



About **Pangea Offshore**



Our Services

- Assist Asian contractors and vessel owners in penetrating new markets
- Brokerage of Offshore Support Vessels and other marine assets, both for term chartering and S&P (Sale & Purchase) transactions
- Niche services in the offshore Oil & Gas space, such as manpower and IMR (Inspection, Maintenance & Repair) in fast growing areas of the world
- We operate globally, with focus on:
 - Africa
 - Latin America
 - Middle East



www.pangeaoffshore.com

Value Proposition



We **bridge** asset owners and vessel providers in Asia with our customers in fast growing regions such as Latin America, Africa and Middle East

Our focus is to establish long term partnerships between the oilfield contractors / vessel owners with reputable local companies and clients in the regions where we have strong network

www.pangeaoffshore.com



Management

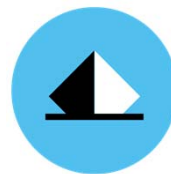
Edgar Espinosa – Executive Director

- 2015 - 2010 BUMI ARMADA
 - VP Sales & Business Development
 - Head of International, Offshore Support Vessels
 - FPSO and OSV Sales for Africa, Latin America and Middle East
 - Also supporting T&I and Subsea business units
- 2009 – 1999 A.P. MOLLER-MAERSK (Maersk Line – Maersk Logistics)
 - Managerial postings in Latin America, Africa and Europe

www.pangeaoffshore.com

Presentation Structure

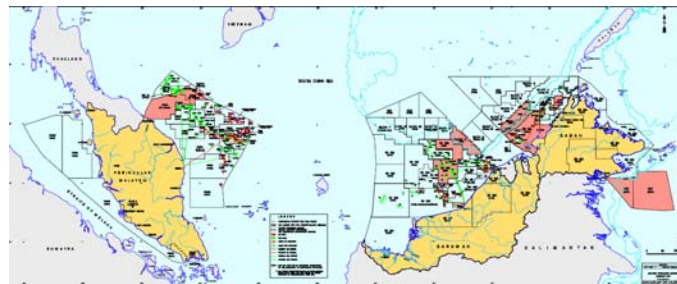
1. Malaysia E&P
2. Malaysia OSV
3. Accommodation Sector



1. About the **Malaysia E&P Market**



Malaysia E&P Overview



- 645,900 b/d (2015), most of it offshore
- Oil Reserves - 4 bn bbls
- Natural gas reserves: 83 trillion cu feet (TCT)
- PETRONAS, Shell and ExxonMobil dominate E&P with approximately 43%, 22% and 16% respectively (80% of total production)

www.pangeaoffshore.com



Malaysia E&P - Outlook

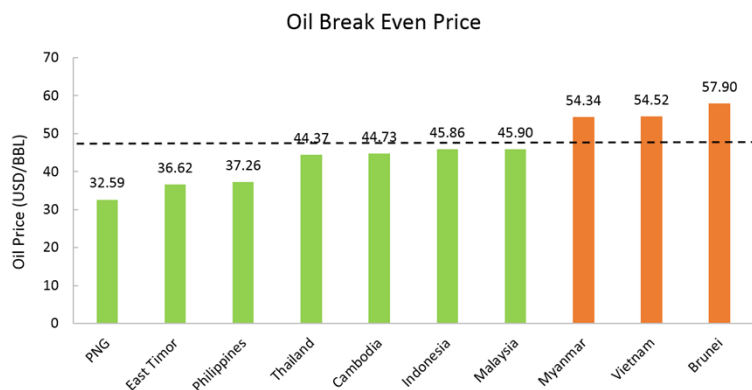
- Oil Production has been declining since its peak of 844,000 b/d (2003)
- Government has taken efforts to incentivize output via RSC (Risk Shared Contracts), marginal field development (EOR, Enhanced Oil Recovery) and Deepwater developments in Sarawak and Sabah
- LNG projects mainly in offshore Sarawak are a bright point
- Approx. other 20 international O&G companies operate in Malaysia plus a total of 82 RSC's, 34 of them producing at the moment
- OUTLOOK: despite above, weak oil prices will delay FID, keeping oil production on a slow downward trend (estimate 645,900 b/d in 2015 to 458,600 b/d in 2025)**

PSC vs RSC		
Terms	PSC	RSC
Production entitlement	Contractor shares production entitlement from cost recovery and oil and gas profit	100% production volume belongs to Petronas
Cost recovery/reimbursement	Contractor recovers the costs in kind up to specified percentage of production	Petronas reimburses contractor the cost in cash from the allocated revenue of the field
Contractor's profit	Contractor is entitled to a specified profit share from the remaining production after royalty and cost recovery	Petronas pays contractor an agreed fee for the service provided subject to actual performance. Upside potential exists depending on both production and capex performance
Contractor's tax	Under Petroleum Income Tax Act	Under Corporate Income Tax Act
Abandonment	Contractor pays abandonment and research levy	Abandonment obligation remains with Petronas and there is no provision for research levy



www.pangeaoffshore.com

Malaysia's Oil Breakeven Price



Source: <http://www.palantirsolutions.com/blog-research/blog/2015/february/4/breakeven-price-crude-oil-southeast-asia>

www.pangeaoffshore.com



Current Situation

Brent crude oil prices, January 2014 - January 2016



Source: Bloomberg

BBC

www.pangeaoffshore.com



Impact?



www.pangeaoffshore.com

Petronas (et al) cutting costs

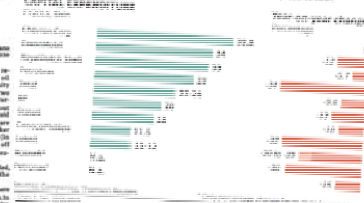


Another cut

After slashing capex, Petronas is now looking at reducing operating expenditure

Capex cuts at major oil and gas companies

A 40 percent drop in oil prices has shaken up the energy sector, leading companies to re-evaluate expenditure. Through balance sheets to cut costs and preserve cash.





...Impacting Results

OSVs: Survival Mode - Marine Log

www.marinelog.com/index.php?option=com_k2&view...osvs...

OSV companies worst hit in Petronas cutback on expenditure

[www.thestar.com.my/Business/Business News](http://www.thestar.com.my/Business/Business%20News)

Thursday, 21 January 2016. **OSV companies worst hit in Petronas cutback on expenditure ...**

O&G firms with exposure to offshore support vessel services					
for the 9-month period		Revenue (RM)		Net Profit (RM)	
		Latest results	Previous year	Latest results	Previous year
Barakah Offshore Petroleum	(FY Dec 31 '15)	425.71mil	500.57mil	4.31mil	50.17mil
Dayang Enterprise Holdings	(FY Dec 31 '15)	556.90mil	635.33mil	155.69mil	147.37mil
Petra Energy	(FY Dec 31 '15)	449.64mil	471.00mil	36.88mil	28.17mil
Alam Maritim Resources	(FY Dec 31 '15)	253.27mil	289.06mil	37.80mil	55.30mil
Icon Offshore	(FY Dec 31 '15)	201.22mil	241.78mil	12.80mil	46.42mil
Daya Materials	(FY Dec 31 '15)	578.12mil	482.10mil	18.50mil	14.56mil
Tanjung Offshore	(FY Dec 31 '15)	41.87mil	87.94mil	(49.90mil)	0.37mil

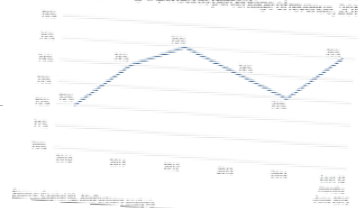
Icon profit down 85% |

TradeWinds

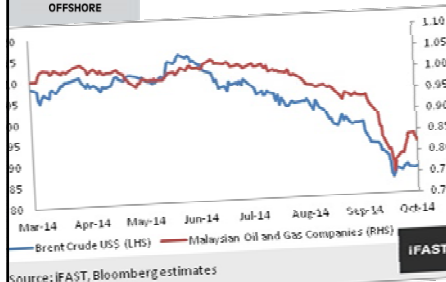
www.tradewindsnews.com/.../icon-profit-down-85-percent

Feb 27, 2015 - The Malaysian offshore vessel company said net income was MYR 12.9m (\$3.6m) ...

FIGURE 4: Operating expenses as percentage of revenue, 2010-15



...and Valuations



Source: IFAST, Bloomberg estimates



Analysts: Stay away from oil & gas exploration stocks

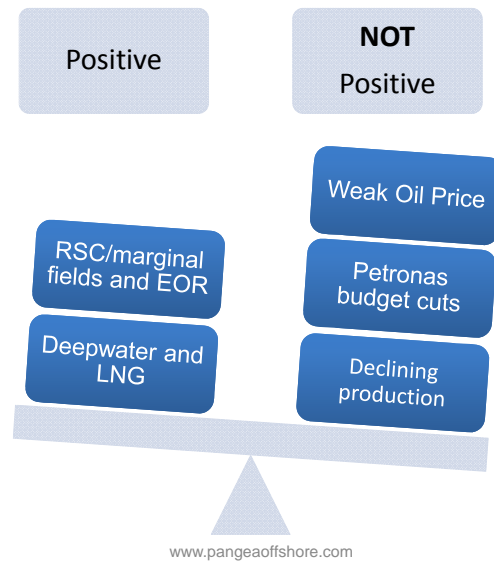
Posted on 18 August 2015 - 05:37am
sunbiz@thesundaily.com

PETALING JAYA: Analysts have advised investors to keep away from listed oil and gas companies involved in the exploration phase and instead buy into stocks involved in the production segment amid the slump in crude oil prices.

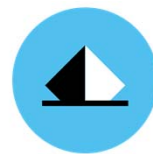


"Last week I saved \$20 on a tank of gas and lost \$20,000 in the stock market!"

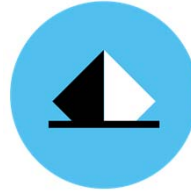
1. Malaysia E&P Summary



2. About the **Malaysia OSV Market**



3. About the **Malaysia Accommodation Market**



Malaysia Accommodation Vessel Market

Malaysia AWB Market Snapshot

Accommodation Vessels in Country	49 (approx.)
Fleet Profile	<ul style="list-style-type: none">▪ 150 – 200 PAX AW Boat DP and Non-DP▪ 150 -300 PAX AW Barges▪ AHTs and PSVs DP and Non-DP with over 30 PAX capacity
Revenue per Bed/day	\$85 (vs. \$120 previously)

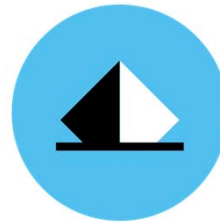


Market Characteristics

- Local content, protected market
- No pure accommodation players
- HUC, IMR contractors serving as accommodation players as well
- Non DP vessels are still in demand due shallow water fields and lower OPEX
- Smaller vessels such as AHTS and PSVs perform accommodation roles
- Access to technology and design innovation through Singapore

www.pangeaoffshore.com

**In Closing,
Alternatives and Opportunities**



Short-Term Alternatives

- Reduce supply (stack/sell vessels)
- Reduce cost base, keep cash
- Restructure capital, refinance (not easy in Malaysia)
- M&A expected prior the end of the year
- Diversify revenue streams (alternative energy, aquaculture, defense, LNG)
- **Expand target market by going International**

www.pangeaoffshore.com

Opportunity: Petronas' Role

- Petronas active role in incentivizing the sector
- Driver is to avoid unemployment and ensuring private companies' survival
- Petronas is encouraging the market by awarding rig and other contracts to local companies

[Alam Maritim bags RM53.5 million Petronas job | theSundaily](#)
www.thesundaily.my/news/1589349

Oct 22, 2015 - PETALING JAYA: Marine services provider Alam Maritim Resources Bhd has ... letter of award from Petronas' subsidiary Petronas Floating LNG 1 (L) Ltd. ... The duration for the subcontract is from June 15, until April 30, 2016.

[UMW Oil & Gas gets Petronas Carigali job for Naga 7 rig](#)

Oct 29, 2015 - UMW Oil & Gas (UMW-OG) is slowly rebuilding its orderbook, recently securing a contract for its Naga 7 jack-up rig from Malaysian national oil ...

[Uzma unit wins Petronas job - Business News | The Star ...](#)
www.thestar.com.my › Business › Business News

Jul 11, 2015 - KUALA LUMPUR: Uzma Engineering Sdn Bhd has secured a five-year contract worth RM350mil to RM400mil from Petronas Carigali Sdn Bhd.

www.pangeaoffshore.com

Short-Term Opportunities

- Increased demand for smaller non-DP vessels 24-26 men for shutdown maintenance, platform repairs (5000 BHP AHTS or 3000 DWT PSVs can perform this SOW)
- Owners are shifting focus into maintenance and EPC work to keep the vessels utilized
- Smaller and more flexible accommodation vessels below 300 PAX are being preferred by the clients

www.pangeaoffshore.com

Medium Term Opportunities

- Oil Majors are setting shore bases closer to the field (Kuala Terengganu, Petronas and ExxonMobil), eliminating the need for helicopter runs and opening the door for crew boats and potentially faster crew boats, e.g. with SWATH (Small Waterplane Area Twin Hull) design



- Embrace greener technology, smarter designs and provide low cost alternatives to the clients (both Diesel Electric and LNG have potential)

www.pangeaoffshore.com

Medium-Long Term Opportunities (Oil Price dependent)

- Reactivation of Upstream projects

Project / Oil and Gas company	Scope of Work	Location
Petronas Carigali's North Malay gas project- fast track basis	Central processing platform, 8 well head platform, 200km pipeline	North Malay Basin
ExxonMobil enhanced oil recovery	Central processing platform, gas compression system, process equipment, MPOU, tender rigs and offshore vessels.	Rejuvenation of Seligi, Guntong, Tapis, Semangkok, Irong Barat, Tabu and palas oil elds of Peninsular, Sabah and Sarawak
Shell Malaysia	Central processing platform and platform upgrades	Baram Delta, off Sarawak and North Sabah
Shell deepwater Malikai project	Fabrication of tension leg platform and installation of pipelines	Malikai eld, Sabah
Murphy oil	Floating lique ed natural gas carrier	Rotan, off Sabah
Petronas Carigali	3 Central processing platforms	Dulang , Semarang, Bokor
Petronas umbrella tender for shallow water jobs	Topside maintenance and marine spread	Peninsula, Sabah & Sarawak
ExxonMobil enhanced oil recovery	Fabrication of platform, topsides, processing units for shallow water elds	Rejuvenation of Teluk gas development off Terengganu
Marine Charters	AHTS charters for shallow waters	Offshore Malaysia

- Deepwater, EOR and marginal field work taking off again
- LNG

www.pangeaoffshore.com

Projects Overview

Malaysia Oil and Gas Opportunities – Bird's Eye View

Opportunities	Types of Project	Types of Project	Estimated Value
Upcoming deepwater fields (7)	Floating production structures		
Malikai	Fabrication of TLP + FPSO		RM1b – RM
22 new open shallow water blocks	Fabrication of 65 – 70 fixed platforms		NA
	2 new tender-assisted rigs		RM450m
Brownfield rejuvenation programs	Fabrication of offshore structures		
Tapis	CPP, upgrade of existing wellhead platforms, pipeline replacement works		RM1b – RM2b RM2-3b
Hook-up and Commissioning (HUC)	To start-up platforms and production		RM2-3b
Topside Major Maintenance	Maintenance on platforms		
EOR programmes			
Seligi, Guntong, Semangkok, Irong Barat, Tabu & Palas fields	Fabrication of offshore structures		RM6b – RM8b
Marginal fields			
Sepat, Cendor, Berantai	Marine conversion, repair		
	Conversion and construction of FPSO, FPSO and MOPU vessels		RM2b – RM3b
Remote gas fields, gas regasification Project	Offshore floating structures		RM9b – RM10b
	Conversion and construction of FSU, FSRU &		
Subsea market	FLNG vessels		RM 1.3b
	Flexible risers, pipes, flow assurance performance		

www.pangeaoffshore.com

Thank You!



Pangea Offshore Pte. Ltd.

(Reg. 200105061K)

Rua Bacelar e Silva,
5 - 1 º Dtº 1000-068
Lisbon
Portugal

190 Middle Road #19-05
(188979)
Singapore

Edgar Espinosa

edgar.espinosa@pangeaoffshore.com

www.pangeaoffshore.com



www.pangeaoffshore.com