

Attachment 5: Supplemental Information on Petroleum Exploration and Production Activities**(A) PTTEP and Our Subsidiaries' Petroleum Reserves Report As of December 31, 2015**

The total Proved Reserves of PTT Exploration and Production Public Company Limited (PTTEP) and our subsidiaries as of December 31, 2015 are shown in the attached table. The Proved Reserves are reviewed annually by Company's earth scientists and reservoir engineers to ensure rigorous professional standards. The Proved Reserves are reported on a gross basis, which includes the company's net working interest and related host country's interest.

As of December 31, 2015, the total Proved Reserves of all projects of PTTEP Group are 180 million stock-tank barrels (MMSTB) of crude oil and condensate¹, and 3,591 billion standard cubic feet (BSCF) of natural gas (558 million barrels of oil equivalent (MMBOE)). The total Proved Reserves (consolidated companies) in term of oil equivalent is 738 MMBOE. Proved Reserves of crude and condensate are approximately 40% while, for gas, are 60% of the total Proved Reserves in terms of oil equivalent.

In 2015, the total production of PTTEP Group is 136 MMBOE (39 MMSTB of crude oil and condensate¹ and 618 BSCF of natural gas or 97 MMBOE) which is equivalent to the production rate of approximately 373,888 barrels of oil equivalent per day (BOED), approximately 14,628 BOED or 4.07% increase from last year. The production increase was attributed mainly to Zawtika Project, which had produced at its full capacity for the entire year for the first time after had started the first production in 2014.

¹ Include the Proved Reserves and production of LPG

	Proved Reserves of Crude and Condensate ⁽²⁾			Proved Reserves of Natural Gas			Proved Reserves of Crude, Condensate and Natural Gas ⁽¹⁾ Barrel of Oil Equivalent		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of reserves of consolidated companies									
As of December 31, 2013	112	138	250	2,065	1,812	3,877	450	396	846
1) Revision of previous estimates	15	1	16	86	48	134	30	9	39
2) Improved recovery	1	-	1	6	-	6	2	-	2
3) Extensions and discoveries	7	-	7	146	-	146	31	-	31
4) Purchases/Sales of Petroleum in place	5	(52)	(47)	222	-	222	42	(52)	(10)
5) Production	(27)	(13)	(40)	(406)	(165)	(571)	(94)	(37)	(131)
As of December 31, 2014	113	74	187	2,119	1,695	3,814	461	316	777
Company's share of reserves of consolidated companies									
As of December 31, 2014	113	74	187	2,119	1,695	3,814	461	316	777
1) Revision of previous estimates	14	9	23	336	53	389	70	17	87
2) Improved recovery	4	1	5	2	1	3	4	2	6
3) Extensions and discoveries	4	-	4	(27)	30	3	(1)	5	4
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(27)	(12)	(39)	(409)	(209)	(618)	(94)	(42)	(136)
As of December 31, 2015	108	72	180	2,021	1,570	3,591	440	298	738

(1) The Proved Reserves are reported on a gross basis which includes the company's net working interest and the related host country's interest.

(2) Included LPG

(B) Capitalized Costs Relating to Oil and Gas Producing Activities

Capitalized costs represent cumulative expenditures for proved and unproved properties together with related accumulated depreciation, depletion, amortization and allowance for impairment.

Proved properties include exploration wells, development wells, transportation pipeline, producing facilities and decommissioning costs. Unproved properties represent amounts associated with capitalized cost of projects which have not yet found proved reserves.

(Unit: Million US Dollar)	2015	2014 (Restated)
Proved properties	25,319	23,795
Unproved properties	<u>4,727</u>	<u>5,042</u>
Gross capitalized costs	30,046	28,837
Accumulated depreciation, depletion, amortization and impairment	<u>(16,871)</u>	<u>(13,014)</u>
Net capitalized costs	<u>13,175</u>	<u>15,823</u>

(C) Costs Incurred in Oil and Gas Property Acquisition, Exploration, and Development Activities

Costs incurred in oil and gas property acquisition, exploration and development activities represent amounts both capitalized and charged to expense during the year.

Property acquisition costs include costs to purchase proved and unproved properties.

Exploration costs include geological and geophysical expenses, exploratory drilling cost as well as reservation fee for exploration blocks.

Development costs include costs associated with drilling and equipping development wells, improved recovery systems, facilities for extraction, treating, gathering and storage, producing facilities for existing developed reserves, and costs associated with transportation pipeline.

(Unit: Million US Dollar)	2015			2014		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	-	-	-	590	-	590
- Unproved	-	-	-	352	95	447
Exploration costs	88	274	362	124	579	703
Development costs	<u>1,171</u>	<u>504</u>	<u>1,675</u>	<u>1,270</u>	<u>759</u>	<u>2,029</u>
Total	<u>1,259</u>	<u>778</u>	<u>2,037</u>	<u>2,336</u>	<u>1,433</u>	<u>3,769</u>

(D) Results of operations for producing activities

Results of operations from oil and gas producing activities for the year 2015 and 2014 are shown in the following table.

Operating costs include lifting costs incurred to operate and maintain productive wells and related equipment.

Exploration expenses consist of geological and geophysical costs, and exploratory well write off expenses.

General administrative expenses are expenses directly related to oil and gas producing activities.

Depreciation, Depletion and Amortization expense relates to capitalized costs incurred in acquisition, exploration and development activities, transportation pipeline, including amortized decommissioning costs.

Other expenses (income) mainly include impairment loss on assets, foreign exchange gains and losses directly related to oil and gas producing activities and other income.

Income tax expenses are based on the results of operations from petroleum producing activities.

General corporate overhead and finance costs are excluded from the results of operations for petroleum producing activities.

(Unit: Million US Dollar)	2015			2014 (Restated)		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Gross revenues						
Sales – Related parties	3,529	1,478	5,007	4,988	1,583	6,571
Sales – Third parties	242	558	800	279	879	1,158
Total Sales	3,771	2,036	5,807	5,267	2,462	7,729
Expenses						
Operating expenses	446	633	1,079	494	637	1,131
Exploration expenses	16	168	184	80	253	333
General administrative expenses	53	67	120	93	78	171
Petroleum royalties and remuneration	426	-	426	607	2	609
Depreciation, depletion and amortization	1,836	861	2,697	1,633	905	2,538
Other (income)/ expenses	171	1,204	1,375	(2)	962	960
Total expenses	2,948	2,933	5,881	2,905	2,837	5,742
Results before income taxes	823	(897)	(74)	2,362	(375)	1,987
Income tax expenses	374	113	487	865	353	1,218
Net results of operations	449	(1,010)	(561)	1,497	(728)	769

(E) Standardized Measure of Discounted Future Net Cash Flows (SMDCF) Relating to the Proved Oil and Gas Reserves

The standardized measure of discounted future net cash flows related to the above proved oil and gas reserves, is computed by applying 12-month average prices* (with consideration of price changes only to the extent provided by contractual arrangements), to the estimated future production of year-end remaining proved oil and gas reserves less estimated future expenditures (based on year-end costs) to be incurred in developing and producing the proved reserves.

Future income taxes are calculated by applying the appropriate year-end statutory tax rates to the future pre-tax net cash flows and deducted by applicable tax deductions or tax credits.

Net Cash flows are discounted using a rate of 10% per year to reflect the estimated timing of the future cash flows.

The estimation of discounted future net cash flow shown below is not intended to represent the fair value of oil and gas properties. The fair value should take into account of several factors, such as probable and possible reserves which may turn into proved reserves in the future, anticipated future oil and gas prices, interest rates, changes in development and production costs and risks associated with future production. Therefore the fair value will subject to the view and perception of analyst.

Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Unit: Million US Dollar)	Domestic		Foreign		Total	
	2015	2014	2015	2014	2015	2014
Future cash inflows	14,538	20,573	10,558	15,771	25,096	36,344
Future production costs	(2,730)	(2,784)	(2,077)	(2,381)	(4,807)	(5,165)
Future development costs	(5,990)	(6,393)	(1,900)	(2,111)	(7,890)	(8,504)
Future income tax expenses	(1,944)	(4,016)	(1,200)	(1,648)	(3,144)	(5,664)
Future net cash flows	3,874	7,380	5,381	9,631	9,255	17,011
10% annual discount	(136)	(1,495)	(1,691)	(3,287)	(1,827)	(4,782)
Standardized measure of discounted future net cash flows (SMDCF)	<u>3,738</u>	<u>5,885</u>	<u>3,690</u>	<u>6,344</u>	<u>7,428</u>	<u>12,229</u>

* Twelve-month average prices are calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month.

Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Unit: Million US Dollar)	2015	2014
Present value at beginning of year	12,229	13,057
Sales and transfers of oil and gas produced, net of production costs	(4,106)	(5,339)
Development costs incurred during the period	1,844	2,590
Net changes in prices and production costs	(9,470)	(357)
Net changes in development costs	(270)	(2,290)
Extensions, discoveries and improved recovery	186	943
Revisions of previous quantity estimates	1,540	1,040
Purchases / sales of petroleum in place	-	73
Accretions of discount	2,955	2,454
Net changes in income taxes	<u>2,520</u>	<u>58</u>
Present value at the year end	<u>7,428</u>	<u>12,229</u>

(F) Other Information

Productive Oil/Condensate and Gas Wells

The numbers of productive wells at December 31, 2015 were as follows:

	Oil/Condensate		Gas	
	Gross	Net	Gross	Net
Thailand	932	519	1,122	472
Foreign				
Southeast Asia	32	8	170	77
Middle East and Others	11	8	12	12
Total	975	535	1,304	561

Drilling in Progress of Oil/Condensate and Gas Wells

The numbers of wells in progress at December 31, 2015 were as follows:

	Gross	Net
<u>Exploratory</u>		
Thailand	-	-
Foreign		
Southeast Asia	-	-
Middle East and Others	2	0.45
Total	2	0.45
<u>Development</u>		
Thailand	40	13.70
Foreign		
Southeast Asia	4	1.69
Middle East and Others	-	-
Total	44	15.39

Net Oil/Condensate and Gas Wells Drilled Annually in 2015

	Net productive wells drilled	Net dry well drilled
<u>Exploratory</u>		
Thailand	5.51	4.00
Foreign		
Southeast Asia	8.80	3.70
Middle East and Others	35.82	4.20
Total	<u>50.13</u>	<u>11.90</u>
 <u>Development</u>		
Thailand	236.45	7.50
Foreign		
Southeast Asia	3.22	0.12
Middle East and Others	0.51	-
Total	<u>240.18</u>	<u>7.62</u>

Gross wells include the total number of wells in which PTTEP Group has an interest excluding utility wells.

Net wells are the sum of PTTEP Group's fractional interests in gross wells.

Quarterly information in 2015 and 2014 for the consolidated financial statements are as follows:

	Unit: US Dollars				
	<u>Year2015</u>	<u>4thQ</u>	<u>3thQ</u>	<u>2thQ</u>	<u>1thQ</u>
Revenues					
Sales		1,212,688,950	1,323,112,662	1,398,375,670	1,391,737,760
Revenue from pipeline transportation		22,964,786	29,836,406	30,536,212	35,150,233
Other income					
Gain on foreign exchange		3,970,694	-	-	-
Interest income		6,367,880	5,385,246	11,170,866	8,992,329
Gain on financial derivatives		78,032,960	101,724,886	-	7,045,036
Other income		13,061,506	13,410,017	8,485,622	10,242,618
Total Revenues		1,337,086,775	1,473,469,217	1,448,568,370	1,453,167,976
Expenses					
Operating expenses		178,142,808	182,814,429	181,567,616	167,241,095
Exploration expenses		53,452,980	78,412,645	38,396,718	13,285,104
Administrative expenses		97,694,382	54,684,121	73,043,554	52,049,482
Petroleum royalties and remuneration		97,160,368	107,121,361	112,714,666	109,048,079
Depreciation, depletion and amortization		612,439,427	653,265,178	725,906,884	728,103,998
Other expenses					
Loss on foreign exchange		-	20,172,895	18,831,847	34,390,377
Loss on financial derivatives		-	-	54,641,472	-
Management's remuneration		169,881	956,325	1,165,405	1,486,834
Impairment loss on assets		-	1,385,209,600	-	-
Other expenses		-	-	-	-
Finance costs		49,526,666	61,528,303	72,305,294	68,620,339
Total Expenses		1,088,586,512	2,544,164,857	1,278,573,456	1,174,225,308
Share of gain from associates		2,072,797	2,474,224	1,861,150	2,619,506
Profit before income taxes		250,573,060	(1,068,221,416)	171,856,064	281,562,174
Income tax expenses		(118,623,845)	(216,233,338)	(136,727,192)	(17,775,948)
Profit(Loss) for the year		131,949,216	(1,284,454,754)	35,128,872	263,786,226
Earnings per share (Baht)					
Basic earnings per share		0.03	(0.32)	0.01	0.07

Unit: US Dollars

<u>Year2014 (Restated)</u>	<u>4thQ</u>	<u>3thQ</u>	<u>2thQ</u>	<u>1thQ</u>
Revenues				
Sales	1,758,233,297	1,910,690,591	1,902,979,214	1,747,285,762
Revenue from pipeline transportation	38,743,913	37,369,030	34,093,118	27,719,064
Other income				
Gain on foreign exchange	-	-	8,791,896	-
Interest income	7,680,716	5,005,177	4,279,374	5,966,528
Gain on financial derivatives	150,822,109	72,180,673	-	-
Other income	18,263,003	18,152,248	112,219,238	8,005,193
Total Revenues	1,973,743,038	2,043,397,718	2,062,362,840	1,788,976,547
Expenses				
Operating expenses	191,263,799	174,700,003	206,484,931	284,058,014
Exploration expenses	125,555,697	125,778,008	65,446,671	16,136,152
Administrative expenses	146,861,646	80,780,572	90,893,509	52,026,423
Petroleum royalties and remuneration	135,326,378	156,845,310	163,743,791	152,887,414
Depreciation, depletion and amortization	779,376,474	666,114,317	617,595,580	499,000,814
Other expenses				
Loss on foreign exchange	21,187,477	33,259,997	-	3,800,600
Loss on financial derivatives	-	-	24,862,208	1,122,584
Management's remuneration	1,794,914	1,324,709	1,460,664	1,478,452
Impairment loss on assets	996,790,379	-	-	-
Other expenses	-	-	41,125,056	-
Finance costs	82,147,673	62,368,984	58,327,643	56,492,572
Total Expenses	2,480,304,437	1,301,171,900	1,269,940,053	1,067,003,025
Share of gain from associates	17,468,307	2,514,361	1,671,683	287,250
Profit before income taxes	(489,093,092)	744,740,180	794,094,470	722,260,772
Income tax expenses	(250,218,520)	(268,157,680)	(233,634,994)	(342,532,443)
Profit(Loss) for the year	(739,311,612)	476,582,500	560,459,476	379,728,329
Earnings per share (Baht)				
Basic earnings per share	(0.20)	0.12	0.14	0.10

Petroleum Sales Volume and Unit Price Summary

	2015	2014 (Restated)
Net sales of petroleum (BOED)	322,167	312,569
Average petroleum unit prices		
Average unit prices of crude oil and condensate (USD/BBL)	50.05	94.82
Average unit prices of natural gas (USD/MMBTU)	7.20	8.06
Average unit prices of petroleum (USD/BOE)	45.29	63.71
Lifting cost (USD/BOE)	4.62	5.26