

Supplemental Information on Petroleum Exploration and Production Activities (Unaudited)

(A) PTTEP and Our Subsidiaries' Petroleum Reserve Report As of December 31, 2017

The total Proved Reserves of PTTEP and our subsidiaries as of December 31, 2017 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, 2017, the total amount of Proved Reserves of PTTEP Group's projects was 156 million stock-tank barrels (MMSTB) of crude oil and condensate¹, and 3,049 billion standard cubic feet (BSCF) of natural gas or 475 million barrels of oil equivalent (MMBOE). The total amount of Proved Reserves in terms of oil equivalent in consolidation was therefore 631 MMBOE. Proved Reserves of crude and condensate are approximately 25% while, for gas, are 75% of the total Proved Reserves in terms of oil equivalent.

In 2017, the total production of PTTEP Group was 127 MMBOE, consisting of 35 MMSTB of crude oil and condensate¹ and 578 BSCF or 92 MMBOE of natural gas. This was equivalent to the production rate of approximately 347,508 barrels of oil equivalent per day (BOED), which was approximately 20,795 BOED or 5.6% decrease from the previous year. The decrease was mainly due to the low nomination from buyers of MTJDA, Bongkot, Sinphuhorm and Contract 4 projects, and the suspension of production of S1 Project in areas under the oversight of the Agricultural Land Reform Office (ALRO). However, the production of S1 Project in these areas has already returned to normal operation since June 26, 2017.

¹ Include the proved reserves and production of LPG

PTT Exploration and Production Public Company Limited

Crude Oil and Condensate and Natural Gas Proved Reserves ⁽¹⁾

As of December 31, 2017

	Proved Reserves of Crude Oil and Condensate ⁽²⁾			Proved Reserves of Natural Gas			Barrel of Oil Equivalent		
	(MMSTB)			(BSCF)			(MMBOE)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of reserves of consolidated companies									
As of December 31, 2015	108	72	180	2,021	1,570	3,591	440	298	738
1) Revision of previous estimates	18	1	19	292	(18)	274	65	(1)	64
2) Improved recovery	4	-	4	5	-	5	5	-	5
3) Extensions and discoveries	5	-	5	111	-	111	23	-	23
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(27)	(11)	(38)	(411)	(199)	(610)	(95)	(40)	(135)
As of December 31, 2016	108	62	170	2,018	1,353	3,371	438	257	695
Company's share of reserves of consolidated companies									
As of December 31, 2016	108	62	170	2,018	1,353	3,371	438	257	695
1) Revision of previous estimates	11	(0)	11	77	(50)	27	24	(7)	17
2) Improved recovery	2	1	3	9	0	9	4	1	5
3) Extensions and discoveries	4	3	7	109	111	220	22	19	41
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(26)	(9)	(35)	(389)	(189)	(578)	(90)	(37)	(127)
As of December 31, 2017	99	57	156	1,824	1,225	3,049	398	233	631

(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) LPG Included

(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)	2017	2016
Proved properties	27,120	25,747
Unproved properties	<u>5,098</u>	<u>4,981</u>
Gross capitalized costs	32,218	30,728
Accumulated depreciation, depletion, amortization and allowance for impairment	<u>(20,929)</u>	<u>(18,703)</u>
Net capitalized costs	<u>11,289</u>	<u>12,025</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)	2017			2016		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	-	-	-	-	-	-
- Unproved	-	-	-	-	1	1
Exploration costs	6	31	37	4	54	58
Development costs	<u>779</u>	<u>417</u>	<u>1,196</u>	<u>747</u>	<u>303</u>	<u>1,050</u>
Total	<u>785</u>	<u>448</u>	<u>1,233</u>	<u>751</u>	<u>358</u>	<u>1,109</u>

(D) Results of operations for producing activities

Results of operations from oil and gas producing activities for the year 2017 and 2016 are shown in the following table.

Operating expenses 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 expenses 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)	2017			2016		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Gross revenues						
Sales – Related parties	2,929	1,066	3,995	2,873	1,018	3,891
Sales – Third parties	228	390	618	249	355	604
Total Sales	3,157	1,456	4,613	3,122	1,373	4,495
Expenses						
Operating expenses	372	511	883	366	461	827
Exploration expenses	25	27	52	3	70	73
General administrative expenses	49	62	111	36	58	94
Petroleum royalties and remuneration	368	-	368	353	-	353
Depreciation, depletion and amortization	1,092	537	1,629	1,434	623	2,057
Other (income)/ expenses	<u>(18)</u>	<u>538</u>	<u>520</u>	<u>(33)</u>	<u>45</u>	<u>12</u>
Total expenses	1,888	1,675	3,563	2,159	1,257	3,416
Results before income taxes	1,269	(219)	1,050	963	116	1,079
Income tax expenses	<u>367</u>	<u>63</u>	<u>430</u>	<u>271</u>	<u>26</u>	<u>297</u>
Net results of operations	<u>902</u>	<u>(282)</u>	<u>620</u>	<u>692</u>	<u>90</u>	<u>782</u>

(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.

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

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

(Unit: Million US Dollar)	Domestic		Foreign		Total	
	2017	2016	2017	2016	2017	2016
Future cash inflows	12,220	13,565	6,463	6,106	18,683	19,671
Future production costs	(2,335)	(2,283)	(1,710)	(1,614)	(4,045)	(3,897)
Future development costs	(4,552)	(4,718)	(1,301)	(1,612)	(5,853)	(6,330)
Future income tax expenses	<u>(1,721)</u>	<u>(2,177)</u>	<u>(723)</u>	<u>(626)</u>	<u>(2,444)</u>	<u>(2,803)</u>
Future net cash flows	3,612	4,387	2,729	2,254	6,341	6,641
10% annual discount	<u>(93)</u>	<u>(337)</u>	<u>(849)</u>	<u>(651)</u>	<u>(942)</u>	<u>(988)</u>
Standardized measure of discounted future net cash flows (SMDCF)	<u>3,519</u>	<u>4,050</u>	<u>1,880</u>	<u>1,603</u>	<u>5,399</u>	<u>5,653</u>

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

(Unit: Million US Dollar)	2017	2016
Present value at beginning of year	5,653	7,428
Sales and transfers of oil and gas produced, net of production costs	(3,386)	(3,210)
Development costs incurred during the period	1,320	1,103
Net changes in prices and production costs	335	(3,779)
Net changes in development costs	(149)	1,495
Extensions, discoveries and improved recovery	837	469
Revisions of previous quantity estimates	384	967
Purchases / sales of petroleum in place	-	-
Accretions of discount	45	839
Net changes in income taxes	<u>360</u>	<u>341</u>
Present value at the year end	<u>5,399</u>	<u>5,653</u>

(E) Other Information

Productive Oil/Condensate and Gas Wells

The numbers of productive wells at December 31, 2017 were as follows:

	Oil/Condensate		Gas	
	Gross	Net	Gross	Net
Thailand	767	497	1,522	698
Foreign				
Southeast Asia	37	9	211	97
Others	19	10	-	-
Total	823	516	1,733	795

Drilling in Progress of Oil/Condensate and Gas Wells

The numbers of wells in progress at December 31, 2017 were as follows:

	Gross	Net
<u>Exploratory</u>		
Thailand	-	-
Foreign		
Southeast Asia	-	-
Others	-	-
Total	-	-
 <u>Development</u>		
Thailand	29	18.9
Foreign		
Southeast Asia	2	1
Others	-	-
Total	31	19.9

Net Oil/Condensate and Gas Wells Drilled in 2017

	Net Productive wells drilled	Net dry well drilled
<u>Exploratory</u>		
Thailand	8.6	4.00
Foreign		
Southeast Asia	-	0.26
Others	-	-
Total	<u>8.6</u>	<u>4.26</u>
 <u>Development</u>		
Thailand	190.66	4.30
Foreign		
Southeast Asia	15.76	-
Others	1	-
Total	<u>207.42</u>	<u>4.30</u>

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

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

Quarterly Information in 2017 and 2016 for the consolidated financial statement are as follows:

Unit: US Dollar

<u>Year2017</u>	<u>4thQ</u>	<u>3rdQ</u>	<u>2ndQ</u>	<u>1stQ</u>
Revenues				
Sales	1,202,119,165	1,063,670,938	975,323,588	1,040,091,549
Revenue from pipeline transportation	22,172,556	24,884,575	17,488,758	13,259,364
Other income				
Gain on foreign exchange	13,906,376	23,129,564	10,803,831	3,561,976
Interest income	18,474,470	12,994,974	15,236,804	12,872,725
Gain on financial derivatives	-	-	-	6,244,406
Other income	14,089,489	9,164,581	13,467,704	16,550,749
Total Revenues	1,270,762,056	1,133,844,632	1,032,320,685	1,092,580,769
Expenses				
Operating expenses	168,080,012	162,191,500	152,874,578	141,915,277
Exploration expenses	23,078,034	8,468,079	19,302,802	1,344,636
Administrative expenses	104,517,340	50,119,038	50,549,963	41,234,942
Petroleum royalties and remuneration	102,391,207	89,664,243	84,302,712	91,499,703
Depreciation, depletion and amortization	435,662,557	413,462,171	381,268,098	419,826,900
Other expenses				
Loss on financial derivatives	28,377,168	3,318,724	2,955,898	-
Management's remuneration	1,623,370	1,209,440	1,096,994	1,019,848
Impairment loss on assets	-	558,214,042	-	-
Finance costs	57,294,151	56,582,968	55,476,839	56,873,468
Total Expenses	921,023,839	1,343,230,205	747,827,884	753,714,774
Share of gain from associates and joint ventures	2,588,042	2,319,103	2,676,899	2,161,371
Profit (loss) before income taxes	352,326,259	(207,066,470)	287,169,700	341,027,366
Income tax	(63,317,211)	(57,351,361)	(67,303,990)	8,401,312
Profit (loss) for the period from continuing operations	289,009,048	(264,417,831)	219,865,710	349,428,678
Profit (loss) for the period from discontinued operations - net of tax	(347,441)	-	-	-
Profit (loss) for the period	288,661,607	(264,417,831)	219,865,710	349,428,678
Basic earnings (loss) per share				
Continuing operations	0.07	(0.07)	0.04	0.09
Discontinued operations	(0.0001)	-	-	-

Unit: US Dollar

<u>Year2016</u>	<u>4thQ</u>	<u>3rdQ</u>	<u>2ndQ</u>	<u>1stQ</u>
Revenues				
Sales	1,037,434,593	1,046,476,331	1,061,000,216	1,044,652,921
Revenue from pipeline transportation	14,225,854	18,934,315	16,701,593	16,624,759
Other income	-	-	-	-
Gain on foreign exchange	-	14,351,726	6,572,363	6,223,388
Interest income	9,659,695	7,210,535	7,452,250	5,742,545
Gain on financial derivatives	14,311,187	14,620,515	-	-
Other income	12,375,135	7,127,104	10,675,095	11,305,278
Total Revenues	1,088,006,464	1,108,720,526	1,102,401,517	1,084,548,891
Expenses				
Operating expenses	167,386,453	146,011,694	138,679,994	130,052,595
Exploration expenses	11,920,878	20,361,689	15,583,064	25,486,002
Administrative expenses	92,016,021	38,466,880	58,134,551	30,325,339
Petroleum royalties and remuneration	87,892,910	88,924,530	87,967,397	88,323,501
Depreciation, depletion and amortization	509,335,454	534,407,622	517,658,659	517,980,644
Other expenses				
Loss on foreign exchange	15,560,457	-	-	-
Loss on financial derivatives	-	-	97,533,923	49,586,533
Management's remuneration	1,580,811	797,861	820,214	785,642
Impairment loss on assets	47,150,837	-	-	-
Finance costs	57,896,251	59,241,885	59,035,264	58,292,333
Total Expenses	990,740,072	888,212,161	975,413,066	900,832,589
Share of gain from associates and joint ventures	2,359,011	2,341,048	1,828,615	2,018,422
Profit before income taxes	99,625,403	222,849,413	128,817,066	185,734,724
Income tax expenses	(133,322,119)	(67,481,839)	(54,598,693)	(29,904,151)
Profit (loss) for the period from continuing operations	(33,696,716)	155,367,574	74,218,373	155,830,573
Profit (loss) for the period from discontinued operations - net of tax	17,635,015	272,758	1,135,156	1,291,184
Profit (loss) for the year	(16,061,701)	155,640,332	75,353,529	157,121,757
Basic earnings (loss) per share				
Continuing operations	(0.01)	0.04	0.01	0.04
Discontinued operations	0.004	0.0001	0.0003	0.0003

Petroleum Sales Volume and Average Unit Prices

	2017	2016
Net sales of petroleum (BOED)	299,206	319,521
Average petroleum unit prices		
Average unit prices of crude oil and condensate (USD/BBL)	52.26	41.17
Average unit prices of natural gas (USD/MMBTU)	5.59	5.60
Average unit prices of petroleum (USD/BOE)	39.20	35.91
Lifting cost (USD/BOE)	4.19	4.18