

Attachment: Supplemental Information on Petroleum Exploration and Production Activities (Unaudited)

(A) PTTEP and Our Subsidiaries' Petroleum Reserves Report as of December 31, 2022

The total Proved Reserves of PTTEP and our subsidiaries as of December 31, 2022 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.

Furthermore, in order to improve efficiency, check and balance of the reserves estimation, reporting and disclosure, the company maintains a Reserves Committee which has the following roles and responsibilities:

- Review and endorse the Company's Annual Reserves
- Review and approve Major Changes of Reserves, and Reserves for Newly-Acquired Project
- Ensure that all activities that related to reserves estimation and disclosure of reserves information conform to regulatory and legal requirements as well as to corporate and international standards
- Approve Annual Reserves Audit Plan, appoint Reserves Auditor, as well as approve Reserves Audit
 Report to ensure compliance with Company's framework and continual process improvement

As of December 31, 2022, the total amount of Proved Reserves of PTTEP Group's projects⁽¹⁾ was 365 million stock-tank barrels (MMSTB) of crude oil and condensate⁽²⁾ and 6,523 billion standard cubic feet (BSCF) of natural gas or 1,077 million barrels of oil equivalent (MMBOE). The total amount of Proved Reserves in terms of oil equivalent was therefore 1,442 MMBOE.

In 2022, the total production of PTTEP Group⁽¹⁾ was 214 MMBOE, consisting of 56 MMSTB of crude oil and condensate⁽²⁾ and 977 BSCF (158 MMBOE) of natural gas. This was equivalent to the average production rate of 585,244 barrels of oil equivalent per day (BOED) which was approximately 90,367 BOED or 18% increase from the previous year. The increase in production mainly comes from G1/61, G2/61, and Algeria Hassi Bir Rekaiz projects first production in April and July 2022. In addition, PTTEP Group has signed side deed to perform sole risk in G1/61 project and obtained participating interest increase from 25.5% to 37.0842% in Yadana project due to TotalEnergies withdrawal with effective date on July 20, 2022.

⁽¹⁾ Include APICO Joint Venture project

⁽²⁾ Include Natural Gas Liquids (NGL)



PTT Exploration and Production Public Company Limited Crude Oil and Condensate and Natural Gas Proved Reserves⁽¹⁾

	Crude Oi	and Cond	lensate ⁽²⁾	Natural Gas (BSCF)		Barrel	Barrel of Oil Equivalent		
		(MMSTB)					(MMBOE)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of proved reserves of									
consolidated companies									
As of December 31, 2020	112	183	295	2,580	2,171	4,751	533	540	1,073
1) Revision of previous estimates	7	4	11	51	(25)	26	15	2	17
2) Improved recovery	2	-	2	2	-	2	3	-	3
3) Extensions and discoveries	20	8	28	781	48	829	147	15	162
4) Purchases/Sales of Petroleum in place	-	69	69	-	1,117	1,117	-	264	264
5) Production	(26)	(22)	(48)	(470)	(342)	(812)	(103)	(76)	(179)
As of December 31, 2021	115	242	357	2,944	2,969	5,913	595	745	1,340
Company's share of proved reserves of									
consolidated companies									
As of December 31, 2021	115	242	357	2,944	2,969	5,913	595	745	1,340
1) Revision of previous estimates	13	6	19	173	208	381	41	33	74
2) Improved recovery	1	0	1	1	-	1	1	0	1
3) Extensions and discoveries	32	9	41	859	171	1,030	174	37	211
4) Purchases/Sales of Petroleum in place	3	(0)	3	80	35	115	16	4	20
5) Production	(31)	(25)	(56)	(566)	(402)	(968)	(123)	(89)	(212)
As of December 31, 2022	133	232	365	3,491	2,981	6,472	704	730	1,434

⁽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⁾ Include Natural Gas Liquids (NGL)



PTT Exploration and Production Public Company Limited Crude Oil and Condensate and Natural Gas Proved Reserves⁽¹⁾

	Crude Oil	and Cond	ensate ⁽²⁾	Natural Gas (BSCF)		Barrel	Barrel of Oil Equivalent (MMBOE)		
		(MMSTB)							
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of proved reserves of									
equity companies ⁽³⁾									
As of December 31, 2020	0	-	0	9	-	9	1	-	1
1) Revision of previous estimates	(0)	-	(0)	(3)	-	(3)	(0)	-	(0)
2) Improved recovery	-	-	-	-	-	-	-	-	-
3) Extensions and discoveries	0	-	0	63	-	63	11	-	11
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(0)	-	(0)	(9)	-	(9)	(2)	-	(2)
As of December 31, 2021	0	-	0	60	-	60	10	-	10
Company's share of proved reserves of									
equity companies ⁽³⁾									
As of December 31, 2021	0	-	0	60	-	60	10	-	10
1) Revision of previous estimates	-	-	-	-	-	-	0	-	0
2) Improved recovery	-	-	-	-	-	-	-	-	-
3) Extensions and discoveries	-	-	-	-	-	-	-	-	-
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(0)	-	(0)	(9)	-	(9)	(2)	-	(2)
As of December 31, 2022	0	-	0	51	-	51	8	-	8
Total Proved Reserves	133	232	365	3,542	2,981	6,523	712	730	1,442
As of December 31, 2022	133	232	303	3,042	2,901	0,023	112	730	1,442

⁽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⁾ Include Natural Gas Liquids (NGL)

⁽³⁾ Reserves from APICO Joint Venture project



(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 loss on assets.

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

(Unit: Million US Dollar)	2022	2021
Proved properties	37,248	36,055
Unproved properties	4,312	4,446
Gross capitalized costs	41,560	40,501
Accumulated depreciation, depletion, amortization, and allowance for impairment	(25,779)	(25,588)
Net capitalized costs	15,781	14,913

(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.

		2022		2021		
(Unit: Million US Dollar)	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	5	-	5	19	2,300	2,319
- Unproved	-	12	12	-	3	3
Exploration costs	13	107	120	44	157	201
Development costs	1,374	718	2,092	799	832	1,631
Total	1,392	837	2,229	862	3,292	4,154



(D) Results of Operations for Producing Activities

Results of operations from oil and gas producing activities for the year 2022 and 2021 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 including project cost write off expenses.

Administrative expenses are expenses directly related to oil and gas producing activities.

Depreciation, depletion, and amortization expenses relate 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.

/I laste Millians LIC Dallan		2022		2021			
(Unit: Million US Dollar)	Domestic	Foreign	Total	Domestic	Foreign	Total	
Revenues							
Revenues from sales – Related parties	5,369	2,031	7,400	4,074	1,029	5,103	
Revenues from sales – Third parties	283	2,021	2,304	231	1,677	1,908	
Total revenues from sales	5,652	4,052	9,704	4,305	2,706	7,011	
Expenses							
Operating expenses	674	788	1,462	454	623	1,077	
Exploration expenses	4	68	72	0	226	226	
Administrative expenses	63	257	320	43	96	139	
Petroleum royalties	596	92	688	501	29	530	
Depreciation, depletion and amortization	1,399	920	2,319	1,339	825	2,164	
Other (income) / expenses	(56)	209	153	3	(222)	(219)	
Total expenses	2,680	2,334	5,014	2,340	1,577	3,917	
Results before income taxes	2,972	1,718	4,690	1,965	1,129	3,094	
Income tax expenses	1,064	1,056	2,120	691	630	1,321	
Net results of operations	1,908	662	2,570	1,274	499	1,773	



(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 pretax 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	
(Offic. Willion 03 Dollar)	2022	2021	2022	2021	2022	2021
Future cash inflows	20,444	15,555	31,528	23,197	51,972	38,752
Future production costs	(6,713)	(5,872)	(5,929)	(5,797)	(12,642)	(11,669)
Future development costs	(6,530)	(4,758)	(3,741)	(3,603)	(10,271)	(8,361)
Future income tax expenses	(1,128)	(1,261)	(6,660)	(3,456)	(7,788)	(4,717)
Future net cash flows	6,073	3,664	15,198	10,341	21,271	14,005
10% annual discount	(1,683)	(678)	(7,585)	(5,243)	(9,268)	(5,921)
Standardized measure of discounted future net	4,390	2,986	7,613	5,098	12,003	8,084
cash flows (SMDCF) of consolidated companies						
SMDCF of equity companies (1)	211	145	-	-	211	145
Total SMDCF	4,601	3,131	7,613	5,098	12,214	8,229

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

(Unit: Million US Dollar)	2022	2021
Present value at beginning of year of consolidated companies	8,084	5,158
Sales and transfers of oil and gas produced, net of production costs during period	(7,334)	(4,624)
Development costs incurred during the period	2,920	1,842
Net changes in prices and production costs	12,466	5,794
Net changes in development costs	(1,455)	(343)
Extensions, discoveries and improved recovery	2,132	1,334
Revisions of previous quantity estimates	1,354	233
Purchases / sales of petroleum in place	253	3,795
Accretions of discount	(3,347)	(3,105)
Net changes in income taxes	(3,070)	(2,000)
Present value at the year end of consolidated companies	12,003	8,084
Present value at the year end of equity company (1)	211	145
Total Present value at the year end	12,214	8,229

⁽¹⁾ included investment in APICO Joint Venture project



(F) Other Information

Producing Oil and Gas Wells

The numbers of producing wells⁽¹⁾ as of December 31, 2022 were as follows:

	Oil	Gas
Thailand	1,707	2,552
Overseas:		
Southeast Asia	125	218
Others	9,595	133
Total	11,427	2,903

Definition of producing wells:

- Producing wells: wells which are either currently producing or temporarily closed but exclude water disposal wells or wells which have been plugged & abandoned.
- Producing Oil wells: wells which primarily produce oil, with or without associated gas.
- Producing Gas wells: wells which primarily produce natural gas, with or without associated liquids.

Drilling in Progress of Oil and Gas Wells

The numbers of wells in progress as at December 31, 2022 were as follows:

	Number of Well (1)
Exploratory	
Thailand	-
Overseas:	
Southeast Asia	1
Others	-
Total	1
<u>Development</u>	
Thailand	56
Overseas:	
Southeast Asia	3
Others	4
Total	63

 $^{^{\}scriptscriptstyle{(1)}}$ Total number of wells reported at 100% (Gross), not only PTTEP's participating interest



Oil and Gas Wells⁽¹⁾ Drilled Annually in 2022

	Technical Success	Dry Well
Exploratory		-
Thailand	2	2
Overseas:		
Southeast Asia	1	1
Others	2	-
Total	5	3
	Productive Well	Dry Well
Development		
Thailand	340	9
Overseas:		
Southeast Asia	17	1
Others	35	-
Total	392	10

 $^{^{\}mbox{\scriptsize (1)}}$ Total number of wells reported at 100% (Gross), not only PTTEP's participating interest



Quarterly information in 2022 and 2021 for the consolidated financial statements are as follows:

Unit: Thousand US Dollar

			Offic. Trious	saria do Dollai
<u>Year 2022</u>	4thQ	3rdQ	2ndQ	1stQ
Revenues				
Revenue from sales	2,469,448	2,388,305	2,382,536	2,030,275
Revenue from pipeline transportation	44,825	43,021	32,719	30,358
Other income				
Gain on foreign exchange rates	44,568	-	-	-
Gain on remeasuring of financial instruments	-	152,519	8,724	-
Interest income	22,778	11,402	5,587	4,264
Other income	115,607	21,835	39,519	18,173
Total revenues	2,697,226	2,617,082	2,469,085	2,083,070
Expenses				
Operating expenses	321,407	300,286	291,598	196,719
Exploration expenses	7,511	41,497	16,553	6,122
Administrative expenses	292,910	80,444	112,400	92,609
Petroleum royalties	174,009	170,824	178,681	164,209
Depreciation, depletion and amortisation	649,934	631,112	565,330	516,759
Other expenses				
Loss on foreign exchange rates	-	86,591	44,217	4,824
Loss on remeasuring of financial instruments	100,117	-	-	245,612
Impairment loss on assets and goodwill	205,084	94,996	-	-
Finance costs	55,586	62,335	63,694	51,968
Total expenses	1,806,558	1,468,085	1,272,473	1,278,822
Share of profit (loss) of associates and joint ventures	13,510	(17,485)	12,964	10,567
Profit before income taxes	904,178	1,131,512	1,209,576	814,815
Income taxes	(486,965)	(467,916)	(609,835)	(496,785)
Profit for the period	417,213	663,596	599,741	318,030
Earnings per share				
Basic earnings per share	0.11	0.17	0.15	0.08



Unit: Thousand US Dollar

			Offic. Tho	usariu 05 Dollar
<u>Year 2021</u>	4thQ	3rdQ	2ndQ	1stQ
Revenues				
Revenue from sales	1,867,008	1,743,639	1,728,895	1,391,318
Revenue from pipeline transportation	26,248	26,686	19,804	20,409
Other income				
Gain on foreign exchange rates	4,946	-	-	-
Gain from a bargain purchase	(8,097)	-	-	349,971
Interest income	3,428	3,465	4,726	5,131
Other income	95,068	10,459	14,392	11,675
Total revenues	1,988,601	1,784,249	1,767,817	1,778,504
Expenses				
Operating expenses	275,037	219,801	192,455	174,202
Exploration expenses	19,698	50,285	7,464	148,805
Administrative expenses	125,534	71,625	82,935	74,945
Petroleum royalties	142,654	131,997	137,964	117,600
Depreciation, depletion and amortisation	419,870	605,821	629,714	546,659
Other expenses				
Loss on foreign exchange rates	-	36,323	1,753	4,462
Loss on remeasuring of financial instruments	6,529	5,052	124,350	98,359
Impairment loss on assets and goodwill	183,000	-	-	-
Finance costs	50,826	52,008	51,372	48,020
Total expenses	1,223,148	1,172,912	1,228,007	1,213,052
Share of profit of associates and joint ventures	3,305	6,895	2,795	2,179
Profit before income taxes	768,758	618,232	542,605	567,631
Income taxes	(447,941)	(326,179)	(320,957)	(191,611)
Profit for the period	320,817	292,053	221,648	376,020
Earnings per share				
Basic earnings per share	0.08	0.07	0.06	0.09



Petroleum Sales Volume and Average Unit Prices

	2022	2021
Net sales of petroleum (BOED)	468,130	416,141
Average petroleum unit prices		
Average unit prices of crude oil and condensate (USD/BBL)	94.89	66.70
Average unit prices of natural gas (USD/MMBTU)	6.27	5.69
Average unit prices of petroleum (USD/BOE)	53.39	43.49
Lifting cost (USD/BOE)	4.42	4.13