

EXECUTIVE PLENARY SESSION 1

Offshore Technology Conference and Excellence in Asia

Wednesday, 23 March • 0900-1030 hours • Plenary Hall, Level 1



DATO' WEE
YIAW HIN



JEFFREY MILLER



TAN SRI DATO'
SERI SHAHRIL
SHAMSUDDIN



ANDY BROWN



KK LIM

Today's climate of challenging economics in the oil and gas industry requires innovative solutions to drive down costs without compromising quality, healthy, safety and environment, which the industry rightly demands as standard. This session will address:

- What are the unique offshore technology gaps in Asia and how can they be overcome, as demand for clean energy in Asia grows?
- Will the unique Asian cost leadership approach sustain growth during the current period of low oil prices?
- Can we match Asia's global leadership in airline, automotive, shipbuilding and electronics in oil and gas: equipment manufacture; services; and upstream operatorship?

SPEAKERS:

- Dato' Wee Yiau Hin, EVP & CEO, Upstream, **PETRONAS**
- Jeffrey Miller, President; Chief Health, Safety and Environment Officer, and Board of Directors, **Halliburton**
- Tan Sri Dato' Seri Shahril Shamsuddin, President & Group CEO, **SapuraKencana Petroleum**
- Andy Brown, Upstream International Director, **Shell**
- KK Lim, President, Asia Pacific, **Technip**

EXECUTIVE PLENARY SESSION 2

Achieving Excellence in Asia: Leadership Stories

Wednesday, 23 March • 1100-1230 hours • Plenary Hall, Level 1



JOHN RICE

Exceptional leadership and innovative business models have allowed Asian companies to become global leaders in airline, automotive, electronics and shipbuilding industries. This session will address:

- Can the oil and gas industry in Asia emulate their success on the global stage?
- What leadership styles, innovation philosophies and business models have helped Asian enterprises achieve global success? Are there uniquely Asian characteristics that underpin success?
- Does the oil and gas industry in Asia need to change to achieve excellence and become a global leader in today's challenging economic environment?

SPEAKERS:

- Tan Sri Tony Fernandes, CEO, **AirAsia**
- John Rice, Vice Chairman, **GE**

PANEL SESSION 1

Excellence in Execution

Tuesday, 22 March • 1600-1730 hours • Plenary Theatre, Level 3



ANKUR GUPTA



BRIAN EVANS



STEVE GILBERT



ZVONIMIR DJERFI

MODERATORS

John McCreery, Director, **Bain & Co.**
 Aki Nakajima, Reservoir Engineer, **INPEX**
 Mathieu Stoltz, Head, Execution Process, **Technip**

SPEAKERS

Zvonimir Djerfi, President Integrated Operations, **Baker Hughes**
 Brian Evans, Head, Department of Petroleum/Subsea Engineering, **Curtin University**
 Steve Gilbert, Vice President, Operations, **LR Synergy**
 Ankur Gupta, Vice President, Asia Pacific, **Weatherford**

With offshore projects in Asia Pacific targeting increasingly complex reservoirs, deepwater (harsher) environments and Enhanced Oil Recovery (EOR), execution risk is clearly increasing. Cost overruns on recent green field LNG projects also illustrate the risks associated with mega projects and the challenges of coordinating both onshore and offshore execution. With gas sales agreements locked in well before start up, it is critical to manage development timelines and have accurate production forecasts.

Experience from the industry with Front End Loading (FEL) suggests that applications of innovative technology and industry 'firsts' reduces FEL and increases project schedule volatility. Once a project plan is determined at or near sanction, it becomes increasingly higher risk to change course – even with the best of intentions.

Other industries have had successes with repeatable models to drive down manufacturing costs and ensure that standardisation occurs at every part of the value chain, including customer experience. Despite many years of effort, the 'design one, build many' concept remains elusive for the offshore oil and gas industry.

Mega projects also requires efficient collaboration between numerous engineering/procurement and construction stakeholders (clients/vendors/contractors) at different locations. It is key to set the right organisation and processes to deliver successfully.

Finally, knowledge management is essential to address execution challenges in terms of staff competency and efficient recycling from past experience.

This panel session, with leading offshore project operators, and companies involved in offshore project development will examine the strategies required to drive execution excellence by:

- Focusing on how to strike the balance between standardisation, maximising FEL and the need for technical innovation
- Looking at integration opportunities among all project stakeholders while recognising their specific drivers
- Investigating the importance of people knowledge as a key asset

PANEL SESSION 2

Cost Reduction Through Innovation

Wednesday, 23 March • 1400-1530 hours • Plenary Theatre, Level 3



AMIR ARYANA



ALAIN MARION



RICHARD VAN LENT

MODERATORS

John McCreery, Director, **Bain & Co.**

Allan Magee, Professor, **National University of Singapore**

The oil and gas industry has had a long history of innovation to open up access to new reserves and to then develop and operate safely. For the offshore industry, from the first steps into the shallow water, to the opening of the North Sea in the 1970s, to today's ultra-deep water fields, cost reduction has been an industry imperative to both developing fields and then extending field life in mature basins.

Technology clearly has a role to play in cost reduction. What new technologies will offer the greatest benefits and justify investments even during a potential industry downturn? What is the process to identify and nurture promising new ideas which may run counter to conventional wisdom?

While technology has often been the catalyst to cost reduction, many have discovered that technology in itself is not enough.

SPEAKERS

Amir Aryana, Onshore Gas Group Leader, **CSIRO**

Alain Marion, Chief Technology Officer, **Forsys Subsea**

Richard van Lent, Vice President, Development Planning, **Woodside**

Innovative business models, the development of new capabilities and re-design of operating models have all played their part. Continuous improvement and lean manufacturing techniques have delivered cost efficiencies that have extended field lives. Others have tackled organisation complexity to speed up decision-making and reduce cycle time. The industry is continually looking to find ways to redefine the relationships and commercial arrangements between governments, operators and the service sector.

This panel will examine the strategies required to deliver cost reduction through innovation, the potential sources of that innovation and the issues that the industry faces in doing this whilst maintaining the highest standards of personal and process safety, integrity and reliability.

PANEL SESSION 3

Nurturing Regional Synergies

Wednesday, 23 March • 1600-1730 hours • Plenary Theatre, Level 3

MODERATORS

Noorudin Abdullah, Head, Upstream Legal, **PETRONAS**

Ramlan Malek, Executive Director,
SapuraKencana Petroleum

PANEL SESSION 4

Offshore Unconventional Resources in Asia

Thursday, 24 March • 0900-1030 hours • Plenary Theatre, Level 3

MODERATORS

Brian Evans, Head, Department of Petroleum/
Subsea Engineering, **Curtin University**
Mi Mo, Senior Government Affairs Adviser, **Woodside**

SPEAKERS

Frank Lim, Principal Director, **2H Offshore**
Christopher Schenk, Project Chief, **U.S. Geological Survey**

Major energy importers in Asia seek energy security, ideally from new domestic energy production, and they prefer clean burning fuels such as gas. Gas from seabed methane hydrates could be available in abundance around Japan, Korea and across Asia in deep waters around Australia, China, Papua New Guinea and New Zealand.

Offshore production technology is reaching the point where commercial production from these deposit may soon be possible. In 2014, Japan completed the world's first production test in the Eastern Nanghai Trough. In 2015, Korea is expected to complete its first production well.

Whilst the gas hydrate production challenge is significant in the reservoir and around the well completion, the surface technology for gas evacuation is maturing quickly with several Floating LNG solutions now in construction; Asia could be ideally placed to drive this technology and deliver the production solutions.

Advances in deepwater production technology in Asia are also evident for other seabed resources including ocean floor polymetallic sulphide deposits (copper, gold and silver) in the territorial waters off Papua New Guinea.

Will the combination of these advanced offshore production technologies allow the economic production of other non-traditional offshore deepwater resources such as hydrocarbons from deep fractured basement rocks? Can the low cost production technology seen in the shale gas revolution be employed subsea for another unconventional revolution?

The panel of experts will discuss national hydrates programmes, deepwater mineral exploration, and a geoscience outlook on the Asia wide prospectivity for deepwater unconventional resources.

PANEL SESSION 5

Oil Price Volatility and Implications to the Industry

Thursday, 24 March • 1100-1230 hours • Plenary Theatre, Level 3



DATUK MOHD
ANUAR TAIB



BRIAN TRUELOVE



GERO FARRUGGIO



JAMES TAYLOR



MAX BELLOTTI



SHAH HAKIM ZAIN

MODERATORS

Alfred Soong, Drilling Engineer, Advisor, **Halliburton Consulting and Project Management**

Marc Lehmann, Principal Production Chemist, **INPEX**

SPEAKERS

James Taylor, Vice President, Consulting and Project Management, **Halliburton**

Brian Truelove, Senior Vice President, **Global Offshore, Hess Corporation**

Datuk Mohd Anuar Taib, Senior Vice President, Upstream Malaysia, **PETRONAS**

Max Bellotti, Managing Director, **Saipem Asia**

Shah Hakim Zain, Group Chief Executive Officer, **Scomi Group**

Gero Farruggio, Vice President, Research, Asia Pacific Upstream Oil and Gas, **Wood Mackenzie**

The last six months of 2014 saw an almost 50% drop in the global oil price, brought on by increased supply and low demand in the industry. This decline caused jarring repercussions in the E&P industry, raising concerns about oil price volatility for the foreseeable future. As a result, operators have been slashing Capex and Opex spends to rebalance their portfolios and remain profitable. The trickle-down effect through the E&P value chain has been equally swift with service providers actively reducing costs commensurate with the expected activity levels.

Industry experts are divided on the supply-demand picture, specifically in the ensuing shape and timing of the price recovery – from a rebound to 60-80\$/bbl by the end of the year, to a more conservative 40-60\$/bbl for several years. Price cycles are not new to the industry and whatever the future holds, the industry will re-balance itself to maintain relevance and power the global energy need.

This panel session, represented by a broad spectrum of leading oil & gas operator and service industry executives will present their views on the current price climate and the corresponding adjustments needed to maintain vibrancy and growth in the industry.

The following key topics will be addressed during the panel session by renowned speakers from global E&P industry:

- Industry consensus on projections for oil price and supply-demand balance
- Impact on unconventional exploration and development in North America and outside of North America
- Opportunities to improve operator performance – technology, operational and organisational efficiency, and productivity. Are there lessons to be learnt from the North America shale industry?
- Operator's Capex/Opex reductions – are cuts too deep and will it impact the industry's ability to recover rapidly?
- Oilfield service industry's view on current activity levels and how they are able to impact operator performance
- EPC contractors – technology and operational efficiency impacts on development costs

PANEL SESSION 6

Next Generation Workforce – Knowledge Transfer and HR Strategies

Thursday, 24 March • 1400-1530 hours • Plenary Theatre, Level 3



DATUK IR. DR. ABDUL
RAHIM HASHIM



SUSAN ROSENBAUM



STEVE BULLOCK

MODERATORS

Deva Prasad Ghosh, Professor, Universiti Teknologi
PETRONAS

Maria Eugenia Yañez Banda, Senior Well Engineer,
Schlumberger

SPEAKERS

Steve Bullock, Managing Director, **Petrofac Training Services**

Susan Rosenbaum, Director, Discipline Career Management
and Knowledge Management, **Schlumberger**

Datuk Ir. Dr. Abdul Rahim Hashim, Vice Chancellor and CEO,
Universiti Teknologi PETRONAS

In the upcoming years the oil and gas industry will face the loss of experienced personnel. Combined with the influx of young employees, this situation will generate difficulties with retention of knowledge and personnel capabilities. This will pose significant challenges to the industry in ensuring excellence in execution, business growth, operational efficiency and development of new technologies.

The following key topics will be addressed within the panel session by the respective speakers, particularly with reference and relevance to the Asia Pacific region:

- What are the current initiatives by various organisations to retain knowledge?
- How will organisations acquire and develop the right competencies to meet future demands of the oil and gas industry?
- What are the strategies to cover the loss of knowledge and expertise due to retirement of domain leaders, applied community experts and subject matter experts across the different disciplines in oil and gas organisations?
- How can organisations fast track the development of personnel competencies (shorter time and wider work exposure)?
- How can the industry and academic organisations encourage and attract young students to join the industry?



PANEL SESSION 7

Environment for Oil and Gas Development – High CO₂ Fields and Carbon Capture and Storage

Thursday, 24 March • 1600-1730 hours • Plenary Theatre, Level 3

MODERATORS

John Fuad Edwards, Global Theme Leader for Asset Integrity, **Lloyd's Register**

Stuart Smith, Chief Executive Officer, **National Offshore Petroleum Safety and Environmental Management Authority, Australia**

SPEAKERS

Tania Constable, Chief Executive Officers, **CO₂ Cooperative Research Centre**

James Johnson, Deputy CEO, **Geoscience Australia**

Syamsu Alam, Director Upstream, **PT Pertamina (Persero)**

John Hulme, Country Manager, **SapuraKencana Energy**

Tim Bertels, CO₂ Implementation Manager, **Shell**

Emissions of carbon dioxide (CO₂) have attracted attention from communities and governments around the world. Much of this attention is focussed on emissions associated with fossil fuel production, yet fossil fuels are expected to remain a key component of the global energy mix for decades to come. It is therefore imperative that solutions be found to manage emissions.

Among the issues requiring attention are technologies and practices to support the development of gas reservoirs with high levels of CO₂ and hydrogen sulphide. These reservoirs are estimated to represent nearly 40% of world gas reservoirs (approximately 2500 trillion cubic feet) so they have the potential to make a substantial contribution to global energy supplies if solutions can be found.

Work is in progress for technologies and practices to manage the capture and storage of CO₂ to avoid emissions into the atmosphere. These technologies and practices may provide a pathway for the management of CO₂ emissions associated with fossil fuel production. However, they also pose substantial challenges for the industry, governments and the community.

This session will draw on the experience of a panel of leading international industry, research and government representatives to discuss current and emerging issues with high CO₂ fields and carbon capture and storage.

PANEL SESSION 8

FLNG

Friday, 25 March • 0900-1030 hours • Plenary Theatre, Level 3



MIKE EFTHYMIOU



JEAN-MARC
LETOURNEL

MODERATORS

Michael Si, Civil Marine/Hull Manager – Malikai TLP Project,
Shell Projects & Technology – East

David White, David White, Professor, Centre for Offshore
Foundation System, **University of Western Australia**

SPEAKERS

Didrik Reymet, Project Director, **Shell Prelude**

Jean-Marc Letournel, Group Senior Vice president,
Business and Technology Offshore, Technip

Mike Efthymiou, Professor of Offshore Structures, **University
of Western Australia**

During the next few years the Asia Pacific region will become host to several new floating facilities including FLNG. These facilities adopt innovative design solutions and extend the boundaries of scale, to address challenging field requirements. For example, the Shell Prelude FLNG facility will be the world's largest floating facility, and further FLNG facilities of similar scale are expected to follow. Meanwhile, Asia is becoming host to the largest semi-submersibles in the world. These include Gumusut-Kakap, which came on stream in 2014, and the Ichthys CPF, which will be the world's largest semisubmersible when it arrives on location in 2016.

This panel session will be presented by leading specialists in floating facilities and FLNG and will highlight the innovations and new approaches that are being adopted in these projects.

The following key topics will be addressed by the panel session by the speakers:

- Design challenges for upscaling of floating system concepts
- Asia Pacific capabilities for construction of floating facilities and FLNG
- Metocean, wave-structure, mooring system and anchoring solutions for large floating structures
- FLNG design, operational and maintenance approaches
- Future trends of production facilities in Asia, including the potential growth of FLNG

PANEL SESSION 9

Automated Offshore Operations

Friday, 25 March • 1100-1230 hours • Plenary Theatre, Level 3



HOLGER STIBBE



RICHARD PARLIMAN II



SUDHIR PAI



WILLIAM J.
KIRKWOOD

MODERATORS

Tomasz Matlak, Mechanical Engineer, **Schlumberger**

SPEAKERS

Holger Stibbe, General Manager, Subsea Production Alliance, **Baker Hughes**

Sudhir Pai, Managing Director, **Liquid Robotics Oil and Gas**

Richard Parlman II, Lead Systems and Controls Technical Specialist, **Lloyd's Register Energy Drilling**

William J. Kirkwood, Senior Research and Design Engineer, **Monterey Bay Aquarium Research Institute**

With the expanse of offshore operations rising, there is an increased need to ensure oilfield developments achieve financial success. The process requires careful logistics planning in every segment, and a key driver is the efficient use of automated systems.

With advancements in technology, we are seeing greater use of automated systems to increase the capabilities of finding and retrieving hydrocarbons, and the speed of installing and maintaining equipment. The technology is not from a single area, but from a range that includes subsea production systems, and AUV and ROV technologies.

At this session, leading experts from these fields will address the current state of offshore operations and where it is progressing. This will reference our current economic climate and its effects on research and development. The following key topics will be discussed:

- Current AUV/ROV performance and long-term potentials
- Improvements in subsea production systems (multiphase subsea compressors)
- Expansion of offshore development in Asia
- Adaptive autonomy and Multi-AUV coordination

PANEL SESSION 10

Decommissioning – Case Studies and Lessons Learnt

Friday, 25 March • 1430-1600 hours • Plenary Theatre, Level 3



STUART SMITH



PETER SLAIBY

MODERATORS

Bacho Pilog, Senior General Manager, Petroleum Operations Management, Malaysia Petroleum Management, **PETRONAS**

Mhairi Glover, Safety and Risk Engineering Manager Development, **Woodside**

SPEAKERS

Joey Tabor, Director of Projects, **Montco Oilfield Contractors**
Stuart Smith, Chief Executive Officer, **National Offshore Petroleum Safety and Environmental Management Authority, Australia**

Brian Twomey, Managing Director, **Reverse Engineering Services Ltd**

Peter Slaiby, Global Vice President, Decommissioning & Restoration, **Shell**

Back in 2010, a study estimated that there were 1,732 offshore installations in the Asia Pacific region with 32.85% of it aged 25 years or above. These statistics were a signpost for industry players as well as regulators in Asia Pacific on the ‘emerging reality’ of decommissioning in the coming years.

Moving forward to 2016, the “evergreen” question on the best timing for decommissioning remains an unsolved puzzle, as it may be tempting to defer physical abandonment for an extended period of time at the end of an economic life of a field. In doing so, it is hoped that the oil price will increase to make it feasible to continue production or that the latest and greatest recovery techniques would be perfected in time.

This thought-provoking panel session will address the challenges, sharing of lessons learnt and key success factors in driving a successful execution of decommissioning/ abandonment projects focusing on:

- Whether implementation of regional/national regulation could be the key determinant of the decommissioning timing?
- How to ensure a field has produced up its maximised its return on investment and technical potential or had been fully depleted before decommissioning?
- What are the best practices in decommissioning planning in order to achieve maximum safety, cost-effectiveness and minimal environmental impact from the field operators’ and service providers’ perspectives?

- When should interventions be injected to minimise risks of cost overrun through minimisation of the “unknown-unknown” in decommissioning?
- How does having decommissioning as part of the development plan contribute to a successful decommissioning project?

The panel consisting of representatives from regulators, field operators, service providers and independent parties who are subject matter experts, will share their experiences, inspirations, insights and key takeaways from projects in the Gulf of Mexico and North Sea.





COUNTRY SESSIONS


Country sessions will provide in-depth coverage of the latest oil and gas development in Asia and beyond. In addition to country briefings that include market outlook, investment climate and opportunities, these sessions will also highlight industry and technological advancements in recent and on-going major projects.


The sessions will incorporate both presentations and panel discussions led by subject matter experts from government and regulatory bodies, national and independent oil companies, service companies and various oil and gas players active in featured countries.


 **COUNTRY SESSION 1**
Japan
Wednesday, 23 March • 1400-1530 hours • Banquet Hall, Level 3


 **COUNTRY SESSION 2**
Mexico
Wednesday, 23 March • 1600-1730 hours • Banquet Hall, Level 3


 **COUNTRY SESSION 3**
China
Thursday, 24 March • 0900-1030 hours • Banquet Hall, Level 3


 **COUNTRY SESSION 4**
Malaysia
Thursday, 24 March • 1100-1230 hours • Banquet Hall, Level 3

 **COUNTRY SESSION 5**
Indonesia
Thursday, 24 March • 1400-1530 hours • Banquet Hall, Level 3

 **COUNTRY SESSION 6**
Myanmar
Thursday, 24 March • 1600-1730 hours • Banquet Hall, Level 3

 **COUNTRY SESSION 7**
Australia
Friday, 25 March • 0900-1030 hours • Banquet Hall, Level 3

 **COUNTRY SESSION 8**
South Korea
Friday, 25 March • 1100-1230 hours • Banquet Hall, Level 3

 **COUNTRY SESSION 9**
Iran
Friday, 25 March • 1430-1600 hours • Banquet Hall, Level 3

SPECIAL SESSIONS

SPECIAL SESSION 1
SPS-SURF: Responding to the Cost Challenges of Low Oil Price
Tuesday, 22 March • 1600-1730 hours • Room 304/305, Level 3

SPECIAL SESSION 2
Experimental Facilities in South Korea
Wednesday, 23 March • 1400-1530 hours • Room 304/305, Level 3

SPECIAL SESSION 3
Oil and Gas Innovations – The Netherlands
Wednesday, 23 March • 1600-1730 hours • Room 304/305, Level 3

SPECIAL SESSION 4
Big Data Analytics
Thursday, 24 March • 0900-1030 hours • Room 304/305, Level 3

SPECIAL SESSION 5
State of the Art in Offshore Renewable Energy
Thursday, 24 March • 1100-1230 hours • Room 304/305, Level 3

SPECIAL SESSION 6
PETRONAS FLNG 1
Thursday, 24 March • 1400-1530 hours • Room 304/305, Level 3

SPECIAL SESSION 7
PETRONAS Refinery and Petrochemical Integrated Development (RAPID) Project
Thursday, 24 March • 1600-1730 hours • Room 304/305, Level 3

SPECIAL SESSION 8
Workforce Diversity
Friday, 25 March • 0900-1030 hours • Room 304/305, Level 3

TOPICAL LUNCHEONS

Sponsoring companies will share insights on topics related to the offshore energy industry.

Wednesday, 23 March 2016



Thursday, 24 March 2016

