

Asia Pacific Decommissioning and Abandonment Market Survey

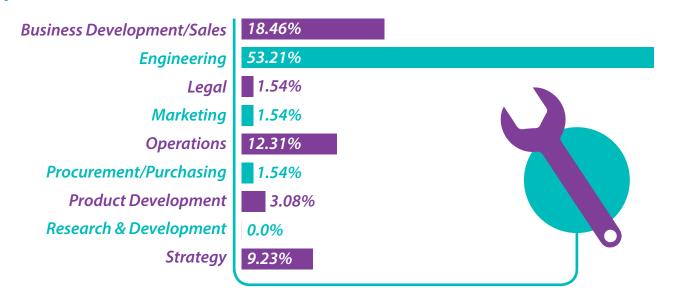




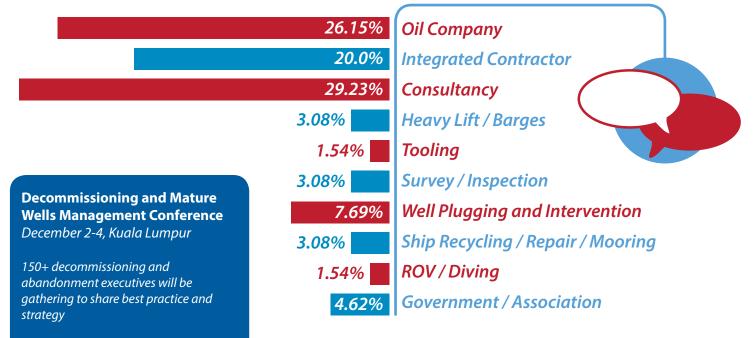
Survey Respondants

Q1.

What is your primary role within the company?



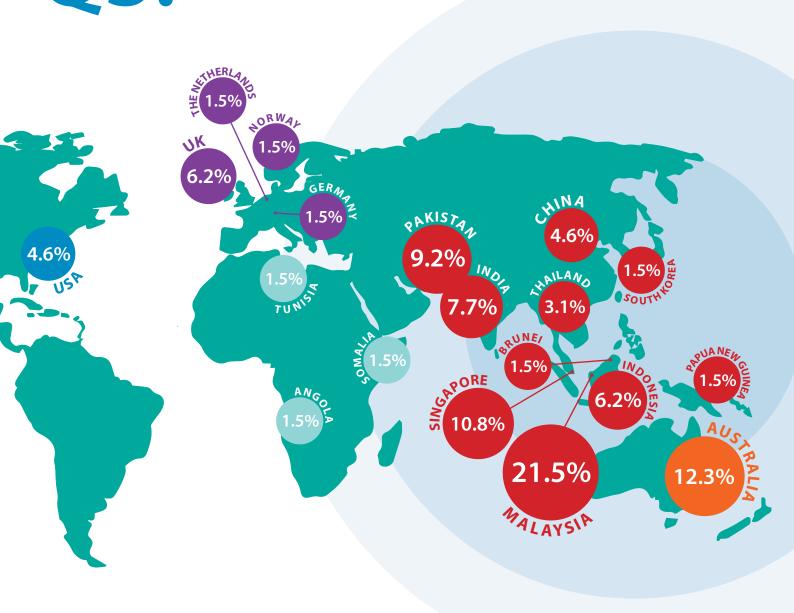
What best describes what your company does?



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In what country are you based?



Decommissioning and Mature Wells Management Conference December 2-4, Kuala Lumpur

150+ decommissioning and abandonment executives will be gathering to share best practice and strategy

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The Decommissioning Market





In 2012, we asked the same question and only 24% agreed or strongly agreed with this





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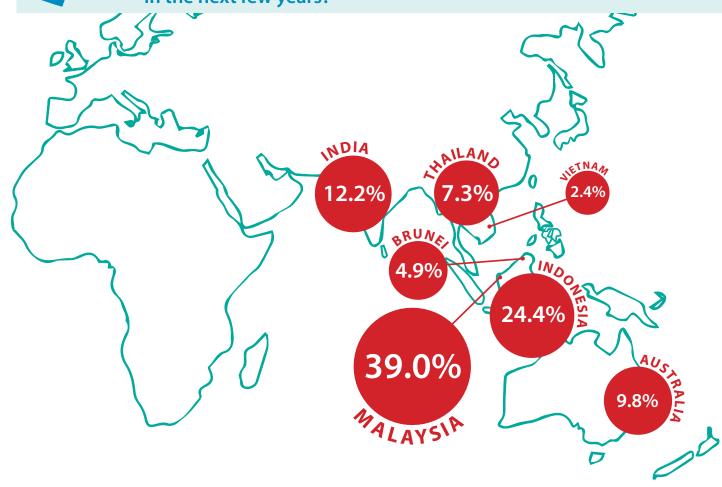
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In 2012, 72% agreed or strongly agreed with this statement compared to 83% this year. Clearly decommissioning is still seen as a growing business opportunity, even in the current climate



Which of the following countries do you see as the biggest growth region within the Asia Pacific for decommissioning in the next few years?





In 2012, **Indonesia** was seen as being the biggest growth region for decommissioning. Now Malaysia has pulled ahead with 39% compared with 23% in 2012

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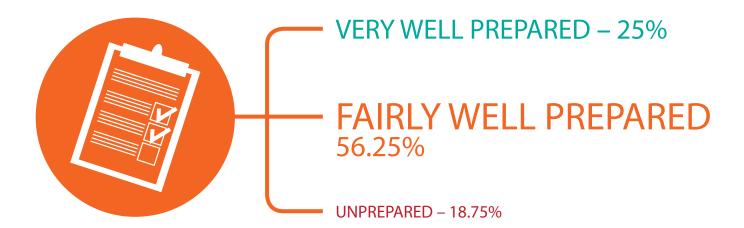
India is also now viewed as a growth region for decom. Only 4% saw it as the country with most opportunities in 2012. This could be due to the commencing of the decommissioning of the Tapti field. India's first ever offshore field to be decommissioned!



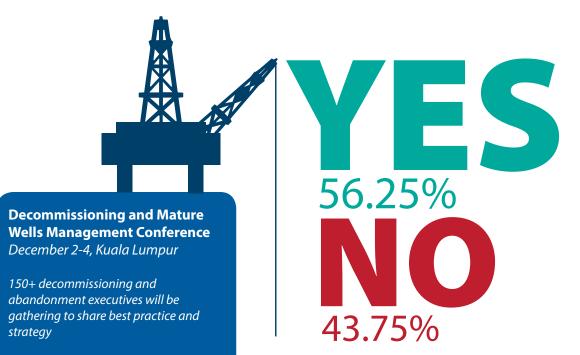
What did the operators say?

Q7.

How well prepared would you say your company is for decommissioning and abandonment?



Do you have a team dedicated to decommissioning and abandonment?



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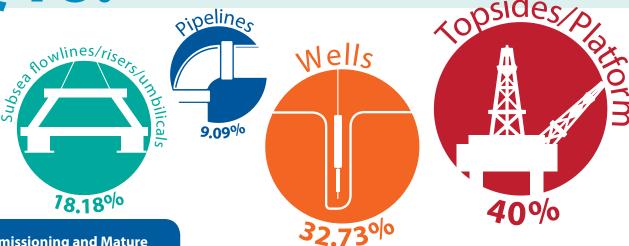
Challenges for the industry

Q9.

Agree or Disagree: Decommissioning is going to be a big challenge for the industry within the Asia Pacific



What is the most challenging asset to abandon?



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It might come as a surprise that almost as many saw wells as being the most challenging asset to abandon! In fact, wells can comprise anywhere from 30-60% of the decommissioning cost



What do you see as being the biggest challenge when moving forward with decommissioning for the Asia Pacific region?

Lack of trained and experienced staff	19.64%	(23.71% in 2012)
Lack of finances to carry out the work	16.07%	(7.22% in 2012)
Lack of regulatory understanding and interaction	32.14%	(37.11% in 2012)
Lack of suitable and experienced contractors	10.71%	(11.34% in 2012)
Lack of accurate cost estimations for decommissioning	10.71%	(20.62% in 2012)
Decommissioning wells and facilities without negatively impacting/	10.71%	



contaminating the environment

Unsurprisingly- in the current climate- financing decom is seen as a greater challenge than previously



As in 2012, this year the lack of decommissioning regulation is still seen as the greatest challenge. With the Department of Mineral Fuels in Thailand bringing out new regulation this year-could this be about to change?



Accurate cost estimations are seen as less of a challenge than before- have operators and contractors become better at this?

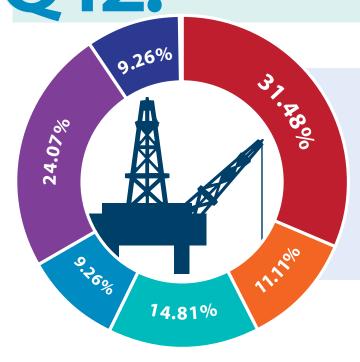
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Well Abandonment- How Can We Reduce Cost?



Rigless technology

New downhole technology
Negotiating better deals with service providers
Purchasing integrated packages
Collaborative operator campaigns
Human factors - finding efficiencies

Conclusion

In all the results of the survey were surprising. Despite the current climate, decommissioning and abandonment service companies still see opportunities for growth in the Asia-Pacific, more so than in 2012.

Malaysia is now seen as the biggest growth area, ahead of Indonesia and Thailand, with a new area, India also coming into prominence recently.

More companies view decommissioning and abandonment as an important part of their business than in 2012, suggesting that despite the challenges, the industry has still managed to grow, with a number of small projects occurring.

Financing decommissioning continues to be a major challenge along with developing decommissioning regulations for the region. These challenges will need to be overcome before the industry can really move forward.



Decommissioning and Mature Wells Management Conference

2-4 December | Sheraton Imperial Hotel, Kuala Lumpur

Develop your decommissioning and mature wells knowledge further and network with over 150 decommissioning and abandonment experts from across South East Asia

At the Decommissioning and Mature Wells Management Conference you will understand the latest intervention and abandonment technologies available to manage your late life wells and plan a cost-effective decommissioning strategy which marries local techniques, with international expertise

- Understand how to effectively plan for decommissioning in a low oil price environment, including accurate cost estimation while ensuring environmental impact is minimized
- Receive a regulatory update from each locality in the region, to understand how this will affect decommissioning cost, technique and how to ensure you comply
- Discuss how local businesses and local expertise can be trained to allow the region to benefit economically from the decommissioning market and develop a decommissioning infrastructure
- Weigh up the choice between intervention and abandonment in late life or suspended wells, then understand the latest technology available for safe and effective well services
- Draw from international case studies and apply their expertise and technical engineering best practice to local situations

Attendees at last year's conference -











Expert speakers at this years' conference



Zahari Razak Senior Structural Engineer PETRONAS



Brian Twomey REVERSE ENGINEERING Managing Director Reverse Engineering Services Ltd



Karayadi Junedi Senior Structural Engineer Pertamina



Amila Zawawi Senior Lecturer Universiti Teknologi PETRONAS



Jeff Haworth

Executive Director, Petroleum Department of Mines and Petroleum, Government of Western Australia



Paul Acorda

Technical Manager, **Pressure Pumping Baker Hughes**

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