

# PTT Exploration and Production Public Company Limited

Q2 2015 Opportunity Day  
Stock Exchange of Thailand  
13 August 2015



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





**Safety**



**Industry Update**



**Financial Results**



**Outlook**

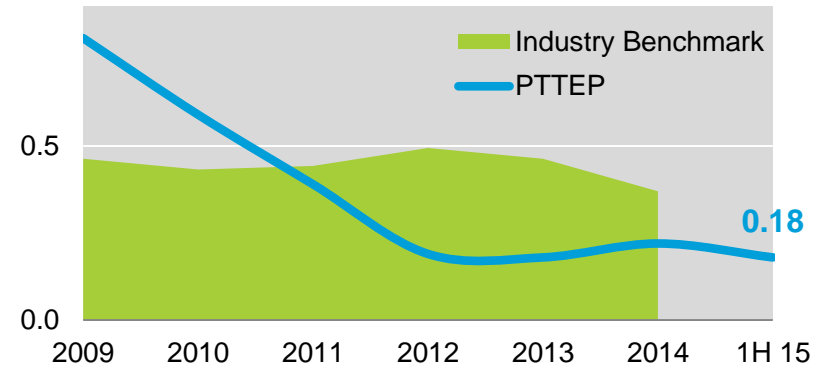
# 1H 2015 Safety Highlights

Emphasis on safety in all areas of operations underlines excellent track record



## Above Industry Average Safety Record

# of incidents per million man hours



*The safety of PTTEP employees and contractors in every aspect of our operations is the key success to achieve the goal of "Target Zero"*





**Safety**



**Industry Update**

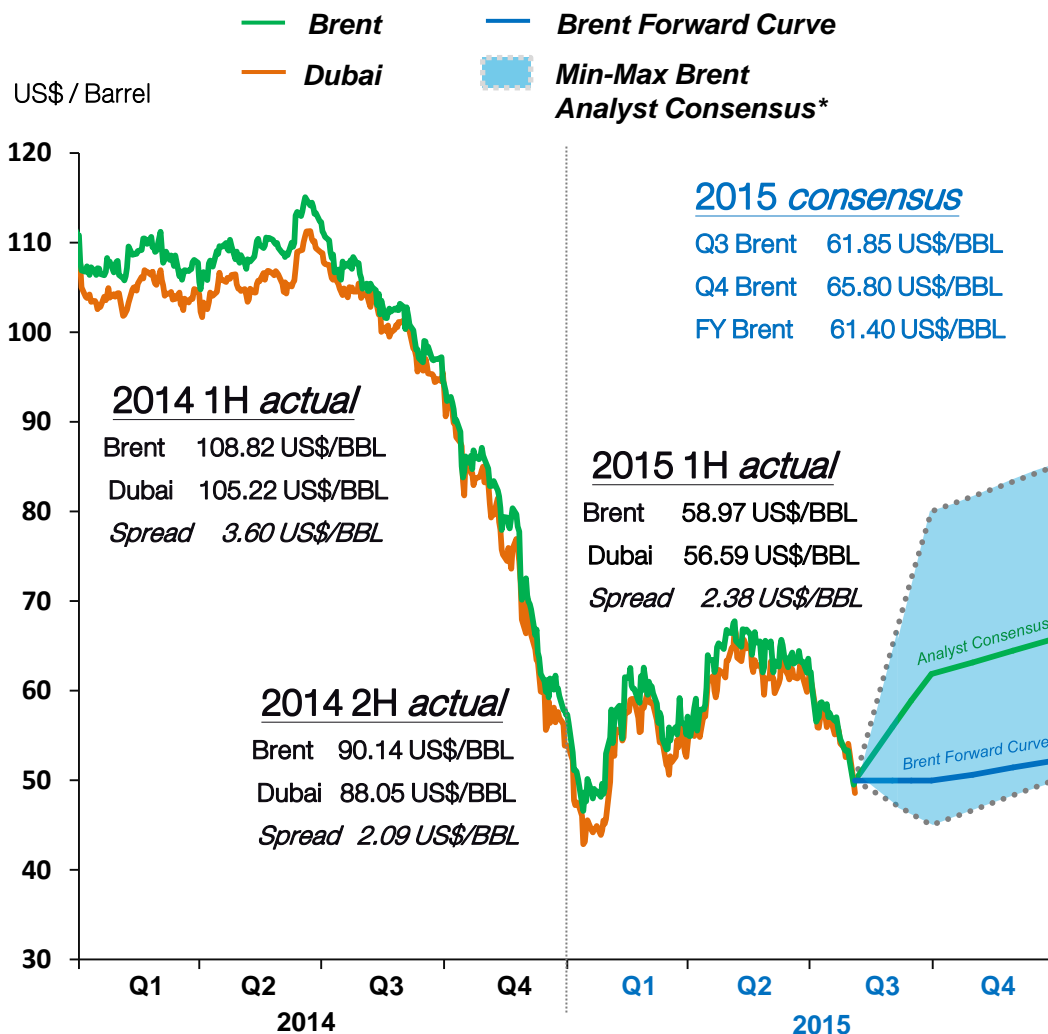


**Financial Results**



**Outlook**





Remark: Bloomberg Analyst Consensus (CPFC) as of 4 August 2015 (43 estimates)

Brent Forward Curve as of 4 August 2015

### 2Q Highlights

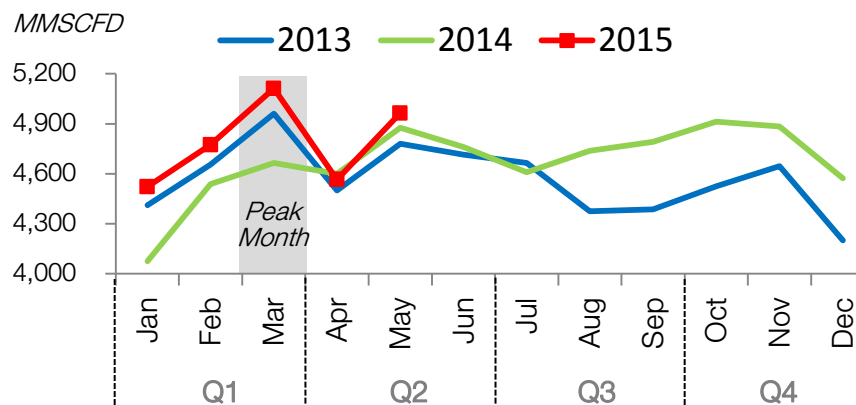
- ↑ Decreased US Rig Counts and drawdown of US oil inventory
- ↑ Fears of contagion in Middle East conflicts
- ↓ OPEC production reaches a 3 year high

### 2H Outlook

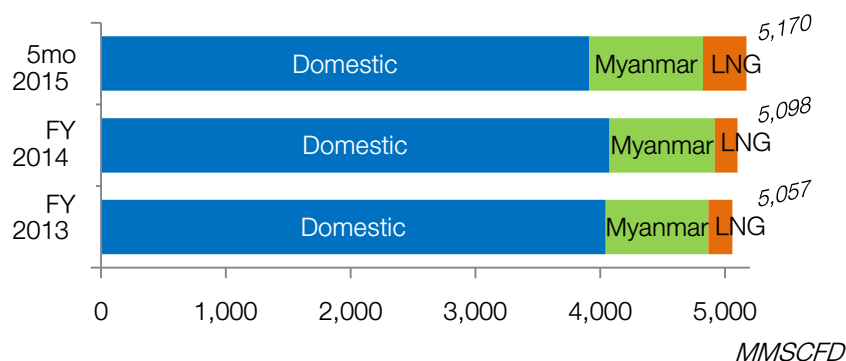
- ↓ Lifting of international sanctions on Iran
- ↓ Softer slowdown in US crude oil production following higher oil prices
- ↓ Downside risks to global economic recovery

### Gas Consumption

#### Monthly Gas Consumption by Year

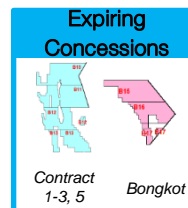


#### Thailand's Gas Supply by Source



Source: EPPO

### Thai Upstream Energy Reform



- According to National Energy Policy Office (NEPO) meeting in May 2015, contractual management plan for expiring concessions to be concluded within one year

- Framework agreed by NEPO includes:

- Continuation of gas supply placed as top priority
- Consider for appropriate increase in State participation and/or Government's take
- Evaluate uses of alternative fiscal regime including Production Sharing



- As per MoE's latest comment, bid round process could be resumed after amendments to Petroleum Act is finalized



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# Summary of Q2 2015 Financial Results



Lower NI primarily from non-recurring items

Unit : MMUSD

Statement of Income	Q1 15	Q2 15	% QoQ	Q2 14 **	% YoY	6M 15	6M 14 **	% YTD
<b>Total Revenues</b>	1,497	<b>1,486</b>	(1)	2,105	(29)	<b>2,976</b>	3,928	(24)
Sales	1,435	<b>1,436</b>	0	1,946	(26)	<b>2,871</b>	3,731	(23)
Others	62	<b>50</b>	(19)	159	(69)	<b>105</b>	197	(47)
<i>Sales Volume (BOED)</i>	327,145	<b>325,534</b>	(0)	315,810	3	<b>326,335</b>	307,263	6
<i>Sales Price (USD/BOE)</i>	48.74	<b>48.47</b>	(1)	67.70	(28)	<b>48.61</b>	66.35	(27)
<b>Total Expenses</b>	1,233	<b>1,451</b>	18	1,545	(6)	<b>2,677</b>	2,988	(10)
<b>Major Expenses:</b>					-			
<i>Operating Expenses</i>	167	<b>182</b>	9	206	(12)	<b>349</b>	491	(29)
<i>Exploration Expenses</i>	13	<b>38</b>	>100	65	(42)	<b>52</b>	82	(37)
<i>DD&amp;A</i>	728	<b>726</b>	(0)	618	17	<b>1,454</b>	1,117	30
<i>Income Tax Expense</i>	18	<b>137</b>	>100	234	(41)	<b>155</b>	576	(73)
<i>(Gain)/Loss on FX</i>	34	<b>19</b>	(44)	(9)	>100	<b>53</b>	(5)	>100
<b>Net Income</b>	<b>264</b>	<b>35</b>	<b>(87)</b>	<b>560</b>	<b>(94)</b>	<b>299</b>	<b>940</b>	<b>(68)</b>
Recurring Net Income	248	<b>194</b>	(22)	537	(64)	<b>440</b>	929	(53)
Non-recurring *	16	<b>(159)</b>	>100	23	>100	<b>(141)</b>	11	>100

\* Includes Gain/(loss) on FX, Deferred tax from Functional currency, Current Tax from FX Revaluation, Gain/loss from Financial instruments, H1 incident Insurance Claim, and etc.

\*\* Restated

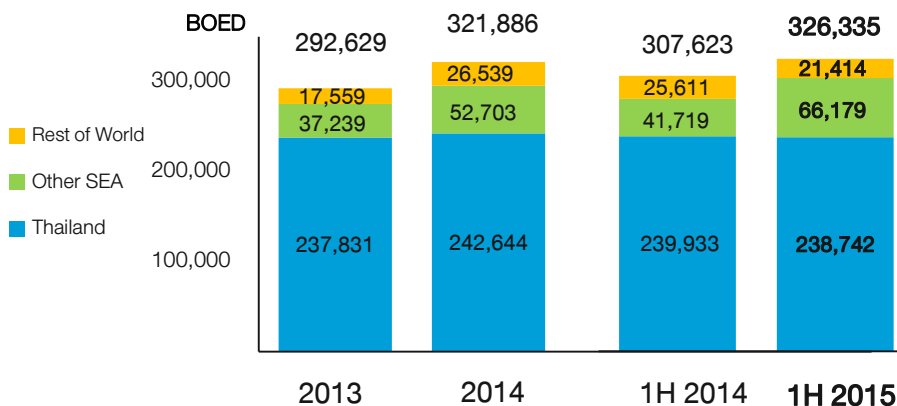


# Sales Volume & Unit Costs

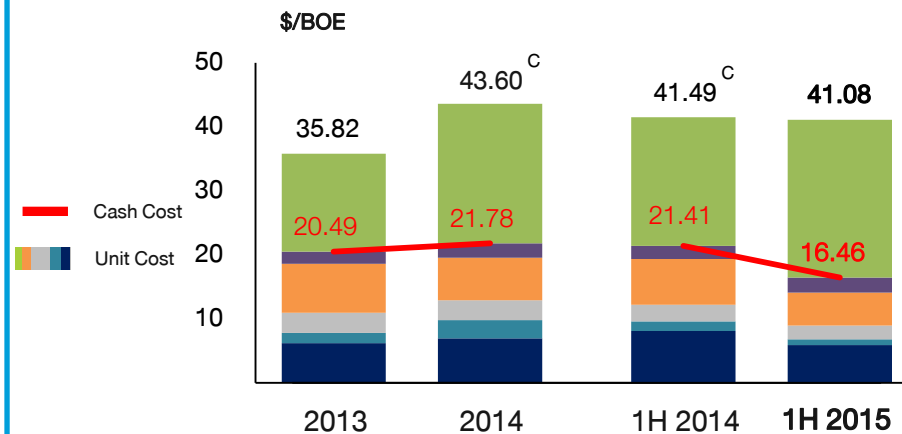
Price stability and healthy cash margin amidst volatile environment



## Sales Volume and Price



## Unit Cost



Gas (\$/MMBTU)	7.92 <sup>A</sup>	8.03 <sup>A</sup>	7.96 <sup>A</sup>	<b>7.66</b>
Liquid (\$/BBL)	100.15	94.91	102.82	<b>54.83</b>
Weighted Avg. (\$/BOE)	65.58 <sup>B</sup>	63.38 <sup>B</sup>	66.35 <sup>B</sup>	<b>48.61</b>
Avg. Dubai (\$/BBL)	105.54	96.60	105.28	<b>56.59</b>
Avg. HSFO (\$/BBL)	97.52	86.74	93.55	<b>52.67</b>
(High Sulphur Fuel Oil)				
Volume Mix (Gas:Liquid)	66 : 34	67 : 33	66 : 34	<b>70 : 30</b>
Revenue Mix (Gas:Liquid)	47 : 53	51 : 49	47 : 53	<b>63 : 37</b>

DD&A	15.33	21.82	20.08	<b>24.62</b>
Finance Cost	1.88	2.21	2.06	<b>2.39</b>
Royalties	7.65	6.69	7.14	<b>5.13</b>
G&A	3.17	3.10	2.63	<b>2.16</b>
Exploration Exp.	1.61	2.83	1.47	<b>0.87</b>
Operating Exp. <sup>D</sup>	6.18	6.95 <sup>C</sup>	8.11 <sup>C</sup>	<b>5.91</b>
Lifting Cost	4.88	5.26	5.60	<b>4.75</b>
Drilling Success Ratio <sup>E</sup>	38 : 55	25 : 43	17 : 22	<b>22 : 27</b>

A) If Vietnam 16-1 retroactive sales are excluded, gas price are \$8.01 (2013), \$8.07 (2014), \$8.04 (1H2014)

B) If Vietnam 16-1 retroactive sales are excluded, average selling price are \$66.09 (2013), \$63.59 (2014), \$66.84 (1H 2014)

C) If exclude extra expense from Montara's Development well (H5) :

2014: Operating Exp. : 6.53 \$/BOE / Unit cost : 43.18 \$/BOE

1H 2014: Operating Exp. : 6.99 \$/BOE / Unit cost : 38.31\$/BOE

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

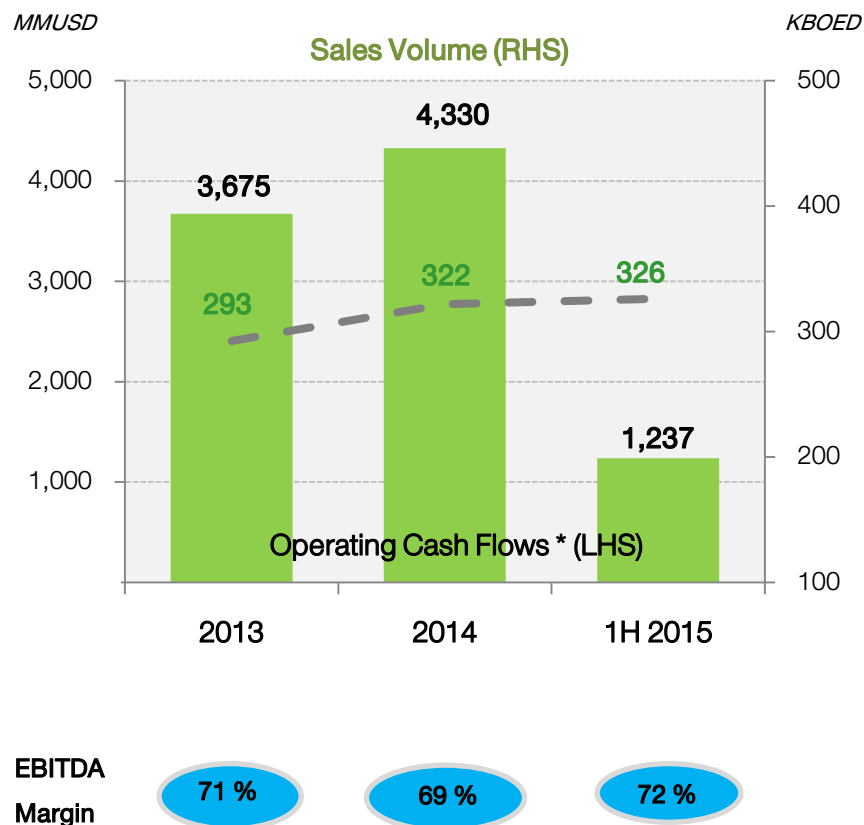
E) Drilling success ratio (successful wells : total wells): includes Exploration and Appraisal wells

# Cash Flow Performance

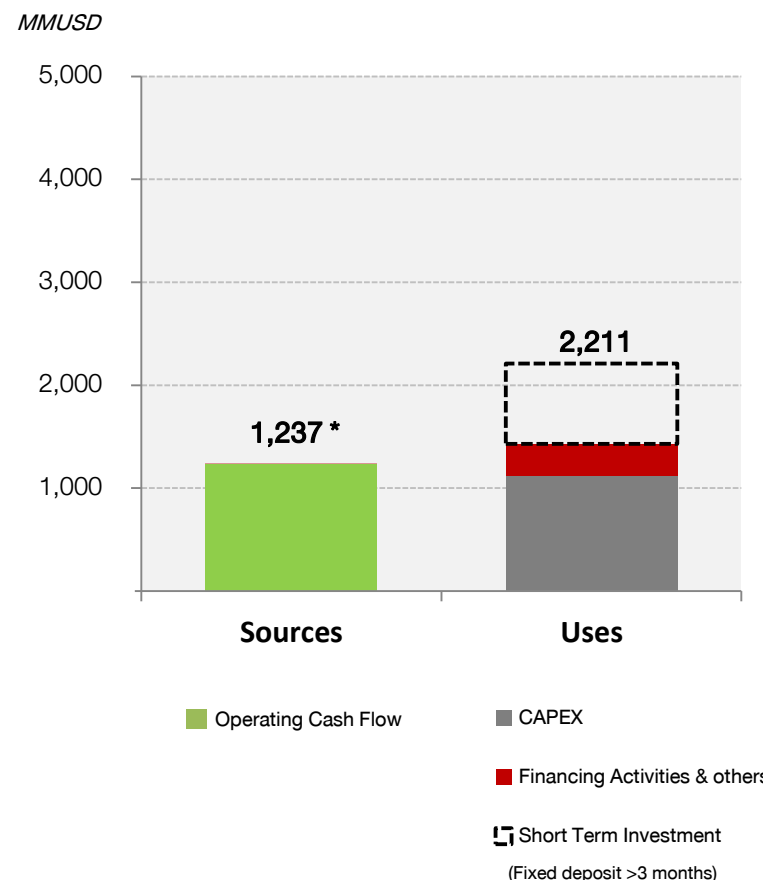
Robust liquidity to fund CAPEX and debt service



## Cash Flow Performance



## Source & Use of Funds in 1H 2015

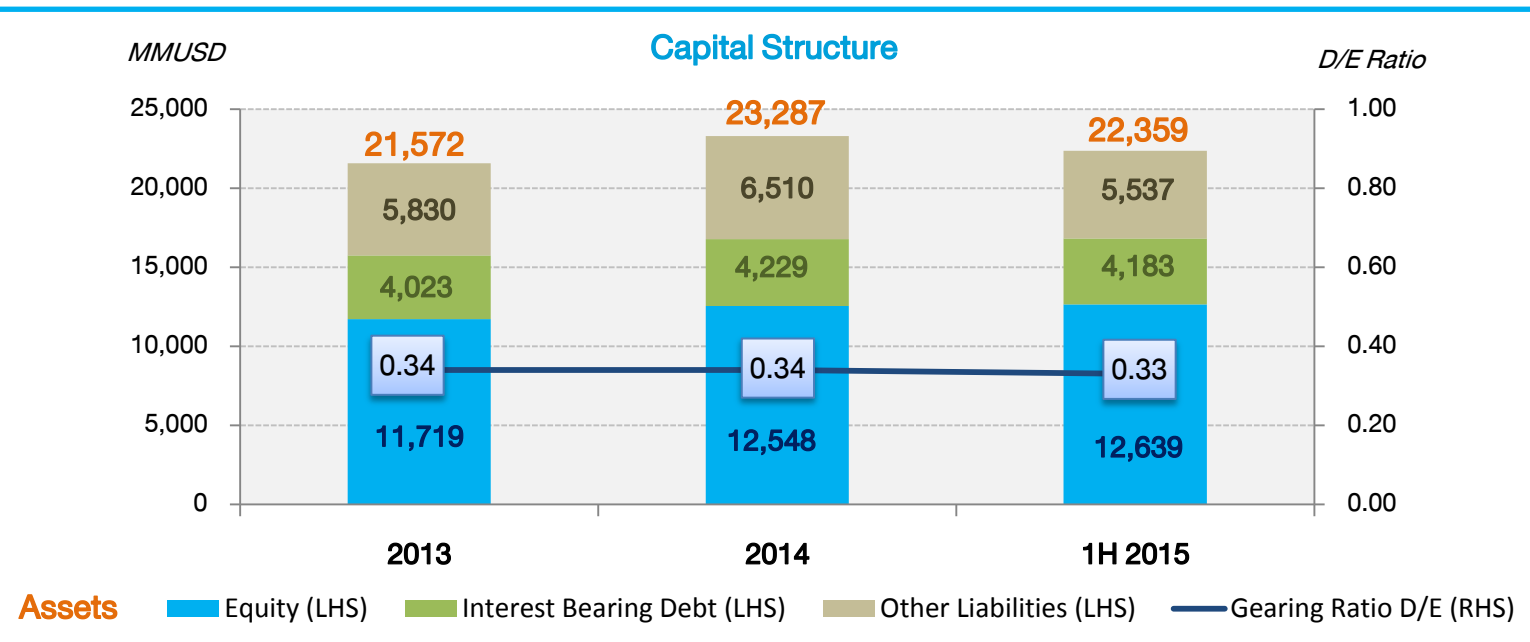


\* Net of adjustment for the effect of exchange rate changes on cash and cash equivalents. Operating cash flows before exchange rate effect adjustment is:

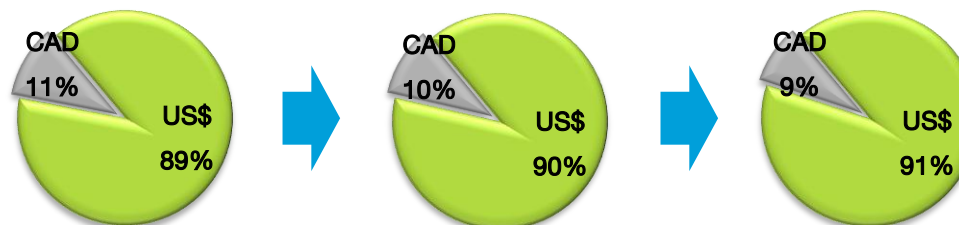
2013 = 3,740 MMUSD ; 2014 = 4,320 MMUSD ; and 1H 2015 = 1,256 MMUSD

# Financial Position

Healthy balance sheet with low gearing ratio



## Debt Profile \*



Weighted Average

Cost of Debt \* (%)

[Fixed : Floating]

Average Loan Life \* (Years)

\* Excludes Hybrid bonds

3.99

[75 : 25]

6.81

4.14

[77 : 23]

7.05

4.13

[77 : 23]

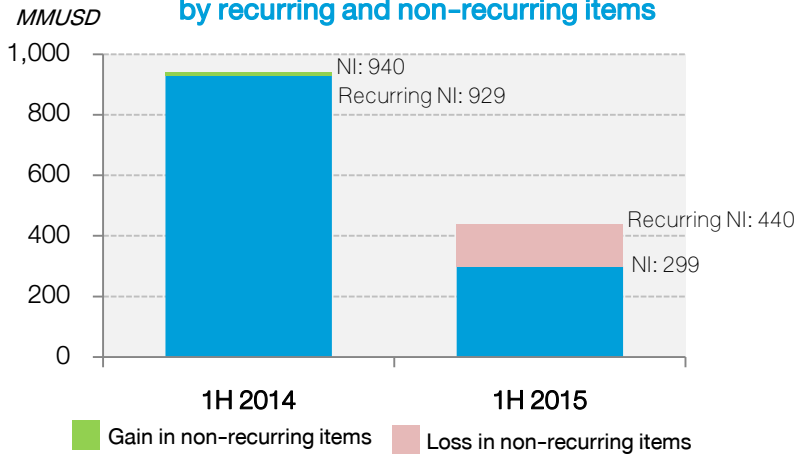
6.58

# Net income breakdown

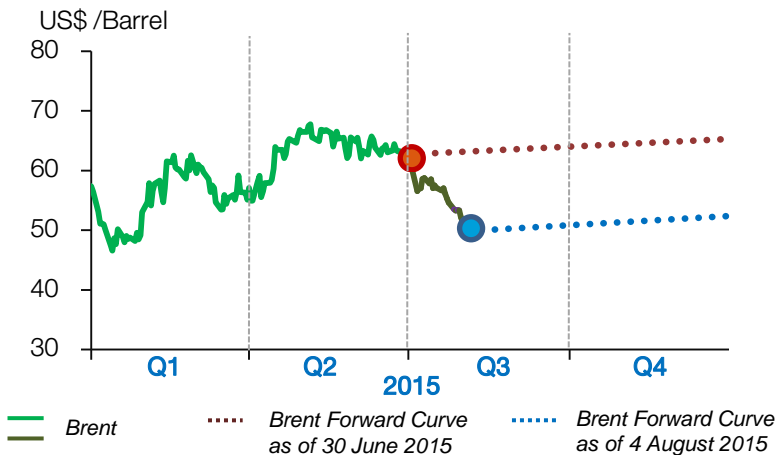
Net income hurt by FX impact and oil price decrease



**Net Income Breakdown  
by recurring and non-recurring items**



**Brent vs Forward Brent**



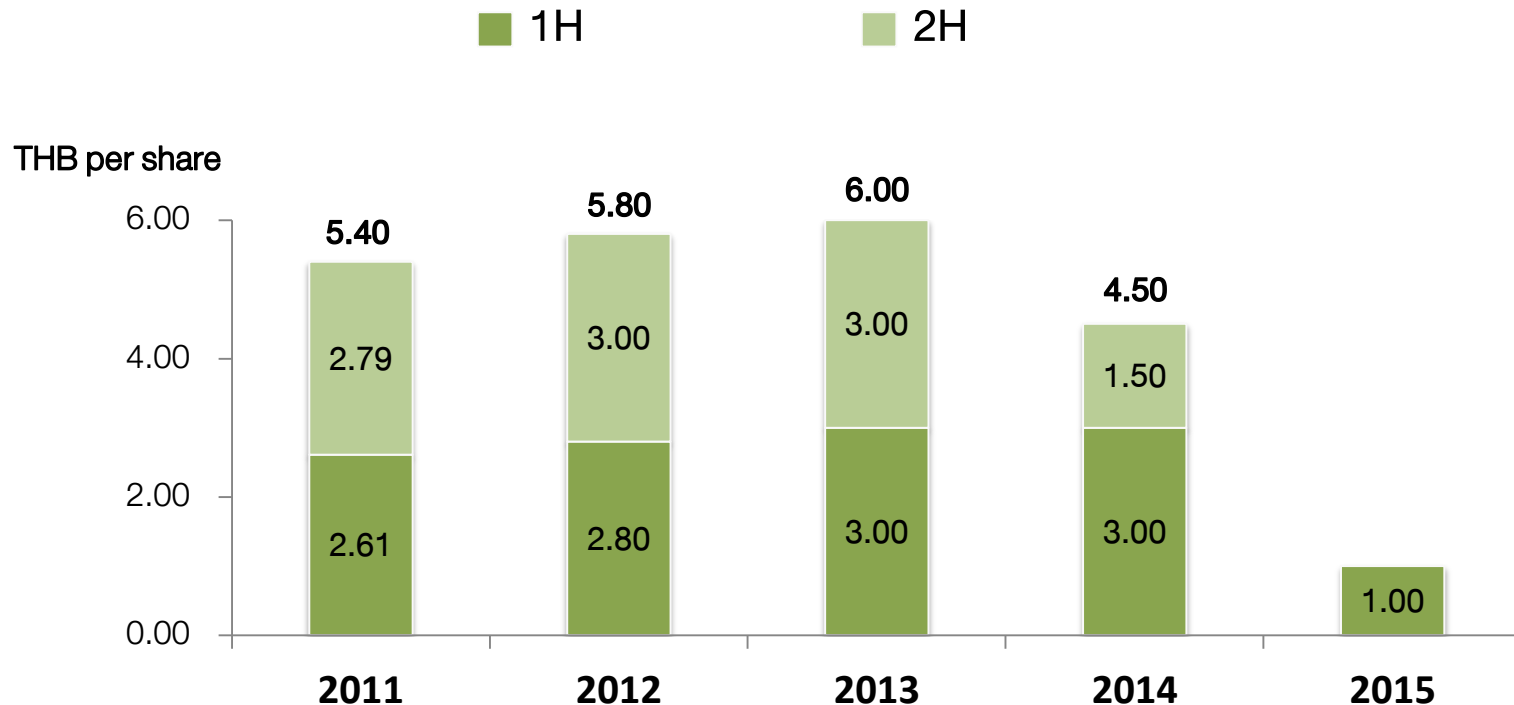
## Core performance effected by low oil price

- 1H 2015 Recurring Net Income decreased YoY by 53% from lower sales price and higher DDA

## Decrease in 1H 2015 Net Income further compounded by non-recurring items

- Effects of Foreign Exchange comprising
  - Deferred Tax on Functional Currency of 43MMUSD resulting from THB depreciation against USD
  - Loss on Foreign Exchange of 53MMUSD from volatility in THB, BRL and CAD against USD
- Oil price hedging loss of 50MMUSD comprising
  - Realized gain of 13MMUSD from hedging contract settlement
  - Unrealized loss of 63MMUSD from mark-to-market to oil price Brent forward curve as of end of June 2015

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



Payout Ratio (%)

40

38

40

82

39





**Safety**



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# Revisiting 2015 Priorities

Deliver operational excellence, cost savings and project development as planned

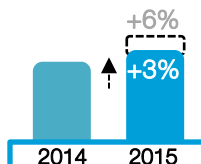


## 2015 Priorities

## 1st Half Recap

## 2nd Half Focus

Deliver sales volume growth through safe and reliable operations



Revised growth outlook on domestic economy and increase in LNG supply

Progressing Algeria 433a & 416b project start-up

Adopt a cautious approach to pre-FID assets and reinforce focus on Southeast Asia

Myanmar Exploration
Contract 4 (Ubon)
MZ Area 1
Algeria HBR
Mariana Oil Sands

Maintain active presence through appraisal programs

Advancing towards final investment decisions

Progressing with exploration program

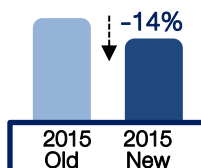
Cost improvement plan and revised work program

Monitor and prepare to capture value-creating opportunities

Focus on conventional assets M&A in Southeast Asia

Cautiously review potential entry opportunities into North American unconventional assets

Focus on cost optimization and investment prioritization



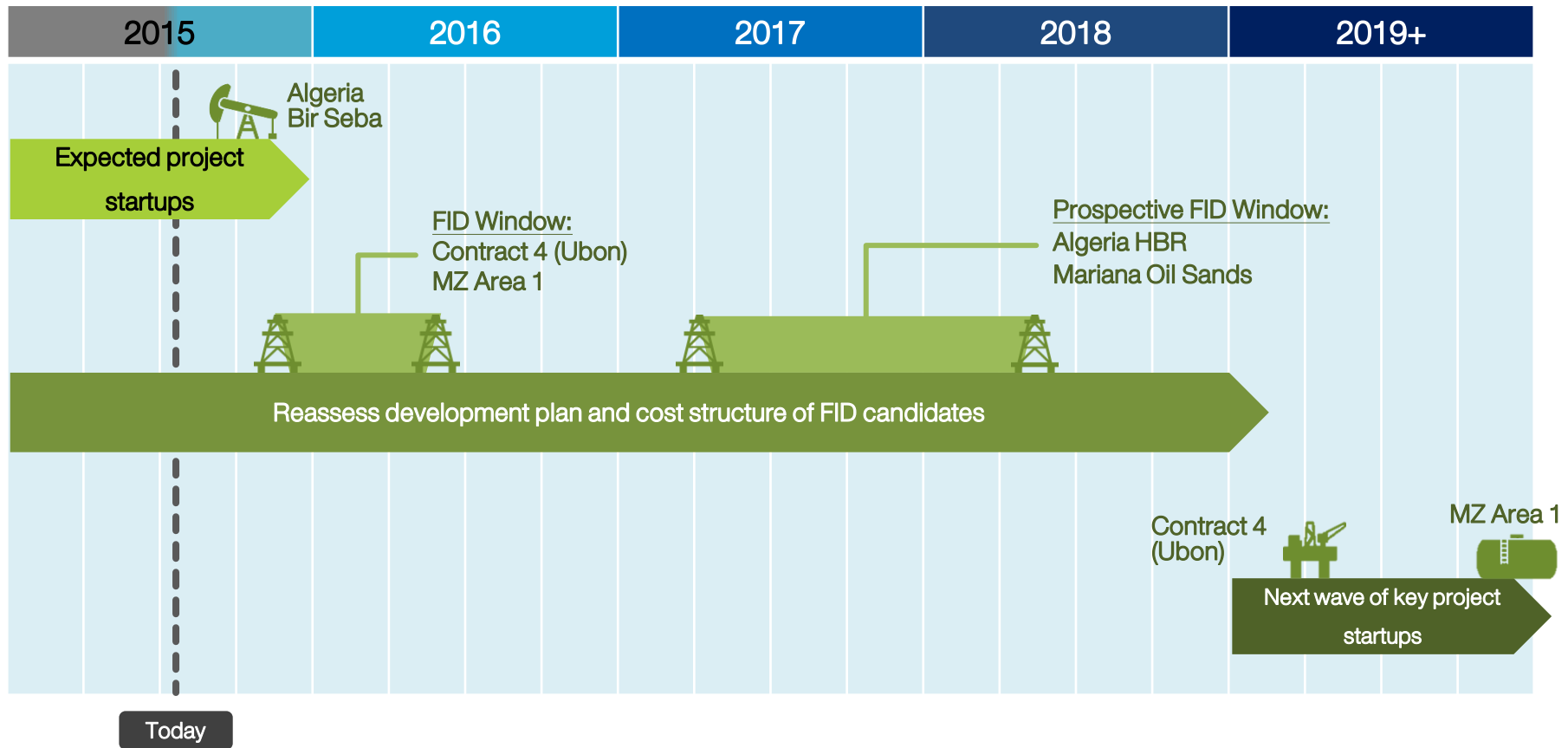
~14% reduction plan to announced budget rolled out

De-risked exploration through prioritization and rescheduling

Continuous implementation to deliver objectives

# Project development candidates

deliver near-term growth and reassess feasibility of medium-long term prospects



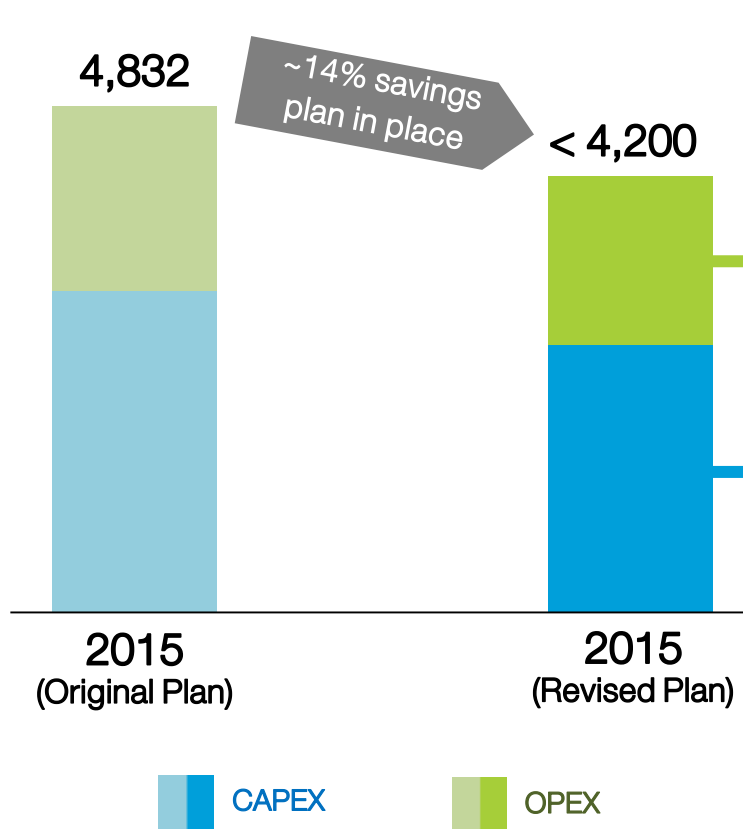
# SAVE to be SAFE Update

Groundwork set for cost performance improvement



>600 MMUSD reduction identified in 2015

Unit : MMUSD



Positive cost reduction trend supported by efficiency improvement through...



## Operating expenditure reduction

Approximately 10% reduction expected through leaner field operations, maintenance activities and G&A expenses



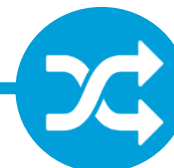
## Offshore drilling in GoT and Myanmar

Expect development well cost reduction in PTTEP-operated projects in the range of 5-25% (depending on the project)



## Facilities cost reduction

Up to 5% reduction (depending on the project) in cost of new wellhead platforms planned



## Exploration prioritization

Reschedule exploration plan to fit risk profile to current environment

# “LEAP” through the 30-Year Journey

Reinforcing the passion to achieve sustainable growth



## LEARN

Emerging national  
E&P company

## ENHANCE

Proven domestic E&P  
operator

## ADVANCE

Recognized  
internationally

Production volume has grown more than 20 times

### From non-operating to operator

20

projects operated globally, successes in  
Bongkot, Arthit and Zawtika

~200

wells drilled by PTTEP annually

~10

wellhead platforms completed by  
PTTEP annually

### Contribution to Thai economy

~30%

of oil and gas production in Thailand

600+

billion Baht of investment and expenditure  
in Thai E&P industry over last 10 years

~1%

of Thai GDP stimulated by PTTEP activities\*

60+

billion Baht per year to government in  
corporate taxes and royalties in the past  
3 years

### Strong financial platform

Strong operating **Cash flow** with significant  
cash on hand

**Disciplined** financially with credit ratings  
maintained at sovereign level

1985-1995

1995-2005

2005-2015

\* Contribution based on value added created by PTTEP investment in Thailand (with an assumption : Value added = Revenue from Thailand minus related depreciation and OPEX)



# “LEAP” through the 30-Year Journey

Reinforcing the passion to achieve sustainable growth



## LEARN

Emerging national E&P company

## ENHANCE

Proven domestic E&P operator

## ADVANCE

Recognized internationally

## PROGRESS

Surpass industry challenges and become a leading Asian E&P company

600

KBOED

M&A and  
Exploration  
Opportunities

Other Existing  
Assets

Base  
Producing Assets

Production volume has grown more than 20 times

1985-1995

1995-2005

2005-2015

...2025



*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](mailto:IR@pttep.com)

OR

Call us at **+66 2 537 4000**



**1. Industry**

**2. Detailed Financial Information**

**3. Project Details**

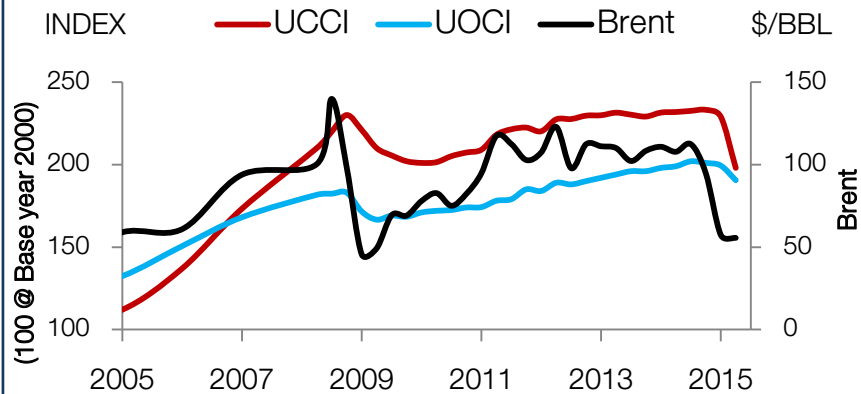
**4. Organization Structure**

**5. Ratios & Formula**

# Industry Costs

## Sharp fall in capital costs and rig utilization

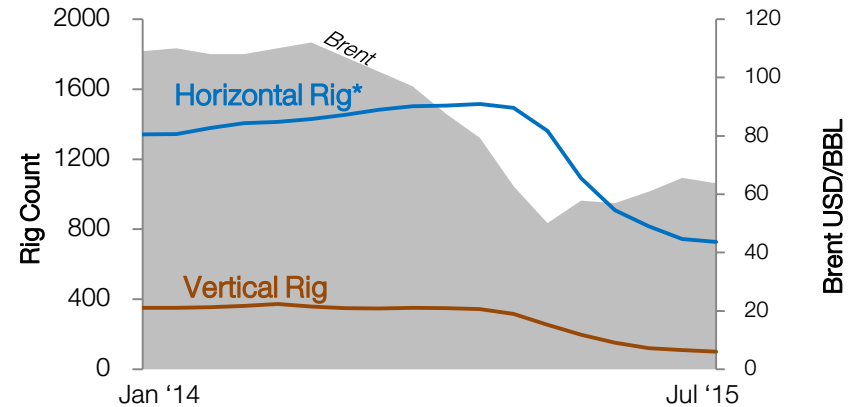
### Cost Index vs. Brent (2005 – 2015 Q2)



UCCI = Upstream Capital Cost Index ; UOCI = Upstream Operating Cost Index

Source: IHS CERA

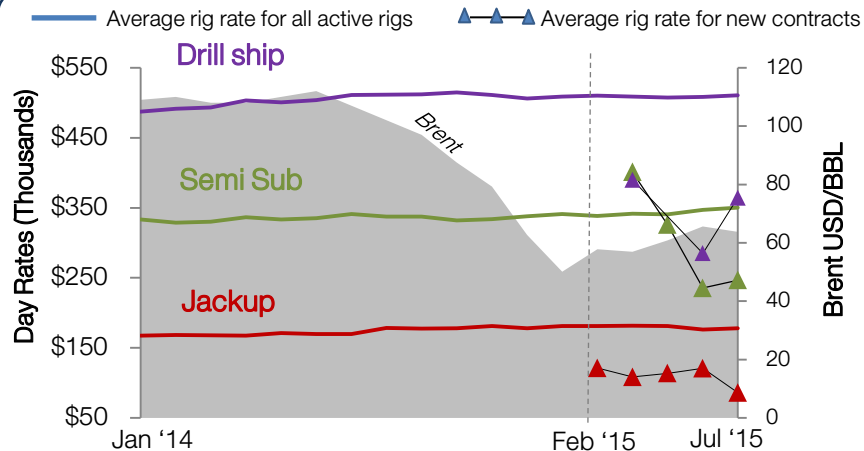
### Onshore U.S. Rig Count (YTD 19 months)



\* Includes horizontal and directional rigs

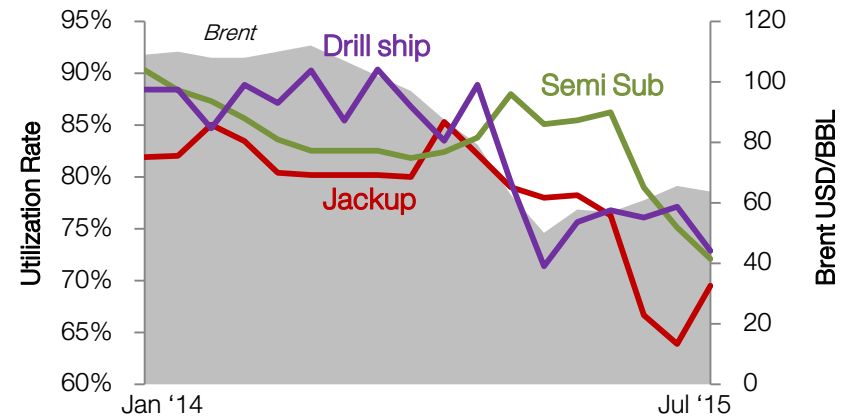
Source: Baker Hughes

### Average Offshore Rig Rates (YTD 19 months)



Source: Riglogix, Company Analysis

### Average Offshore Rig Utilization (YTD 19 months)



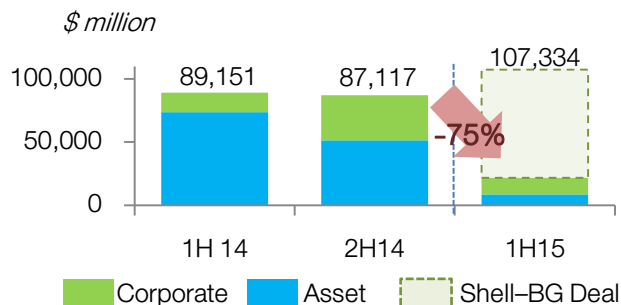
Source: Riglogix, Company Analysis

# 2015 1H M&A Recap

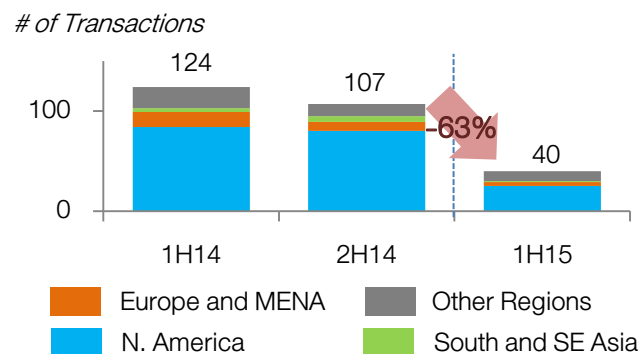
Uncertainty of oil price outlook creates disconnect between buyers and sellers



## Global Upstream M&A Deal Value

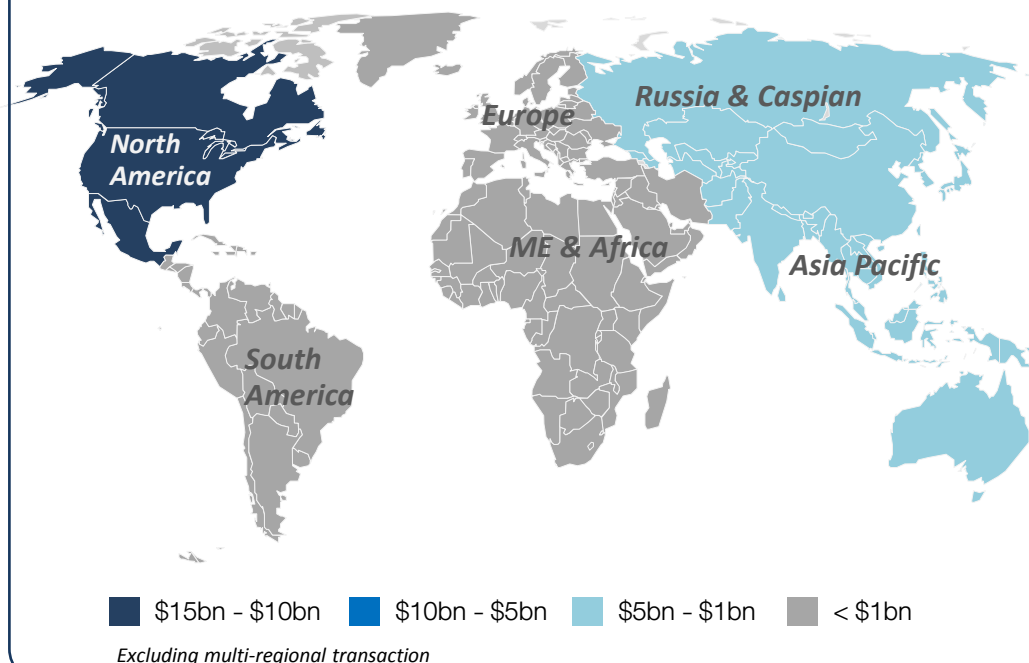


## Global Upstream M&A Deal Counts



## Deal Value Distribution by Region

Total upstream M&A during 1H 2015 valued at \$22bn excluding multi-regional transaction deal (i.e. Shell-BG)



- Differing price expectations by sellers and buyers remain
- Activity has picked up in the second quarter, led by corporate transactions, and US buying-selling; but overall market still subdued

Source: IHS

Note: \* Includes transactions where value > US\$100 million

Supplement 1.2 / 5

Passion to Explore for a Sustainable Future

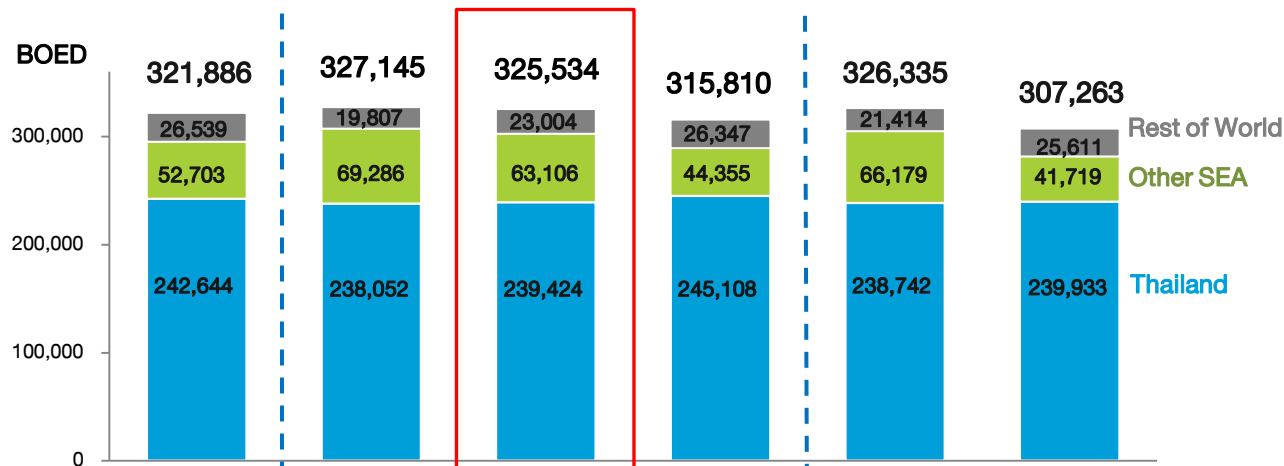


# PTTEP Sales Volume and Average Product Price

Price stability amidst volatile environment



## Sales Volume



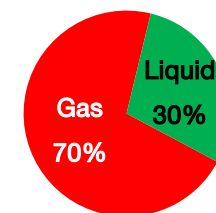
## Sales Price

	2014	Q1 15	Q2 15	Q2 14	6M 15	6M 14
Gas (\$/MMBTU)	* 8.03	8.03	7.29	8.11	7.66	* 7.96
Liquid (\$/BBL)	94.91	50.12	59.34	104.64	54.83	102.82
Weighted Avg. (\$/BOE)	** 63.38	48.74	48.47	67.70	48.61	** 66.35
Avg. Dubai (\$/BBL)	96.60	51.89	61.30	106.11	56.59	105.28
Avg. HSFO (\$/BBL)	86.74	48.90	56.44	93.32	52.67	93.55

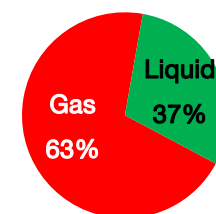
(High Sulphur Fuel Oil)

## Q2 2015 Sales Volume By Product

### Volume Mix



### Revenue Mix

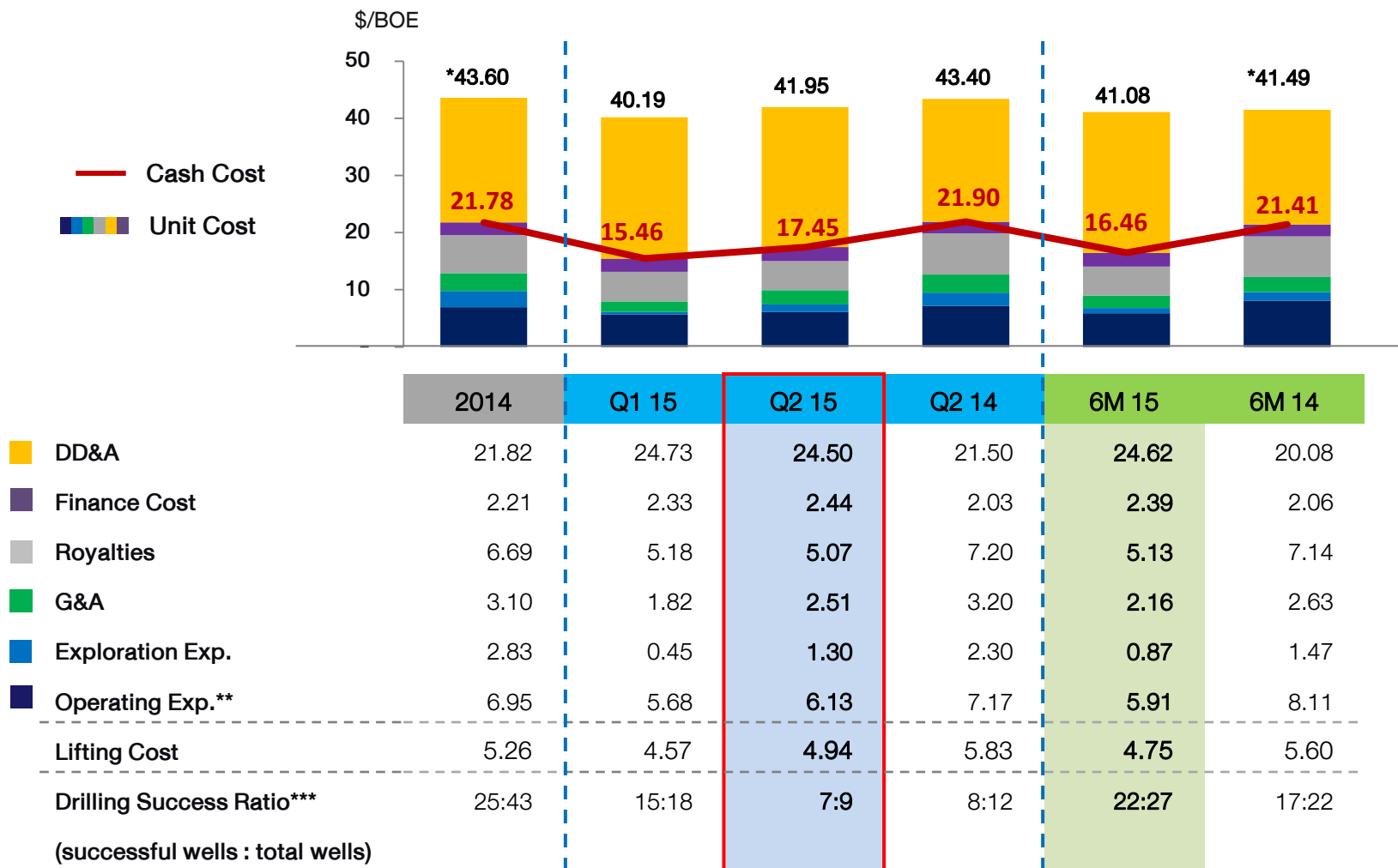


\* Gas price, if excludes Vietnam 16-1 retroactive sale recording, is \$8.07 for 2014 / \$8.04 for 6M 2014

\*\* Average selling price, if excludes Vietnam 16-1 retroactive sale recording is \$63.59 for 2014 / \$66.84 for 6M 2014

# Operating Performance

Slight QoQ increase in unit cost from exploration write-off and higher maintenance cost



\* If excluded extra expense from Montara's Development well (H5) :  
**2014** ; Operating Exp. : 6.53 \$/BOE / Unit cost : 43.18 \$/BOE  
**6M 14** : Operating Exp. : 6.99 \$/BOE / Unit cost : 38.31 \$/BOE

\*\* Excludes diluent cost for blending bitumen in Oil Sands project

\*\*\* Exploration and Appraisal Wells

Note : The formulas for calculating ratios are provided in the supplementary section for your reference

# Financial Performance : Income Statement

Healthy EBITDA margin



	Q1 15	Q2 15	Q2 14 **	6M 15	6M 14 **
Sales Revenue * (MMUSD)	1,470	1,466	1,980	2,937	3,792
EBITDA (MMUSD)	1,084	1,022	1,409	2,106	2,677
Net Profit (MMUSD)	264	35	560	299	940
Earning Per Share (USD)	0.07	0.005	0.14	0.07	0.24
<b>Key Financial Ratios</b>					
EBITDA Margin (%)	74	70	71	72	71
Return on Equity (%) (LTM)	5	0.28	14	0.28	14
Return on Capital Employed (%) (LTM)	4	1	12	1	12

\* Includes revenue from pipeline transportation

\*\* Restated

# Financial Performance : Balance Sheet

Healthy balance sheet with low gearing ratio



	Q1 15	Q2 15	Q2 14 **	6M 15	6M 14 **
Total Assets (MMUSD)	23,353	22,359	22,877	22,359	22,877
- Cash & cash equivalents (MMUSD)	3,959	2,956	3,211	2,956	3,211
Total Liabilities (MMUSD)	10,760	9,720	9,626	9,720	9,626
- Interest bearing debt (MMUSD)	4,206	4,183	4,274	4,183	4,274
Equity (MMUSD)	12,593	12,639	13,251	12,639	13,251
<b>Key Financial Ratios</b>					
Total Debt to Equity (X)	0.33	0.33	0.32	0.33	0.32
Net Debt to Equity (X)	0.02	0.10	0.08	0.10	0.08
Total Debt / Capital (X)	0.25	0.25	0.24	0.25	0.24
Total Debt / EBITDA (X)	0.82	0.89	0.82	0.89	0.82
Net Debt / EBITDA (X)	0.05	0.26	0.21	0.26	0.21
EBITDA Interest Coverage (X)	27	24	30	24	30

**Credit Ratings :** BBB+ (S&P), Baa1 (Moody's), AAA (TRIS)

**Weighted Average Cost of Debt \* :** 4.13 %

**Average Loan Life \* :** 6.58 years

\* Exclude Hybrid bonds

\*\* Restated

# Project Information 1/4

## Production Phase: Thailand and JDA



	Project	Status*	PTTEP's Share	Partners (as of Q2 2015)		6M 2015 Average Sales Volume **		2015 Key Activities	
						Gas	Oil and Other		
Production Phase									
Thailand and JDA									
1	Arthit	OP	80%	Chevron MOECO	16% 4%	203 MMSCFD	Condensate: 8.9 k BPD	<ul style="list-style-type: none"><li>Ensure gas deliverability level at DCQ***</li><li>Drill Exploration / Appraisal wells/ Development wells</li><li>Install wellhead platforms</li></ul>	
2	B6/27	OP	60%	JX NOEX	40%	N/A	N/A	<ul style="list-style-type: none"><li>Evaluate further potential of reservoir</li></ul>	
3	B8/32 & 9A		25%	Chevron MOECO KrisEnergy PSTL	51.66% 16.71% 4.63% 2%	92 MMSCFD	Crude: 26 k BPD	<ul style="list-style-type: none"><li>Drill development wells</li></ul>	
4	Bongkot	OP	44.4445 %	TOTAL British Gas	33.3333% 22.2222%	892 MMSCFD	Condensate: 28.8 k BPD	<ul style="list-style-type: none"><li>Ensure gas deliverability level at DCQ***</li><li>Drill Exploration / Appraisal / Development wells</li><li>Install wellhead platforms</li></ul>	
5	Contract 3 (Formerly Unocal III)		5%	Chevron MOECO	71.25% 23.75%	558 MMSCFD	Crude: 20.2 k BPD Condensate: 20.5 k BPD	<ul style="list-style-type: none"><li>Drill Exploration / Appraisal / Development wells</li><li>Install wellhead platforms</li></ul>	
6	Contract 4 (Formerly Pailin)		60%	Chevron MOECO	35% 5%	310 MMSCFD	Condensate: 13.5 k BPD	<ul style="list-style-type: none"><li>Ensure gas deliverability level at DCQ***</li><li>Drill Exploration / Appraisal / Development wells</li><li>Install wellhead platforms</li><li>Review development plan of Ubon field</li></ul>	
7	E5		20%	ExxonMobil	80%	12 MMSCFD	-		
8	G4/43		21.375%	Chevron MOECO PSTL	51% 21.25% 6.375%	3 MMSCFD	Crude: 6.7 k BPD	<ul style="list-style-type: none"><li>Drill Exploration / Development wells</li><li>Install wellhead platform</li></ul>	
9	G4/48		5%	Chevron MOECO	71.25% 23.75%	5.5 MMSCFD	Crude: 797 BPD		
10	L53/43 & L54/43	OP	100%			-	Crude: 147 BPD	<ul style="list-style-type: none"><li>Drill Exploration Wells</li></ul>	
11	PTTEP1	OP	100%			-	Crude: 347 BPD	<ul style="list-style-type: none"><li>Drill Appraisal / Development wells</li><li>Perform waterflood activities</li></ul>	
12	S1	OP	100%			27 MMSCFD	Crude: 27.8 k BPD	<ul style="list-style-type: none"><li>Continue Exploration appraisal and development activities</li></ul>	
13	Sinphuhorm	OP	55%	Apico ExxonMobil	35% 10%	124 MMSCFD	Condensate: 480 BPD	<ul style="list-style-type: none"><li>Drill development wells</li></ul>	
14	MTJDA	JOC	50%	Petronas-Carigali	50%	320 MMSCFD	Condensate: 6.7 k BPD	<ul style="list-style-type: none"><li>Drill Exploration / Appraisal / Development wells</li><li>Install wellhead platforms</li></ul>	
15	L22/43	OP	100%			-	Crude: 71 BPD	<ul style="list-style-type: none"><li>Drill Exploration / Appraisal / Development wells</li></ul>	

\*Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship

\*\* Sales volume stated at 100% basis. \*\*\* DCQ = Daily Contractual Quantity



# Project Information 2/4

## Production Phase: Overseas



	Project	Status*	PTTEP's Share	Partners (as of Q2 2015)	6M 2015 Average Sales Volume **		2015 Key Activities
					Gas	Oil and Other	
Production Phase							
Overseas							
16	Oman 44	OP	100%		21 MMSCFD	Condensate: 554 BPD	<ul style="list-style-type: none"><li>Drill Exploration / Appraisal / Development wells</li><li>Maintain production rate</li></ul>
17	Vietnam 9-2	JOC	25%	PetroVietnam 50% SOCO 25%	13 MMSCFD	Crude: 5 k BPD	<ul style="list-style-type: none"><li>Drill development wells</li><li>Explore new reservoirs</li></ul>
18	Yadana		25.5%	TOTAL 31.24% Chevron 28.26% MOGE 15%	774 MMSCFD	-	<ul style="list-style-type: none"><li>Drill Exploration / Appraisal wells</li></ul>
19	Yetagun		19.3178%	Petronas- 30.00140% Carigali MOGE 20.4541% Nippon Oil 19.3178% PC Myanmar 10.90878% (Hong Kong)	310 MMSCFD	Condensate: 5.8 k BPD	<ul style="list-style-type: none"><li>Reservoir Management</li><li>Well Intervention</li></ul>
20	Vietnam 16-1	JOC	28.5%	PetroVietnam 41% SOCO 28.5% OPECO 2%	16 MMSCFD	Crude: 31.3 K BPD	<ul style="list-style-type: none"><li>Drill development wells</li><li>Complete H5 development project</li></ul>
21	PTTEP Australasia (PTTEP AA)	OP	20%-100% (varied by permits)		-	Crude: 17 k BPD	<ul style="list-style-type: none"><li>Drill an exploration well</li><li>Assess resource potential of exploration permits</li></ul>
22	Natuna Sea A		11.5%	Premier Oil 28.67% KUFPEC 33.33% Petronas 15% Pertamina 11.5%	197 MMSCFD	Crude: 853 BPD	<ul style="list-style-type: none"><li>Drill Exploration / Appraisal / Development wells</li><li>Maximize gas exports</li></ul>
23	Zawtika (M9 & a part of M11)	OP	80%	Myanma Oil and Gas 20% Enterprise (MOGE)	292 MMSCFD	-	<ul style="list-style-type: none"><li>Maintain production rate</li><li>Drill Exploration / Appraisal wells</li><li>Install wellhead platforms</li></ul>

\* Status: OP= PTTEP operatorship / JOC = PTTEP joint operatorship

\*\* Sales volume stated at 100% basis

	Project	Status*	PTTEP's Share	Partners (as of Q2 2015)	2015 Key Activities
<b>Development Phase :</b>					
<b>Overseas</b>					
24	Algeria 433a & 416b (Bir Seba)	JOC	35%	PetroVietnam Sonatrach 40% 25%	<ul style="list-style-type: none"> <li>Continue Engineering, Procurement &amp; Construction (EPC) work</li> <li>First oil expected in 2H of 2015</li> </ul>

	Project	Status*	PTTEP's Share	Partners (as of Q2 2015)	2015 Key Activities
<b>Exploration Phase</b>					
<b>Thailand and JDA</b>					
25	G9/43	OP	100%		<ul style="list-style-type: none"> <li>Acquire 3D seismic</li> <li>Drill Exploration / Appraisal wells</li> </ul>
26	L28/48	OP	70%	Resourceful Petroleum (Thailand) 30%	<ul style="list-style-type: none"> <li>In process of plug and abandon (P&amp;A) Ratana-1 and Ratana-2 well</li> <li>G&amp;G Studies</li> </ul>
<b>Overseas</b>					
27	Myanmar M3	OP	80%	MOECO 20%	<ul style="list-style-type: none"> <li>Drill 5 appraisal wells</li> <li>Conduct Pre development Study</li> </ul>
28	Mozambique Rovuma Offshore Area 1		8.5%	Anadarko, Mitsui, ENH, Bharat Petroleum, BREML, OVL 26.5%,20%, 15%,10%, 10%,10%	<ul style="list-style-type: none"> <li>Drill Appraisal wells for reserves certification</li> <li>Prepare for Final Investment Decision (FID)</li> </ul>
29	Algeria Hassi Bir Rekaiz	OP	24.5%	CNOOC Sonatrach 24.5% 51%	<ul style="list-style-type: none"> <li>Drill Appraisal wells</li> </ul>

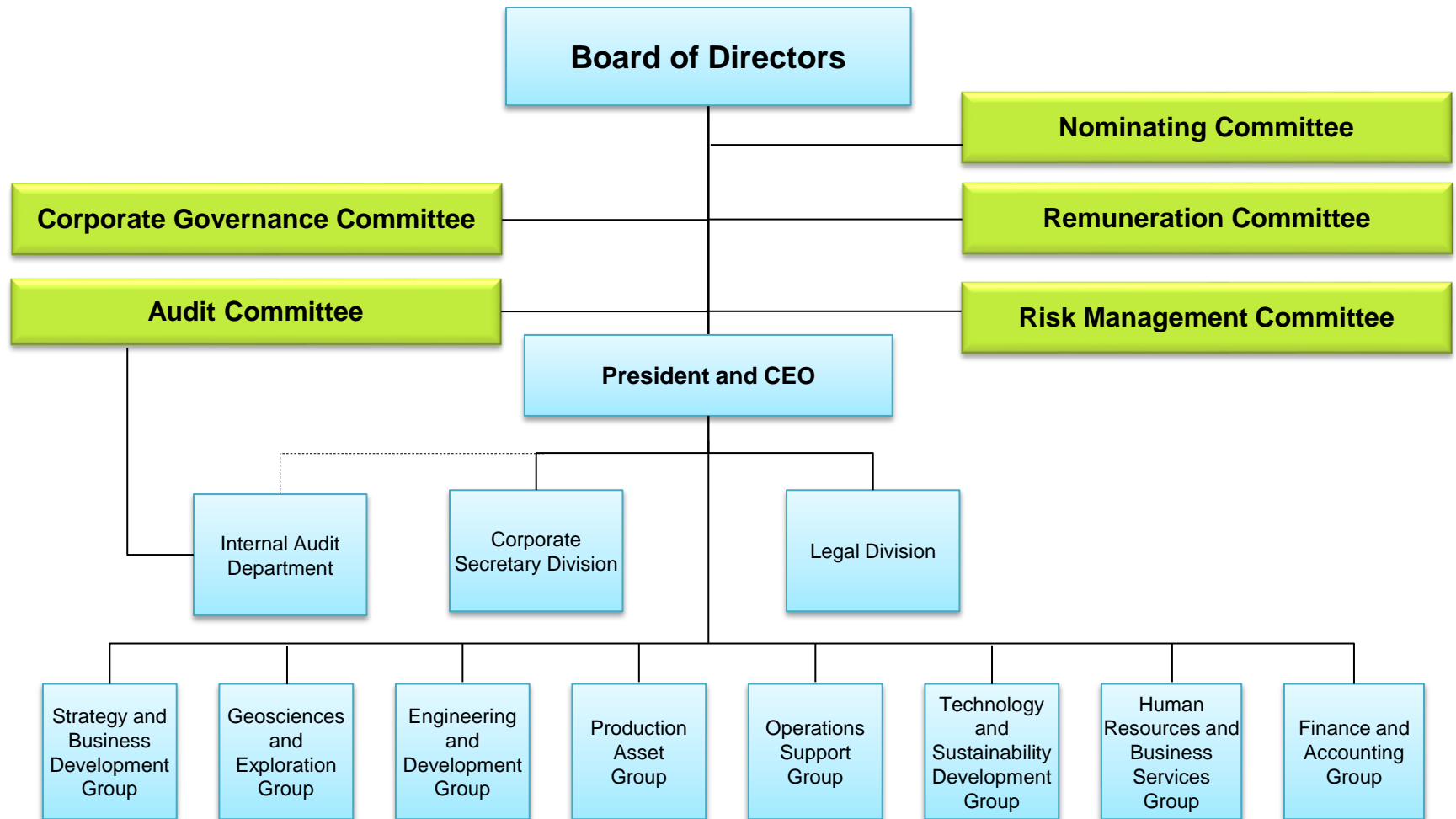
\* Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship

	Project	Status*	PTTEP's Share	Partners (as of Q2 2015)	2015 Key Activities
<b>Exploration Phase (con't)</b>					
<b>Overseas (con't)</b>					
30	Myanmar M11	OP	52.9412 %	TOTAL 47.0588%	
31	Vietnam B & 48/95		8.5%	Chevron 42.38% MOECO 25.62% PVEP 23.5%	• Negotiate a GSA with the Vietnamese government
32	Vietnam 52/97		7%	Chevron 43.4% PVEP 30% MOECO 19.6%	• Negotiate a GSA with the Vietnamese government
33	Myanmar PSC-G and EP-2	OP	90%	WinPreciousResources 10%	• Drill 4 exploration wells (2 wells in PSC G & 2 wells in EP 2)
34	Mozambique Rovuma Onshore		10%	Anadarko, Maurel&Prom, 35.7%, 27.7% ENH, Wentworth 15%, 11.6% Resources	• Drill an exploration well
35	Kenya L5, L7 Kenya L11A, L11B, L12		10% 10%	Anadarko, Total 50%, 40% Anadarko, Total, ENI 50%, 30%, 10%	• Conduct G&G Studies
36	Myanmar MD 7 and MD 8	OP	100%		• Acquire 3D seismic
37	Mariana Oil Sands	OP	100%		• Conduct Winter Delineation Program • Prepare regulatory application to submit to the government of Alberta for Thornbury Phase 1 development
38	Barreirinhas AP1		25%	BG Brasil 75%	• Prepare EIA in preparation for 3D seismic survey
39	MOGE 3	OP	85%	Palang Sophon Offshore 10% WinPreciousResources 5%	• Submit EIA in preparation for 2D&3D seismic survey
40	Brazil BM-ES-23		20%	Petrobras 65% INPEX 15%	• Drill 2 exploration wells

Remarks: 40 projects exclude 4 projects that are pending official withdrawal approval

# Organizational Structure

Ensuring Transparency, Integrity, and Good Corporate Governance practices



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)	$(\text{Operating Exp.} + \text{Exploration Expense} + \text{SG\&A} + \text{Royalty} + \text{DD\&A}) / \text{Sales Volume}$
Success Ratio	Number of wells with petroleum discovery / 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	Short-term loans from financial institution + Current portion of long-term debts + Bonds + Long-term loans from financial institution
Total Debt to Equity Ratio	$\text{Total interest bearing debt} / \text{Shareholders' equity}$
Total Debt to EBITDA Ratio	$\text{Total interest bearing debt} / \text{Trailing-12-month EBITDA}$