# PTT Exploration and Production Public Company Limited

# **PTT Group Homeshow**

14 July 2015





Dow Jones Sustainability Indices

In Collaboration with RobecoSAM (









**Company Overview** 

**Key Highlight** 

**CAPEX** 

**Project Update** 

**Outlook** 

# **Thailand's Energy Value Chain**



**Natural Gas** 

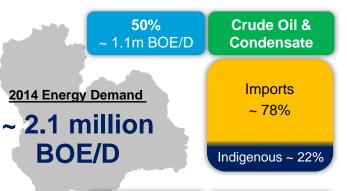
Imports ~ 20%

Others







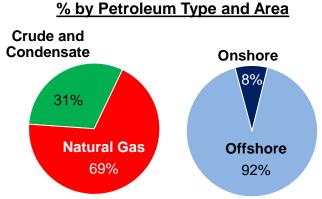


45%

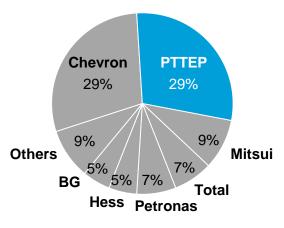
~ 0.9m BOE/D



#### **Thailand Petroleum Production 2014**



#### % Production by Company



**Integration with** Midstream and **Downstream Value Chain** 

#### Midstream

**Transmission Pipelines Gas Separation Plants** 

#### Downstream & **End User Products**

Refineries **Petrochemical Plants Power Plants** Electricity **Industrial Plants Transportation** Fuels, Lubes, NGV/CNG

**Household Use and Products** 

LPG

Chemical Products

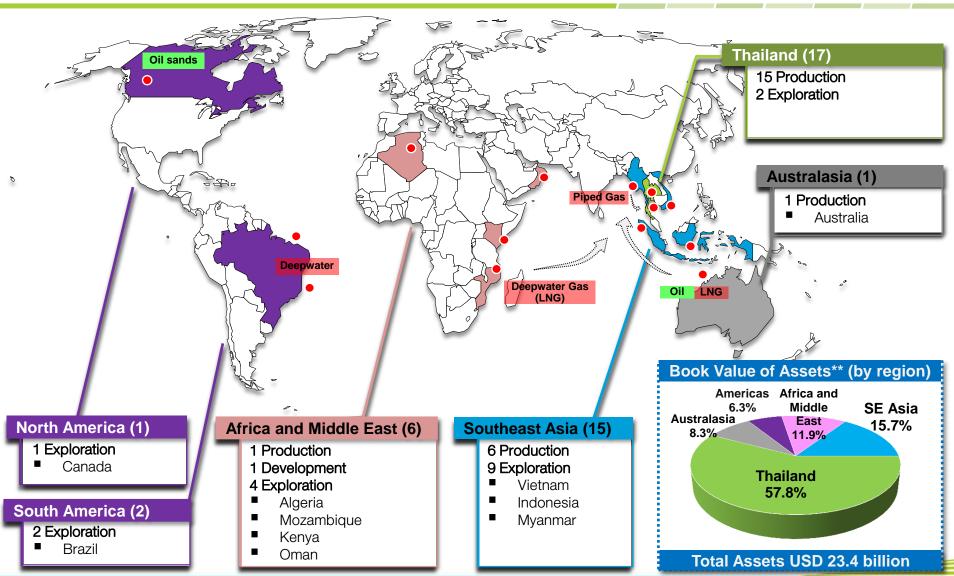
Source: Energy Policy and Planning Office (EPPO) and Department of Mineral Fuels (DMF)

# **Diversified International Portfolio**





Worldwide operations: 42 projects\* in 11 countries



#### Notes:

\* Excludes 4 projects that are pending official withdrawal approval

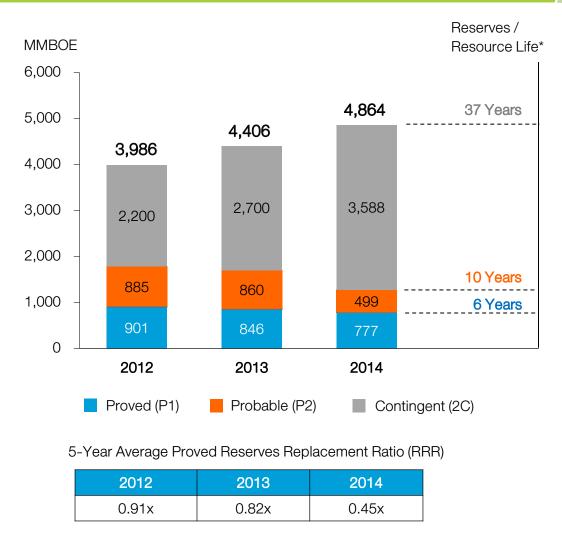
\*\* Information dated as of 31 March 2015

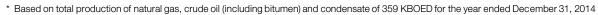
# **Reserves and Resources**

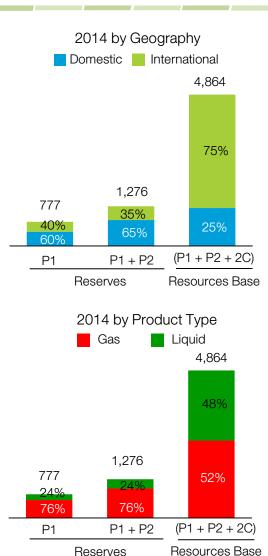
# PTTEP



#### Target resource turnaround in the near future











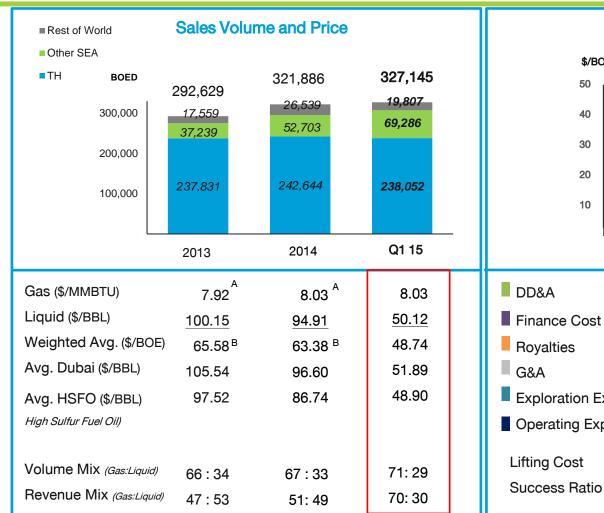


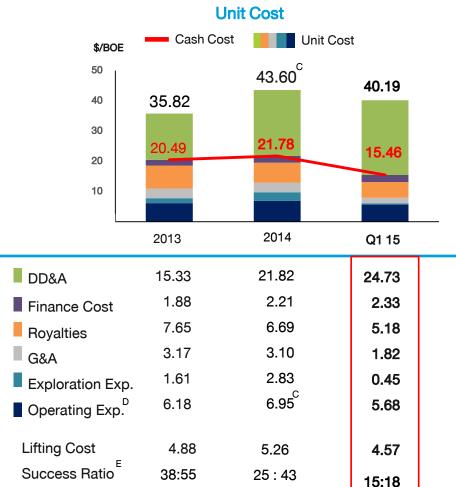
# Sales Volume & Unit Costs





#### Strong gas price and healthy cash margin amidst low oil prices environment





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

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

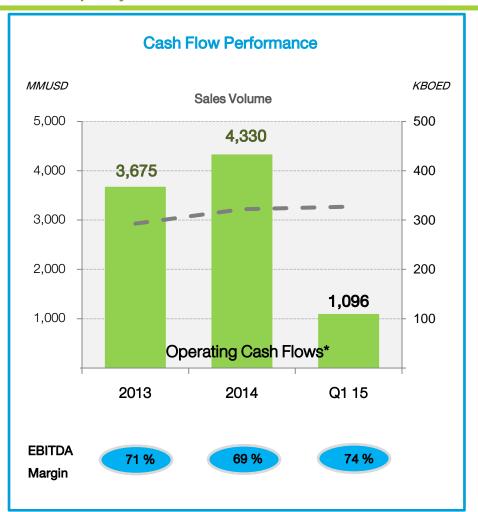
E) Exploration and Appraisal wells

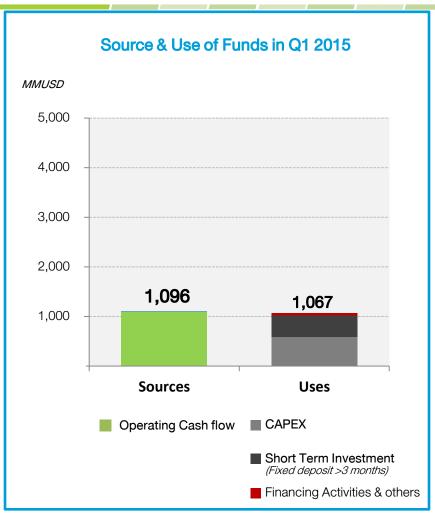
# **Cash Flow Performance**

# PTTEP



#### Robust liquidity to fund CAPEX and Debt Service





<sup>\*</sup> 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 Q1 2015 = 1,094 MMUSD

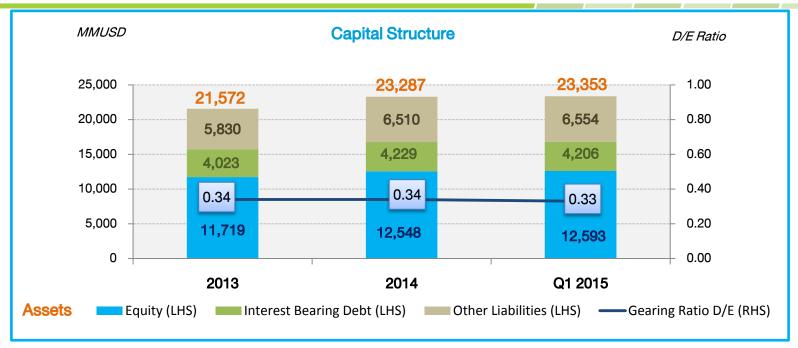
<sup>\*\*</sup> Operating cashflow included in Source of fund in Q1 2015 is shown net of adjustment for the effect of exchange rate changes on cash and cash equivalents 1,094 MMUSD

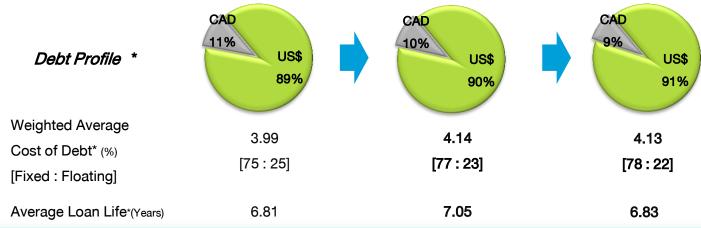
# **Financial Position**





#### Strong Balance Sheet with Low Gearing



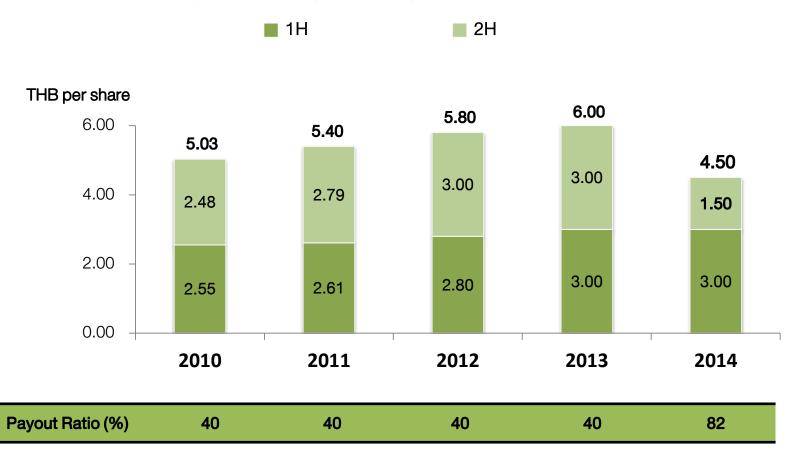


<sup>\*</sup> Excludes Hybrid bonds



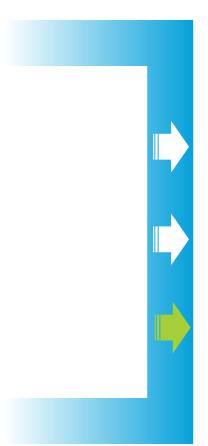


## Dividend Payment History (Policy: No Less Than 30% of Net Income)









**Company Overview** 

**Financial Results** 

**Outlook** 

# **Company Outlook**

#### Adaptive to industry fundamental change







#### Near-term priorities: key objectives



Deliver ~3% sales volume growth

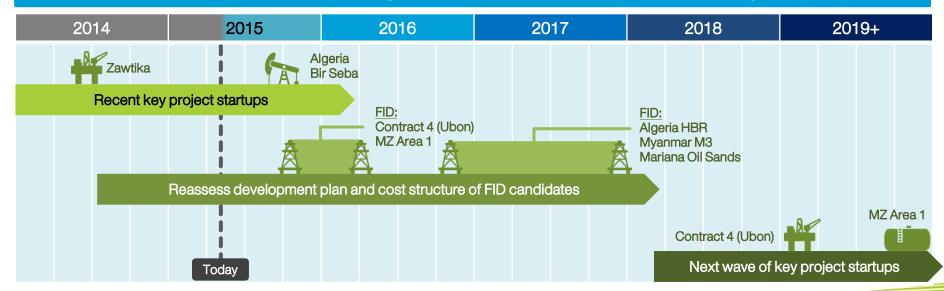


Focus on cost optimization and investment prioritization



Leverage strong balance sheet for value-creating growth opportunity

#### Further down horizon: deliver near-term growth and reassess feasibility of medium-long term prospects



# **SAVE to be SAFE**

#### Four levers to manage our capital efficiency





#### "Efficiency"

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

## Cost Optimization

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

# Production Stabilization

- ✓ Operational reliability
- ✓ Field capacity vs nomination

#### "Productivity"

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

#### "Effectiveness"

- Capital allocation
- Strengthen project management process

# Financial & Portfolio Management

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

#### **G&A Reduction & Culture**

- ✓ G&A reduction
- ✓ Cost conscious culture

#### "Awareness"

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

4

# Sales Volume Profile





Thailand and Southeast Asia continue to be the strong production base



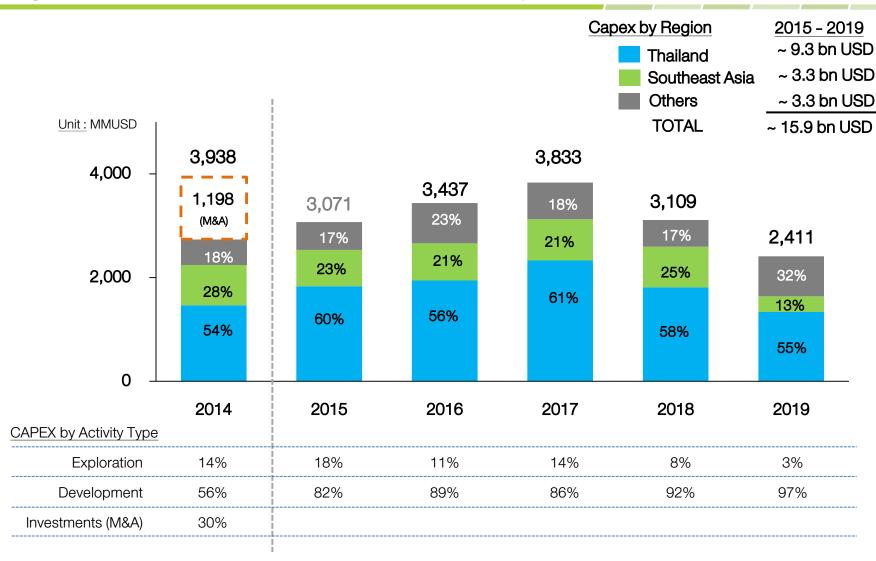
Based on announced 5-year investment plan on 22 December 2014

# **Investment Plan**





Target at least 10% reduction from announced 2015 investment plan









# 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
- Competitive cash cost profile ensures positive operating cash flow
- Strong capital structure with low gearing and high liquidity founded on stringent financial discipline



# Our priorities for 2015

- Target ~3% sales volume growth
- Continued focus on cost optimization
- Prioritization of investments in exploration and pre-development portfolios
- Leverage of strong balance sheet for value-accretive M&A opportunities







For more information, please visit our website at

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# **Supplementary Index**







# **Sustainable Development**







Pursuing long-term growth hand-in-hand with social and environmental well-being

MEMBER OF

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#### 2014 DJSI Listed Company

Dow Jones Sustainability World Index
Oil & Gas Sector



# PTTEP



#### **Certified Member**

Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)



#### Proven business integrity

**NACC Integrity Awards** 

The National Anti-Corruption Commission

Thailand's Top Corporate Brand Value Industrial Resources Sector

Chulalongkorn University

Best Public Company in Resources Sector

Money & Banking Magazine

#### Exemplary social contributor

**CSR Excellence Award** 

Ministry of Social Development and Human Security

Best Strategic Corporate CSR

Alpha Southeast Asia Magazine

Global CSR Award: Best Community Program

Pinnacle Group International Singapore

#### Green driver to environment

Best Environmental Responsibility

Corporate Governance Asia

Joint research project with HITZ for CO2 to methane conversion

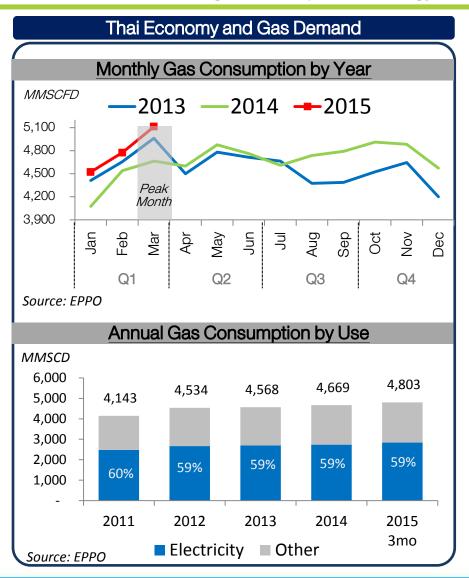
Participation in Thailand Voluntary Emission Reduction Program (T-VER)

# **Thailand Energy Updates**





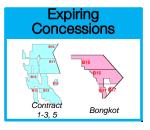
Gas demand continues to grow, and upstream energy reform makes progress



#### **Upstream Energy Reform**



 Bidding round expected to resume later in 2015 after reaching a solution on an appropriate fiscal policy



- NEPC announced basic principles to concession renewal
- Target for definitive solution within 2017
- Gas supply stability continues to be key consideration



 Discussion resumes at the Government level to seek resolution on OCA

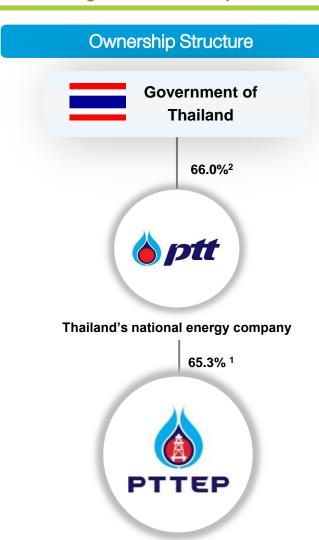
Source: MOE, DMF

# Integral support from major shareholder





PTTEP leverages its relationships with PTT Plc. and the Thai Government



#### Oil & Gas exploration and production Flagship of PTT



PTTEP supplies more than 80% of sales volume to PTT, a financially strong corporate and Thailand's main provider of natural gas

 PTTEP is engaged in long-term gas off-take agreements (generally 25 to 30 years) with PTT, a major source of PTTEP's stable revenue stream



# Synergies between PTTEP and PTT in the natural gas value chain

- PTTEP provides PTT with access to gas production
- PTT provides leverage and support for PTTEP's relationships with other government bodies and agencies
- The relationship with PTT provides PTTEP with a competitive position to offer integrated solutions to counterparties

#### Credit Ratings on par with Sovereign Rating

	PTTEP	Thailand
Moody's	Baa1	Baa1
S&P's	BBB+	BBB+
JCR	A-	A-
TRIS	AAA	N/A

Notes.

<sup>1</sup> Ownership as of 13 February 2015

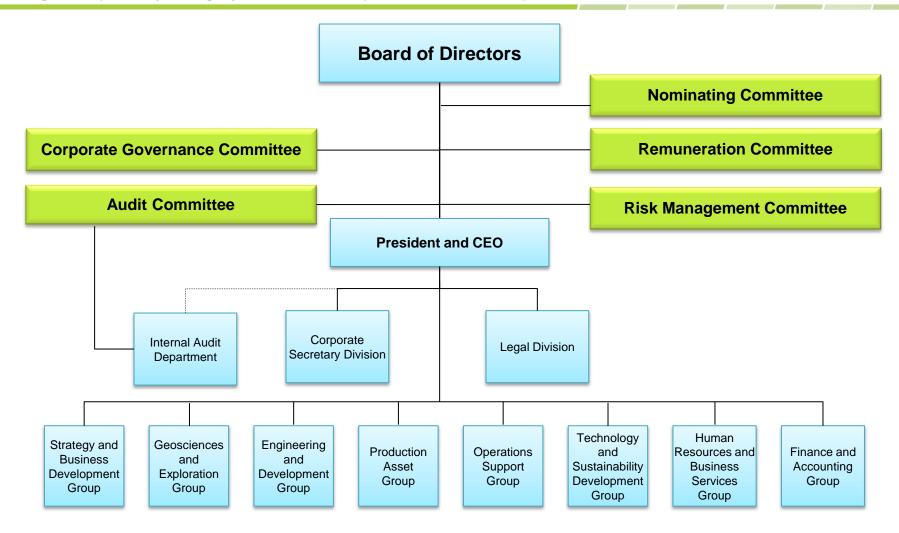
<sup>2 51.1%</sup> is directly held by the Government of Thailand (Ministry of Finance), with the remaining 14.9% held by the state-controlled Vayupak Fund I

# **Organizational Structure**





Ensuring Transparency, Integrity, and Good Corporate Governance practices



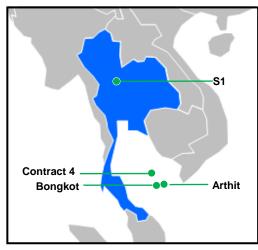
# **Thailand**

#### Strong home base with legacy assets maintaining production plateau









Production / Ramp-up Projects

#### Bongkot (44.4% interest)

- Bongkot's production capacity of close to 1 Bcf/d represents approximately 20% of Thailand's natural gas supply
- Average natural gas sales volume from the Bongkot fields was 863 MMSCFD in Q1 2015
- Average condensate sales volume was 28.2 KBPD in Q1 2015

#### **S1 (100% interest)**

- S1 is the largest onshore crude oil production field in Thailand
- Average crude oil sales volume was 27 KBPD in Q1 2015

#### Arthit (80% interest)

 Average sales volume in Q1 2015 was 208 MMSCFD of natural gas and 9.5 KBPD of condensates

#### Acquisition of Hess Assets in Thailand

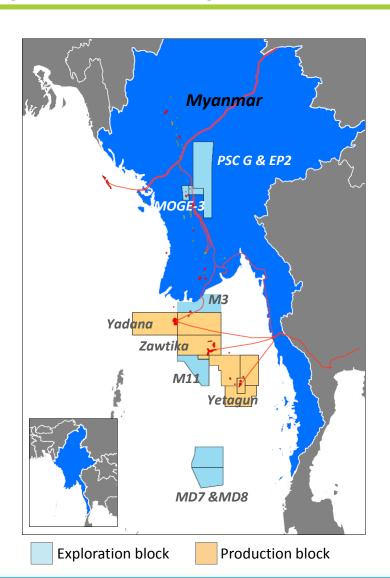
- PTTEP successfully acquired Hess Corporation's working interests in the Contract 4 project and Sinphuhorm project, and now holds 60% working interest in the Contract 4 project and 55% working interest in the Sinphuhorm project. PTTEP has also become the operator of the Sinphuhorm project
- The Contract 4 project had an average sales rate of 297 MMSCD for natural gas and 14.5 KBPD for condensate in Q1 2015

# **Southeast Asia: Myanmar**

#### Significant contribution to growth







- Participation in three producing gas fields which supply gas to both Thailand and Myanmar: Yadana, Yetagun, Zawtika,
- Successful exploration and development of the Zawtika gas field. Current operations delivering stable gas supply of 300 MMSCFD,
- Significant exploration acreage both onshore and offshore, in the Moattama Basin.

# **Project Status**

#### **Producing**

- Yadana (25.5% WI)
- Yetagun (19.31784% WI)
- Zawtika (80% WI)

#### **Appraisal & Develop**

• M3 (80% WI)

#### **Exploration**

- PSC G & EP2 (90% WI)
- MOGE-3 (85% WI)
- M11 (52.9% WI)
- MD7 & MD8 (100% WI)

*Note: WI – working interest* 

# Southeast Asia: Vietnam and Indonesia

Natuna Sea A











#### Vietnam 16-1 (28.5% interest)

- Average crude oil sales volume of 31 KBPD in Q1 2015
- Currently in the process to install a production platform in the H5 area to support current production level

#### Natuna Sea A (11.5% interest)

 Average sales volume of natural gas was 199 MMSCFD, and average sales volume of crude oil was 1.7 KBPD in Q1 2015



Production / Ramp-up Projects

Source: Premier Oil

# East Africa: Mozambique









### **Location and Cost Advantage**

- Close proximity to shore
- High quality reservoirs
- Access to Asian markets

Substantial recoverable resources of <u>70+ tcf</u> with scalable offshore development of <u>more than 6 LNG trains</u>

#### Key Milestones to Final Investment Decision

**Technical** 

- ✓ Certified reserves to support initial trains
- ✓ Announced selection of contractor for onshore LNG facilities construction

Commercial

√ Secured more than 8 MMTPA of non-binding HOAs

Regulatory

✓ Substantial engagement with government to progress on remaining agreements and approvals to support investment

Financing

✓ Positive indications on project financing

Onwards to initial phase of 12 MMTPA

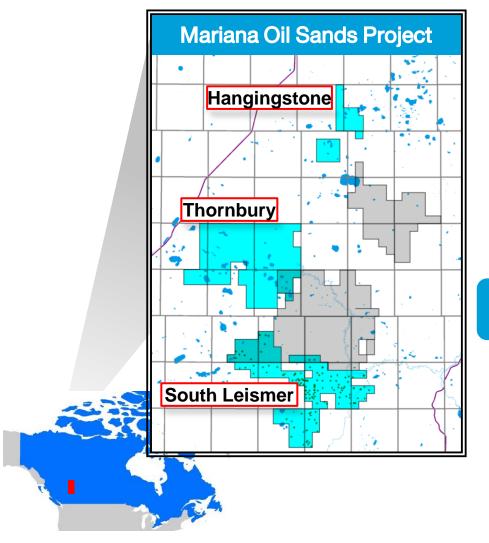
Source: Anadarko

# **America: Canada Oil Sands**

#### Flexibility to pursue long-term from the oil sands project







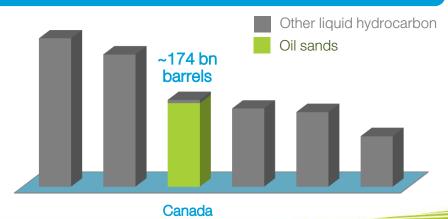
#### Key activities

 Completed the Winter Delineation Program and continue to assess development potential of the Thornbury field

#### The Asset Swap

- The Partnership Unit Redemption Agreement (PURA) came into effect on 28 May 2014.
- Following such date, PTTEP Canada Limited now owns and operates 100% of the Thornbury, Hangingstone and South Leismer areas, and has received from Statoil Canada a total of 419 million US dollars

Approximately 96% of the reserves in Canada, the world's 3<sup>rd</sup> largest oil reserves, is oil sands



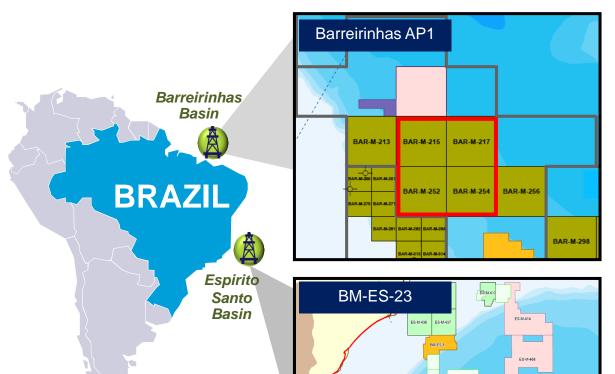
Source: Company data, BP Statistical Review of World Energy 2014

# **America: Brazil Deepwater**

#### Entry into high potential petroleum province at exploration phase







- Farm-in 25% from BG Group
- Operated by BG Group (75% interest)
- Four offshore exploration blocks: BAR-M-215, BAR-M-217, BAR-M-252 and BAR-M-254
- Currently preparing for seismic acquisition and conducting G&G studies

- Acquired 20% interest from Shell in Q3 2014
- Partnered with Petrobras (65%, operator) and INPEX (15%)
- Currently drilling the first of 2 planned exploration and appraisal wells in 2015

Source: The National Agency of Petroleum, Natural Gas and Biofuels, Brazil (the ANP)

# **Project Information 1/4**

# PTTEP



#### **Production Phase: Thailand and JDA**

	Project	Status*	PTTEP's	Parti	ners	Q1 2015 Average	Sales Volume **	2015 Key Activities		
			Share	(as of Q1 2015)		Gas	Oil and Other			
Pro	duction Phas	<u>se</u>								
Tha	ailand and JD	<u>A</u>								
1	Arthit	OP	80%	Chevron MOECO	16% 4%	208 MMSCFD	Condensate: 9.5 k BPD	Ensure gas deliverability level at DCQ***     Drill Exploration / Appraisal wells/ Development wells     Install wellhead platforms		
2	B6/27	OP	60%	JX NOEX	40%	N/A	N/A	Evaluate further potential of reservoir		
3	B8/32 & 9A		25%	Chevron MOECO KrisEnergy PSTL	51.66% 16.71% 4.63% 2%	93 MMSCFD	Crude: 26 k BPD	Drill development wells		
4	Bongkot	OP	44.4445 %	TOTAL British Gas	33.3333% 22.2222%	863 MMSCFD	Condensate: 28.2 k BPD	<ul> <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%	550 MMSCFD	Crude: 21.5 k BPD Condensate: 19.8 k BPD	Drill Exploration / Appraisal / Development wells     Install wellhead platforms		
6	Contract 4 (Formerly Pailin)		60%	Chevron MOECO	35% 5%	297 MMSCFD	Condensate: 14.5 k BPD	<ul> <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%	4 MMSCFD	Crude: 7.2 k BPD	Drill Exploration / Development wells     Install wellhead platform		
9	G4/48		5%	Chevron MOECO	71.25% 23.75%	6.6 MMSCFD	-			
10	L53/43 & L54/43	OP	100%			-	Crude: 53 BPD	Drill Exploration Wells		
11	PTTEP1	OP	100%			-	Crude: 348 BPD	<ul> <li>Drill Appraisal / Development wells</li> <li>Perform waterflood activities</li> </ul>		
12	S1	OP	100%			27 MMSCFD	Crude: 26.7 k BPD	Continue Exploration appraisal and developme activities		
13	Sinphuhorm	OP	55%	Apico ExxonMobil	35% 10%	120 MMSCFD	Condensate: 456 BPD	Drill development wells		
14	MTJDA	JOC	50%	Petronas- Carigali	50%	341 MMSCFD	Condensate: 9.4 k BPD	Drill Exploration / Appraisal / Development we Install wellhead platforms		
15	L22/43	OP	100%			-	Crude: 134 BPD	Drill Exploration / Appraisal / Development wells		

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

# **Project Information 2/4**

#### **Production Phase: Overseas**





	Project	Status*	PTTEP's Share	Partn		Q1 2015 Avera	age Sales Volume **	201	5 Key Activities
				(as of Q1 2015)		Gas Oil and Other		-	
Pro	oduction Phase								
Ov	erseas								
16	Oman 44	OP	100%			23 MMSCFD	-	Developm	ration / Appraisal / lent wells production rate
17	Vietnam 9-2	JOC	25%	PetroVietnam SOCO	50% 25%	15 MMSCFD	Crude: 3.3 k BPD		opment wells ew reservoirs
18	Yadana		25.5%	TOTAL Chevron MOGE	31.24% 28.26% 15%	797 MMSCFD	-	Drill Explo	ration / Appraisal wells
19	Yetagun		19.3178%	Petronas- Carigali MOGE Nippon Oil PC Myanmar (Hong Kong)	30.00140% 20.4541% 19.3178% 10.90878%	331 MMSCFD	Condensate: 7.5 k BPD	Reservoir     Well Inter	Management vention
20	Vietnam 16-1	JOC	28.5%	PetroVietnam SOCO OPECO	41% 28.5% 2%	16 MMSCFD	Crude: 31.3 K BPD		opment wells H5 development project
21	PTTEP Australasia (PTTEP AA)	OP	20%-100% (varied by permits)			-	Crude: 15.6 k BPD		ploration well source potential of exploration
22	Natuna Sea A		11.5%	Premier Oil KUFPEC Petronas Pertamina	28.67% 33.33% 15% 11.5%	199 MMSCFD	Crude: 1.7 k BPD	Developm	ration / Appraisal / ent wells gas exports
23	Zawtika (M9 & a part of M11)	OP	80%	Myanma Oil and Gas Enterprise (MOGE)	20%	309 MMSCFD	-	Drill Explo	oroduction rate ration / Appraisal wells lhead platforms

<sup>\*</sup> Status: OP= PTTEP operatorship / JOC = PTTEP joint operatorship

<sup>\*\*</sup> Sales volume stated at 100% basis

# **Project Information 3/4**



## **Development & Exploration Phase**

	Project	Status*	PTTEP's Share	Partners (as of Q1 2015)			2015 Key Activities		
<u>De</u>	Development Phase :								
<u>Ov</u>	<u>erseas</u>								
24	Algeria 433a & 416b (Bir Seba)	JOC	35%	PetroVietnam Sonatrach	40% 25%		Continue Engineering, Procurement & Construction (EPC) work First oil expected in 2H of 2015		

	Project	Status*	PTTEP's Share	Partners (as of Q1 2015)			2015 Key Activities
<u>Ex</u>	ploration Phase						
<u>Th</u>	ailand and JDA						
25	G9/43	OP	100%			•	Acquire 3D seismic Drill Exploration / Appraisal wells
26	L28/48	OP	70%	Resourceful Petroleum (Thailand)	30%	•	In process of plug and abandon (P&A) Ratana-1 and Ratana-2 well G&G Studies
<u>Ov</u>	erseas						
27	Myanmar M3	OP	80%	MOECO	20%	•	Drill 5 appraisal wells Conduct Pre development Study
28	Mozambique Rovuma Offshore Area 1		8.5%	Anadarko, Mitsui, ENH, Bharat Petroleum, BREML, OVL	26.5%,20% 15%,10%, 10%,10%		Drill Appraisal wells for reserves certification Prepare for Final Investment Decision (FID)
29	Algeria Hassi Bir Rekaiz	OP	24.5%	CNOOC Sonatrach	24.5% 51%	•	Drill Appraisal wells

# **Project Information 4/4**





## **Exploration Phase**

	Project	Status*	PTTEP's Share	<b>Partners</b> (as of Q1 2015)			2015 Key Activities
Ex	ploration Phas	se (con't)					
Ov	erseas (con't)						
30	Indonesia South Mandar	OP	34%	Talisman TOTAL	33% 33%	•	G&G studies
31	Indonesia Malunda	OP	100%			•	G&G studies
32	Myanmar M11	OP	52.9412 %	TOTAL	47.0588%		
33	Vietnam B & 48/95		8.5%	Chevron MOECO PVEP	42.38% 25.62% 23.5%	•	Negotiate a GSA with the Vietnamese government
34	Vietnam 52/97		7%	Chevron PVEP MOECO	43.4% 30% 19.6%	•	Negotiate a GSA with the Vietnamese government
35	Myanmar PSC-G and EP-2	OP	90%	WinPreciousResources	10%	•	Drill 4 exploration wells (2 wells in PSC G & 2 wells in EP 2)
36	Mozambique Rovuma Onshore		10%		5.7%,27.7% 15%,11.6%	•	Drill an exploration well
37	Kenya L5, L7 Kenya L11A, L11B, L12		10% 10%	Anadarko, Total	50%,40% %,30%,10%	•	Conduct G&G Studies
38	Myanmar MD 7 and MD 8	OP	100%			•	Acquire 3D seismic
39	Mariana Oil Sands	OP	100%			•	Conduct Winter Delineation Program Prepare regulatory application to submit to the government of Alberta for Thornbury Phase 1 development
40	Barreirinhas AP1		25%	BG Brasil	75%	•	Prepare EIA in preparation for 3D seismic survey
41	MOGE 3	OP	85%	Palang Sophon Offshore WinPreciousResources	10% 5%	•	Submit EIA in preparation for 2D&3D seismic survey
42	Brazil BM-ES- 23		20%	Petrobras INPEX	65% 15%	•	Drill 2 exploration wells

<sup>\*</sup> Status: OP= PTTEP operatorship / JOC = PTTEP joint operatorship

# **Ratios & Formulas**





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