

PTT Exploration and Production Public Company Limited

2014 Year-end Opportunity Day
Stock Exchange of Thailand
3 March 2015



MEMBER OF
**Dow Jones
Sustainability Indices**
In Collaboration with RobecoSAM





2014 Highlights

- **SD**
- **Industry**
- **Key accomplishment**
- **Financial performance**

Outlook



2014 DJSI Listed Company

MEMBER OF

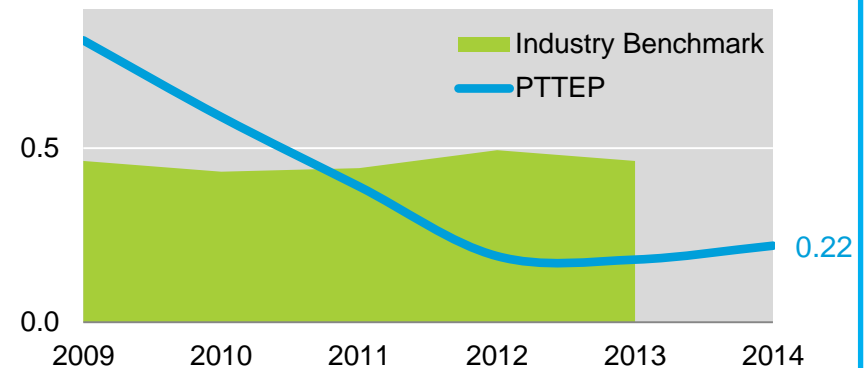
**Dow Jones
Sustainability Indices**

In Collaboration with RobecoSAM

Dow Jones Sustainability World Index Oil & Gas Sector

Above Industry Average Safety Record

of incidents per million man hours



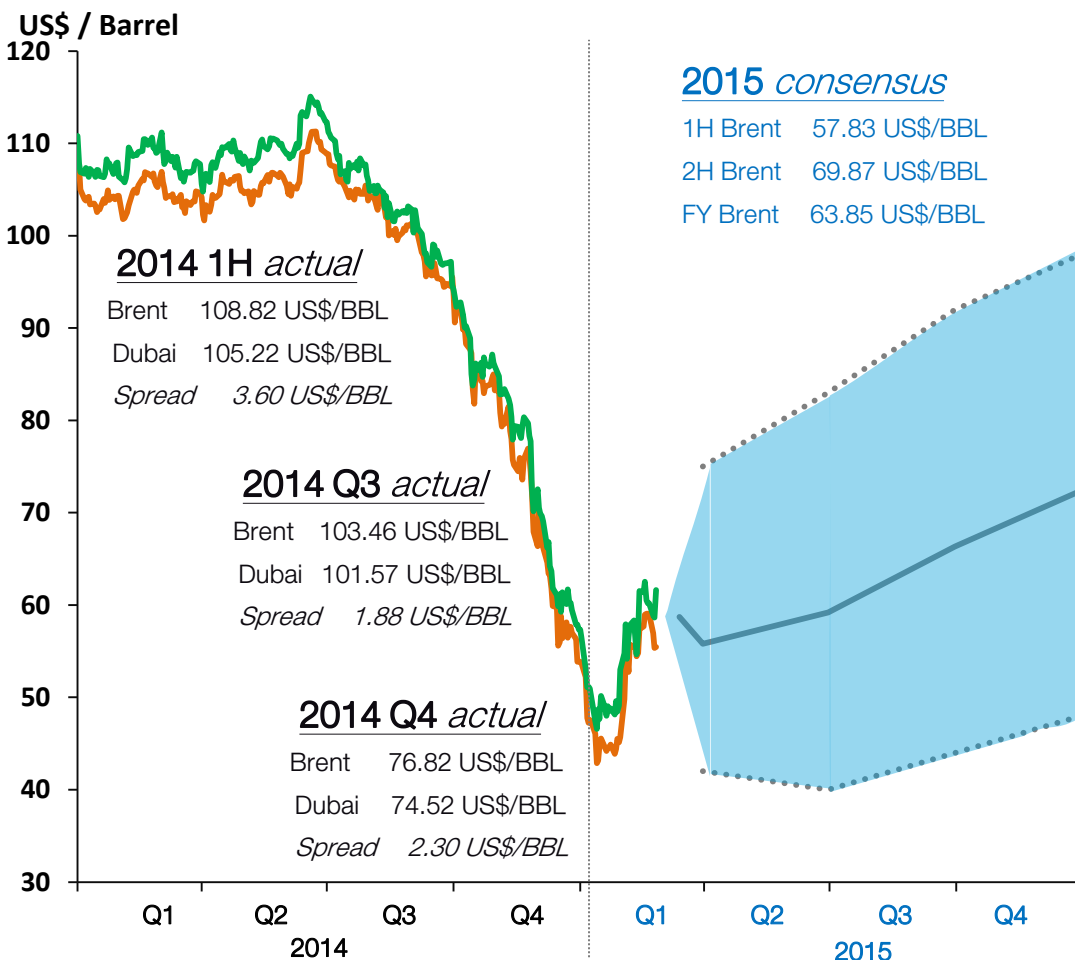


2014 Highlights

- SD
- **Industry**
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Outlook

— Brent — Dubai  *Min-Max Brent Analyst Consensus**



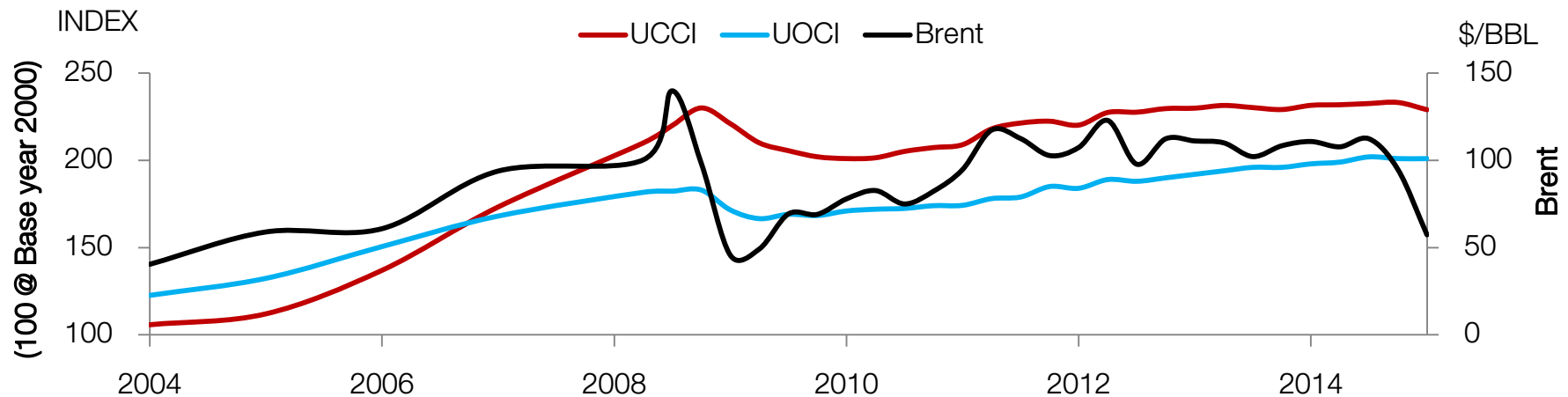
2014 Highlights

- ↓ Increased US shale-oil production
- ↓ OPEC maintains production
- ↓ Weak global economic growth

Outlook

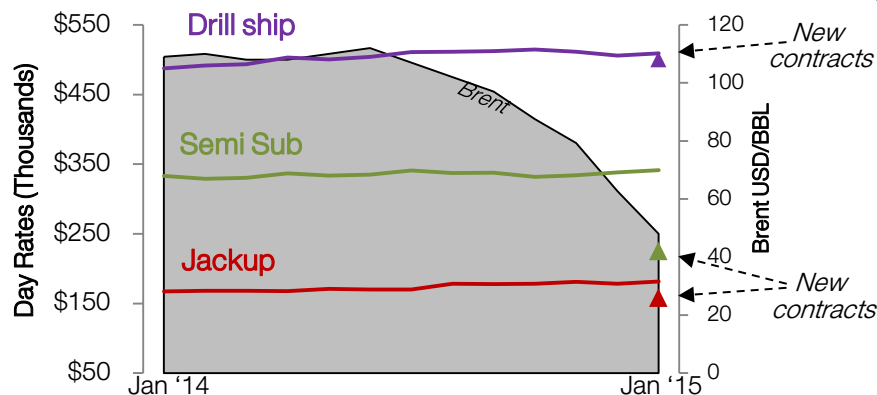
- ↓ 1H 2015: Continued oversupply;
Current cash costs and production are a function of historical spending.
- ↑ 2H 2015
 Supply and Demand Rebalancing;
 - 1) Global Demand recovery
 - 2) Lower non-OPEC supply

Annual Upstream Capital and Operating Cost Index vs. Brent (2004 – 2014)



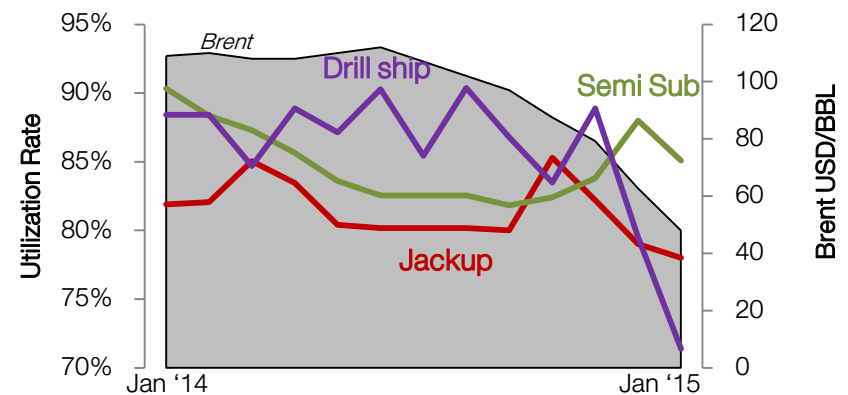
Source: IHS CERA.; UCCI = Upstream Capital Cost Index ; UOCI = Upstream Operating Cost Index

Average Offshore Rig Rates (YTD 12 months)



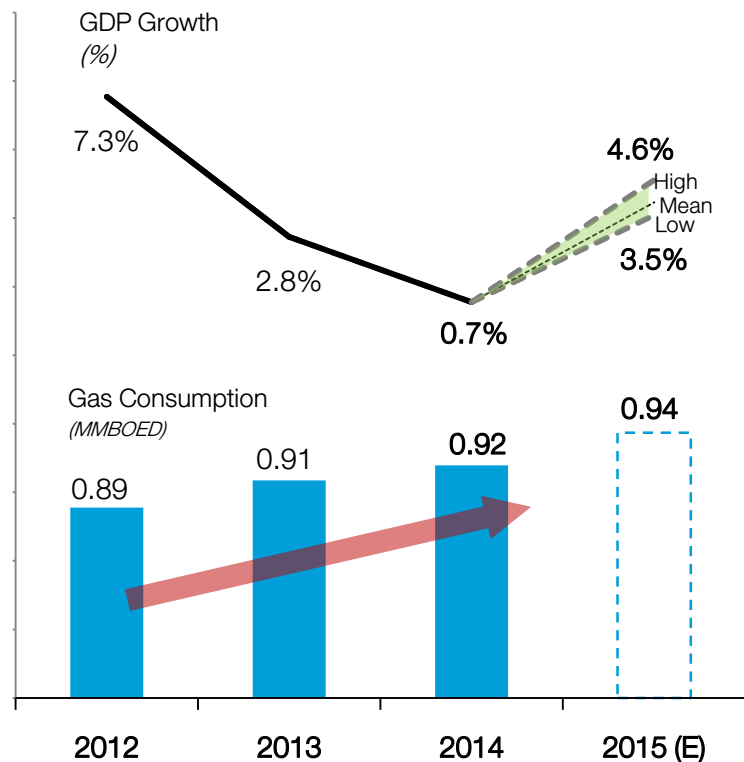
Source: Riglogix, Company Analysis

Average Offshore Rig Utilization (YTD 12 months)



Source: Riglogix, Company Analysis

Thai Economy and Gas Demand

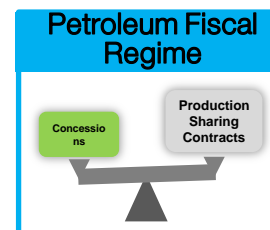


Source: EPPO, BOT, NESDB, FPO, IMF, World Bank, PTT Plc.

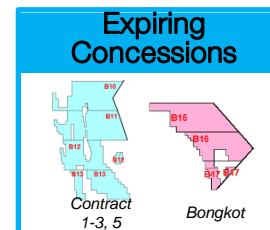
Upstream Energy Reform



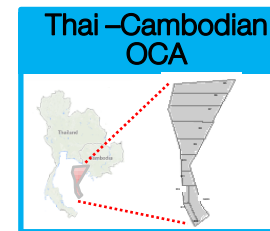
- Bidding round rescheduled, new timeline to be announced



- Fiscal regime for Bidding Round 21 subject to review



- Government targets to decide on framework in 2015
- Gas supply stability will be the key consideration



- Discussion resumes at the Government level to seek resolution on OCA

Source: MOE, DMF



2014 Highlights

- SD
- Industry
- **Key accomplishment**
- Financial performance

Outlook

2014 Key Accomplishments

Delivered growth from robust operations and strategic fine-tuning



Zawtika ZPQ

Strong production base from high-margin assets : 10% Growth

- ✓ Maintain domestic production to support energy demand
- ✓ Successfully commenced gas production from Zawtika
- ✓ Ramp-up production from Montara to full potential

Gaining clarity on resource potential through continued exploration

- ✓ Continued appraisal program in Zawtika, Myanmar M3 and Algeria HBR
- ✓ Kick-off Myanmar PSC-G & EP-2 exploration program
- ✓ Additional exploration discovery in Mozambique Area 1

Active portfolio management for short-term and long-term growth

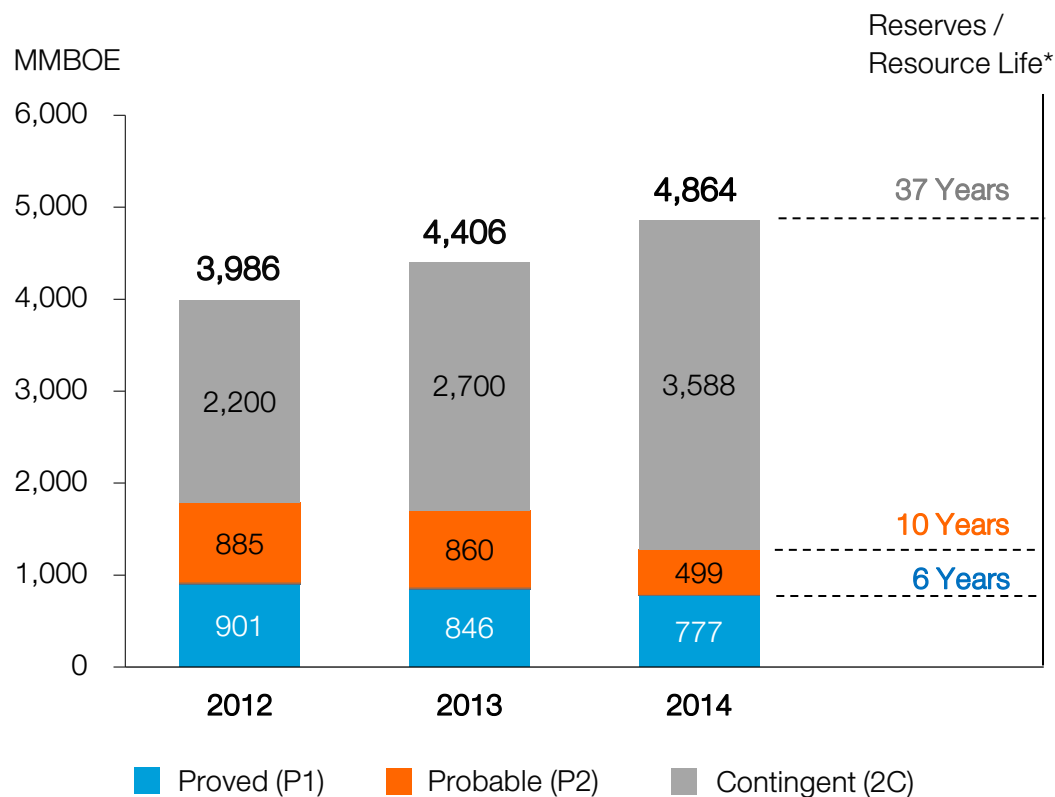
- ✓ Strengthen domestic base through Hess Thailand acquisition
- ✓ Restructured oil sands business through KKD asset swap
- ✓ Expanding exploration horizon into Brazil high-potential areas

Financially well-positioned against the oil price headwind

- ✓ Recorded >4 bn USD operating cash flow from higher sales volume
- ✓ Strategic funding of 1.6 bn USD to strengthen capital structure
- ✓ Balance dividend payment and cash flow with 4.50 THB/share dividend

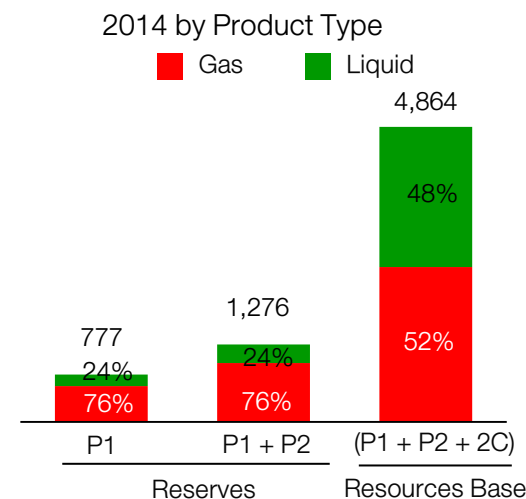
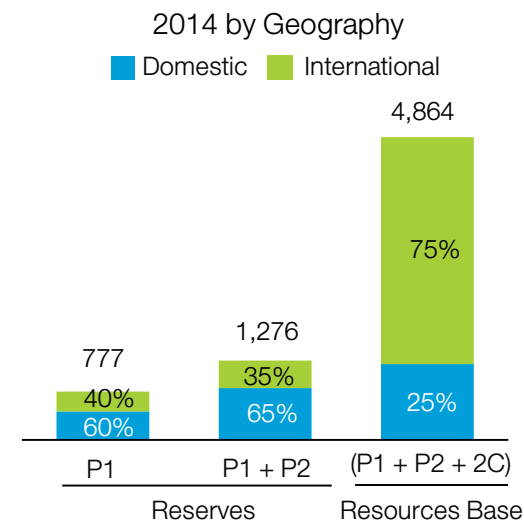
Reserves and Resources

Target resource turnaround in the near future



5-Year Average Proved Reserves Replacement Ratio (RRR)

2012	2013	2014
0.91x	0.82x	0.45x



* Based on total production of natural gas, crude oil (including bitumen) and condensate of 359 KBOED for the year ended December 31, 2014



2014 Highlights

- SD
- Industry
- Key achievement
- Financial performance

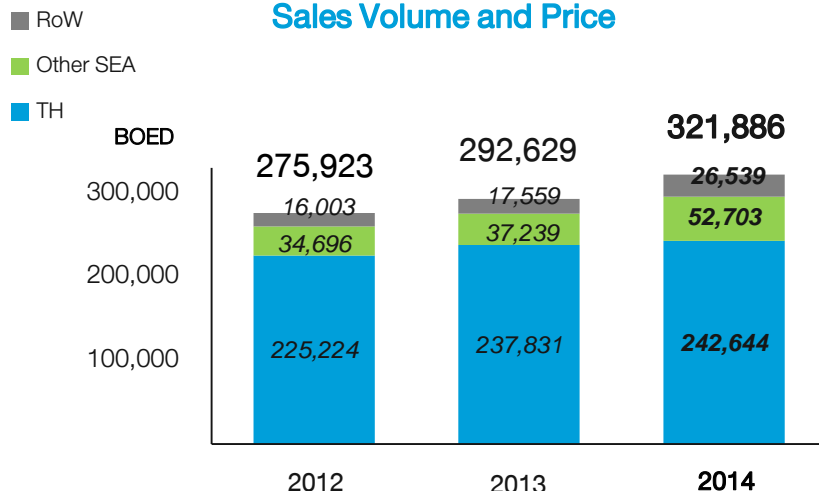
Outlook

Sales Volume & Unit Costs

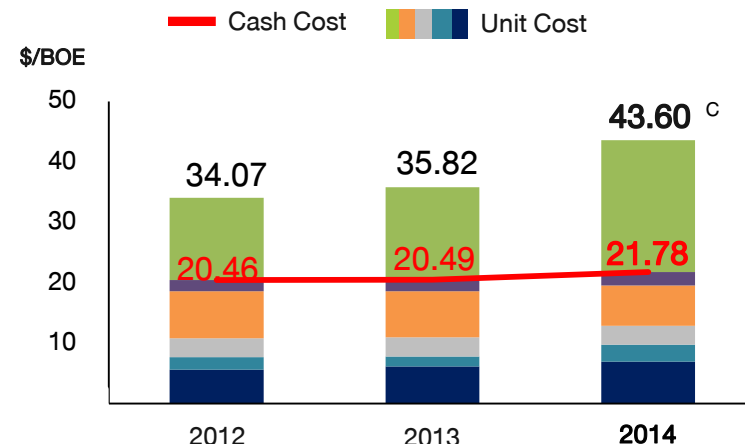
Gas-weighted portfolio and healthy cash margin to weather low oil prices



Sales Volume and Price



Unit Cost



Gas (\$/MMBTU)	7.59	7.92 ^A	8.03 ^A
Liquid (\$/BBL)	103.27	100.15	94.91
Weighted Avg. (\$/BOE)	64.86	65.58 ^B	63.38 ^B
Avg. Dubai (\$/BBL)	109.03	105.54	96.60
Avg. HSFO (\$/BBL)	103.26	97.52	86.74
<i>High Sulfur Fuel Oil</i>			
Volume Mix (Gas:Liquid)	66 : 34	66 : 34	67 : 33
Revenue Mix (Gas:Liquid)	46 : 54	47 : 53	51 : 49

A) If Vietnam 16-1 retroactive sales are excluded, gas price is
8.01\$ for 2013 and 8.07 \$ for 2014

B) If Vietnam 16-1 retroactive sales are excluded, average selling price is
66.09 \$ for 2013 and 63.59 \$ for 2014

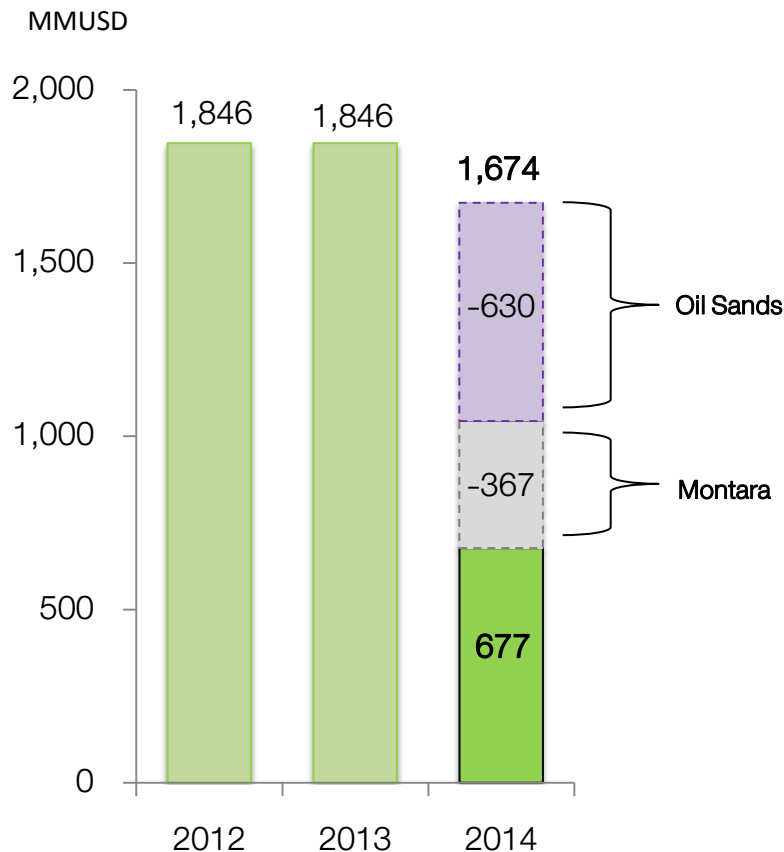
DD&A	13.61	15.33	21.82
Finance Cost	1.85	1.88	2.21
Royalties	7.80	7.65	6.69
G&A	3.09	3.17	3.10
Exploration Exp.	2.11	1.61	2.83
Operating Exp. ^D	5.61	6.18	6.95 ^C
Lifting Cost	4.28	4.88	5.26
Success Ratio ^E	43:54	38:55	25 : 43

C) If exclude extra expense from Montara's Development well (H5) :
2014 Operating Exp. : 6.53 \$/BOE / Unit cost : 43.18 \$/BOE

D) Exclude diluent cost for blending bitumen in KKD Oil Sands project

E) Exploration and Appraisal wells

Net Income



Factors affecting Impairment

(per international accounting standard, IAS36)

- Product Price
- Development schedule
- Production Profile
- Cost Profile and etc.

Key Reasons for 2014 Impairment

Montara:

- Immediate exposure to the low oil price outlook

Mariana oil sand:

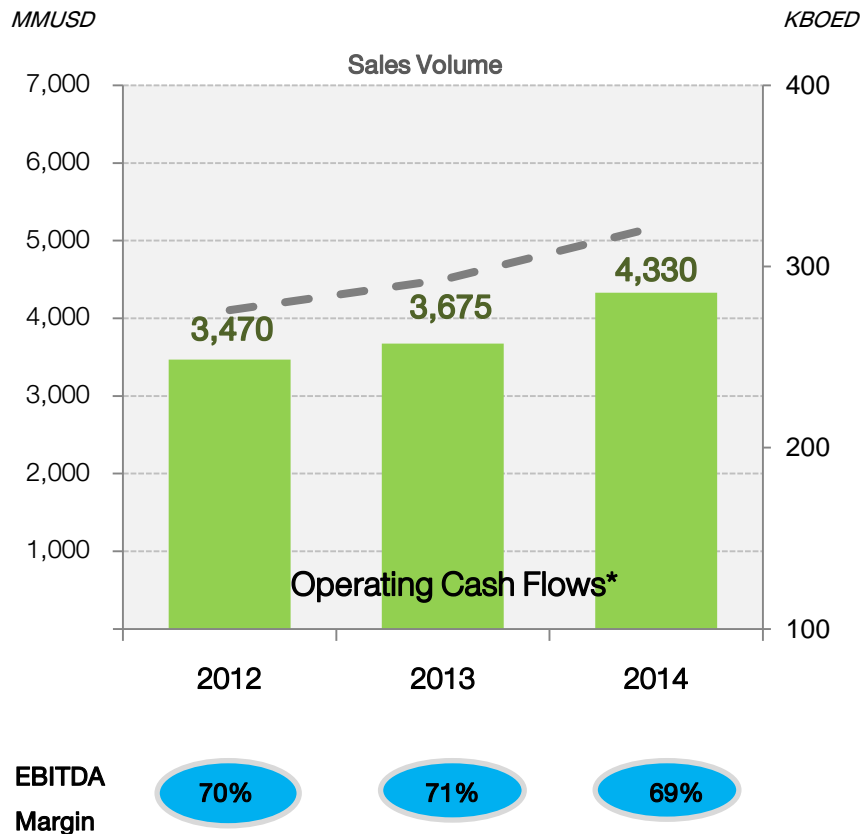
- Significant revision on timing and phasing of the development

Cash Flow Performance

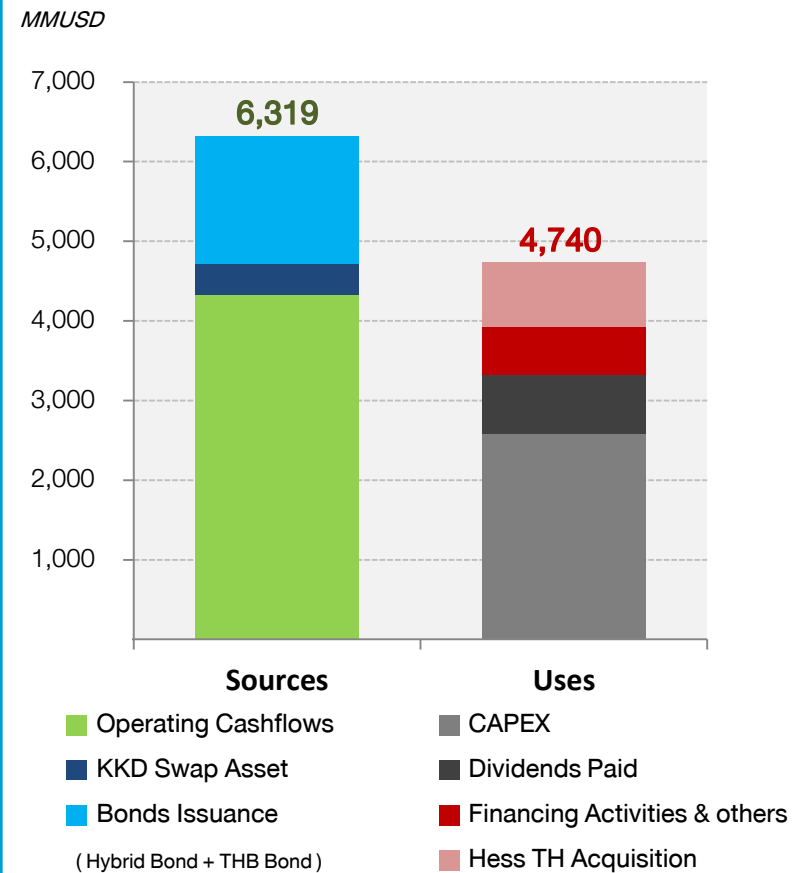
Robust liquidity to fund CAPEX and debt service



Cash Flow Performance



Source & Use of Funds in 2014

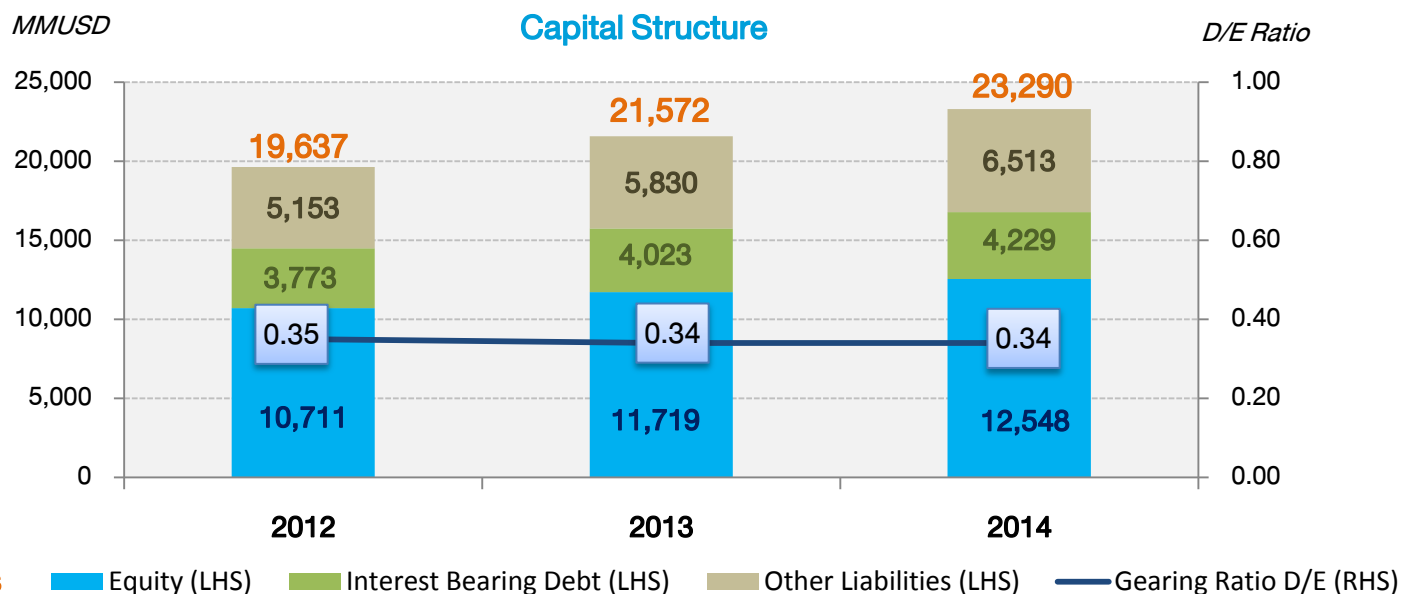


* Net of adjustment for the effect of exchange rate changes on cash and cash equivalents. Operating cash flows before exchange rate effect adjustment is:
2012 = 3,455 MMUSD ; 2013 = 3,740 MMUSD ; 2014 = 4,320 MMUSD

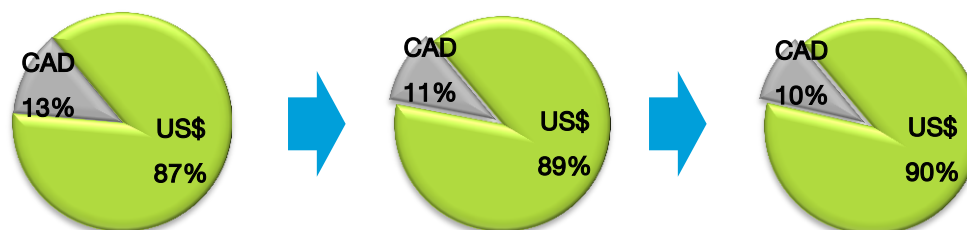
** Operating cashflow included in Source of fund in 2014 is shown net of adjustment for the effect of exchange rate changes on cash and cash equivalents 4,320 MMUSD

Financial Position

Strong balance sheet with low gearing



Debt Profile *



Weighted Average

Cost of Debt* (%)

[Fixed : Floating]

Average Loan Life*(Years)

3.99

[79 : 21]

7.50

3.99

[75 : 25]

6.81

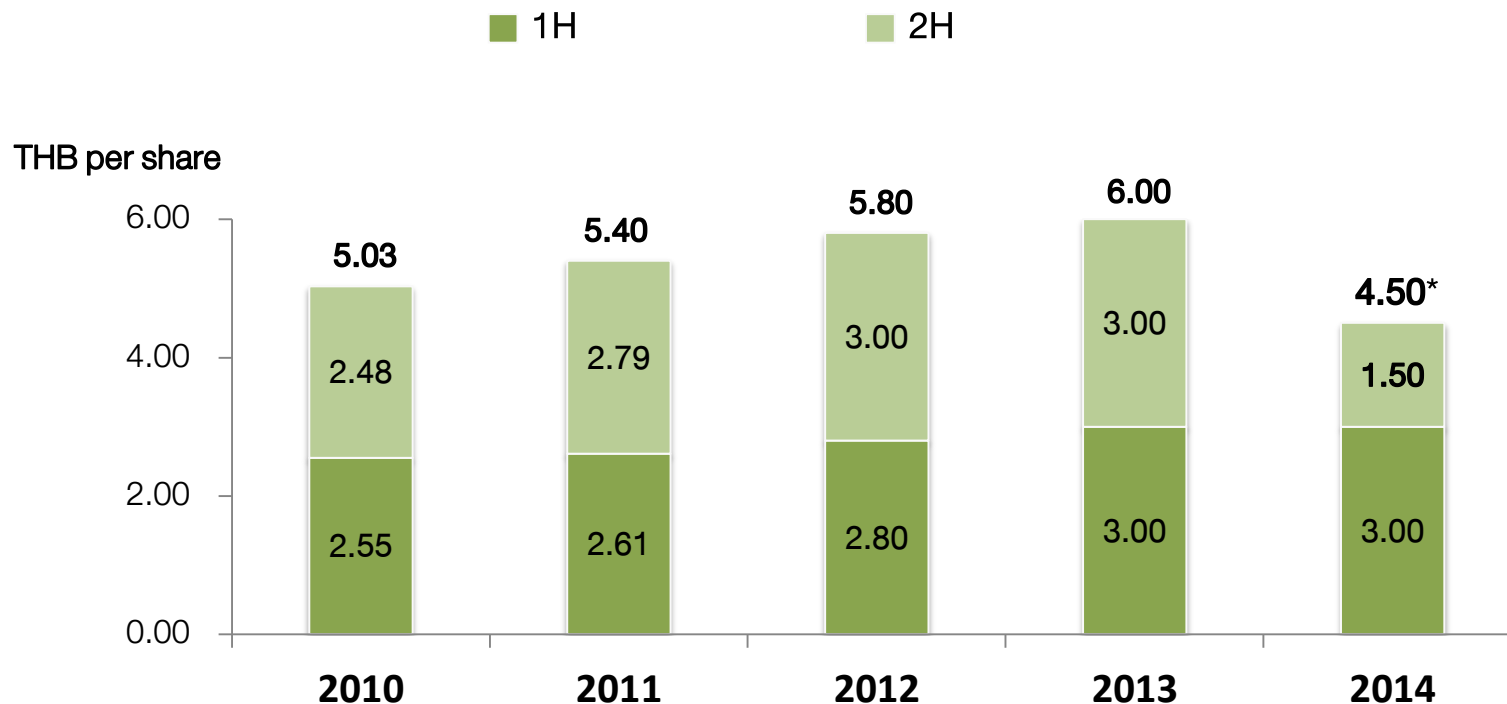
4.14

[77 : 23]

7.05

* Excludes Hybrid bonds

Dividend Payment History (Policy : No Less Than 30% of Net Income)



Payout Ratio (%)	40	40	38	40	82
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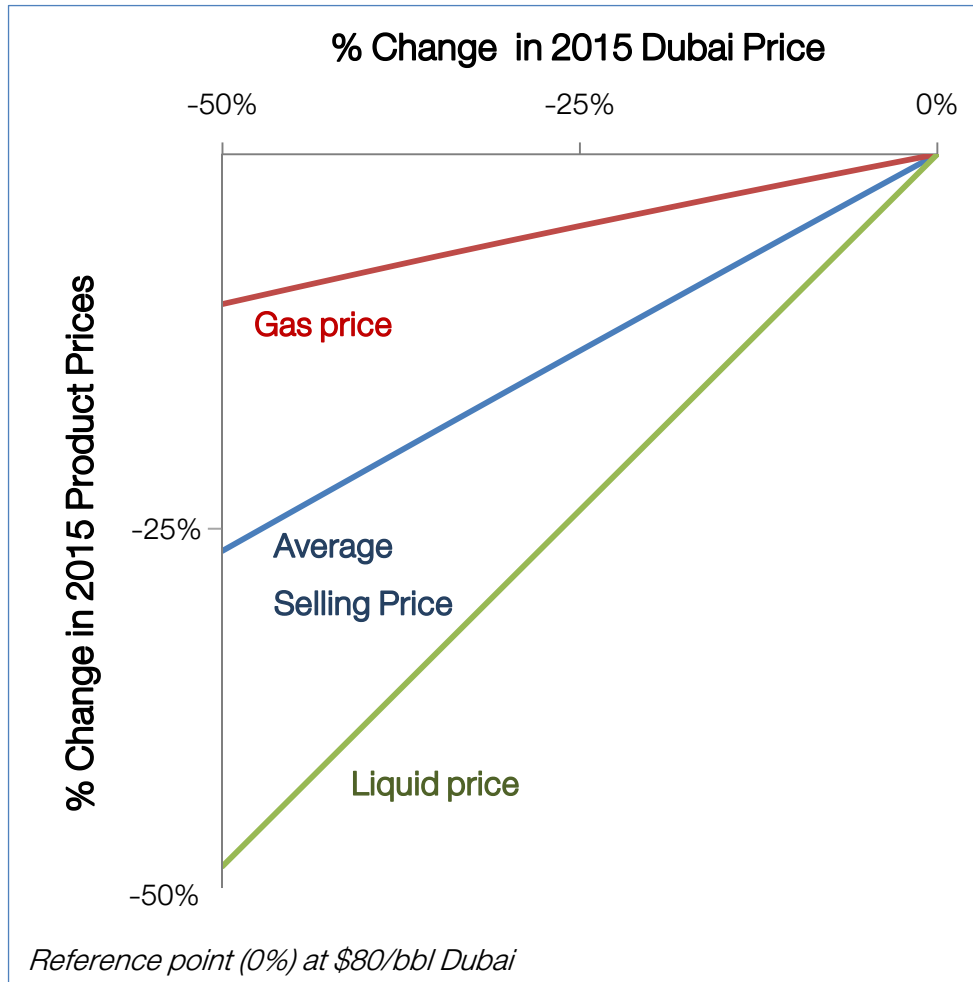
* Subject to the 2015 Annual General Shareholders' Meeting approval

A glimpse of 2015 liquidity

Strong cash margin from resilient gas price coupled with competitive cash cost



Resilient gas price

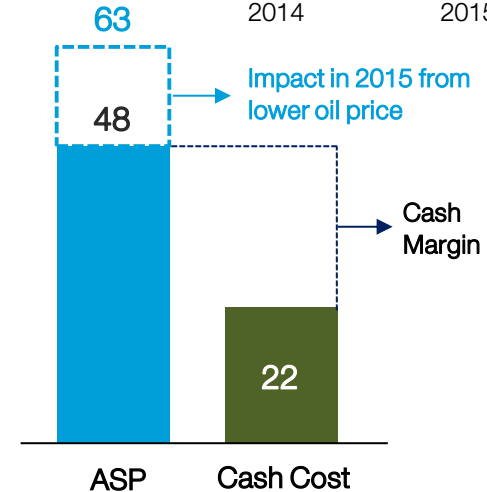


Protected cash margin

Unit : USD / BOE

Avg. Dubai Assumption

97 → **55**
2014 → 2015









- ✓ Strong gas portfolio limits oil price downside
- ✓ Competitive cash cost supports healthy operating cash flow



2014 Highlights

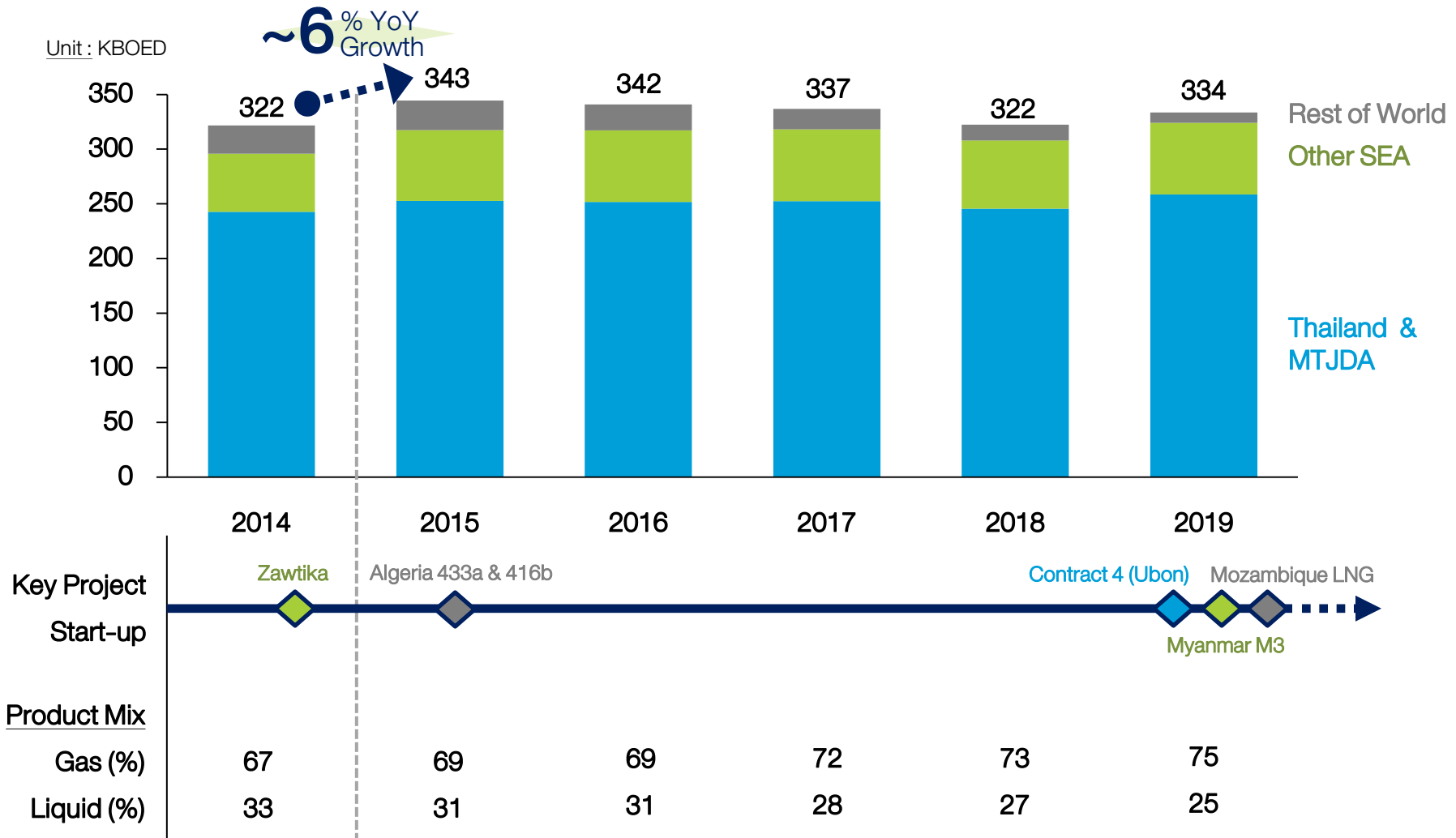
- SD
- Industry
- Key accomplishment
- Financial performance

Outlook

Implication	Priorities in changing industry environment
Short term	<ul style="list-style-type: none"> Deliver 6% volume growth as planned Focus on cost optimization and investment prioritization Leverage strong balance sheet for value-creating growth opportunity
Medium term	<ul style="list-style-type: none"> Adopt a cautious approach on our pre-development assets <i>e.g. Mariana Oil Sands, Algeria HBR, Cash Maple</i> Continue to focus on our core basins in the southeast Asia
Long term	<ul style="list-style-type: none"> Reassess long term aspiration

Sales Volume Profile

Stable volume from high value contributors in Thailand and Other SEA



5-Year CAPEX Plan

~80% allocated to core operations in Southeast Asia

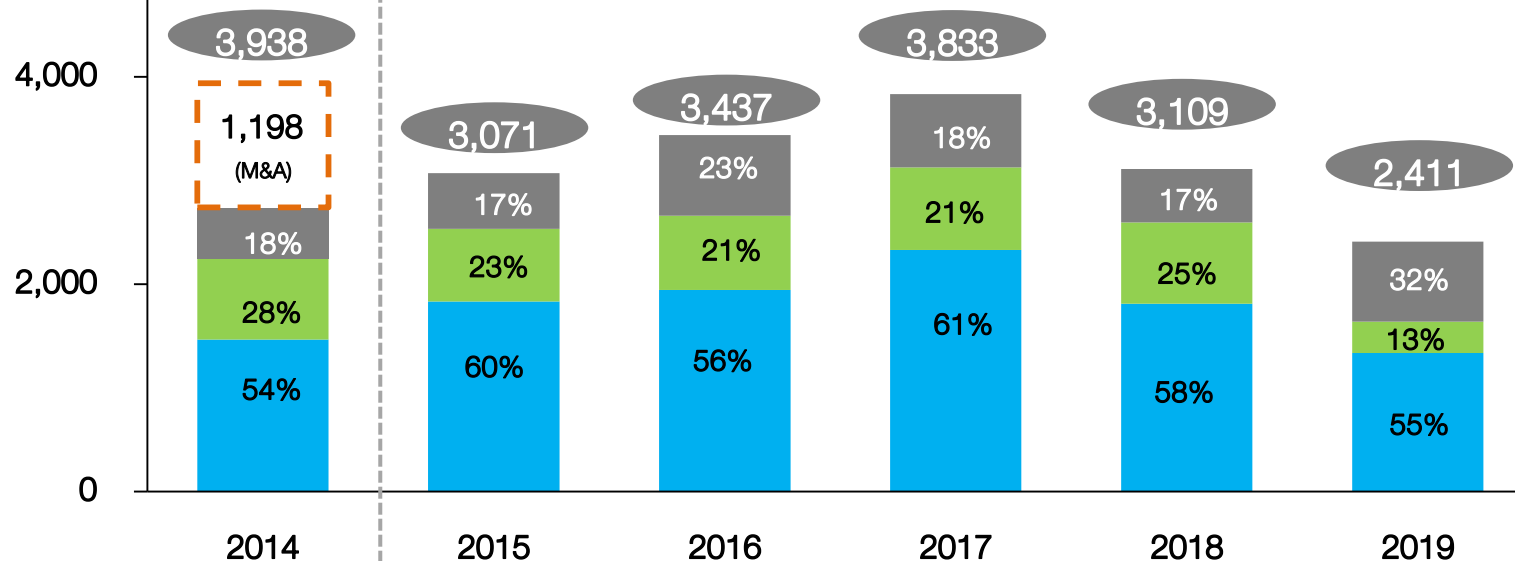
Capex by Region



2015 - 2019

~ 9.3 bn USD
~ 3.3 bn USD
~ 3.3 bn USD
~ 15.9 bn USD

Unit : MMUSD



CAPEX by Activity Type

Activity Type	2014	2015	2016	2017	2018	2019
Exploration	14%	18%	11%	14%	8%	3%
Development	56%	82%	89%	86%	92%	97%
Investments (M&A)	30%					

“Efficiency”

- Integrated activity planning
- Contract renegotiation and sourcing strategy
- Synergy & Standardization
- Inventory management

1

Cost Optimization

- ✓ Operational Excellence
- ✓ Supply chain savings
- ✓ Development cost improvement

2

Production Stabilization

- ✓ Operational reliability
- ✓ Field capacity vs nomination

“Productivity”

- Minimize unplanned shutdown
- Close coordination with PTT on gas nomination

3

Financial & Portfolio Management

- ✓ Investment prioritization
- ✓ Exploration prioritization
- ✓ Risk management & hedging program

4

G&A Reduction & Culture

- ✓ G&A reduction
- ✓ Cost conscious culture

“Awareness”

- Manpower optimization
- Travelling expense management
- Culture of “Fit for Purpose”, “Just-in-Time”

“Effectiveness”

- Capital allocation
- Strengthen project management process



Fundamental change in E&P industry

- U.S. shale output re-shaping balance and dynamics of the oil market
- Expect market forces to rebalance but the path to price recovery is still uncertain
- The uncertainty also presents opportunities for industry's cost adjustment



Well prepared to weather downturn in oil price

- Cushion from gas-weighted volumes secured through long-term contracts
- Maintain competitive cash cost profile ensures positive operating cash flow
- Stringent financial discipline to ensure strong capital structure with low gearing and high liquidity



Our priorities for 2015

- Target 6% sales volume growth
- Focus on further cost optimization
- Prioritize investment in our exploration and pre-development portfolio
- Leverage strong balance sheet for value-creating M&A opportunity



Exploring new horizons, we take every step as learning

For more information, please visit our website at

<http://www.pttep.com>

OR

Contact us via email address at

IR@pttep.com

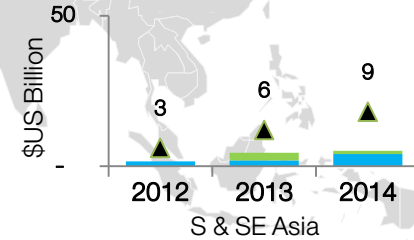
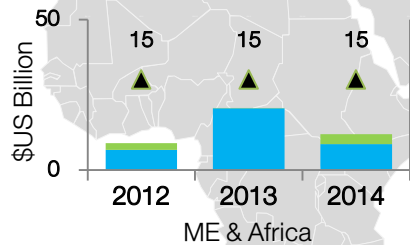
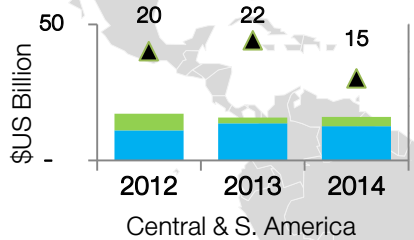
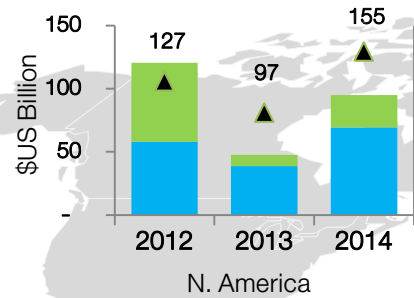
OR

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- 
- 1] Industry**
 - 2] Organization Structure**
 - 3] Project Details**
 - 4] Ratios & Formula**

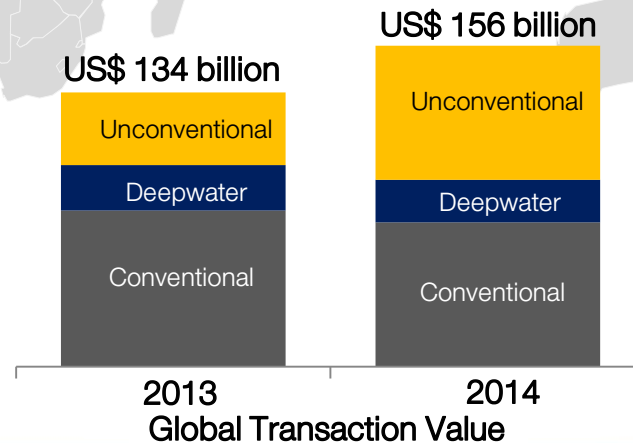
2014 M&A Recap

Activity focused in North American unconventional E&P assets



LEGEND

- Corporate Transaction Value
- Asset Transaction Value
- Deal Count



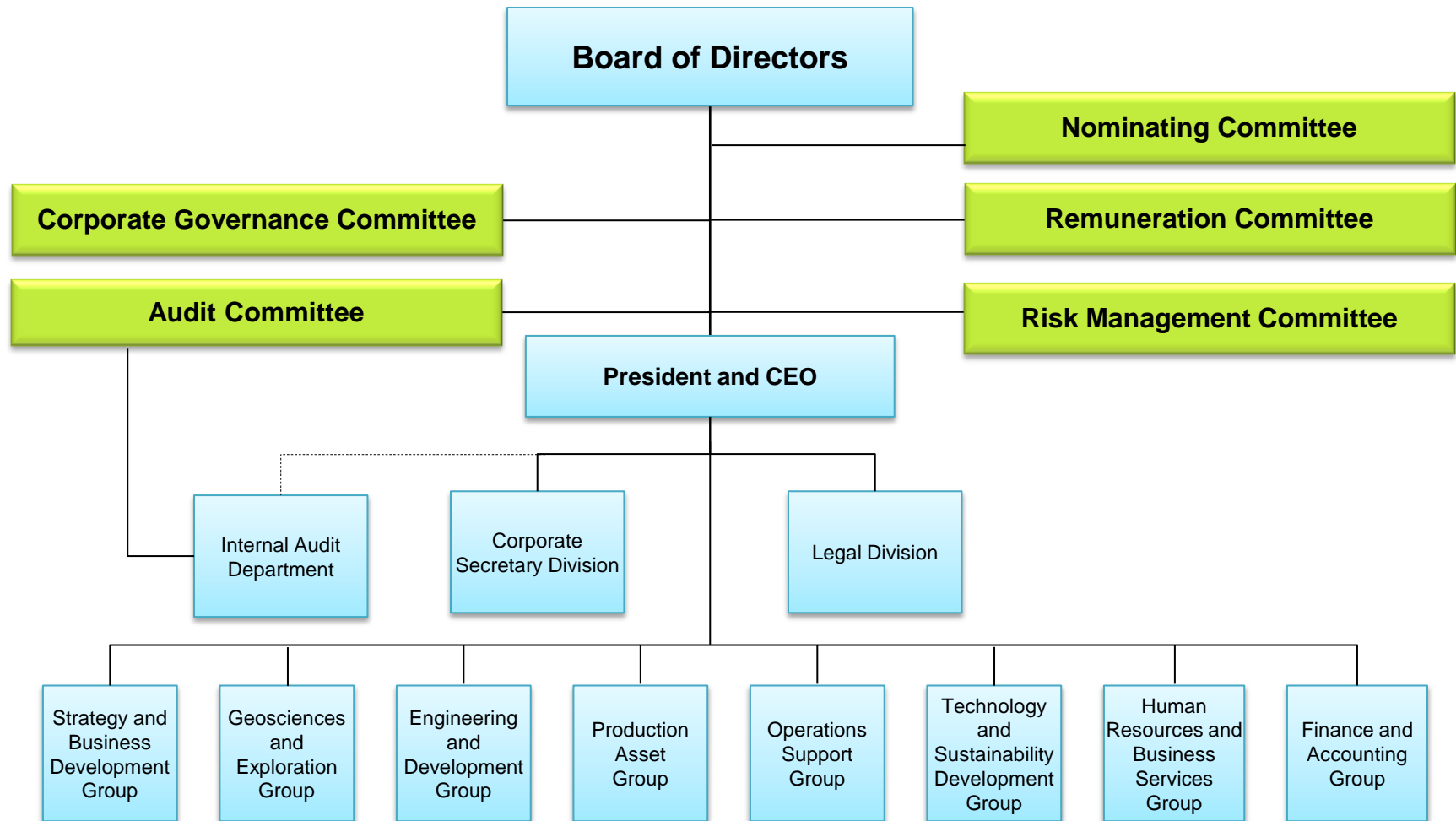
2013
2014
Global Transaction Value

Source: IHS, Company Analysis,

Note: Dataset filtered for dealsize over \$100 Million.

Organizational Structure

Ensuring Transparency, Integrity, and Good Corporate Governance practices



Project Information 1/4

Production Phase: Thailand and JDA



	Project	PTTEP's Share	Partners <i>(as of 2014)</i>		2014 Average Sales Volume *		2015 Key Activities
					Gas	Oil and Other	
Production Phase							
Thailand and JDA							
1	Arthit	80%	Chevron MOECO	16% 4%	218 MMSCFD	Condensate: 9.4 k BPD	<ul style="list-style-type: none">Ensure gas deliverability level at DCQ**Drill Exploration / Appraisal wells/ Development wellsInstall wellhead platforms
2	B6/27	60%	JX NOEX	40%	N/A	N/A	<ul style="list-style-type: none">Evaluate further potential of reservoir
3	B8/32 & 9A	25%	Chevron MOECO KrisEnergy PSTL	51.66% 16.71% 4.63% 2%	93 MMSCFD	Crude: 28 k BPD	<ul style="list-style-type: none">Drill development wells
4	Bongkot	44.4445%	TOTAL British Gas	33.3333% 22.2222%	860 MMSCFD	Condensate: 28.8 k BPD	<ul style="list-style-type: none">Ensure gas deliverability level at DCQ**Drill Exploration / Appraisal / Development wellsInstall wellhead platforms
5	Contract 3 <i>(Formerly Unocal III)</i>	5%	Chevron MOECO	71.25% 23.75%	606 MMSCFD	Crude: 21 k BPD Condensate: 16.9 k BPD	<ul style="list-style-type: none">Drill Exploration / Appraisal / Development wellsInstall wellhead platforms
6	Contract 4 <i>(Formerly Pailin)</i>	60%	Chevron MOECO	35% 5%	374 MMSCFD	Condensate: 17.4 k BPD	<ul style="list-style-type: none">Ensure gas deliverability level at DCQ**Drill Exploration / Appraisal / Development wellsInstall wellhead platformsReview development plan of Ubon field
7	E5	20%	ExxonMobil	80%	12 MMSCFD	-	
8	G4/43	21.375%	Chevron MOECO PSTL	51% 21.25% 6.375%	3.5 MMSCFD	Crude: 6.5 k BPD	<ul style="list-style-type: none">Drill Exploration / Development wellsInstall wellhead platform
9	G4/48	5%	Chevron MOECO	71.25% 23.75%	9.4 MMSCFD	Crude: 1.7 k BPD	
10	L53/43 & L54/43	100%			-	Crude: 123 BPD	<ul style="list-style-type: none">Drill Exploration Wells
11	PTTEP1	100%			-	Crude: 267 BPD	<ul style="list-style-type: none">Drill Appraisal / Development wellsPerform waterflood activities
12	S1	100%			27 MMSCFD	Crude: 27.8 k BPD	<ul style="list-style-type: none">Maintain production level above 29 k BPDContinue Exploration appraisal and development activities
13	Sinphuhorm	55%	Apico ExxonMobil	35% 10%	105 MMSCFD	Condensate: 415 BPD	<ul style="list-style-type: none">Drill development wells
14	MTJDA	50%	Petronas-Carigali	50%	332 MMSCFD	Condensate: 8.3 k BPD	<ul style="list-style-type: none">Drill Exploration / Appraisal / Development wellsInstall wellhead platforms

* Sales volume stated at 100% basis.

** DCQ = Daily Contractual Quantity

	Project	PTTEP's Share	Partners (as of 2014)	2014 Average Sales Volume *		2015 Key Activities
				Gas	Oil and Other	
<u>Production Phase</u>						
<u>Overseas</u>						
15	Oman 44	100%		27 MMSCFD	Condensate: 2.2 k BPD	<ul style="list-style-type: none">• Drill Exploration / Appraisal / Development wells• Maintain production rate
16	Vietnam 9-2	25%	PetroVietnam 50% SOCO 25%	15 MMSCFD	Crude: 5.8 k BPD	<ul style="list-style-type: none">• Drill development wells• Explore new reservoirs
17	Yadana	25.5%	TOTAL 31.24% Chevron 28.26% MOGE 15%	767 MMSCFD	-	<ul style="list-style-type: none">• Drill Exploration / Appraisal wells
18	Yetagun	19.3178%	Petronas- 30.00140% Carigali MOGE 20.4541% Nippon Oil 19.3178% PC Myanmar 10.90878% (Hong Kong)	343 MMSCFD	Condensate: 7.9 k BPD	<ul style="list-style-type: none">• Reservoir Management• Well Intervention
19	Vietnam 16-1	28.5%	PetroVietnam 41% SOCO 28.5% OPECO 2%	38 MMSCFD	Crude: 34.3 K BPD	<ul style="list-style-type: none">• Drill development wells• Complete H5 development project
20	PTTEP Australasia (PTTEP AA)	20%-100% (varied by permits)		-	Crude: 18.6 k BPD	<ul style="list-style-type: none">• Drill an exploration well• Assess resource potential of exploration permits
21	Natuna Sea A	11.5%	Premier Oil 28.67% KUFPEC 33.33% Petronas 15% Pertamina 11.5%	219 MMSCFD	Crude: 1.5 k BPD	<ul style="list-style-type: none">• Drill Exploration / Appraisal / Development wells• Maximize gas exports
22	Zawtika (M9 & a part of M11)	80%	Myanma Oil and Gas Enterprise (MOGE) 20%	147 MMSCFD	-	<ul style="list-style-type: none">• Maintain production rate• Drill Exploration / Appraisal wells• Install wellhead platforms

* Sales volume stated at 100% basis.

	Project	PTTEP's Share	Partners (as of 2014)	2015 Key Activities
Development Phase :				
Thailand and JDA				
23	L22/43	100%		<ul style="list-style-type: none"> Drill Exploration / Appraisal / Development wells
Overseas				
24	Algeria 433a & 416b (Bir Seba)	35%	PetroVietnam 40% Sonatrach 25%	<ul style="list-style-type: none"> Continue Engineering, Procurement & Construction (EPC) work First oil expected in 2H of 2015

	Project	PTTEP's Share	Partners (as of 2014)	2015 Key Activities
Exploration Phase				
Thailand and JDA				
25	A4, 5 /48	100%		<ul style="list-style-type: none"> G&G Studies
26	G9/43	100%		<ul style="list-style-type: none"> Acquire 3D seismic Drill Exploration / Appraisal wells
27	L28/48	70%	Resourceful Petroleum (Thailand) 30%	<ul style="list-style-type: none"> In process of plug and abandon (P&A) Ratana-1 and Ratana-2 well G&G Studies
Overseas				
28	Myanmar M3	80%	MOECO 20%	<ul style="list-style-type: none"> Drill 5 appraisal wells & 1 exploration well Pre development Study
29	Mozambique Rovuma Offshore Area 1	8.5%	Anadarko, Mitsui, 26.5%,20% ENH, Bharat Petroleum, 15%,10% BREML, OVL 10%,10%	<ul style="list-style-type: none"> Drill Appraisal wells for reserves certification Prepare for Final Investment Decision (FID)
30	Algeria Hassi Bir Rekaiz	24.5%	CNOOC 24.5% Sonatrach 51%	<ul style="list-style-type: none"> Drill Appraisal wells
31	Indonesia Semai II	28.33%	Murphy 28.33% INPEX 28.33% PT Pertamina Hulu Energi 15% Semai II	<ul style="list-style-type: none"> G&G Studies

	Project	PTTEP's Share	Partners (as of 2014)	2015 Key Activities	
Exploration Phase (con't)					
Overseas (con't)					
32	Indonesia South Mandar*	34%	Talisman TOTAL	33% 33%	• G&G studies
33	Indonesia Malunda	100%			• G&G studies
34	Myanmar M11	52.9412 %	TOTAL	47.0588%	
35	Vietnam B & 48/95	8.5%	Chevron MOECO PVEP	42.38% 25.62% 23.5%	• Negotiate a GSA with the Vietnamese government
36	Vietnam 52/97	7%	Chevron PVEP MOECO	43.4% 30% 19.6%	• Negotiate a GSA with the Vietnamese government
37	Myanmar PSC-G and EP-2	90%	WinPreciousResources	10%	• Drill 4 exploration wells (2 wells in PSC G & 2 wells in EP 2)
38	Mozambique Rovuma Onshore	10%	Anadarko, Maurel&Prom, ENH, Wentworth Resources	35.7%,27.7% 15%,11.6%	• Drill an exploration well
39	Kenya L10A	31.25%	BG, Pan Cont.	50%,18.75%	• Conduct G&G studies
40	Kenya L5, L7, L11, L11B, L12	10%	Anadarko, Total	50%,40%	• Conduct G&G Studies • Drill an Exploration well
41	Myanmar MD 7 and MD 8	100%			• Acquire 3D seismic
42	Mariana Oil Sands	100%			• FEED for the first production phase of the Thornbury field • Conduct Winter Delineation Program
43	Barreirinhas AP1	25%	BG Brasil	75%	• Acquire 3D seismic
44	MOGE 3	85%	Palang Sophon Offshore WinPreciousResources	10% 5%	• Acquire 2D & 3D seismic
45	Brazil BM-ES-23	20%	Petrobras INPEX	65% 15%	• Drill 2 exploration wells

* Waiting for the official approval from Indonesian government to change the participation interest resulting from Talisman's withdrawal from the project.

Ratio	Formula
Lifting Cost (\$/BOE)	$(\text{Operating Exp.} - \text{Transportation Cost} - \text{Stock Variation} - \text{Other expense not related to lifting}) / \text{Production Volume}$
Cash Cost (\$/BOE)	$(\text{Operating Exp.} + \text{Exploration Exp.} + \text{SG\&A} + \text{Royalty \& SRB} + \text{Interest Expense}) / \text{Sales Volume}$
Unit Cost (\$/BOE)	$(\text{Operating Exp.} + \text{Exploration Expense} + \text{SG\&A} + \text{Royalty} + \text{DD\&A}) / \text{Sales Volume}$
Reserves Replacement Ratio	$5\text{-Yr Additional Proved Reserves} / 5\text{-Yr Production Volume}$
Reserves Life Index (Year)	$\text{Proved Reserves} / \text{Production Volume}$
Success Ratio	$\text{Number of wells with petroleum discovery} / \text{Total number of exploration and appraisal wells}$
EBITDA	$(\text{Sales} + \text{Revenue from pipeline transportation}) - (\text{Operating expenses} + \text{Exploration expenses} + \text{Administrative expenses} + \text{Petroleum royalties and remuneration} + \text{Management's remuneration})$
EBITDA Margin	$\text{EBITDA} / \text{Sales Revenue}$
Total Interest Bearing Debt	$\text{Short-term loans from financial institution} + \text{Current portion of long-term debts} + \text{Bonds} + \text{Long-term loans from financial institution}$
Total Debt to Equity Ratio	$\text{Total interest bearing debt} / \text{Shareholders' equity}$
Total Debt to EBITDA Ratio	$\text{Total interest bearing debt} / \text{Trailing-12-month EBITDA}$
Dividend Payout Ratio	$\text{Dividend Payment} / \text{Net Profit}$