectivity of the Browse Basin: the results of a multi-disciplinary study

N Rollet, E Grosjean, D Edwards, T Palu, S Abbott, J Totterdell, M Lech, K Khider, L Hall, C Orlov, D Nguyen C Nicholson, K Higgins and S McLennan (Geoscience Australia)

Australian onshore petroleum acreage releases 2016

J Gorton (Geological Survey of Queensland, Department of Natural Resources and Mines, Queensland Government)

CONCURRENT SESSION 10: Optimising CSG production**ROOM
M3**

CHAIR: Mr Rick Wilkinson, Chief Technical Officer, APPEA

Improvements in understanding short-range permeability variability in coal seam gas reservoirs

S Tyson (Centre for Coal Seam Gas, The University of Queensland), S Hurter, F Zhou and M Jami (School of Earth Sciences, The University of Queensland)

More bang for your buck: optimising CSG extraction to achieve increased project value | N Allison (OSD Limited)**Reducing production downtime and well intervention costs through innovative advancements in insertable progressing cavity pumps (PCP) technology for Australian CSG operators**

L Govea Hernandez*, M Vasquez* and G Pertuz (Weatherford)

CONCURRENT SESSION 11:**ROOM
M2****The physics of geology—geophysics and petrophysics****SPONSORED BY SCHLUMBERGER**

CHAIR: Mr Martin Bayly, Advising Geophysicist, Schlumberger

Estimation of uncertainties in fault lateral positioning on 3D PSDM seismic image: an example from the North West Shelf

S Birdus, V Ganivet, A Artemov (CGG), R Teakle and P Phythian (Chevron Australia)

Complete wavefield seismic structural, stratigraphic, geomorphic and elastic interpretation in the offshore Browse Basin

A Long, D Rajeswaran, J Greenhalgh, C Reiser and N Chemingui (PGS)

Constraining Late Cretaceous exhumation in the Eromanga Basin using sonic velocity data

M Keany, S Holford and M Bunch (Australian School of Petroleum, The University of Adelaide)

CONCURRENT SESSION 12: How to improve joint venture relations**ROOM
M4**

CHAIR: Mrs Justine Neep, Corporate Performance and Tax Manager, Senex Energy

Sustainable partnerships: the art of high-performing alliances and joint ventures | A Riksen* and N Chipman* (PwC)**How to avoid aches and pains in your joint ventures** | B Steedman (KPMG)**Access to information in joint ventures: the dangers of being kept in the dark** | A Freeman (Piper Alderman)**Recent developments in joint venture jurisprudence** | R Brockett (Ashurst)

Tuesday 7 June

12:30pm–2.00pm

Networking Lunch in the exhibition hall

SPONSORED BY JEMENA

All delegates are invited to enjoy lunch in the exhibition halls and view the stands and poster presentations.

2:00pm

CONCURRENT SESSIONS 13–16

CONCURRENT SESSION 13: PESA—2015 in review

SPONSORED BY PESA

ROOM
M3

CHAIR: Dr Steve Mackie, PESA Federal President

2015 PESA industry exploration review

S Kelemen (Santos Ltd)

2015 PESA production and development review

R Evans, D Close, B Richards and R Ilett (Origin Energy)

Application and legislation pertaining to hydraulic stimulation across the states and territories

M Stone (Department of Natural Resources and Mines, Queensland Government)

CONCURRENT SESSION 14: Coming to the end: decommissioning

SPONSORED BY SUBSEA ENERGY AUSTRALIA

ROOM
M4

CHAIR: Mr Arvind Chetty, Business Development Director, SPIE Oil & Gas Services, committee member and past Vice-Chairman of Subsea Energy Australia

Field trials of the use of hydrated bentonite for decommissioning oil and gas wells

B Towler, M Firouzi, A Mortezapour and P Hywel-Evans (School of Chemical Engineering, The University of Queensland)

Challenges in applying AS 2885 to aging oil and gas pipelines

J Jones (Project Delivery Assurance)

Collaborative approach: a foundation for successful decommissioning

N Lees and W van Es (Wood Group)

CONCURRENT SESSION 15: North West Shelf 1

GREAT
HALL

CHAIR: Mr Adam Craig, Manager Geosciences, KUPPEC Australia

The petroleum prospectivity of the Oobagooma Sub-basin and adjacent Leveque Platform, North West Shelf, Australia | P Harrison (Insight Petroleum Pty Ltd), C Swarbrick (Swarbrick Exploration Services Pty Ltd), J Winterhalder (Exploration geologist) and M Ballesteros (Searcher Seismic)

Mesozoic tectonostratigraphic evolution of the North Carnarvon Basin unlocked using regional 3D seismic

D Bishop, M Halbert, K Welbourn, B Boterhoven, S Mansfield, S Gerth and A Maulana (BP)

Mesozoic rift onset and its impact on the sequence stratigraphic architecture of the Northern Carnarvon Basin

A Gartrell (The University of Western Australia; RISC Advisory), J Torres, M Dixon (Shell Australia) and M Keep (The University of Western Australia)

CONCURRENT SESSION 16: Refining government regulations

ROOM
M2

CHAIR: Mr Chris Lamont, Director Government Relations, APPEA

The patchwork approach to the regulation of fracking and unconventional in Australia | J Hedge (Allens)

Structural reform and petroleum (environment) regulations in the Northern Territory

J van Hattum and V Jackson (Department of Mines and Energy, Northern Territory Government)

Department of Natural Resources and Mines perspective on gas resource development

D Rynne (Department of Natural Resources and Mines, Queensland Government)

Warning. Danger. Caution: over-regulation leads to unsafe work environments | D Fletcher (K&L Gates)

3:15pm–3:45pm

AFTERNOON TEA IN THE EXHIBITION HALL

SPONSORED BY AGGREKO

Tuesday 7 June

CONCURRENT SESSIONS 17–20

3:45pm

CONCURRENT SESSION 17: North West Shelf 2**ROOM
M4**

CHAIR: Mr Mark Thompson, Vice President Exploration Australasia, Woodside Energy

Observations on the Lower Triassic petroleum prospectivity of the offshore Carnarvon and Roebuck basins

S Molyneux, J Goodall*, R McGee, G Mills and B Hartung-Kagi (Carnarvon Petroleum)

Is there a benefit to throwing the kitchen sink at geotechnical studies in an exploration phase?

J Shadlow, A Craig and D Christiansen (KUPPEC Australia Pty Ltd)

Facies architecture of the K10 supersequence in the Browse Basin: when sequence stratigraphy meets lithostratigraphy

S Abbott, K Khider, A Kelman (Geoscience Australia) and K Romine (FROGTECH Pty Ltd)

CONCURRENT SESSION 18: Well completion methodologies**ROOM
M2**CHAIR: Dr Brian Towler, Professor of Petroleum Engineering and
Chair for the Centre for Coal Seam Gas, University of Queensland**Using a 3D hydraulic fracture simulator to assess the impact of perforation design on high near-wellbore pressure loss in the Cooper Basin**

N Eades, M Patter and A Smokaj (Australian School of Petroleum, The University of Adelaide)

Innovative borehole treatment utilising inflatable packer straddle system technology

A Loginov and M Aminkhaki* (TAM International Australia)

Development of a new approach for hydraulic fracturing in tight sand with pre-existing natural fractures

K Pokalai, D Kulikowski, RL Johnson, Jr., M Haghighi and D Cooke (The University of Adelaide)

CONCURRENT SESSION 19: Working with communities**ROOM
M3****SPONSORED BY DUPONT**

CHAIR: Ms Fiona Hoban, Senior Project Leader, DuPont

Measuring organisational resilience: small firms dealing with gas investment cycles

J Ford, M Verreyne and J Steen* (The University of Queensland Business School)

Stakeholder trust in the Queensland CSG industry

N Gillespie (The University of Queensland)

How does a community add value to the oil and gas industry?

S Trundle* and A Probert* (Venture Taranaki)

CONCURRENT SESSION 20: Innovation via collaboration**GREAT
HALL****SPONSORED BY NOVA SYSTEMS**

CHAIR: Mr Tim Anderson, Utilities and Energy Program Manager, Nova Systems

Remote ops: a new way of delivering traditional field operations

M Little (Santos GLNG), presented by G James (Santos GLNG)

Training collaboration in Australia's LNG sector building unprecedented levels of trust

M Lynn and V Holmes (Deloitte)

The death of Australian LNG—and how to bring it back to life

S Kavonic (Wood Mackenzie)

Enabling operational excellence through the effective management of master data

M Puzey* and S Latham* (KPMG)

Tuesday 7 June

5:00pm–6:00pm



HAPPY HOUR IN THE EXHIBITION HALL

SPONSORED BY **QUADRANT ENERGY**

Meet with colleagues and new contacts and share ideas over a refreshing drink before the Conference Dinner.



Complimentary to delegates, registered partners and exhibitors.



Includes drinks and light refreshments.



Business attire.

7:30pm for 8:00pm



CONFERENCE DINNER— Plaza Ballroom Brisbane Convention and Exhibition Centre

Black & white with a touch of bright

The annual APPEA Conference dinner is the hottest ticket in town. Enjoy a sumptuous three-course dinner and internationally acclaimed entertainment. Whether you book a single ticket or a table, this event will impress!



\$195 per person
(not included in the registration fee)



Cocktail/lounge suit

SPONSORED BY



Conference Charity

GIVIT
goods for good causes

APPEA is proud to announce GIVIT as the 2016 APPEA Conference Charity. GIVIT is a national not-for-profit connecting those who have with those who need, through its website givit.org.au. GIVIT's vision is to match generosity with genuine need by inspiring and connecting an online network of givers. Through its website, almost 1200 trusted Australian charities are supported as they request essential, quality items on behalf of their clients. GIVIT then facilitates donated quality goods and services to reach our most vulnerable, impoverished and marginalised individuals in a safe, easy and timely manner. Since establishment in 2009, more than 300,000 items have been donated via GIVIT to assist Australians in need.

GIVIT makes giving easy via its free online giving portal givit.org.au, enabling everyday Australians to see exactly what items are required by vulnerable members of their local community. Somewhere in Australia, there is a pair of unwanted work boots which could help a father secure work to support his family, a reliable washing machine that will allow a single mother the time to apply for work instead of washing clothes by hand and a bed which could provide someone the chance to live in their own home. To see what is needed in your local community or donate simply visit givit.org.au.



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8:00am–3:00pm **Meeting Zone open** — Exhibition Hall, Brisbane Convention and Exhibition Centre
SPONSORED BY KPMG
 An ideal place to meet for an hour, with two private meeting areas seating up to eight people.

8:30am PLENARY SESSION: TECHNOLOGY AND INNOVATION

SPONSORED BY McCONNELL DOWELL

GREAT HALL

CHAIR: Ms Claire Fitzpatrick, Managing Director, BP Developments Australia

As one of the world's most technologically sophisticated industries, innovation has always played a key role in the way in how the oil and gas industry has supplied energy to global markets. Technology continues to change the way the industry operates, sometimes in abrupt and disruptive ways. If anything, these changes will accelerate in the future. As an industry at the forefront of technology, oil and gas must continue to position itself both to develop and to take advantage of technology and innovation to continue to secure its place in the global energy future.

Federal Opposition Address

(invited)

Navigating a market downturn—innovation and cost competitiveness in an EPC environment

Mr Peter Bennett, Chief Executive Officer, Clough

Oil and gas development—the role of technology and innovation in moving the economic frontiers

Dr Francis O'Sullivan, Director of Research MIT Energy Initiative

Aerospace meets oil and gas—technology for accelerated optimisation

Mr Jim Whalley, Chief Executive Officer, Nova Systems

10:30am–11:15am **MORNING TEA IN THE EXHIBITION HALL**

SPONSORED BY AGGREKO

Wednesday 8 June

CONCURRENT SESSIONS 21-24

11:15am

CONCURRENT SESSION 21: Maximising value in project management

ROOM
M3

CHAIR: Mr Damien Hills, Associate Director Environment, APPEA

Maximising value in mega-projects: Ichthys LNG project | C van der Linden (INPEX)

Front end loading: misunderstood or misapplied? | D Newman, S Begg and M Welsh (The University of Adelaide)

Addressing the CSG-LNG economic challenge with surface engineering solutions | N Hough (GPA Engineering)

Maximising value by using good data to drive good decisions | A Shields, M Mirhan and E Stratford (Santos Ltd)

CONCURRENT SESSION 22: Exploration and play analysis

ROOM
M4

SPONSORED BY GEOSCIENCE AUSTRALIA

CHAIR: Dr Andrew Heap, Branch Head, Energy Systems Group, Resources Division, Geoscience Australia

Northern Houtman Sub-basin prospectivity—preliminary results

I Borissova, C Southby, G Bernardel, J Totterdell, R Morris and R Owens (Geoscience Australia)

The rebirth of Papua New Guinea's E&P frontier | J Warburton and K Wulff* (Oil Search)

Prospectivity and play analysis in the frontier Great Australian Bight: the benefits of a public domain data system and the application of traditional and new technologies

I Longley (GIS-Pax Pty Ltd) and J Dirstein (Total Depth Pty Ltd)

Source rock characterisation of under-explored regions of Queensland

A Troup and S Edwards (Geological Survey of Queensland)

CONCURRENT SESSION 23: Cost driven productivity

ROOM
M2

CHAIR: Mr Geoffrey Cann, National Director, Oil and Gas, Deloitte Australia

Cost transparency: which levers do you pull when we cannot trust the dials?

The continued challenge of understanding what is really driving costs | J Smith (KPMG)

Continuous improvement in the gas plant | J Ruiz* (Woodside Energy) and C Jordan* (EY)

Achieving data-driven efficiencies with integrated planning analytics | E Boto (Accenture)

Why are the values of large capital projects routinely overestimated? | S Reid (Deloitte)

Creating the circular advantage for the oil and gas industry | C Coldrick, R Fenn and D Sahota (Accenture)

CONCURRENT SESSION 24: Market developments and the fall of the global oil price

GREAT
HALL

CHAIR: The Hon Martin Ferguson AM, Chairman, APPEA Advisory Board

Lower oil and gas prices and the changing LNG landscape

C Graham (Wood Mackenzie)

Sales and marketing of LNG is evolving. Are you prepared?

A Georgievski*, J Hamilton*, G Gervasoni and P Tan (Deloitte)

Australian LNG: the cost myths and truths

M Wilkes (RISC Advisory)

The dawn of LNG price reviews in Asia Pacific

E van Geuns (De Brauw Blackstone Westbroek)

Implications of LNG exposure on the competitiveness of Australia's eastern gas market

R Lambie, N Thomas and D Whitelaw (Department of Industry, Innovation and Science, Australian Government)

Wednesday 8 June

1:00pm–2:30pm

Networking Lunch in the exhibition hall

SPONSORED BY JEMENA

1:00pm–2:30pm

Authors' Lunch—Brisbane Convention and Exhibition Centre | By invitation only

SPONSORED BY SENEX ENERGY

ROOMS
P1 & P2

2:30pm

PLENARY SESSION: STAKEHOLDER ENGAGEMENT

SPONSORED BY INPEX

GREAT HALL

CHAIR: Dr Malcolm Roberts, Chief Executive, APPEA

Public perceptions of the oil and gas in Australia have changed significantly in recent years. Sophisticated campaigns by interest groups, on the ground and in the media, are underway against onshore and offshore projects. Political representatives on the one hand, and project developers on the other, are under pressure, as industry comes to terms with community engagement, and public advocacy, in the 21st century. While the news is mixed there are success stories and many lessons learnt. This panel session includes speakers at the forefront of engaging with these issues globally and in Australia, within and outside the oil and gas industry. The session is a must-see for all conference delegates.

Opening Comments by session facilitator, Ms Ellen Fanning, Journalist**Beyond Community Engagement: Corporate Social Responsibility**

Mr Peter Botten CBE, Managing Director, Oil Search Ltd

Community trust—key to Australian energy future

Mr John Cotter, Chairman, GasFields Commission Queensland

Developing a greenfield LNG project on the doorstep of an Australian capital city

Mr Seiya Ito, President Director Australia, INPEX

Leveraging stakeholder engagement to drive productivity and efficiency through the energy cycle

Mr Graeme Hunt, Managing Director and Chief Executive Officer, Chairman, Broadspectrum Limited

Panel discussion with session facilitator**Closing address**Note:
Presentation
order may vary.

4:15pm–6:15pm

FAREWELL COCKTAILS: 'Au revoir, adios, arrivederci...'

The Charming Squire, adjacent to the convention centre on Grey Street

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No matter how you say it, there's no better way to say goodbye to your APPEA 2016 conference contacts than at the Farewell Cocktail Reception. Join us for the final networking function as we close the conference.



Complimentary to full delegates and registered partners.

\$50 per person for all other registration categories and additional guest tickets.



Smart casual attire.

**Thursday 9 June & Friday 10 June****2016 AUSTRALIAN OILFIELD GOLF TOURNAMENT**

ORGANISED BY AOGT 2016 COMMITTEE | SPONSORED BY OILFIELD PIPING SYSTEMS

The Australian Oilfield Golf Tournament (AOGT) is brought to you by a committee of dedicated volunteers that are from or related to the Queensland oil and gas industry and aims to raise funds for the Royal Flying Doctor Service.

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Through our fuel refining distribution and marketing assets we also manufacture and sell billions of litres of fuel every year, continuing our commitment to Australia's energy future.



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Poster presentations

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The APPEA conference technical program incorporates an extensive poster series comprising of 40 outstanding papers. Extended abstracts or full papers of these posters will be included in the conference proceedings provided after the conference.

The poster series will be on display within the exhibition hall of the convention centre from 8:00am to 6:00pm Monday and Tuesday, and 8:00am to 3:00pm Wednesday. Delegates are encouraged to meet the authors of the posters on Monday 6 June from 3:15pm to 6:00pm to discuss their work.

GEOSCIENCE

G01 1D depth burial history and thermal maturity modelling of the Toolebuc Formation, Queensland

B Talebi (Geological Survey of Queensland, Department of Natural Resources and Mines)

G02 A visual assessment of the recovery of 3D seismic lines in the Cooper Basin, South Australia

B Doudy (Department of State Development, Government of South Australia), presented by D Cockshell (Department of State Development, Government of South Australia)

G03 A workflow to build a model investigating coal cleat upscaling conditioned by the lithotype

K Barbosa, J Esterle (School of Earth Sciences, The University of Queensland) and M Ruest (School of Civil Engineering, The University of Queensland)

G04 Australia's onshore basin inventory: volume I

L Carr, R Korsch and T Palu* (Geoscience Australia)

G05 Automatic NMO correction in anisotropic media and non-hyperbolic NMO velocity field estimation

M Sedek and L Gross (School of Earth Sciences, The University of Queensland)

G06 Coal microstructure changes due to water absorption and CO₂ injection | Y Zhang, M Sarmadivaleh,

A Barifcani, M Lebedev and S Iglauer (Department of Petroleum Engineering, Curtin University)

G07 Constraining the distribution and relationship between overpressure, natural fracture density and temperature in the Cooper Basin, Australia

D Kulikowski, D Cooke and K Amrouch (Australian School of Petroleum, The University of Adelaide)

G08 Cooper Basin source rock atlas

L Hall, T Palu, C Boreham, D Edwards (Geoscience Australia), T Hill (Department of State Development, Government of South Australia), A Troup (Geological Survey of Queensland) and P Henson (Geoscience Australia)

G09 Core scanner technologies: take everything without breaking

S Rodrigues and J Esterle (School of Earth Sciences, The University of Queensland)

GEOSCIENCE

- G10 Nested approaches to modelling swamp and fluvial channel distribution in the Upper Juandah Member of the Walloon Coal Measures, Surat Basin**
F Zhou, DJ Shields, S Tyson and J Esterle (School of Earth Sciences, The University of Queensland)
- G11 Palynostratigraphic and U-Pb CA-IDTIMS isotopic dating of the upper Orallo Formation, northern Surat Basin, Queensland**
JJ Cooling (The University of Queensland; Geological Survey of Queensland) and JL McKellar (Geological Survey of Queensland)
- G12 Post Jurassic shortening in the western Surat Basin relative to underlying basement depth and faulting**
A Babaahmadi (School of Earth Sciences, The University of Queensland), R Sliwa (Integrated Geoscience Pty Ltd) and J Esterle (School of Earth Sciences; Centre for Coal Seam Gas, The University of Queensland)
- G13 Rangal Supermodel 2015**
R Sliwa (Integrated Geoscience Pty Ltd) and J Esterle* (School of Earth Sciences, The University of Queensland)
- G14 Seismic modelling of fault zones**
E Frery, L Langhi, J Strand (CSIRO) and J Shragge (The University of Western Australia)
- G15 Seismic petrophysics focused case study for AVA modelling and pre-stack seismic inversion**
J Zeb (PETRONAS, Malaysia), S Rajput* (Baker Hughes, Malaysia) and J Ting (CGG)
- G16 Stratigraphic forward model of Springbok Sandstone sedimentation controlled by dynamic topography**
V Bianchi, T Smith and J Esterle (School of Earth Sciences, The University of Queensland)
- G17 The use of stable carbon isotope trends as a correlation tool: an example from the Surat Basin, Australia**
A Hentschel, JS Esterle (School of Earth Sciences; The Centre for Coal Seam Gas, The University of Queensland) and SD Golding (School of Earth Sciences, The University of Queensland)
- G18 Trends in onshore seismic data acquisition: a case study on cable-free nodal systems**
N Yassi (Geokinetics [Australasia] Pty Ltd)
- G19 Vertical gas migration associated with coal seam gas production**
L Ricard and J Strand (CSIRO Energy)
- G20 Virtual and classical Precipice Sandstone outcrops mapping for reservoir modelling**
D Pistellato (School of Earth Sciences, The University of Queensland), R Murphy (Australian Centre for Field Robotics, The University of Sydney), A Sansoleimani, V Bianchi and J Esterle (School of Earth Sciences, The University of Queensland)

ENGINEERING

- E01 A Cooper Basin simulation study of flow-back after hydraulic fracturing in tight gas wells**
S Sarkar, M Haghighi, M Sayyafzadeh, D Cooke, K Pokalai and F Mohamed Ali Sahib (The University of Adelaide)
- E02 A low-cost deepwater gas development solution using subsea dehydration**
R Moore (SubCool Technologies Pty Ltd) and I Long (INTECSEA, WorleyParsons Group)
- E03 Advances in the simulation of offshore heavy lifts from experiences in Bass Strait, Victoria**
S Wales (AMOG Consulting), G Swaik (Origin Energy Limited), K Yik Ting (SapuraAcergy Sdn. Bhd.), K Jayasingh, J Gumley and A Potts (AMOG Consulting)
- E04 Analytical investigation of well/perforation scale effect on sand production of weakly consolidated sandstones**
S Tehrani, M Sarmadivaleh (Australian Resource Research Centre, Curtin University), A Younessi Sinaki (Baker Hughes), M Mostofi and M Bayati (Australian Resource Research Centre, Curtin University)

ENGINEERING

E05 Condition monitoring for the safe operation of offshore cranes

J De Melo, L Rojas (Upstream Production Solutions) and D Shorten (Lloyds Register, Marine UK)

E06 Exergy analysis of an ethylene refrigeration cycle integrated with a NGL recovery process for a large LNG train

NB Najibullah Khan (Curtin University; University Malaysia Pahang), A Barifcani, M Tade and V Pareek (Curtin University)

E07 Experimental investigation on CO₂ foam flooding enhanced by a new combined thickening formula

X Xu, A Saeedi (Curtin University) and K Liu (Research Institute of Petroleum Exploration and Development)

E08 Micro-scale simulation of bubble-water flow in coal seams by the lattice Boltzmann method

J Yi, H Xing (Centre for Geoscience Computing, School of Earth Sciences, The University of Queensland), T Sun (Leading Petro-tech Co., Ltd) and V Rudolph (The University of Queensland)

E09 Preparation of high-accuracy reference gas samples for proficiency testing

D Smeulders (National Measurement Institute)

E10 Prevention of surface annular casing pressure (SCP/SAP) in the B-annulus

D Field, J Bårdsen and V Dagestad (Welltec Oilfield Services Pty Ltd)

E11 Simulation of hydraulic fracturing with propane-based fluid using a fracture propagation model coupled with multiphase flow simulation in the Cooper Basin, South Australia

Y Fei, ME Gonzalez Perdomo, VQ Nguyen, ZY Lei, K Pokalai, S Sarkar and M Haghighi (Australian School of Petroleum, The University of Adelaide)

E12 Small GTL technology for a big country

P Larkin (PROCOM Consultants Pty Ltd)

E13 Small-scale technology solutions to eliminate flaring

J Brown, CY Law, K Fielden and C Dee (DNV GL), presented by N Pollock (DNV GL)

E14 The application of risk-based methods to multilateral well design

LJ Nguyen (The University of Western Australia), PF Pickering (Woodside Energy) and ZM Aman (The University of Western Australia)

E15 Wind tunnel testing and computational fluid dynamics in FLNG and floating production system design

J Green and S Sivandran* (BMT Fluid Mechanics)

BUSINESS

B01 Digital turnarounds: leading practice in LNG train turnaround management

V Neep and A Radach (Accenture)

B02 Financing LNG infrastructure using master limited partnerships

K Wee (Chartered Accountant)

B03 Fracking forum

M Williamson (Wiltax Consulting Pty Ltd)

B04 Legal challenges to aerial drone technology in the oil and gas industry

J Lawrence (Piper Alderman)

B05 What have we learned? Insights from a decade of bias research

MB Welsh and SH Begg (Australian School of Petroleum, The University of Adelaide)

