

AUDITOR'S REPORT AND FINANCIAL STATEMENTS  
PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED  
AND SUBSIDIARIES  
FOR THE YEAR ENDED DECEMBER 31, 2018

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**AUDITOR'S REPORT**

**To The Shareholders of PTT Exploration and Production Public Company Limited**

**Opinion**

The State Audit Office of the Kingdom of Thailand has audited the accompanying consolidated financial statements of PTT Exploration and Production Public Company Limited and its subsidiaries (the Group), and the Company's financial statements of PTT Exploration and Production Public Company Limited (the Company), which comprise the consolidated and the Company's statements of financial position, as at December 31, 2018, the consolidated and the Company's statements of income, the consolidated and the Company's statements of comprehensive income, the consolidated and the Company's statements of changes in equity and the consolidated and the Company's statements of cash flows for the year then ended, which are presented in US Dollar and Thai Baht, and notes to the consolidated and the Company's financial statements, including a summary of significant accounting policies.

In the State Audit Office of the Kingdom of Thailand's opinion, the above mentioned consolidated and the Company's financial statements present fairly, in all material respects, the consolidated financial position of PTT Exploration and Production Public Company Limited and its subsidiaries, and the Company's financial position of PTT Exploration and Production Public Company Limited, as at December 31, 2018, and their consolidated and the Company's financial performance and cash flows for the year then ended, presented in US Dollar and Thai Baht, in accordance with Thai Financial Reporting Standards.

**Basis for Opinion**

The State Audit Office of the Kingdom of Thailand conducted the audit in accordance with the State Audit Standards and Thai Standards on Auditing. The State Audit Office of the Kingdom of Thailand's responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and the Company's Financial Statements section of the State Audit Office of the Kingdom of Thailand's report. The State Audit Office of the Kingdom of Thailand is independent of the Group and the Company in accordance with the State Audit Standards and the Code of Ethics for Professional Accountants determined by the Federation of Accounting Professions that are relevant to the audit of the consolidated and the Company's financial statements. The State Audit Office of the Kingdom of Thailand has fulfilled other ethical responsibilities in accordance with the State Audit Standards and these ethical requirements. The State Audit Office of the Kingdom of Thailand believes that the audit evidence the

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State Audit Office of the Kingdom of Thailand obtained is sufficient and appropriate to provide a basis for the State Audit Office of the Kingdom of Thailand's opinion.

**Key Audit Matters**

Key audit matters are those matters that, in the State Audit Office of the Kingdom of Thailand's professional judgment, were of most significance in the audit of the consolidated and the Company's financial statements of the current period. These matters were addressed in the context of the State Audit Office of the Kingdom of Thailand's audit of the consolidated and the Company's financial statements as a whole, and in forming the State Audit Office of the Kingdom of Thailand's opinion thereon, and the State Audit Office of the Kingdom of Thailand does not provide a separate opinion on these matters.

The State Audit Office of the Kingdom of Thailand has the following key audit matters to communicate:

**1. Estimation of petroleum reserves (the consolidated and the Company's financial statements)**

Petroleum reserves are an indicator of the Group's potential to operate its business in the future and one of the factors taken into consideration in petroleum exploration and production that reflect the Group's ability to continue as a going concern. Petroleum reserves, especially proved reserves, have a significant impact on the financial statements in impairment testing and calculation of depreciation, depletion, and amortization expenses as described in Note 4.12, Significant Accounting Policies – Property, Plant and Equipment, Note 7, Major Estimates and Assumptions – Estimation of Petroleum Reserves, and Note 20, Property, Plant and Equipment.

Estimated proved reserves may differ from actual reserves to be recoverable in the future because the estimation is based on available information at the time of the estimation. At the beginning of each project, an estimation may be subject to a large variance, but the variance becomes smaller when the project approaches the end of its production life. This may impact the management's investment decisions to sustain the Group's businesses. The management relies on the Group's internal teams of experts in estimating the proved reserves using the estimation methods consistent with those generally employed by the petroleum exploration and production industry. The experts have to exercise significant judgment as well as experience in determining appropriate estimation methods for the available information at the time of the estimation. Therefore, the amount of proved reserves may vary with individual judgment and experience. In addition, changes in the estimated proved reserves will impact the recognition of depreciation, depletion, and

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amortization expenses in the financial statements. As a result, the State Audit Office of the Kingdom of Thailand considers this as a key audit matter.

The State Audit Office of the Kingdom of Thailand performed the following key audit procedures:

1. Obtaining an understanding of the proved reserve estimation processes, assessing the adequacy of the designed key internal controls, and performing tests of key controls of such processes, especially the controls over the reliability of the data used in the preparation of reports related to the Group's proved reserves and the uses of proved reserves data in the calculation of depreciation, depletion, and amortization expenses, as well as the assessment of impairment of assets.

2. Assessing the qualifications of the Group's internal experts who are responsible for estimating proved reserves and preparing the Group's proved reserves data.

3. Using the results of the reserve estimation audit performed by the energy regulatory agency in Thailand, which has its own processes and experts for verifying the estimation of domestic petroleum reserves for projects the operators of which have submitted the required reports. The State Audit Office of the Kingdom of Thailand compared the Group's proved reserves at the end of 2017 with those verified by the regulatory agency and reconciled with the estimated proved reserves presented in internal reports related to proved reserves during the year to determine the estimated proved reserves of domestic projects of which the Group was the operator at the end of 2018.

4. Verifying that the Group recognized significant changes in the estimated proved reserves in the appropriate accounting period and in accordance with the Group's accounting policy, and those changes were applied to the calculation of depreciation, depletion, and amortization expenses appropriately.

**2. Provision for decommissioning costs (the consolidated and the Company's financial statements)**

Provision for decommissioning costs is disclosed in Note 7, Major Estimates and Assumptions – Provision for Decommissioning Costs and Note 32, Provision for Decommissioning Costs. As at December 31, 2018, the total short-term and long-term provision for decommissioning costs was presented in the consolidated and the Company's financial statements in the amount of US Dollar 2,277.25 million and US Dollar 1,375.34 million, respectively.

Decommissioning activities occur at the end of projects. Decommissioning methods vary with locations of petroleum exploration and production, which are classified into onshore and offshore production areas, where the main infrastructure, including Central Processing Platforms, Well Head Platform, Development

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Well, Pipeline, and other producing properties, is installed. Also, the regulations in each country have varying requirements for decommissioning activities, which can be either total or partial removal. In addition, only a small number of decommissioning activities with certain natures have taken place, resulting in limited decommissioning cost information that can be used as a reference in the Group's estimation of future expenses. Due to these factors, the calculation of the provision for decommissioning costs has to rely significantly on the exercise of judgment in determining assumptions around decommissioning costs, inflation rates, discount rates, and timing of the decommissioning based on the estimated field life of a project. These assumptions are subject to change over time. The management relies on the Group's teams of experts, comprising those from Engineering and Development Group, Production Asset Group, Operations Support Group, and Finance and Accounting Group in estimating the provision for decommissioning costs. As a result, the State Audit Office of the Kingdom of Thailand considers this as a key audit matter.

The State Audit Office of the Kingdom of Thailand performed the following key audit procedures:

1. Obtaining an understanding of the decommissioning cost estimation processes, assessing the adequacy of the designed internal controls and performing tests of controls over the estimation, review, and adjustment of the provision for decommissioning costs, as well as related approval.

2. Assessing the qualifications of the Group's experts who are responsible for estimating the provision for decommissioning costs and who are responsible for inspection and control the quality of engineering work.

3. Evaluating the reasonableness of the assumptions used in the calculation of provision for decommissioning costs by

- 3.1 Evaluating the reasonableness of the decommissioning costs through inquiry of the experts about the assumptions used, relying on the State Audit Office of the Kingdom of Thailand's knowledge of the businesses, decommissioning information of other comparable projects and related laws;

- 3.2 Evaluating the appropriateness of the expected timing of decommissioning used in the calculation of the provision for decommissioning costs by considering its consistency with investment plans, initial decommissioning plan submitted to the energy regulatory agency in Thailand, or any other related information; and

- 3.3 Evaluating the appropriateness of inflation rates and discount rates through inquiry of the experts and comparison with the information from external sources.

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4. Agreeing decommissioning costs used in the calculation of the provision for decommissioning costs to the information obtained from the Group's engineers, both for projects of which the Group is the operator and for projects of which the Group is non-operator.

5. Validating significant changes in the estimated decommissioning costs incurred during the year and changes that impact the statements of income against supporting evidence.

6. Testing the calculation of the provision for decommissioning costs.

7. In case of projects for which the Group had submitted the initial decommissioning plan and the decommissioning cost estimate report, required to be audited and verified by the Group's external experts, to the energy regulatory agency in Thailand, the State Audit Office of the Kingdom of Thailand assessed the reliability of the external experts by ensuring that their qualifications, work experience and independence were in compliance with the requirements imposed by the regulatory agency for the appointment of third parties in auditing and verifying the accuracy of decommissioning cost estimates.

8. Comparing actual decommissioning cost incurred with those estimated by the Group to evaluate the appropriateness of the estimation. In case that there were any significant variances, the State Audit Office of the Kingdom of Thailand considered the reasonableness of the clarifications made by the Group regarding the causes of such variances, as well as considered whether the Group incorporated the experience gained from the actual decommissioning in the current year into the review of the provision appropriately.

**3. Business combination (the consolidated and the Company's financial statements)**

As disclosed in note 5, Business Acquisition, the Group acquired the 22.2222% participating interests in the Bongkot Project, consisting of Blocks B15, B16, B17, and G12/48. For the consolidated and the Company's financial statements, the Group and the Company has to pay the total considerations for the acquisition of US Dollar 1,105.23 million, and US Dollar 1,083.01 million, respectively. The fair value of the acquired identifiable net assets for the Group and the Company are US Dollar 937.53 million, and US Dollar 918.39 million, respectively. The Group's management assesses that the participating interest acquired is the business combination according to the definition under Thai Financial Reporting Standard (TFRS) 3, Business combination.

According to TFRS 3, Business combination, the Group has to recognize and measure the fair value on the acquisition date of the acquired identifiable assets, liabilities and the considerations transferred (the value of acquisition's considerations), and recognize the deferred tax assets or liabilities, and goodwill, including disclosing the related information whether it complies with the TFRS. The Group used the

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independent valuer to estimate the fair value of the participating interest acquired. The fair value estimation requires the selection of valuation technique, and various assumptions, which may be different depending on the individual judgement and experience of the valuer. The information which the valuer obtained and used in the fair value estimation also significantly affects the fair value. As a result, the State Audit Office of the Kingdom of Thailand considers this as a key audit matter.

The State Audit Office of the Kingdom of Thailand performed the following key audit procedures:

1. Validating the Sales and Purchase Agreement of the 22.2222% participating interest acquired in the Bongkot Project and inquire the Group's management to understand the nature and objective of the transaction, including the significant content, terms, and conditions in the agreement, and evaluate the management's judgement to determine whether the acquired of the participating interest is appropriate according to the definition of business combination under TFRS3, Business Combination.
2. Verifying the evidence of payments, the approval of petroleum concession transferred according to the law, and related documents used in recording of the accounting transactions, to determine the appropriateness of the identification of the assets acquired and liabilities assumed, including the considerations transferred.
3. Assessing the knowledge, capability, and integrity of the independent valuer who is associated with the preparation of Purchase Price Allocation report.
4. Verifying the fair value estimation of the acquired identifiable assets and liabilities in the Purchase Price Allocation report prepared by the independent valuer by assessing the appropriateness of the valuation technique, and the information used in the estimation, including the significant assumptions which the independent valuer used in the fair value estimation, and testing the fair value calculation. The validation also includes the communication with the independent valuer about the significant issues.
5. Reviewing the relevant classification and disclosures in accordance with TFRS.

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**Other Information**

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and the Company's financial statements and the auditor's report thereon. Management expects to provide the annual report to the State Audit Office of the Kingdom of Thailand after the date of this auditor's report.

The State Audit Office of the Kingdom of Thailand's opinion on the consolidated and the Company's financial statements does not cover the other information and the State Audit Office of the Kingdom of Thailand will not express any form of assurance conclusion thereon.

In connection with the audit of the consolidated and the Company's financial statements, the State Audit Office of the Kingdom of Thailand's responsibility is to read the other information identified above and consider whether the other information is materially inconsistent with the consolidated and the Company's financial statements or the State Audit Office of the Kingdom of Thailand's knowledge obtained in the audit, or otherwise appears to be materially misstated.

When the State Audit Office of the Kingdom of Thailand reads the annual report, if the State Audit Office of the Kingdom of Thailand concludes that there is a material misstatement therein, the State Audit Office of the Kingdom of Thailand is required to communicate the matter to those charged with governance.

**Responsibilities of Management and Those Charged with Governance for the Consolidated and the Company's Financial Statements**

Management is responsible for the preparation and fair presentation of the consolidated and the Company's financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated and the Company's financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and the Company's financial statements, management is responsible for assessing the Group and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's and the Company's financial reporting process.

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**Auditor's Responsibilities for the Audit of the Consolidated and the Company's Financial Statements**

The State Audit Office of the Kingdom of Thailand's audit objectives are to obtain reasonable assurance about whether the consolidated and the Company's financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes the State Audit Office of the Kingdom of Thailand's opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with State Audit Standards and Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and the Company's financial statements.

As part of an audit in accordance with State Audit Standards and Thai Standards on Auditing, the State Audit Office of the Kingdom of Thailand exercises professional judgment and maintain professional skepticism throughout the audit. The State Audit Office of the Kingdom of Thailand also:

- Identifies and assesses the risks of material misstatement of the consolidated and the Company's financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence that is sufficient and appropriate to provide a basis for the State Audit Office of the Kingdom of Thailand's opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concludes on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Company's ability to continue as a going concern. If the State Audit Office of the Kingdom of Thailand concludes that a material uncertainty exists, the State Audit Office of the Kingdom of Thailand is required to draw attention in the auditor's report of the

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State Audit Office of the Kingdom of Thailand to the related disclosures in the consolidated and the Company's financial statements or, if such disclosures are inadequate, to modify the State Audit Office of the Kingdom of Thailand's opinion. The State Audit Office of the Kingdom of Thailand's conclusions are based on the audit evidence obtained up to the date of the auditor's report of the State Audit Office of the Kingdom of Thailand. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.

- Evaluates the overall presentation, structure and content of the consolidated and the Company's financial statements, including the disclosures, and whether the consolidated and the Company's financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The State Audit Office of the Kingdom of Thailand is responsible for the direction, supervision and performance of the group audit. The State Audit Office of the Kingdom of Thailand remains solely responsible for the State Audit Office of the Kingdom of Thailand's opinion.

The State Audit Office of the Kingdom of Thailand communicates with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that the State Audit Office of the Kingdom of Thailand identifies during the State Audit Office of the Kingdom of Thailand's audit.

The State Audit Office of the Kingdom of Thailand also provides those charged with governance with a statement that the State Audit Office of the Kingdom of Thailand has complied with the State Audit Standards and relevant ethical requirements regarding independence, and communicates with them all relationships and other matters that may reasonably be thought to bear on the State Audit Office of the Kingdom of Thailand's independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, the State Audit Office of the Kingdom of Thailand determines those matters that were of most significance in the audit of the consolidated and the Company's financial statements of the current period and are therefore the key audit matters. The State Audit Office of the Kingdom of Thailand describes these matters in the auditor's report of the State Audit Office of the Kingdom of Thailand unless law or regulation precludes

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public disclosure about the matter or when, in extremely rare circumstances, the State Audit Office of the Kingdom of Thailand determines that a matter should not be communicated in the State Audit Office of the Kingdom of Thailand's report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

*(Signed)*

Pasutnicha Jumphathes  
(Pasutnicha Jumphathes)  
Deputy Auditor General

*(Signed)*

Prawit Tantrajin  
(Prawit Tantrajin)  
Director of Financial and Procurement Audit Office No. 15

*State Audit Office of the Kingdom of Thailand*

February 20, 2019

## PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31, 2018

CONSOLIDATED

	Notes	Unit : US Dollar		Unit : Baht	
		December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Assets</b>					
<b>Current Assets</b>					
Cash and cash equivalents	8	3,180,095,315	1,512,181,292	103,193,560,790	49,419,466,004
Short-term investments	9	820,529,928	2,955,491,269	26,626,058,762	96,588,154,097
Investments in trading securities	10	70,550,255	207,592	2,289,343,959	6,784,308
Investments in available-for-sales securities	11	10,450,000	-	339,100,750	-
Account receivable - parent company	12, 17.2	637,129,582	566,568,454	20,674,748,268	18,515,974,561
Trade accounts receivable	13	87,250,589	109,434,304	2,831,266,994	3,576,412,993
Other accounts receivable		471,385,978	78,595,277	15,296,380,912	2,568,562,127
Inventories	14	23,401,706	19,186,294	759,381,456	627,025,615
Materials and supplies	15	258,824,758	298,063,802	8,398,820,043	9,740,997,301
Current tax assets		44,251,011	89,006,743	1,435,933,751	2,908,820,568
Other current assets					
Working capital from co-venturers		23,136,199	46,919,770	750,765,770	1,533,380,944
Accrued interests receivable		18,743,848	19,793,398	608,234,720	646,866,335
Financial derivative assets	27	44,760,255	720,444	1,452,462,783	23,544,769
Others	16	65,558,388	68,666,897	2,127,357,369	2,244,095,699
<b>Total Current Assets</b>		<b>5,756,067,812</b>	<b>5,764,835,536</b>	<b>186,783,416,327</b>	<b>188,400,085,321</b>
<b>Non-current Assets</b>					
Investments in available-for-sale securities	11	556,840	713,347	18,069,366	23,312,828
Investments in associates	18.3	219,796,559	212,644,091	7,132,361,802	6,949,403,099
Investments in joint ventures	18.4	17,412,037	18,721,333	565,017,696	611,830,253
Other long-term investments	19	223,807	11,307	7,262,505	369,529
Long-term loans to related parties	17.4	95,495,279	110,497,369	3,098,805,811	3,611,154,952
Property, plant and equipment	20, 24	8,203,148,334	8,034,374,696	266,190,788,685	262,570,703,080
Goodwill	21	1,091,040,269	1,014,382,174	35,404,074,028	33,150,935,961
Intangible assets	22	82,092,341	83,988,319	2,663,882,715	2,744,814,987
Exploration and evaluation assets	23, 24	3,312,349,369	3,306,975,679	107,485,185,289	108,074,986,294
Deferred tax assets	25.1	462,550,222	416,116,927	15,009,674,962	13,599,080,791
Rights to receive reimbursement from decommissioning funds		161,721,008	131,356,153	5,247,819,635	4,292,839,069
Other non-current assets					
Prepaid expenses	26	19,870,031	20,829,912	644,779,168	680,740,553
Deferred remuneration under agreement		13,060,045	14,817,758	423,796,265	484,257,844
Financial derivative assets	27	22,098,578	19,460,308	717,095,155	635,980,642
Others	24, 28	113,877,349	70,095,848	3,695,300,906	2,290,796,318
<b>Total Non-current Assets</b>		<b>13,815,292,068</b>	<b>13,454,985,221</b>	<b>448,303,913,988</b>	<b>439,721,206,200</b>
<b>Total Assets</b>		<b>19,571,359,880</b>	<b>19,219,820,757</b>	<b>635,087,330,315</b>	<b>628,121,291,521</b>

Notes to financial statements are an integral part of these financial statements.

(Signed) Phongsthom Thavisin  
(Phongsthom Thavisin)  
President and Chief Executive Officer

(Signed) Jaroonsri Wankertphon  
(Jaroonsri Wankertphon)  
Senior Vice President, Accounting Division

## PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31, 2018

CONSOLIDATED

	Notes	Unit : US Dollar		Unit : Baht	
		December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Liabilities and Equity</b>					
<b>Current Liabilities</b>					
Trade accounts payable		102,655,689	115,352,784	3,331,159,471	3,769,834,227
Working capital to co-venturers		17,578,681	15,640,555	570,425,258	511,147,634
Current portion of long-term financial liabilities	29	407,014,532	399,710,434	13,207,553,411	13,062,902,055
Accrued expenses		596,428,200	490,905,549	19,353,988,336	16,043,240,286
Accrued interests payable		16,274,462	24,150,871	528,103,567	789,272,508
Income tax payable		678,133,387	406,005,018	22,005,314,869	13,268,614,806
Short-term provision	30	133,674,387	63,423,986	4,337,711,471	2,072,753,782
Deferred considerations acquired through business acquisition		465,971,435	-	15,120,695,026	-
Financial derivative liabilities	27	10,685,306	25,521,108	346,736,397	834,053,133
Other current liabilities		57,364,252	60,545,450	1,861,456,007	1,978,679,428
<b>Total Current Liabilities</b>		<b>2,485,780,331</b>	<b>1,601,255,755</b>	<b>80,663,143,813</b>	<b>52,330,497,859</b>
<b>Non-current Liabilities</b>					
Debentures	29	1,537,766,538	1,938,720,566	49,900,266,673	63,359,158,876
Long-term loans	29	985,476	568,730,791	31,978,536	18,586,641,706
Deferred tax liabilities	25.1	854,017,385	963,020,365	27,712,721,132	31,472,385,124
Provision for employee benefits	31	135,263,864	123,772,502	4,389,278,210	4,044,996,125
Provision for decommissioning costs	32	2,243,654,819	2,275,432,888	72,806,223,203	74,363,225,090
Provision for remuneration for the renewal of petroleum production	33	238,661,335	195,015,188	7,744,520,345	6,373,274,452
Other non-current liabilities					
Deferred income		4,957,352	7,359,738	160,865,239	240,522,954
Financial derivative liabilities	27	-	7,458,980	-	243,766,267
Others		49,767,464	22,401,371	1,614,945,891	732,097,260
<b>Total Non-current Liabilities</b>		<b>5,065,074,233</b>	<b>6,101,912,389</b>	<b>164,360,799,229</b>	<b>199,416,067,854</b>
<b>Total Liabilities</b>		<b>7,550,854,564</b>	<b>7,703,168,144</b>	<b>245,023,943,042</b>	<b>251,746,565,713</b>
<b>Equity</b>					
Share capital	37				
Authorized share capital					
3,969,985,400 ordinary shares of Baht 1 each				3,969,985,400	3,969,985,400
Issued and paid-up share capital					
3,969,985,400 ordinary shares of Baht 1 each		150,683,762	150,683,762	3,969,985,400	3,969,985,400
Share premium		3,439,036,612	3,439,036,612	105,417,619,764	105,417,619,764
Subordinated capital debentures		1,154,687,532	1,154,811,834	38,231,753,921	38,234,354,686
Retained earnings					
Appropriated					
Legal reserve	38	15,048,319	15,048,319	396,998,540	396,998,540
Reserve for expansion		431,231,212	431,231,212	16,900,000,000	16,900,000,000
Unappropriated		6,862,942,815	6,354,905,664	223,433,839,506	206,909,233,643
Other components of equity		(33,124,936)	(29,064,790)	1,713,190,142	4,546,533,775
<b>Total Equity</b>		<b>12,020,505,316</b>	<b>11,516,652,613</b>	<b>390,063,387,273</b>	<b>376,374,725,808</b>
<b>Total Liabilities and Equity</b>		<b>19,571,359,880</b>	<b>19,219,820,757</b>	<b>635,087,330,315</b>	<b>628,121,291,521</b>

Notes to financial statements are an integral part of these financial statements.

## PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31, 2018

THE COMPANY

	Notes	Unit : US Dollar		Unit : Baht	
		December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
<b>Assets</b>					
<b>Current Assets</b>					
Cash and cash equivalents	8	462,093,407	387,985,125	14,994,853,673	12,679,708,245
Short-term investments	9	462,699,928	1,247,324,963	15,014,535,178	40,763,719,054
Investments in trading securities	10	70,541,991	199,289	2,289,075,812	6,512,935
Investments in available-for-sale securities	11	10,450,000	-	339,100,750	-
Account receivable - parent company	12, 17.2	399,091,972	321,541,329	12,950,467,667	10,508,264,327
Trade accounts receivable	13	987,080	1,602,237	32,030,591	52,362,583
Other accounts receivable		434,624,804	39,505,848	14,103,502,101	1,291,087,192
Short-term loans to related parties	17.3	1,175,450,898	6,778,675,773	38,143,184,822	221,533,315,677
Inventories	14	4,271,210	3,046,705	138,600,061	99,569,113
Materials and supplies	15	101,402,073	98,217,255	3,290,480,304	3,209,829,599
Current tax assets		24,436,122	25,721,216	792,948,075	840,592,831
Other current assets					
Working capital from co-venturers		2,883,927	8,073,734	93,582,934	263,856,988
Accrued interests receivable		48,917,142	8,187,999	1,587,353,078	267,591,284
Financial derivative assets	27	5,638,411	700,458	182,965,483	22,891,612
Others	16	30,755,680	28,624,915	998,016,666	935,488,382
<b>Total Current Assets</b>		<b>3,234,244,645</b>	<b>8,949,406,846</b>	<b>104,950,697,195</b>	<b>292,474,789,822</b>
<b>Non-current Assets</b>					
Investments in associates	18.3	25,577,427	25,577,427	829,983,238	835,893,690
Investments in subsidiaries	18.2	795,711,719	657,203,250	25,820,712,047	21,478,002,490
Other long-term investment	19	11,307	11,307	366,916	369,529
Long-term loans to related parties	17.4	5,418,528,669	24,956,095	175,830,348,003	815,587,984
Property, plant and equipment	20, 24	3,782,063,076	3,137,668,958	122,727,313,550	102,541,887,393
Goodwill	21	75,157,587		2,438,851,117	
Intangible assets	22	71,600,170	73,936,496	2,323,413,531	2,416,312,203
Exploration and evaluation assets	23, 24	149,886,527	145,307,858	4,863,792,694	4,748,793,516
Deferred tax assets	25.1	315,463,776	202,523,526	10,236,746,710	6,618,653,803
Other non-current assets					
Deferred remuneration under agreement		13,060,045	14,817,758	423,796,265	484,257,844
Financial derivative assets	27	22,098,578	19,460,308	717,095,155	635,980,642
Others	24, 28	11,923,493	5,608,582	386,915,351	183,293,571
<b>Total Non-current Assets</b>		<b>10,681,082,374</b>	<b>4,307,071,565</b>	<b>346,599,334,577</b>	<b>140,759,032,665</b>
<b>Total Assets</b>		<b>13,915,327,019</b>	<b>13,256,478,411</b>	<b>451,550,031,772</b>	<b>433,233,822,487</b>

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF FINANCIAL POSITION  
AS AT DECEMBER 31, 2018  
THE COMPANY

	Notes	Unit : US Dollar		Unit : Baht	
		December 31, 2017	December 31, 2016	December 31, 2018	December 31, 2017
<b>Liabilities and Equity</b>					
<b>Current Liabilities</b>					
Trade accounts payable		30,527,462	28,299,361	990,611,039	924,848,979
Working capital to co-venturers		1,110,819	1,678,619	36,045,896	54,858,807
Current portion of long-term financial liabilities	29	407,014,532	399,710,434	13,207,553,411	13,062,902,055
Accrued expenses		288,067,227	243,765,166	9,347,733,288	7,966,468,262
Accrued interests payable		5,145,915	10,945,087	166,984,084	357,695,450
Income tax payable		522,663,759	298,530,473	16,960,351,476	9,756,248,522
Short-term provision	30	93,671,595	63,320,142	3,039,627,557	2,069,360,076
Deferred considerations acquired through business acquisition		465,971,435	-	15,120,695,026	-
Financial derivative liabilities	27	9,615,920	17,976,785	312,034,992	587,497,754
Other current liabilities		29,716,745	37,271,976	964,303,412	1,218,082,219
<b>Total Current Liabilities</b>		<b>1,853,505,409</b>	<b>1,101,498,043</b>	<b>60,145,940,181</b>	<b>35,997,962,124</b>
<b>Non-current Liabilities</b>					
Debentures	29	351,006,573	752,284,564	11,390,104,509	24,585,346,659
Long-term loans	29	985,476	-	31,978,536	-
Deferred tax liabilities	25.1	-	146,787,160	-	4,797,138,454
Provision for employee benefit	31	121,503,357	114,501,723	3,942,763,602	3,742,020,900
Provision for decommissioning costs	32	1,370,656,206	1,211,046,076	44,477,564,365	39,578,091,896
Provision for remuneration for the renewal of petroleum production	33	238,401,631	194,692,457	7,736,093,019	6,362,727,333
Other non-current liabilities					
Deferred income		3,503,193	2,383,038	113,678,016	77,879,849
Financial derivative liabilities	27	-	7,458,980	-	243,766,267
Others		23,048,355	15,097,378	747,915,257	493,396,100
<b>Total Non-current Liabilities</b>		<b>2,109,104,791</b>	<b>2,444,251,376</b>	<b>68,440,097,304</b>	<b>79,880,367,458</b>
<b>Total Liabilities</b>		<b>3,962,610,200</b>	<b>3,545,749,419</b>	<b>128,586,037,485</b>	<b>115,878,329,582</b>
<b>Equity</b>					
Share capital	37				
Authorized share capital					
3,969,985,400 ordinary shares of Baht 1 each				3,969,985,400	3,969,985,400
Issued and paid-up share capital					
3,969,985,400 ordinary shares of Baht 1 each		150,683,762	150,683,762	3,969,985,400	3,969,985,400
Share premium		3,439,036,612	3,439,036,612	105,417,619,764	105,417,619,764
Subordinated capital debentures		301,226,483	301,226,483	9,661,771,205	9,661,771,205
Retained earnings					
Appropriated					
Legal reserve	38	15,048,319	15,048,319	396,998,540	396,998,540
Reserve for expansion		431,231,212	431,231,212	16,900,000,000	16,900,000,000
Unappropriated		5,597,858,914	5,356,440,194	187,500,874,929	179,555,557,529
Other components of equity		17,631,517	17,062,410	(883,255,551)	1,453,560,467
<b>Total Equity</b>		<b>9,952,716,819</b>	<b>9,710,728,992</b>	<b>322,963,994,287</b>	<b>317,355,492,905</b>
<b>Total Liabilities and Equity</b>		<b>13,915,327,019</b>	<b>13,256,478,411</b>	<b>451,550,031,772</b>	<b>433,233,822,487</b>

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF INCOME  
FOR THE YEAR ENDED DECEMBER 31, 2018  
CONSOLIDATED

	Notes	Unit : US Dollar		Unit : Baht	
		2018	2017	2018	2017
<b>Revenues</b>					
Sales		5,202,809,857	4,281,205,240	168,327,503,985	145,097,741,313
Revenue from pipeline transportation		107,563,734	77,805,253	3,481,649,960	2,626,916,542
Other income					
Gain on foreign exchange		-	51,401,747	-	1,645,957,461
Interest income		83,352,666	59,578,973	2,691,351,050	2,016,049,886
Gain on financial derivatives		13,966,633	-	539,300,427	-
Other income		50,784,060	53,272,523	1,647,110,915	1,811,073,785
<b>Total Revenues</b>		<b>5,458,476,950</b>	<b>4,523,263,736</b>	<b>176,686,916,337</b>	<b>153,197,738,987</b>
<b>Expenses</b>					
Operating expenses		645,084,154	625,061,367	20,855,434,660	21,174,007,181
Exploration expenses		45,685,474	52,193,551	1,481,056,817	1,744,618,470
Administrative expenses	17.1	290,233,637	251,370,935	9,404,564,362	8,459,253,564
Petroleum royalties and remuneration	39	469,663,029	367,857,865	15,204,940,727	12,472,102,479
Depreciation, depletion and amortization		1,848,510,539	1,650,219,726	59,809,002,872	55,983,367,203
Other expenses					
Loss on foreign exchange		18,632,091	-	624,229,740	-
Loss on financial derivatives		-	28,407,384	-	933,962,338
Impairment loss on assets		-	558,214,042	-	18,504,889,118
Other expenses	6	57,768,001	-	1,886,227,194	-
Finance costs		238,564,895	226,227,426	7,707,126,230	7,676,494,055
<b>Total Expenses</b>		<b>3,614,141,820</b>	<b>3,759,552,296</b>	<b>116,972,582,602</b>	<b>126,948,694,408</b>
Share of profit of associates and joint ventures		7,932,268	9,745,415	256,247,378	328,715,206
<b>Profit before income taxes</b>		<b>1,852,267,398</b>	<b>773,456,855</b>	<b>59,970,581,113</b>	<b>26,577,759,785</b>
Income taxes	25.2	(732,658,187)	(179,571,250)	(23,764,290,782)	(5,986,945,721)
<b>Profit for the year from continuing operations</b>		<b>1,119,609,211</b>	<b>593,885,605</b>	<b>36,206,290,331</b>	<b>20,590,814,064</b>
Loss for the year from discontinued operations - net of tax		-	(347,441)	-	(11,349,343)
<b>Profit for the year</b>		<b>1,119,609,211</b>	<b>593,538,164</b>	<b>36,206,290,331</b>	<b>20,579,464,721</b>
<b>Basic earnings per share</b>					
	41				
Continuing operations		0.27	0.13	8.69	4.54
Discontinued operations		-	(0.0001)	-	(0.003)

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
 STATEMENTS OF COMPREHENSIVE INCOME  
 FOR THE YEAR ENDED DECEMBER 31, 2018  
 CONSOLIDATED

	Note	Unit : US Dollar		Unit : Baht	
		2018	2017	2018	2017
Profit for the year		1,119,609,211	593,538,164	36,206,290,331	20,579,464,721
Other comprehensive income (loss)					
Items that will be reclassified subsequently to profit or loss					
Exchange differences on translating financial statement		(4,808,840)	53,525,981	(502,012,756)	(2,624,279,921)
Gain (loss) on remeasuring available-for-sale securities		(150,837)	28,183	(5,158,138)	1,657,805
Income taxes relating to remeasuring available-for-sale securities		(1,134)	-	(37,087)	-
Gain on cash flow hedges		705,714	13,470,224	15,136,434	440,112,029
Income taxes relating to cash flow hedges		(141,143)	(2,694,044)	(3,027,287)	(88,022,406)
Share of other comprehensive income of associates and joint ventures		336,094	4,038,119	10,828,716	138,147,230
<b>Total Items that will be reclassified subsequently to profit or loss</b>		<b>(4,060,146)</b>	<b>68,368,463</b>	<b>(484,270,118)</b>	<b>(2,132,385,263)</b>
Items that will not be reclassified subsequently to profit or loss					
Exchange differences on translating financial statement		-	-	(2,349,073,515)	(32,660,055,793)
Loss from changes in actuarial assumptions of provision for employee benefit	31	(3,702,983)	-	(121,107,966)	-
Income taxes from changes in actuarial assumptions of provision for employee benefit		774,275	-	25,323,046	-
Share of other comprehensive loss of associates and joint ventures		-	(103,708)	-	(3,618,660)
<b>Total Items that will not be reclassified subsequently to profit or loss</b>		<b>(2,928,708)</b>	<b>(103,708)</b>	<b>(2,444,858,435)</b>	<b>(32,663,674,453)</b>
Other comprehensive income (loss) for the year - net of tax		(6,988,854)	68,264,755	(2,929,128,553)	(34,796,059,716)
<b>Total comprehensive income (loss) for the year</b>		<b>1,112,620,357</b>	<b>661,802,919</b>	<b>33,277,161,778</b>	<b>(14,216,594,995)</b>
Other comprehensive income (loss) attributable to other components of equity					
Continuing operations		(6,988,854)	68,264,755	(2,929,128,553)	(34,796,059,716)
Discontinued operations		-	-	-	-

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF INCOME  
FOR THE YEAR ENDED DECEMBER 31, 2018  
THE COMPANY

	<u>Notes</u>	Unit : US Dollar		Unit : Baht	
		<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Revenues</b>					
Sales		2,832,497,051	2,160,774,039	91,712,945,783	73,216,725,742
Other income					
Gain on foreign exchange		-	17,231,842	-	572,688,229
Interest income		92,885,998	75,983,616	3,019,858,698	2,593,058,146
Gain on financial derivatives		4,659,465	-	166,844,469	-
Other income		115,177,833	108,673,611	3,723,159,334	3,679,055,167
Dividends received from related parties		66,297,020	110,476,453	2,167,208,482	3,704,235,682
<b>Total Revenues</b>		<b>3,111,517,367</b>	<b>2,473,139,561</b>	<b>100,790,016,766</b>	<b>83,765,762,966</b>
<b>Expenses</b>					
Operating expenses		235,458,276	198,369,847	7,628,665,176	6,723,849,659
Exploration expenses		11,874,628	885,028	371,826,640	30,327,904
Administrative expenses	17.1	283,838,494	248,617,979	9,192,753,402	8,372,209,127
Petroleum royalties and remuneration	39	354,062,131	270,096,819	11,464,123,929	9,152,093,006
Depreciation, depletion and amortization		916,664,049	696,010,878	29,724,240,162	23,614,983,096
Other expenses					
Loss on foreign exchange		11,539,391	-	395,104,181	-
Loss on financial derivatives		-	47,168,260	-	1,610,629,085
Finance costs		131,782,407	145,536,523	4,266,270,221	4,937,666,385
<b>Total Expenses</b>		<b>1,945,219,376</b>	<b>1,606,685,334</b>	<b>63,042,983,711</b>	<b>54,441,758,262</b>
<b>Profit before income taxes</b>		<b>1,166,297,991</b>	<b>866,454,227</b>	<b>37,747,033,055</b>	<b>29,324,004,704</b>
Income taxes	25.2	(354,782,123)	(50,288,302)	(11,471,397,351)	(1,616,581,274)
<b>Profit for the year</b>		<b>811,515,868</b>	<b>816,165,925</b>	<b>26,275,635,704</b>	<b>27,707,423,430</b>
<b>Earnings per share</b>					
Basic earnings per share	41	0.20	0.19	6.50	6.39

Notes to financial statements are an integral part of these financial statements

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
 STATEMENTS OF COMPREHENSIVE INCOME  
 FOR THE YEAR ENDED DECEMBER 31, 2018  
 THE COMPANY

	<u>Note</u>	Unit : US Dollar		Unit : Baht	
		<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Profit for the year		811,515,868	816,165,925	26,275,635,704	27,707,423,430
Other comprehensive income (loss)					
Items that will be reclassified subsequently to profit or loss					
Gain on remeasuring available-for-sale securities		5,670	-	185,437	-
Income taxes relating to remeasuring available-for-sale securities		(1,134)	-	(37,087)	-
Gain on cash flow hedges		705,714	13,470,224	15,136,434	440,112,029
Income taxes relating to cash flow hedges		(141,143)	(2,694,044)	(3,027,287)	(88,022,406)
<b>Total Items that will be reclassified subsequently to profit or loss</b>		<b>569,107</b>	<b>10,776,180</b>	<b>12,257,497</b>	<b>352,089,623</b>
Item that will not be reclassified subsequently to profit or loss					
Exchange differences on translating financial statement		-	-	(2,349,073,515)	(32,660,055,793)
Loss from changes in actuarial assumptions of provision for employee benefit	31	(184,084)	-	(6,020,448)	-
Income taxes from changes in actuarial assumptions of provision for employee benefit		92,042	-	3,010,224	-
<b>Total Items that will not be reclassified subsequently to profit or loss</b>		<b>(92,042)</b>	<b>-</b>	<b>(2,352,083,739)</b>	<b>(32,660,055,793)</b>
Other comprehensive income (loss) for the year - net of tax		477,065	10,776,180	(2,339,826,242)	(32,307,966,170)
<b>Total comprehensive income (loss) for the year</b>		<b>811,992,933</b>	<b>826,942,105</b>	<b>23,935,809,462</b>	<b>(4,600,542,740)</b>

Notes to financial statements are an integral part of these financial statements

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CHANGES IN EQUITY  
FOR THE YEAR ENDED DECEMBER 31, 2018  
CONSOLIDATED

Unit : US Dollar

	Other components of equity													Total equity	
	Retained earnings						Other comprehensive income (loss)								
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Exchange differences on translating financial statement	Available-for-sale securities	Income taxes relating to remeasuring of available-for-sale securities		Cash flow hedges	Income taxes relating to cash flow hedges	Share of other comprehensive income (loss) of associates and joint ventures		Total other components of equity
									of available-for-sale securities	of available-for-sale securities					
Balance - as at January 1, 2017	150,683,762	3,439,036,612	1,152,102,940	15,048,319	431,231,212	6,295,794,297	(102,698,834)	(596,170)	-	7,857,788	(1,571,558)	(424,479)	(97,433,253)	11,386,463,889	
<b>Changes in equity for the year</b>															
Interest expenses for subordinated capital debentures	-	-	-	-	-	(52,825,890)	-	-	-	-	-	-	-	(52,825,890)	
Redemption of subordinated capital debentures	-	-	(850,876,457)	-	-	(23,434,261)	-	-	-	-	-	-	-	(874,310,718)	
Issuance of subordinated capital debentures	-	-	853,585,351	-	-	-	-	-	-	-	-	-	-	853,585,351	
Income tax for subordinated capital debentures	-	-	-	-	-	506,678	-	-	-	-	-	-	-	506,678	
Dividends paid	-	-	-	-	-	(458,569,616)	-	-	-	-	-	-	-	(458,569,616)	
Profit for the year	-	-	-	-	-	593,538,164	-	-	-	-	-	-	-	593,538,164	
Other comprehensive income (loss) for the year	-	-	-	-	-	(103,708)	53,525,981	28,183	-	13,470,224	(2,694,044)	4,038,119	68,368,463	68,264,755	
<b>Balance - as at December 31, 2017</b>	<b>150,683,762</b>	<b>3,439,036,612</b>	<b>1,154,811,834</b>	<b>15,048,319</b>	<b>431,231,212</b>	<b>6,354,905,664</b>	<b>(49,172,853)</b>	<b>(567,987)</b>	<b>-</b>	<b>21,328,012</b>	<b>(4,265,602)</b>	<b>3,613,640</b>	<b>(29,064,790)</b>	<b>11,516,652,613</b>	

Unit : US Dollar

	Other components of equity													Total equity	
	Retained earnings						Other comprehensive income (loss)								
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Exchange differences on translating financial statement	Available-for-sale securities	Income taxes relating to remeasuring of available-for-sale securities		Cash flow hedges	Income taxes relating to cash flow hedges	Share of other comprehensive income (loss) of associates and joint ventures		Total other components of equity
									of available-for-sale securities	of available-for-sale securities					
Balance - as at January 1, 2018	150,683,762	3,439,036,612	1,154,811,834	15,048,319	431,231,212	6,354,905,664	(49,172,853)	(567,987)	-	21,328,012	(4,265,602)	3,613,640	(29,064,790)	11,516,652,613	
<b>Changes in equity for the year</b>															
Interest expenses for subordinated capital debentures	-	-	-	-	-	(57,696,014)	-	-	-	-	-	-	-	(57,696,014)	
Income tax for subordinated capital debentures	-	-	-	-	-	4,754,733	-	-	-	-	-	-	-	4,754,733	
Finance cost from issuance of subordinated capital debentures	-	-	(124,302)	-	-	-	-	-	-	-	-	-	-	(124,302)	
Dividends paid	44	-	-	-	-	(555,702,071)	-	-	-	-	-	-	-	(555,702,071)	
Profit for the year	-	-	-	-	-	1,119,609,211	-	-	-	-	-	-	-	1,119,609,211	
Other comprehensive income (loss) for the year	-	-	-	-	-	(2,928,708)	(4,808,840)	(150,837)	(1,134)	705,714	(141,143)	336,094	(4,060,146)	(6,988,854)	
<b>Balance - as at December 31, 2018</b>	<b>150,683,762</b>	<b>3,439,036,612</b>	<b>1,154,687,532</b>	<b>15,048,319</b>	<b>431,231,212</b>	<b>6,862,942,815</b>	<b>(53,981,693)</b>	<b>(718,824)</b>	<b>(1,134)</b>	<b>22,033,726</b>	<b>(4,406,745)</b>	<b>3,949,734</b>	<b>(33,124,936)</b>	<b>12,020,505,316</b>	

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CHANGES IN EQUITY (CONTINUED)  
FOR THE YEAR ENDED DECEMBER 31, 2018  
CONSOLIDATED

Unit : Baht

	Other components of equity														
	Retained earnings						Other comprehensive income (loss)								
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Exchange differences on translating financial statement	Available-for-sale securities	Income taxes relating to remeasuring of available-for-sale securities		Cash flow hedges	Income taxes relating to cash flow hedges	Share of other comprehensive income (loss) of associates and joint ventures	Total other components of equity	Total equity
									of available-for-sale securities	of available-for-sale securities					
Balance - as at January 1, 2017	3,969,985,400	105,417,619,764	37,188,504,448	396,998,540	16,900,000,000	204,771,839,646	39,020,683,018	(21,250,162)	-	364,393,516	(8,985,455)	(15,866,086)	39,338,974,831	407,983,922,629	
<b>Changes in equity for the year</b>															
Interest expenses for subordinated capital debentures	-	-	-	-	-	(1,777,211,658)	-	-	-	-	-	-	-	(1,777,211,658)	
Redemption of subordinated capital debentures	-	-	(27,526,733,243)	-	-	(784,243,839)	-	-	-	-	-	-	-	(28,310,977,082)	
Issuance of subordinated capital debentures	-	-	28,572,583,481	-	-	-	-	-	-	-	-	-	-	28,572,583,481	
Income tax for subordinated capital debentures	-	-	-	-	-	2,834,103	-	-	-	-	-	-	-	2,834,103	
Dividends paid	-	-	-	-	-	(15,879,830,670)	-	-	-	-	-	-	-	(15,879,830,670)	
Profit for the year	-	-	-	-	-	20,579,464,721	-	-	-	-	-	-	-	20,579,464,721	
Other comprehensive income (loss) for the year	-	-	-	-	-	(3,618,660)	(35,284,335,714)	1,657,805	-	440,112,029	(88,022,406)	138,147,230	(34,792,441,056)	(34,796,059,716)	
Balance - as at December 31, 2017	3,969,985,400	105,417,619,764	38,234,354,686	396,998,540	16,900,000,000	206,909,233,643	3,736,347,304	(19,592,357)	-	804,505,545	(97,007,861)	122,281,144	4,546,533,775	376,374,725,808	

Unit : Baht

	Other components of equity														
	Retained earnings						Other comprehensive income (loss)								
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Exchange differences on translating financial statement	Available-for-sale securities	Income taxes relating to remeasuring of available-for-sale securities		Cash flow hedges	Income taxes relating to cash flow hedges	Share of other comprehensive income (loss) of associates and joint ventures	Total other components of equity	Total equity
									of available-for-sale securities	of available-for-sale securities					
Balance - as at January 1, 2018	3,969,985,400	105,417,619,764	38,234,354,686	396,998,540	16,900,000,000	206,909,233,643	3,736,347,304	(19,592,357)	-	804,505,545	(97,007,861)	122,281,144	4,546,533,775	376,374,725,808	
<b>Changes in equity for the year</b>															
Interest expenses for subordinated capital debentures	-	-	-	-	-	(1,876,708,776)	-	-	-	-	-	-	-	(1,876,708,776)	
Income tax for subordinated capital debentures	-	-	-	-	-	154,780,651	-	-	-	-	-	-	-	154,780,651	
Finance cost from issuance of subordinated capital debentures	-	-	(2,600,765)	-	-	-	-	-	-	-	-	-	-	(2,600,765)	
Dividends paid	44	-	-	-	-	(17,863,971,423)	-	-	-	-	-	-	-	(17,863,971,423)	
Profit for the year	-	-	-	-	-	36,206,290,331	-	-	-	-	-	-	-	36,206,290,331	
Other comprehensive income (loss) for the year	-	-	-	-	-	(95,784,920)	(2,851,086,271)	(5,158,138)	(37,087)	15,136,434	(3,027,287)	10,828,716	(2,833,343,633)	(2,929,128,553)	
Balance - as at December 31, 2018	3,969,985,400	105,417,619,764	38,231,753,921	396,998,540	16,900,000,000	223,433,839,506	885,261,033	(24,750,495)	(37,087)	819,641,979	(100,035,148)	133,109,860	1,713,190,142	390,063,387,273	

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CHANGES IN EQUITY  
FOR THE YEAR ENDED DECEMBER 31, 2018  
THE COMPANY

Unit : US Dollar

	Retained earnings						Other components of equity					
							Other comprehensive income (loss)			Total other components of equity	Total equity	
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Income taxes relating to reemeasuring		Income taxes relating to			
							Available-for-sale securities	of available-for-sale securities	Cash flow hedges			cash flow hedges
Balance - as at January 1, 2017	150,683,762	3,439,036,612	1,152,102,940	15,048,319	431,231,212	5,067,305,119	-	-	7,857,788	(1,571,558)	6,286,230	10,261,694,194
Changes in equity for the year												
Interest expenses for subordinated capital debentures	-	-	-	-	-	(46,005,401)	-	-	-	-	-	(46,005,401)
Redemption of subordinated capital debentures	-	-	(850,876,457)	-	-	(23,434,261)	-	-	-	-	-	(874,310,718)
Income tax for subordinated capital debentures	-	-	-	-	-	978,428	-	-	-	-	-	978,428
Dividends paid	-	-	-	-	-	(458,569,616)	-	-	-	-	-	(458,569,616)
Profit for the year	-	-	-	-	-	816,165,925	-	-	-	-	-	816,165,925
Other comprehensive income (loss) for the year	-	-	-	-	-	-	-	-	13,470,224	(2,694,044)	10,776,180	10,776,180
Balance - as at December 31, 2017	150,683,762	3,439,036,612	301,226,483	15,048,319	431,231,212	5,356,440,194	-	-	21,328,012	(4,265,602)	17,062,410	9,710,728,992

Unit : US Dollar

	Retained earnings						Other components of equity					
							Other comprehensive income (loss)			Total other components of equity	Total equity	
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Income taxes relating to reemeasuring		Income taxes relating to			
							Available-for-sale securities	of available-for-sale securities	Cash flow hedges			cash flow hedges
Balance - as at January 1, 2018	150,683,762	3,439,036,612	301,226,483	15,048,319	431,231,212	5,356,440,194	-	-	21,328,012	(4,265,602)	17,062,410	9,710,728,992
Changes in equity for the year												
Interest expenses for subordinated capital debentures	-	-	-	-	-	(17,404,632)	-	-	-	-	-	(17,404,632)
Income tax for subordinated capital debentures	-	-	-	-	-	3,101,597	-	-	-	-	-	3,101,597
Dividends paid	44	-	-	-	-	(555,702,071)	-	-	-	-	-	(555,702,071)
Profit for the year	-	-	-	-	-	811,515,868	-	-	-	-	-	811,515,868
Other comprehensive income (loss) for the year	-	-	-	-	-	(92,042)	5,670	(1,134)	705,714	(141,143)	569,107	477,065
Balance - as at December 31, 2018	150,683,762	3,439,036,612	301,226,483	15,048,319	431,231,212	5,597,858,914	5,670	(1,134)	22,033,726	(4,406,745)	17,631,517	9,952,716,819

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CHANGES IN EQUITY (CONTINUED)  
FOR THE YEAR ENDED DECEMBER 31, 2018  
THE COMPANY

Unit : Baht

	Retained earnings						Other components of equity						
							Other comprehensive income (loss)					Total other components of equity	Total equity
	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Exchange differences on translating financial statement	Available-for-sale securities	Income taxes relating to reemeasuring of available-for-sale securities	Cash flow hedges	Income taxes relating to cash flow hedges		
Balance - as at January 1, 2017	3,969,985,400	105,417,619,764	37,188,504,448	396,998,540	16,900,000,000	170,048,099,303	33,516,549,333	-	-	317,502,941	(72,525,637)	33,761,526,637	367,682,734,092
<b>Changes in equity for the year</b>													
Interest expenses for subordinated capital debentures	-	-	-	-	-	(1,554,416,687)	-	-	-	-	-	-	(1,554,416,687)
Redemption of subordinated capital debentures	-	-	(27,526,733,243)	-	-	(784,243,839)	-	-	-	-	-	-	(28,310,977,082)
Income tax for subordinated capital debentures	-	-	-	-	-	18,525,992	-	-	-	-	-	-	18,525,992
Dividends paid	-	-	-	-	-	(15,879,830,670)	-	-	-	-	-	-	(15,879,830,670)
Profit for the year	-	-	-	-	-	27,707,423,430	-	-	-	-	-	-	27,707,423,430
Other comprehensive income (loss) for the year	-	-	-	-	-	-	(32,660,055,793)	-	-	440,112,029	(88,022,406)	(32,307,966,170)	(32,307,966,170)
<b>Balance - as at December 31, 2017</b>	<b>3,969,985,400</b>	<b>105,417,619,764</b>	<b>9,661,771,205</b>	<b>396,998,540</b>	<b>16,900,000,000</b>	<b>179,555,557,529</b>	<b>856,493,540</b>	<b>-</b>	<b>-</b>	<b>757,614,970</b>	<b>(160,548,043)</b>	<b>1,453,560,467</b>	<b>317,355,492,905</b>

Unit : Baht

	Retained earnings						Other components of equity							
							Other comprehensive income (loss)					Total other components of equity	Total equity	
	Note	Issued and paid-up share capital	Share premium	Subordinated capital debentures	Legal reserve	Reserve for expansion	Unappropriated	Exchange differences on translating financial statement	Available-for-sale securities	Income taxes relating to reemeasuring of available-for-sale securities	Cash flow hedges			Income taxes relating to cash flow hedges
Balance - as at January 1, 2018		3,969,985,400	105,417,619,764	9,661,771,205	396,998,540	16,900,000,000	179,555,557,529	856,493,540	-	-	757,614,970	(160,548,043)	1,453,560,467	317,355,492,905
<b>Changes in equity for the year</b>														
Interest expenses for subordinated capital debentures		-	-	-	-	-	(564,099,593)	-	-	-	-	-	-	(564,099,593)
Income tax for subordinated capital debentures		-	-	-	-	-	100,762,936	-	-	-	-	-	-	100,762,936
Dividends paid	44	-	-	-	-	-	(17,863,971,423)	-	-	-	-	-	-	(17,863,971,423)
Profit for the year		-	-	-	-	-	26,275,635,704	-	-	-	-	-	-	26,275,635,704
Other comprehensive income (loss) for the year		-	-	-	-	-	(3,010,224)	(2,349,073,515)	185,437	(37,087)	15,136,434	(3,027,287)	(2,336,816,018)	(2,339,826,242)
<b>Balance - as at December 31, 2018</b>		<b>3,969,985,400</b>	<b>105,417,619,764</b>	<b>9,661,771,205</b>	<b>396,998,540</b>	<b>16,900,000,000</b>	<b>187,500,874,929</b>	<b>(1,492,579,975)</b>	<b>185,437</b>	<b>(37,087)</b>	<b>772,751,404</b>	<b>(163,575,330)</b>	<b>(883,255,551)</b>	<b>322,963,994,287</b>

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2018  
CONSOLIDATED

	Unit : US Dollar		Unit : Baht	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Cash flows from operating activities</b>				
Profit before income taxes	1,852,267,398	773,456,855	59,970,581,113	26,577,759,785
Adjustment to reconcile profit before income taxes to net cash provided by (used in) operating activities				
Share of profit of associates and joint ventures	(7,932,268)	(9,745,415)	(256,247,378)	(328,715,206)
Depreciation, depletion and amortization	1,848,510,539	1,650,219,726	59,809,002,872	55,983,367,203
Impairment loss on assets	-	558,214,042	-	18,504,889,118
Other provision	11,004,545	-	359,903,221	-
Increase in (reversal of) allowance for decrease in value of inventory to net realizable value	1,642,796	(9,323,117)	46,211,969	(319,258,785)
Write-off of exploration assets	673,405	25,936,298	21,470,147	858,038,433
Other amortization of expenses	11,974,556	7,729,752	380,498,448	262,254,444
Loss on disposal of assets	17,369,216	33,558,675	560,519,399	1,108,215,506
Income recognized from deferred income	(5,457,190)	(5,922,130)	(176,240,204)	(200,848,890)
(Gain) loss on financial derivatives	(35,469,813)	9,446,722	(1,197,296,074)	308,084,042
Provision for employee benefits	13,395,278	12,232,006	432,564,030	414,866,581
Loss (gain) on foreign exchange	8,005,626	(5,360,643)	258,542,066	(181,806,085)
Interest income less than interest expenses	147,261,911	162,878,745	4,765,073,023	5,532,771,275
Loss from divestment of asset	57,768,001	-	1,886,227,194	-
	<b>3,921,014,000</b>	<b>3,203,321,516</b>	<b>126,860,809,826</b>	<b>108,519,617,421</b>
<b>Changes in operating assets (increase) decrease</b>				
Investments in trading securities	(70,000,000)	-	(2,260,653,329)	-
Account receivable - parent company	(70,110,255)	(179,350,306)	(2,264,214,009)	(6,082,661,180)
Trade accounts receivable	22,358,808	(32,178,569)	722,078,767	(1,091,335,366)
Other accounts receivable	8,229,120	(3,028,073)	265,759,818	(102,697,000)
Inventories	(8,167,391)	13,751,271	(263,766,269)	466,374,025
Materials and supplies	17,796,849	22,242,766	574,750,091	754,362,869
Working capital from co-venturers	23,619,877	(1,865,167)	762,805,036	(63,257,086)
Other current assets	(10,113,775)	13,745,030	(326,624,860)	466,162,367
Rights to receive reimbursement from decommissioning funds	(30,364,855)	(15,482,685)	(980,634,427)	(525,094,900)
Prepaid expenses	(401,257)	(498,743)	(12,958,616)	(16,914,855)
Other non-current assets	(5,902,396)	654,891	(190,618,148)	22,210,599
<b>Changes in operating liabilities increase (decrease)</b>				
Trade accounts payable	96,951,729	5,352,952	3,131,060,695	181,545,227
Working capital to co-venturers	1,911,181	336,208	61,721,688	11,402,481
Accrued expenses	365,027	164,467,421	11,788,572	5,577,908,513
Other current liabilities	(5,463,046)	5,317,097	(176,429,323)	180,329,199
Deferred income	1,938,878	-	62,616,171	-
Provision	(103,750,870)	(86,847,295)	(3,350,639,267)	(2,945,423,847)
Other non-current liabilities	(5,010,630)	(4,974,819)	(161,818,541)	(168,720,858)
Currency translation differences	509,984	1,232,254	16,469,946	41,791,846
Interest received from bank deposits	41,713,612	20,365,810	1,347,143,068	690,705,935
Taxation paid	(550,257,922)	(457,659,853)	(17,770,605,756)	(15,521,522,553)
	<b>(644,147,332)</b>	<b>(534,419,810)</b>	<b>(20,802,768,693)</b>	<b>(18,124,834,584)</b>
<b>Net cash flows provided by operating activities</b>	<b>3,276,866,668</b>	<b>2,668,901,706</b>	<b>106,058,041,133</b>	<b>90,394,782,837</b>

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2018  
CONSOLIDATED

	Unit : US Dollar		Unit : Baht	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Cash flows from investing activities</b>				
Cash payment for short-term investments	(1,652,634,859)	(4,415,787,957)	(53,371,921,365)	(149,761,338,851)
Cash received from investing in short-term investments	3,786,110,314	3,442,374,205	122,272,612,620	116,748,035,648
Cash payment for investment in available-for-sale securities	(10,444,330)	-	(337,300,134)	-
Cash payment for long-term loans to related parties	-	(92,750,000)	-	(3,145,613,946)
Cash received from long-term loans to related parties	15,128,483	-	488,575,078	-
Cash payment for business acquisition	(652,851,992)	-	(21,083,886,123)	-
Cash prepayment for business acquisition	(397,779,587)	-	(12,846,310,693)	-
Cash received from divestment of asset	133,091,954	-	4,298,210,984	-
Cash payment for investment in associate	-	(156,609,002)	-	(5,311,390,420)
Cash received from investment in joint ventures	1,048,800	393,300	33,871,046	13,338,760
Increase in other long-term investments	-	(11,307)	-	(383,482)
Dividends received from related parties	5,437,332	5,275,218	175,598,906	178,908,880
Interest received from short-term investments	39,796,666	27,730,121	1,285,235,233	940,466,350
Interest received from loans	3,335,083	575,186	107,706,654	19,507,412
Increase in property, plant and equipment	(1,081,484,756)	(1,331,920,387)	(34,926,601,616)	(45,172,046,816)
Increase in intangible assets	(11,694,808)	(6,163,767)	(377,684,387)	(209,043,990)
Increase in exploration and evaluation assets	(60,772,959)	(22,845,405)	(1,962,665,601)	(774,801,356)
<b>Net cash flows provided by (used in) investing activities</b>	<b>116,285,341</b>	<b>(2,549,739,795)</b>	<b>3,755,440,602</b>	<b>(86,474,361,811)</b>
<b>Cash flows from financing activities</b>				
Payments of debentures	(403,742,006)	-	(13,038,867,283)	-
Payments of long-term loans	(575,134,857)	-	(18,574,007,559)	-
Interest paid for loans	(128,371,867)	(133,512,103)	(4,145,775,533)	(4,528,059,665)
Cash payment for redemption of subordinated capital debentures	-	(874,310,718)	-	(29,652,226,277)
Cash received from issuance of subordinated capital debentures	-	854,695,000	-	28,986,959,692
Finance costs paid for issuance of subordinated capital debentures	(1,226,264)	(66,608)	(39,602,268)	(2,258,995)
Interest paid for subordinated capital debentures	(57,696,014)	(52,825,890)	(1,863,295,513)	(1,791,588,744)
Net cash paid for financial derivative contract	(2,395,365)	-	(77,358,436)	-
Dividends paid	(555,702,071)	(458,569,616)	(17,946,424,798)	(15,552,377,131)
<b>Net cash flows used in financing activities</b>	<b>(1,724,268,444)</b>	<b>(664,589,935)</b>	<b>(55,685,331,390)</b>	<b>(22,539,551,120)</b>
Net increase (decrease) in cash and cash equivalents	1,668,883,565	(545,428,024)	54,128,150,345	(18,619,130,094)
<b>Cash and cash equivalents at the beginning of the year</b>	<b>1,512,181,292</b>	<b>2,039,499,782</b>	<b>49,419,466,004</b>	<b>73,076,515,987</b>
	3,181,064,857	1,494,071,758	103,547,616,349	54,457,385,893
Adjustment for the effect of exchange rate changes	(969,542)	18,109,534	(354,055,559)	(5,037,919,889)
<b>Cash and cash equivalents at the end of the year</b>	<b>3,180,095,315</b>	<b>1,512,181,292</b>	<b>103,193,560,790</b>	<b>49,419,466,004</b>
<b>Supplementary cash flow information</b>				
Unpaid for outstanding payable from purchases of assets	644,480,659	698,995,158	20,813,533,539	23,706,403,413

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2018  
THE COMPANY

	Unit : US Dollar		Unit : Baht	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Cash flows from operating activities</b>				
Profit before income taxes	1,166,297,991	866,454,227	37,747,033,055	29,324,004,704
Adjustment to reconcile profit before income taxes to net cash provided by (used in) operating activities				
Depreciation, depletion and amortization	916,664,049	696,010,878	29,724,240,162	23,614,983,096
Write-off of exploration assets	-	10	-	352
Other amortization of expenses	2,819,502	2,386,563	91,008,481	81,001,548
Loss on disposal of assets	3,845,950	12,629,264	125,242,187	414,542,014
Income recognized from deferred income	(480,490)	(320,844)	(15,517,454)	(10,881,426)
(Gain) loss on financial derivatives	(9,280,591)	30,238,134	(276,885,775)	1,053,188,626
Dividends received from related parties	(66,297,020)	(110,476,453)	(2,167,208,482)	(3,704,235,682)
Provision for employee benefits	11,861,080	10,952,372	383,020,294	371,468,307
Gain on foreign exchange	(112,338,627)	(496,071)	(3,627,981,296)	(16,824,241)
Interest income less than interest expenses	37,555,761	68,044,551	1,203,130,583	2,293,659,439
	<u>1,950,647,605</u>	<u>1,575,422,631</u>	<u>63,186,081,755</u>	<u>53,420,906,737</u>
<b>Changes in operating assets (increase) decrease</b>				
Investments in trading securities	(70,000,000)	-	(2,260,653,329)	-
Account receivable - parent company	(78,095,566)	(104,827,787)	(2,522,100,015)	(3,555,231,795)
Trade accounts receivable	625,855	(243,024)	20,212,011	(8,242,142)
Other accounts receivable	3,325,497	(6,105,635)	107,397,072	(207,072,477)
Inventories	(349,150)	91,070	(11,275,820)	3,088,637
Materials and supplies	8,706,897	7,141,934	281,189,673	242,218,520
Working capital from co-venturers	5,185,491	21,431	167,465,672	726,832
Other current assets	(936,057)	(16,522,450)	(30,230,006)	(560,358,472)
Other non-current assets	(900,936)	448,580	(29,095,763)	15,213,579
<b>Changes in operating liabilities increase (decrease)</b>				
Trade accounts payable	83,575,456	72,431,247	2,699,073,334	2,456,503,953
Working capital to co-venturers	(567,800)	131,049	(18,337,128)	4,444,527
Accrued expenses	42,979,644	(33,027,143)	1,388,029,639	(1,120,114,746)
Other current liabilities	(9,527,802)	11,357,074	(307,700,829)	385,174,861
Deferred income	484,720	-	15,654,047	-
Provision	(84,199,380)	(68,821,437)	(2,719,222,979)	(2,334,077,327)
Other non-current liabilities	(4,338,087)	(4,360,634)	(140,098,728)	(147,890,793)
Interest received from bank deposits	12,949,835	5,886,203	418,215,547	199,630,437
Taxation paid	(301,844,934)	(242,659,850)	(9,748,096,483)	(8,229,802,795)
	<u>(392,926,317)</u>	<u>(379,059,372)</u>	<u>(12,689,574,085)</u>	<u>(12,855,789,201)</u>
<b>Net cash flows provided by operating activities</b>	<u>1,557,721,288</u>	<u>1,196,363,259</u>	<u>50,496,507,670</u>	<u>40,565,117,536</u>

Notes to financial statements are an integral part of these financial statements.

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2018  
THE COMPANY

	Unit : US Dollar		Unit : Baht	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Cash flows from investing activities</b>				
Cash payment for short-term investments	(613,295,843)	(1,891,621,651)	(19,806,418,429)	(64,154,301,309)
Cash received from investing in short-term investments	1,396,434,992	1,946,374,205	45,097,934,486	66,011,232,812
Cash payment for investment in available-for-sale securities	(10,444,330)	-	(337,300,134)	-
Decrease (Increase) in short-term loans to related parties	5,721,081,385	(2,528,555,290)	184,762,595,402	(85,755,889,838)
Cash received from long-term loans to related parties	7,438,539	2,285,196,743	240,227,976	77,502,390,794
Cash payments for long-term loans to related parties	(5,400,588,120)	(7,712,895)	(174,412,250,155)	(261,582,644)
Cash payment for business acquisition	(630,819,897)	-	(20,372,358,575)	-
Cash prepayment for business acquisition	(397,779,587)	-	(12,846,310,693)	-
Cash payment for investment in subsidiaries	(177,751,391)	(40,708,308)	(5,740,489,624)	(1,380,621,241)
Decrease in investment in subsidiary	39,968,574	-	1,290,786,987	-
Increase in other long-term investments	-	(11,307)	-	(383,482)
Dividends received from related parties	66,297,020	110,476,453	2,141,065,419	3,746,806,171
Interest received from short-term investments	12,469,053	15,142,839	402,688,644	513,569,014
Interest received from loans	27,163,187	55,543,408	877,236,423	1,883,753,285
Increase in property, plant and equipment	(476,833,625)	(502,473,131)	(15,399,364,603)	(17,041,363,746)
Increase in intangible assets	(10,014,111)	(5,377,829)	(323,406,180)	(182,388,954)
Increase in exploration and evaluation assets	(4,578,669)	(4,854,883)	(147,868,326)	(164,653,234)
<b>Net cash flows used in investing activities</b>	<b>(451,252,823)</b>	<b>(568,581,646)</b>	<b>(14,573,231,382)</b>	<b>(19,283,432,372)</b>
<b>Cash flows from financing activities</b>				
Payments of debentures	(403,742,006)	-	(13,038,867,283)	-
Payments of long-term loan	(134,857)	-	(4,355,214)	-
Interest paid for loans	(54,206,254)	(90,398,772)	(1,750,593,540)	(3,065,872,141)
Cash payment for redemption of subordinated capital debentures	-	(874,310,718)	-	(29,652,226,277)
Interest paid for subordinated capital debentures	(17,404,632)	(46,005,401)	(562,083,439)	(1,560,272,020)
Net cash paid for financial derivative contract	(2,395,365)	-	(77,358,436)	-
Dividends paid	(555,702,071)	(458,569,616)	(17,946,424,798)	(15,552,377,131)
<b>Net cash flows used in financing activities</b>	<b>(1,033,585,185)</b>	<b>(1,469,284,507)</b>	<b>(33,379,682,710)</b>	<b>(49,830,747,569)</b>
Net increase (decrease) in cash and cash equivalents	72,883,280	(841,502,894)	2,543,593,578	(28,549,062,405)
<b>Cash and cash equivalents at the beginning of the year</b>	<b>387,985,125</b>	<b>1,227,500,948</b>	<b>12,679,708,245</b>	<b>43,982,104,344</b>
	460,868,405	385,998,054	15,223,301,823	15,433,041,939
Adjustment for the effect of exchange rate changes	1,225,002	1,987,071	(228,448,150)	(2,753,333,694)
<b>Cash and cash equivalents at the end of the year</b>	<b>462,093,407</b>	<b>387,985,125</b>	<b>14,994,853,673</b>	<b>12,679,708,245</b>
<b>Supplementary cash flow information</b>				
Unpaid for outstanding payable from purchases of assets	501,400,086	322,471,509	16,192,739,628	10,936,613,220
Long-term loans to related parties for interest rollover	18,004	10,706,065	581,428	363,095,912

Notes to financial statements are an integral part of these financial statements.

## PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2018

## 1. General Information

PTT Exploration and Production Public Company Limited (the Company) is registered as a company in Thailand and listed on the Stock Exchange of Thailand. The address of its registered office is 555/1 Energy Complex Building A, 6<sup>th</sup> and 19<sup>th</sup> – 36<sup>th</sup> Floor, Vibhavadi-Rangsit Road, Chatuchak, Bangkok 10900.

The principal business operations of the Company, subsidiaries, associates, joint ventures and joint operations (the Group) are exploration and production of petroleum in Thailand and overseas, foreign gas pipeline transportation and investment in projects strategically connected to the energy business.

As at December 31, 2018, the Group had operations relating to the exploration and production of petroleum in 11 countries and had investments in exploration and production projects with participating interests as follows:

Project	Country	Operator	Participating interest	
			2018	2017
<b>PTT Exploration and Production Public Company Limited</b>				
Bongkot <sup>1</sup>	Thailand	PTT Exploration and Production Plc.	66.6667	44.4445
Arthit	Thailand	PTT Exploration and Production Plc.	80	80
Contract 4 (B12/27)	Thailand	Chevron Thailand Exploration and Production, Ltd.	45	45
Sinphuhorm (E5 North)	Thailand	PTTEP SP Limited	20	20
S1	Thailand	PTTEP Siam Limited	25	25
Contract 3 (B10, B11, B12 and B13)	Thailand	Chevron Thailand Exploration and Production, Ltd.	5	5
E5	Thailand	ExxonMobil Exploration and Production Khorat Inc.	20	20
Algeria Hassi Bir Rekaiz	People's Democratic Republic of Algeria	PTT Exploration and Production Plc.	24.5	24.5

Project	Country	Operator	Participating interest	
			2018	2017
<b>PTTEP International Limited (PTTEPI)</b>				
Yadana	Republic of the Union of Myanmar	Total E&P Myanmar	25.5	25.5
Yetagun	Republic of the Union of Myanmar	Petronas Carigali Myanmar (Hong Kong) Ltd.	19.31784	19.31784
PTTEP 1	Thailand	PTTEP International Limited	100	100
G4/43	Thailand	Chevron Offshore (Thailand) Ltd.	21.375	21.375
G9/43	Thailand - Kingdom of Cambodia	PTTEP International Limited	100	100
L22/43	Thailand	PTTEP International Limited	100	100
L53/43 & L54/43	Thailand	PTTEP International Limited	100	100
G4/48	Thailand	Chevron Pattani, Ltd.	5	5
Bongkot (G12/48) <sup>1</sup>	Thailand	PTTEP International Limited	66.6667	44.4445
Contract 4 (G7/50)	Thailand	Chevron Pattani, Ltd.	45	45
Arthit (G8/50)	Thailand	PTTEP International Limited	80	80
Zawtika	Republic of the Union of Myanmar	PTTEP International Limited	80	80
Myanmar M3	Republic of the Union of Myanmar	PTTEP International Limited	80	80
Myanmar M11	Republic of the Union of Myanmar	PTTEP International Limited	100	100
MTJDA	Thailand – Malaysia	Carigali-PTTEPI Operating Company Sdn Bhd.	50	50
<b>PTTEP Offshore Investment Company Limited (PTTEPO)</b>				
B8/32 & 9A <sup>2</sup>	Thailand	Chevron Offshore (Thailand) Ltd.	25.001	25.001
<b>PTTEP Southwest Vietnam Company Limited (PTTEP SV)</b>				
Vietnam 52/97	Socialist Republic of Vietnam	Vietnam Oil and Gas Group	7	7
<b>PTTEP Kim Long Vietnam Company Limited (PTTEP KV)</b>				
Vietnam B & 48/95	Socialist Republic of Vietnam	Vietnam Oil and Gas Group	8.5	8.5

Project	Country	Operator	Participating interest	
			2018	2017
<b>PTTEP Hoang-Long Company Limited (PTTEP HL)</b>				
Vietnam 16-1	Socialist Republic of Vietnam	Hoang-Long Joint Operating Company	28.5	28.5
<b>PTTEP Hoan-Vu Company Limited (PTTEP HV)</b>				
Vietnam 9-2	Socialist Republic of Vietnam	Hoan-Vu Joint Operating Company	25	25
<b>PTTEP Algeria Company Limited (PTTEP AG)</b>				
Algeria 433a & 416b	People's Democratic Republic of Algeria	Groupement Bir Seba	35	35
<b>PTTEP Siam Limited (PTTEPS)</b>				
Sinphuhorm (EU-1)	Thailand	PTTEP SP Limited	20	20
B6/27	Thailand	PTTEP Siam Limited	100	100
S1	Thailand	PTTEP Siam Limited	75	75
<b>PTTEP Semai II Limited (PTTEP SM)</b>				
Indonesia Semai II <sup>3</sup>	Republic of Indonesia	Murphy Semai Oil Co., Ltd	-	28.33
<b>PTTEP South Asia Limited (PTTEP SA)</b>				
Myanmar MD-7	Republic of the Union of Myanmar	PTTEP South Asia Limited	50	50
Myanmar MOGE 3	Republic of the Union of Myanmar	PTTEP South Asia Limited	75	75
<b>PTTEP Malunda Limited (PTTEP ML)</b>				
Indonesia Malunda <sup>4</sup>	Republic of Indonesia	PTTEP Malunda Limited	-	100

Project	Country	Operator	Participating interest	
			2018	2017

**PTTEP Canada Limited (PTTEP CA)**

Mariana Oil Sands	Canada	PTTEP Canada Limited	100	100
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**PTTEP Australia Perth Pty Ltd (PTTEP AP)**

PTTEP Australasia *	Commonwealth of Australia			
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\* Details of operators and participating interests in PTTEP Australasia projects are as follows:

Block	Operator	Participating interest	
		2018	2017
AC/L7, AC/L8 <sup>5</sup>	PTTEP Australasia (Ashmore Cartier) Pty Ltd	-	100
AC/RL7, AC/RL12 and AC/P54	PTTEP Australasia (Ashmore Cartier) Pty Ltd	100	100
AC/L1, AC/L2 <sup>6</sup>	PTTEP Australasia (Ashmore Cartier) Pty Ltd	-	100
AC/L3	PTTEP Australasia (Ashmore Cartier) Pty Ltd	100	100
AC/RL10	PTTEP Australia Timor Sea Pty Ltd	90	90
AC/RL4 (Tenacious)	PTTEP Australia Timor Sea Pty Ltd	100	100
AC/RL6 (Audacious), AC/RL6 (exclusive of Audacious)	PTTEP Australia Timor Sea Pty Ltd	100	100
AC/RL4 (exclusive of Tenacious), AC/RL5	PTTEP Australia Timor Sea Pty Ltd	100	100

Project	Country	Operator	Participating interest	
			2018	2017

**Cove Energy Limited (Cove)**

Mozambique Rovuma Offshore Area 1	Republic of Mozambique	Anadarko Mozambique Area 1 Limitada	8.5	8.5
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**Natuna 2 B.V. (Natuna 2)**

Natuna Sea A	Republic of Indonesia	Premier Oil Natuna Sea BV	11.5	11.5
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**PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL)**

Barreirinhas AP1	Federative Republic of Brazil	Shell Brasil Petroleo Ltda.	25	25
Brazil BM-ES-23	Federative Republic of Brazil	Petróleo Brasileiro S.A. (Petrobras)	20	20

Project	Country	Operator	Participating interest	
			2018	2017
<b>PTTEP SP Limited (PTTEP SP)</b>				
Contract 4 (B12/27)	Thailand	Chevron Thailand Exploration and Production, Ltd.	15	15
Sinphuhorm (E5 North and EU-1)	Thailand	PTTEP SP Limited	35	35
<b>PTTEP G7 Limited (PTTEP G7)</b>				
Contract 4 (G7/50)	Thailand	Chevron Pattani, Ltd.	15	15
<b>PTTEP HK Offshore Limited (PTTEP HKO)</b>				
Sarawak SK410B	Malaysia	PTTEP HK Offshore Limited	42.5	42.5
Sarawak SK417 <sup>7</sup>	Malaysia	PTTEP HK Offshore Limited	80	-
Sarawak SK438 <sup>7</sup>	Malaysia	PTTEP HK Offshore Limited	80	-
<b>PTTEP Mexico E&amp;P Limited, S. de R.L. de C.V. (PTTEP MEP)</b>				
Mexico Block 12 (2.4) <sup>8</sup>	Mexico	PC Carigali Mexico Operations, S.A. de C.V.	20	-
Mexico Block 29 (2.4) <sup>8</sup>	Mexico	Repsol Exploración México, S.A. de C.V.	16.67	-

<sup>1</sup> On January 31, 2018, the Company signed an Agreement for the Assignment and Transfer of the 22.2222% participating interests in the Bongkot Project, consisting of Blocks B15, B16, B17 and G12/48, as disclosed in Note 5 - Business Acquisition.

<sup>2</sup> PTTEP Offshore Investment Company Limited (PTTEPO) has shareholding in Orange Energy Limited and B8/32 Partners Limited, which hold the project's concession.

<sup>3</sup> On May 9, 2018, PTTEP Semai II Limited (PTTEP SM) received the official approval from the Government of the Republic of Indonesia to terminate and return the exploration block of Indonesia Semai II Project.

<sup>4</sup> On June 4, 2018, PTTEP Malunda Limited (PTTEP ML) received the official approval from the Government of the Republic of Indonesia to terminate and return the exploration block of Indonesia Malunda Project.

<sup>5</sup> On July 15, 2018, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) signed the Agreement for the Sale of Montara Assets to divest a 100% stake in the Montara field (blocks AC/L7 and AC/L8), as disclosed in Note 6 - Montara Divestment.

<sup>6</sup> On May 7, 2018, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) received the official approval from the Government of Commonwealth of Australia to terminate and return the exploration blocks of AC/L1 and AC/L2.

<sup>7</sup> On March 30, 2018, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, had entered into the Production Sharing Contract to obtain the exploration and production rights of 2 offshore exploration blocks, Sarawak SK417 and Sarawak SK438 located in Malaysia. PTTEP HKO is the operator of the projects.

<sup>8</sup> On January 31, 2018, PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP), a subsidiary of the Group, and its partners had been selected as the successful bidders of 2 exploration blocks located in the Gulf of Mexico, Mexico, which are block 12 in the Mexican Ridges located on the Western Gulf of Mexico and block 29 in the Campeche on the Southern Gulf of Mexico. PTTEP MEP and the consortium signed the concession agreement on May 7, 2018.

## **2. Basis of Financial Statements Preparation**

The consolidated and the Company financial statements have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Act, B.E. 2543, being those Thai Accounting Standards issued under the Accounting Profession Act, B.E. 2547 including the interpretation and accounting guidance announced by the Federation of Accounting Professions, as well as the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act, B.E. 2535.

The Group's management has determined US Dollar as the functional currency and presents its financial statements in US Dollar. However, the Stock Exchange of Thailand and the Department of Business Development require the entity to present its financial statements in Thai Baht, so the Group also presents its financial statements in Thai Baht by translating from US Dollar.

Where the Group has entered into joint interest operations in the Concession or the Production Sharing Contract with other parties to participate in exploration and production of petroleum businesses, the Group records its share of expenses, assets and liabilities incurred in accordance with the Statements of Expenditures prepared by the operators of the Concession or the Production Sharing Contract. The Statements of Expenditures have been audited by other independent auditors on an annual basis and by the joint venture committee on a regular basis.

The consolidated and the Company financial statements have been prepared under the historical cost basis except as disclosed in the accounting policies.

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires management to make estimates and assumptions that affect the amounts of assets, liabilities, revenues and expenses reported in the financial statements. Estimates and assumptions are based on management's past experience and other information available which is reasonable in a particular circumstance. Although these estimates and assumptions are based on management's best knowledge of current events and actions, actual results may differ from these estimates and assumptions.

An English language version of the consolidated and the Company's financial statements has been translated from the statutory financial statements which are prepared in the Thai language. In the event of a conflict or difference in the interpretation between the two languages, the Thai language version of the statutory financial statements shall prevail.

### 3. New and revised Accounting Standards, Financial Reporting Standards, Interpretation to Accounting Standards and Interpretation to Financial Reporting Standards

The new and revised accounting standards, financial reporting standards, interpretation to accounting standards and interpretation to financial reporting standards which are published in the Government Gazette are as follows:

- Effective for the periods beginning on or after January 1, 2018

Thai Accounting Standard No. 1 (Revised 2017)	Presentation of financial statements
Thai Accounting Standard No. 2 (Revised 2017)	Inventories
Thai Accounting Standard No. 7 (Revised 2017)	Statement of cash flows
Thai Accounting Standard No. 8 (Revised 2017)	Accounting policies, changes in accounting estimates and errors
Thai Accounting Standard No. 10 (Revised 2017)	Events after the reporting period
Thai Accounting Standard No. 11 (Revised 2017)	Construction contracts
Thai Accounting Standard No. 12 (Revised 2017)	Income taxes
Thai Accounting Standard No. 16 (Revised 2017)	Property, plant and equipment
Thai Accounting Standard No. 17 (Revised 2017)	Leases
Thai Accounting Standard No. 18 (Revised 2017)	Revenue
Thai Accounting Standard No. 19 (Revised 2017)	Employee benefits
Thai Accounting Standard No. 20 (Revised 2017)	Accounting for government grants and disclosure of government assistance
Thai Accounting Standard No. 21 (Revised 2017)	The effects of changes in foreign exchange rates
Thai Accounting Standard No. 23 (Revised 2017)	Borrowing costs
Thai Accounting Standard No. 24 (Revised 2017)	Related party disclosures
Thai Accounting Standard No. 26 (Revised 2017)	Accounting and reporting by retirement benefit plans
Thai Accounting Standard No. 27 (Revised 2017)	Separate financial statements
Thai Accounting Standard No. 28 (Revised 2017)	Investments in associates and joint ventures
Thai Accounting Standard No. 29 (Revised 2017)	Financial reporting in hyperinflationary economies
Thai Accounting Standard No. 33 (Revised 2017)	Earnings per share
Thai Accounting Standard No. 34 (Revised 2017)	Interim financial reporting
Thai Accounting Standard No. 36 (Revised 2017)	Impairment of assets
Thai Accounting Standard No. 37 (Revised 2017)	Provisions, contingent liabilities and contingent assets

Thai Accounting Standard No. 38 (Revised 2017)	Intangible assets
Thai Accounting Standard No. 40 (Revised 2017)	Investment property
Thai Accounting Standard No. 41 (Revised 2017)	Agriculture
Thai Financial Reporting Standard No. 2 (Revised 2017)	Share-based payment
Thai Financial Reporting Standard No. 3 (Revised 2017)	Business combinations
Thai Financial Reporting Standard No. 4 (Revised 2017)	Insurance contracts
Thai Financial Reporting Standard No. 5 (Revised 2017)	Non-current assets held for sale and discontinued operations
Thai Financial Reporting Standard No. 6 (Revised 2017)	Exploration for and evaluation of mineral resources
Thai Financial Reporting Standard No. 8 (Revised 2017)	Operating segments
Thai Financial Reporting Standard No. 10 (Revised 2017)	Consolidated financial statements
Thai Financial Reporting Standard No. 11 (Revised 2017)	Joint arrangements
Thai Financial Reporting Standard No. 12 (Revised 2017)	Disclosure of interests in other entities
Thai Financial Reporting Standard No. 13 (Revised 2017)	Fair value measurement
Thai Standing Interpretations Committee No. 10 (Revised 2017)	Government assistance – no specific relation to operating activities
Thai Standing Interpretations Committee No. 15 (Revised 2017)	Operating leases - incentives
Thai Standing Interpretations Committee No. 25 (Revised 2017)	Income taxes – changes in the tax status of an entity or its shareholders
Thai Standing Interpretations Committee No. 27 (Revised 2017)	Evaluating the substance of transactions involving the legal form of a lease
Thai Standing Interpretations Committee No. 29 (Revised 2017)	Service concession arrangements : disclosures
Thai Standing Interpretations Committee No. 31 (Revised 2017)	Revenue – barter transactions involving advertising services
Thai Standing Interpretations Committee No. 32 (Revised 2017)	Intangible assets – web site costs
Thai Financial Reporting Interpretations Committee No. 1 (Revised 2017)	Changes in existing decommissioning, restoration and similar liabilities
Thai Financial Reporting Interpretations Committee No. 4 (Revised 2017)	Determining whether an arrangement contains a lease
Thai Financial Reporting Interpretations Committee No. 5 (Revised 2017)	Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds

Thai Financial Reporting Interpretations Committee No. 7 (Revised 2017)	Applying the restatement approach under TAS 29 (Revised 2017) Financial reporting in hyperinflationary economies
Thai Financial Reporting Interpretations Committee No. 10 (Revised 2017)	Interim financial reporting and impairment
Thai Financial Reporting Interpretations Committee No. 12 (Revised 2017)	Service concession arrangements
Thai Financial Reporting Interpretations Committee No. 13 (Revised 2017)	Customer loyalty programmes
Thai Financial Reporting Interpretations Committee No. 14 (Revised 2017)	TAS 19 (Revised 2017) Employee benefits – the limit on a defined benefit asset, minimum funding requirements and their interaction
Thai Financial Reporting Interpretations Committee No. 15 (Revised 2017)	Agreements for the construction of real estate
Thai Financial Reporting Interpretations Committee No. 17 (Revised 2017)	Distributions of non-cash assets to owners
Thai Financial Reporting Interpretations Committee No. 18 (Revised 2017)	Transfers of assets from customers
Thai Financial Reporting Interpretations Committee No. 20 (Revised 2017)	Stripping costs in the production phase of a surface mine
Thai Financial Reporting Interpretations Committee No. 21 (Revised 2017)	Levies

The implementation of these revised accounting standards, financial reporting standards, interpretation to accounting standards and interpretation to financial reporting standards has no significant impact to the financial statements presented.

■ Effective for the periods beginning on or after January 1, 2019

Thai Accounting Standard No. 1 (Revised 2018)	Presentation of financial statements
Thai Accounting Standard No. 2 (Revised 2018)	Inventories
Thai Accounting Standard No. 7 (Revised 2018)	Statement of cash flows
Thai Accounting Standard No. 8 (Revised 2018)	Accounting policies, changes in accounting estimates and errors
Thai Accounting Standard No. 10 (Revised 2018)	Events after the reporting period
Thai Accounting Standard No. 12 (Revised 2018)	Income taxes
Thai Accounting Standard No. 16 (Revised 2018)	Property, plant and equipment
Thai Accounting Standard No. 17 (Revised 2018)	Leases
Thai Accounting Standard No. 19 (Revised 2018)	Employee benefits

Thai Accounting Standard No. 20 (Revised 2018)	Accounting for government grants and disclosure of government assistance
Thai Accounting Standard No. 21 (Revised 2018)	The effects of changes in foreign exchange rates
Thai Accounting Standard No. 23 (Revised 2018)	Borrowing costs
Thai Accounting Standard No. 24 (Revised 2018)	Related party disclosures
Thai Accounting Standard No. 26 (Revised 2018)	Accounting and reporting by retirement benefit plans
Thai Accounting Standard No. 27 (Revised 2018)	Separate financial statements
Thai Accounting Standard No. 28 (Revised 2018)	Investments in associates and joint ventures
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Thai Accounting Standard No. 34 (Revised 2018)	Interim financial reporting
Thai Accounting Standard No. 36 (Revised 2018)	Impairment of assets
Thai Accounting Standard No. 37 (Revised 2018)	Provisions, contingent liabilities and contingent assets
Thai Accounting Standard No. 38 (Revised 2018)	Intangible assets
Thai Accounting Standard No. 40 (Revised 2018)	Investment property
Thai Accounting Standard No. 41 (Revised 2018)	Agriculture
Thai Financial Reporting Standard No. 1 (Revised 2018)	First-time adoption of Thai financial reporting standards
Thai Financial Reporting Standard No. 2 (Revised 2018)	Share-based payment
Thai Financial Reporting Standard No. 3 (Revised 2018)	Business combinations
Thai Financial Reporting Standard No. 4 (Revised 2018)	Insurance contracts
Thai Financial Reporting Standard No. 5 (Revised 2018)	Non-current assets held for sale and discontinued operations
Thai Financial Reporting Standard No. 6 (Revised 2018)	Exploration for and evaluation of mineral resources
Thai Financial Reporting Standard No. 8 (Revised 2018)	Operating segments
Thai Financial Reporting Standard No. 10 (Revised 2018)	Consolidated financial statements
Thai Financial Reporting Standard No. 11 (Revised 2018)	Joint arrangements
Thai Financial Reporting Standard No. 12 (Revised 2018)	Disclosure of interests in other entities
Thai Financial Reporting Standard No. 13 (Revised 2018)	Fair value measurement
Thai Financial Reporting Standard No. 15	Revenue from contracts with customers
Thai Standing Interpretations Committee No. 10 (Revised 2018)	Government assistance – no specific relation to operating activities

Thai Standing Interpretations Committee No. 15 (Revised 2018)	Operating leases - incentives
Thai Standing Interpretations Committee No. 25 (Revised 2018)	Income taxes – changes in the tax status of an entity or its shareholders
Thai Standing Interpretations Committee No. 27 (Revised 2018)	Evaluating the substance of transactions involving the legal form of a lease
Thai Standing Interpretations Committee No. 29 (Revised 2018)	Service concession arrangements : disclosures
Thai Standing Interpretations Committee No. 32 (Revised 2018)	Intangible assets – web site costs
Thai Financial Reporting Interpretations Committee No. 1 (Revised 2018)	Changes in existing decommissioning, restoration and similar liabilities
Thai Financial Reporting Interpretations Committee No. 4 (Revised 2018)	Determining whether an arrangement contains a lease
Thai Financial Reporting Interpretations Committee No. 5 (Revised 2018)	Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds
Thai Financial Reporting Interpretations Committee No. 7 (Revised 2018)	Applying the restatement approach under TAS 29 (Revised 2018) Financial reporting in hyperinflationary economies
Thai Financial Reporting Interpretations Committee No. 10 (Revised 2018)	Interim financial reporting and impairment
Thai Financial Reporting Interpretations Committee No. 12 (Revised 2018)	Service concession arrangements
Thai Financial Reporting Interpretations Committee No. 14 (Revised 2018)	TAS 19 (Revised 2018) Employee benefits – the limit on a defined benefit asset, minimum funding requirements and their interaction
Thai Financial Reporting Interpretations Committee No. 17 (Revised 2018)	Distributions of non-cash assets to owners
Thai Financial Reporting Interpretations Committee No. 20 (Revised 2018)	Stripping costs in the production phase of a surface mine
Thai Financial Reporting Interpretations Committee No. 21 (Revised 2018)	Levies
Thai Financial Reporting Interpretations Committee No. 22	Foreign currency transactions and advance consideration

Thai Financial Reporting Standard No. 15 - Revenue from contracts with customers - will replace the current accounting standards, interpretation to accounting standards and interpretation to financial reporting standards listed below.

Thai Accounting Standard No. 11 (Revised 2017)	Construction contracts
Thai Accounting Standard No. 18 (Revised 2017)	Revenue
Thai Standing Interpretations Committee No. 31 (Revised 2017)	Revenue – barter transactions involving advertising services
Thai Financial Reporting Interpretations Committee No. 13 (Revised 2017)	Customer loyalty programmes
Thai Financial Reporting Interpretations Committee No. 15 (Revised 2017)	Agreements for the construction of real estate
Thai Financial Reporting Interpretations Committee No. 18 (Revised 2017)	Transfers of assets from customers

The Group's management has assessed and concluded that these new and revised accounting standards, financial reporting standards, interpretation to accounting standards and interpretation to financial reporting standards are implemented without significant impact to the financial statements presented.

■ Effective for the periods beginning on or after January 1, 2020

Thai Accounting Standard No. 32	Financial instruments: presentation
Thai Financial Reporting Standard No. 7	Financial instruments: disclosures
Thai Financial Reporting Standard No. 9	Financial instruments
Thai Financial Reporting Interpretations Committee No. 16	Hedges of a net investment in a foreign operation
Thai Financial Reporting Interpretations Committee No. 19	Extinguishing financial liabilities with equity instruments

These accounting standard, financial reporting standards and interpretation to financial reporting standards will replace the accounting standards listed below.

Thai Accounting Standard No. 101	Doubtful accounts and bad debts
Thai Accounting Standard No. 103	Disclosures in the financial statements of banks and similar financial institutions
Thai Accounting Standard No. 104 (Revised 2016)	Accounting for troubled debt restructurings
Thai Accounting Standard No. 105 (Revised 2016)	Accounting for investments in debt and equity securities
Thai Accounting Standard No. 106	Accounting for investment entities
Thai Accounting Standard No. 107 (Revised 2016)	Financial instruments : disclosure and presentation
Thai Standing Interpretations Committee No. 9	Assets transferred by debtors for debt settlement

The Group's management is currently evaluating the impact of adopting these accounting standards, financial reporting standards and interpretation to financial reporting standards for the first time.

#### 4. Significant Accounting Policies

##### 4.1 Preparation of Consolidated Financial Statements

The consolidated financial statements comprise the Company, subsidiaries, associates, joint ventures and joint operations. The major inter-company transactions between the Company, subsidiaries, associates, joint ventures and joint operations are eliminated from the consolidated financial statements.

##### **Subsidiaries**

Subsidiaries are entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns using its power over the entity, including the authority to control the finance and operation policies and generally has more than one half of the voting rights. In assessing the ability to control other entities, the Group considers the existence and the impact of the convertible rights of the instruments, including the potential voting rights in which other entities within the Group have interests. Subsidiaries are consolidated from the date on which control is transferred to the Group and will be disconsolidated from the date that control ceases.

The Group uses the purchase method of accounting to account for the acquisition of subsidiaries. The cost of an acquisition is measured at the fair value of the assets given, equity instruments issued or liabilities incurred at the date of exchange, plus other costs directly attributable to the acquisition. Identifiable assets and liabilities acquired from a business combination are measured initially at their fair values at the acquisition date.

The excess of the cost of acquisition over the fair value of the Group's share of the subsidiary's identifiable net assets acquired is recorded as goodwill. On the other hand, if the cost of acquisition is less than the fair value of the Group's share of the subsidiary's identifiable net assets, the difference is recognized immediately in the statements of income.

Investments in subsidiaries are accounted for at cost less provision for impairment in the Company's financial statements. The cost is adjusted to reflect changes in contingent consideration expected to be paid. The cost also includes direct attributable costs of investment. The Company determines at each reporting date whether there is any indicator that the investment in subsidiaries is impaired. If the indicators exist, the Company will conduct an impairment test. If the recoverable amount of the investment is lower than its carrying value, the Company will recognize the loss in the Company's statement of income.

A list of subsidiaries is set out in Note 18.

### **Associates**

Associates are those entities over which the Group has significant influence over their finance and operation policies, but does not have the ability to control. Investments in associates are accounted for using the equity method in the consolidated financial statements from the date on which the Group gains significant influence until the date that significant influence ceases.

Under the equity method, the investment is initially recognized at cost. Subsequently, the carrying amount is increased or decreased based on the investor's share of the profit or loss of the investee. The Group's investment in associates includes goodwill identifiable on acquisition date.

If the ownership interest in an associate is reduced but significant influence is retained, the Group will reclassify only a proportionate decrease in share ownership previously recognized in other comprehensive income to profit or loss.

The Group's share of its associates' post-acquisition profits or losses and its share of post-acquisition profits or losses in other comprehensive income (loss) are recognized in the statements of income and statements of comprehensive income, respectively. The cumulative post-acquisition movements are adjusted against the carrying amount of the investments. When the Group's share of losses in associates equals or exceeds its interest in the associates, the Group does not recognize further losses, unless it has incurred obligations or has committed to make payments for the liabilities on behalf of the associates.

Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

The Group determines at each reporting date whether there is any indicator that the investment in associates is impaired. If the indicators exist, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount to the share of profit (loss) of associates in the statements of income.

Investments in associates are accounted for at cost less provision for impairment in the Company's financial statements. The cost is adjusted to reflect changes in contingent consideration expected to be paid. The cost also includes direct attributable costs of investment.

A list of associates is set out in Note 18.

## **Joint Arrangements**

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor rather than the legal structure of the joint arrangements. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures and joint operations as follows:

### Joint Ventures

Joint arrangement is classified as joint venture when the Group has rights to the net assets of the arrangement. Investments in joint ventures are accounted for using the equity method in the consolidated financial statements. They are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive income (loss) based on its share proportion. When the Group's share of losses in joint ventures equals or exceeds its interests in the joint ventures (including any long-term interests that, in substance, form part of the Group's net investments in the joint ventures), the Group will not recognize further losses, unless it has incurred obligations or has made the payments for the liabilities on behalf of the joint ventures.

Unrealized gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, accounting policies of the joint ventures have been changed to be conformed with the policies adopted by the Group.

Investments in joint ventures are accounted for at cost less provision for impairment in the Company's financial statements. The cost is adjusted to reflect changes in contingent consideration expected to be paid. The cost also includes direct attributable costs of investment.

### Joint Operations

The Group has classified its investments in the joint arrangements in which the group has the rights to the assets, and obligations for the liabilities relating to the arrangement as joint operations. The Group recognized for its share of assets, liabilities, revenues and expenses relating to the joint operations in accordance with the Group's accounting policies which relate to those assets, liabilities, revenues and expenses.

The Group has not recognized its share of profit or loss resulting from the purchase of assets from the joint operations until the assets are sold to an independent third party.

For details of joint ventures and joint operations, please refer to Note 18.

## **Related Parties**

Related parties are those entities that directly or indirectly control, or are controlled by the Company, or are under common control with the Company. They also include holding companies, fellow subsidiaries, associates and joint ventures.

In considering each relationship between parties, attention is directed to the substance of the relationship, not merely the legal form.

#### 4.2 Foreign Currency Translation

Transactions included in the financial statements of each entity in the Group are measured using US Dollar which is the Group's functional currency.

Foreign currency transactions are translated into functional currency at the exchange rates ruling on the transaction dates. Monetary assets and liabilities denominated in foreign currency remaining at the statements of financial position date are translated into functional currency at the exchange rate ruling on the statements of financial position date. Gains and losses arising from the settlement of foreign currency transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognized in the statements of income in the period in which they are incurred.

To comply with the financial reporting requirements of the Stock Exchange of Thailand and the Department of Business Development, the Group presents the consolidated financial statements by translating from US Dollar to Thai Baht. The assets and liabilities are translated into Thai Baht using the average buying and selling rates determined by the Bank of Thailand at period-end, whereas the statements of income is translated using average exchange rates during the period. Differences from such translations have been presented in other comprehensive income (loss).

#### 4.3 Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand and at banks, and other highly liquid short-term investments with original maturities of three months or less from the date of acquisition.

#### 4.4 Short-term Investments

- Investments with fixed maturity of more than 3 months but within 12 months from the date of acquisition and the Group intends to hold them to maturity are subsequently recognized at amortized cost using the effective yield method less allowance for decrease in value of investments. A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investments is higher than its recoverable amount, the Group will recognize the impairment loss of investments in the statements of income.
- The embedded derivatives in financial assets and liabilities are separately recognized from its main financial instruments when they meet the conditions specified in the accounting standard. However, the entity may designate those financial assets or liabilities with embedded derivative as the financial assets and liabilities measured at fair value through profit or loss if the embedded derivatives significantly modify the cash flows that otherwise would be required by the contract.

#### **4.5 Investments in Trading Securities**

Investments in trading securities are acquired principally for the purpose of generating a profit from the price fluctuation.

Investments in trading securities are initially recognized at cost, which is equal to the fair value of consideration paid plus transaction cost, and subsequently measured at fair value. The fair value of investments is based on value of net assets of the unit trust. The unrealized gains and losses of investments in trading securities are recognized in the statements of income.

#### **4.6 Trade Accounts Receivable**

Trade accounts receivable are carried at net realizable value. An allowance for doubtful accounts is estimated, based on the review of all outstanding trade accounts receivable as at the statements of financial position date. The amount of the allowance is the difference between the carrying amount of the accounts receivable and the amount expected to be collected. Doubtful accounts are recognized as expenses in the statements of income in the year in which they are incurred.

#### **4.7 Inventories**

Inventories are stated at the lower of cost or net realizable value. The cost is determined using the weighted average cost method. Net realizable value is the estimated selling price in the ordinary course of business less the costs of completion and selling expenses.

#### **4.8 Materials and Supplies**

Materials and supplies are stated at the lower of cost or net realizable value. The costs of materials and supplies are determined using the weighted average cost method. The net realizable value is the estimated selling price in the ordinary course of business less the necessary expenses.

#### **4.9 Investments in Available-For-Sale Securities**

Investments in available-for-sale securities are initially recognized at cost, which is equal to the fair value of consideration paid plus transaction cost and subsequently measured at fair value. The fair value of investment is based on close price on the last business day of the reporting period from the investment's reference sources. Unrealized gains or losses of investments in available-for-sale securities are recognized in other comprehensive income (loss).

A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, impairment loss is recognized in the statements of income.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is recognized in the statements of income.

#### 4.10 Other Long-term Investments

The Group classifies Investments in non-marketable equity securities other than investments in subsidiaries, associates, joint ventures and joint operations as general investments and presents them as other long-term investments at cost less provision for impairment in the statements of financial position. A test for impairment is carried out when there is an indicator that the investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, the Group will recognize the impairment loss in the statements of income.

A list of other long-term investments is set out in Note 19.

#### 4.11 Finance Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until the assets are ready for their intended use or sale.

For general borrowings, the Group capitalized the borrowing costs as part of the respective assets using the capitalization rate which is calculated from the weighted average interest rate of the borrowings during the year.

When borrowings are incurred for specific construction or production of qualifying assets, the borrowing costs which are capitalized as part of the costs of the respective assets are borrowing costs incurred during the year less income earned from temporary investment of such borrowings.

The Group records the transaction cost as the deduction from the share premium. The transaction cost comprises direct expense incurred for capital raising activities, such as fees, cost of printing the offering memorandum, financial advisor fees, etc.

Other borrowing costs are recognized as expenses in the period in which they are incurred.

#### 4.12 Property, Plant and Equipment

Property, plant and equipment are presented at cost, after deducting accumulated depreciation and the provision for the impairment of assets.

##### ■ Oil and Gas Properties

The Group follows the Successful Efforts Method in accounting for its assets used for oil and gas exploration and production activities as follows:

##### Cost of Properties

Costs of properties comprise total acquisition costs of petroleum rights or the acquisition costs of the portion of properties, decommissioning costs as well as support equipment and facilities.

Exploratory drilling costs are capitalized as exploration and evaluation assets and will be classified as oil and gas properties of the projects if their exploratory wells have identified proved reserves

that have been found to be commercially producible. However, if the exploratory wells have not identified proved reserves or have identified proved reserves but have not been found to be commercially producible, such drilling costs will be expensed in the statements of income.

Exploration costs, comprising geological and geophysical costs as well as area reservation fees during the exploration stage, are charged to expenses in the statements of income when incurred.

Development costs, whether relating to the successful or unsuccessful development of wells, are capitalized as oil and gas properties.

#### Depreciation and Depletion

The capitalized acquisition costs of petroleum rights are depreciated using the unit of production method based on proved reserves. Depreciation of exploratory wells, development costs as well as decommissioning costs, except unsuccessful projects, are calculated using the unit of production method based on proved reserves or proved developed reserves. The Group recognizes changes in reserve estimates prospectively.

Depreciation for support equipment and facilities is calculated using the straight-line method with an estimated useful life of assets not exceeding 20 years.

Depreciation for remuneration for the renewal of petroleum production is calculated using the straight-line method with an estimated useful life of 10 years in accordance with the agreement.

Proved reserves and proved developed reserves are calculated by the engineers of the Company and are based on the information received from the joint operators.

#### ■ **Pipelines and Others**

Costs of properties comprise purchase prices and other direct costs necessary to bring the asset to working condition suitable for its intended use.

Depreciation of pipelines and others are determined using the straight-line method with an estimated useful life of assets not exceeding 30 years

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down to its recoverable amount.

Gains and losses on disposal of property, plant and equipment are determined by comparing proceeds from disposal with the carrying amount and are recognized in the statements of income when incurred.

The cost of major renovations is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group.

Repair and maintenance costs are recognized as expenses when incurred.

#### **4.13 Carried Costs under Petroleum Sharing Contract**

Under Petroleum Sharing Contracts in which the government has a participating interest, some contracts require the contracting parties, excluding the government, to fund the costs of all exploration operations until the first development area is determined. During the exploration period, the contracting parties will carry an agreed upon proportion of the government's exploration costs (Carried Costs). When the project commences production, such carried costs will be fully recouped or recovered without interest by the contracting parties from the production of petroleum under the agreed procedures.

The Group classifies the carried costs based on petroleum activities under the Successful Efforts Method. The majority of them are recognized in oil and gas properties, exploration and evaluation assets in the statements of financial position and exploration expenses in the statements of income. (For details, please refer to Note 24.)

#### **4.14 Goodwill**

Goodwill arises from the business combination which represents the excess of the fair value of the consideration transferred over the fair value of the net identifiable assets, liabilities and contingent liabilities of the acquired subsidiaries, joint operations, associates or joint ventures undertaking at the date of acquisition.

Goodwill on acquisitions of subsidiaries and joint operations is separately reported in the statements of financial position, while goodwill on acquisitions of associates and joint ventures is included in investments in associates and joint ventures.

Goodwill is not amortized but is annually tested for impairment. Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to a single cash-generating unit or group of cash-generating units that are expected to gain benefit from goodwill from the business combination. Goodwill is presented at cost less accumulated impairment losses.

Impairment losses on goodwill are not reversed. The carrying amount of goodwill is included in the gains and losses on the disposal of business when it is divested.

#### **4.15 Intangible Assets**

Intangible assets are presented at cost, after deducting accumulated amortization and the allowance for the impairment of assets.

Research expenditures are recognized as expenses when incurred. Development cost is recognized as intangible assets when the value can be reliably measured and when the project is assessed that it is technically feasible and is able to provide future economic benefits.

Other intangible assets comprise expenditures incurred to acquire computer software licenses and leasehold rights.

Intangible assets are amortized using the straight-line method according to asset's useful life but not exceeding 30 years.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down to its recoverable amount.

#### 4.16 Exploration and Evaluation Assets

- **Probable Reserves**

Probable reserves represent reserves that are assessed by the Group at the time when there is a purchase of business. Probable reserves will be classified as oil and gas properties once they are proved reserves and amortized using the unit of production method.

- **Exploration and Evaluation Assets**

Exploration and evaluation expenditures are capitalized at cost as exploration and evaluation assets. If the projects have identified the proved reserves that have been found to be commercially producible, the capitalized exploration and evaluation expenditures under these projects will be transferred to oil and gas properties of the projects with proved reserves. Subsequent accounting is described in the accounting policy for property, plant and equipment in Note 4.12 - Property, Plant and Equipment.

The capitalized exploration and evaluation expenditure is written off as expenses in the statements of income in the period in which the projects have not identified proved reserves or have identified proved reserves, but have not been found to be commercially producible.

#### 4.17 Impairment of Assets

The Group's assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may exceed the recoverable amount. Intangible assets that have an indefinite useful life or are not ready to be used are tested for impairment annually.

An impairment loss is recognized for the amount by which the carrying amount of the assets exceeds its recoverable amount which is the higher of an asset's fair value less costs to sell and its value in use, and is recorded in the statements of income. For the purposes of assessing impairment, assets are grouped at the lowest levels in which they are separately identifiable.

Estimates of future cash flows used in the evaluation for impairment of assets which relate to petroleum production are made with consideration of the risk assessment on field and reservoir performance which includes the estimate of proved and unproved reserves.

Allowance for impairment of assets, except when relating to goodwill, is reversed as applicable to the extent that the events or circumstances that triggered the original allowance for impairment change. For this circumstance, the increased carrying amount of the assets from the reversal could not exceed the carrying amount (net of amortization or depreciation), if the Group did not recognize the impairment loss for assets in the prior period.

#### **4.18 Income Taxes**

Income tax expenses for the period comprise current and deferred taxes. Income taxes are recognized in profit or loss, except to the extent that they relate to items recognized in other comprehensive income (loss) or items directly recognized in equity which must be recognized in other comprehensive income (loss) or directly recognized in equity, respectively.

The current income taxes are calculated using the tax rates as identified by tax laws enacted or substantively enacted by the end of reporting period in the countries where the Company and its subsidiaries operate and generate taxable income.

Deferred income taxes are recognized on temporary differences between the tax base of assets and liabilities and their carrying amounts in the financial statements.

However, the deferred income taxes are not accounted for if they arise from initial recognition of assets or liabilities in transactions other than a business combination, that at the time, the transactions affect neither accounting nor taxable profit or loss. Deferred income taxes are determined using tax rates (and tax laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to be applied when the related deferred income tax assets are realized or the deferred income tax liabilities are settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

#### **4.19 Deferred Remuneration under Agreement**

The Company has an obligation to make a payment to the buyer (PTT) under the conditions in the Gas Sales Agreement of Arthit project. The remuneration is classified as non-current asset, presented under the caption "Deferred Remuneration under Agreement", and amortized over the contract life using the straight-line method.

#### **4.20 Borrowings**

The Group records its borrowings at the fair value of the proceeds received, net of transaction costs incurred.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer the settlement of the liability for at least 12 months after the statements of financial position date.

#### 4.21 Leases

- **Leases - where the Group is the lessee**

Leases of property, plant and equipment in which substantially all the risks and rewards of ownership are transferred to the lessee are classified as finance leases. Finance leases are capitalized at the inception of the lease at the lower of the fair value of the leased property or the net present value of the lease payments. Each lease payment is allocated to the principal and to the finance costs so as to achieve a constant interest rate on the liability balance outstanding. The outstanding rental obligations, net of finance costs, are included in liabilities. The interest expenses are recorded in the statements of income over the lease period so as to achieve a constant periodic rate of interest on the remaining balance of the liabilities for each period.

The property, plant and equipment acquired under finance leases are depreciated over the shorter period of the useful life of the asset or the lease term.

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the statements of income on a straight-line basis over the lease period.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognized as an expense in the period in which the termination takes place.

- **Leases - where the Group is the lessor**

Assets leased out under operating leases are included in property, plant and equipment in the statements of financial position. They are depreciated over their expected useful lives on a basis consistent with other similar property, plant and equipment owned by the Group. Rental income is recognized on a straight-line basis over the lease term.

#### 4.22 Employee Benefits

The Group has recognized employee benefits based on the types of benefits which are post-employment benefits and other long-term benefits.

##### **Post-employment Benefits**

The Group has recognized both defined contribution and defined benefit plans as follows:

##### Defined Contribution Plans

The Group's employees have become members of the following provident funds: "Employee of PTTEP Registered Provident Fund", "Sinsataporn Registered Provident Fund" and "TISCO Master Pooled Fund Registered Provident Fund".

The provident funds are funded by payments from employees and from the Group which are held in a separate trustee-administered fund. The Group contributes to the funds at a rate of 3% - 15% of the employees' salaries which are charged to the statements of income in the period the contributions are made.

#### Employee Retirement Benefits

The Group's obligation in respect of the retirement benefit plans is calculated by estimating the amount of future benefits that employees will earn in return for their services to the Group in current and future periods. Such benefits are discounted to the present value using the rate of government debenture yields. The calculation is performed by an independent actuary using the Projected Unit Credit Method. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income (loss) in the period in which they arise.

Past-service costs are recognized immediately in the statements of income.

#### **Other Long-term Benefits**

The Group's other long-term benefits are benefits based on employees' length of service. The Group calculates the amount of these benefits according to the employees' service period.

The expected obligation of these benefits is calculated by independent actuarial experts and accrued over the period of employment based on the same accounting practice used for the employee retirement benefits. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions will be recognized in the statements of income in the period in which they arise.

The Group recognizes the obligation in respect of employee benefits in the statements of financial position under "Provision for Employee Benefit" as disclosed in Note 31.

#### **4.23 Capital Risk Management**

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns to shareholders and benefits to other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

#### **4.24 Reserve for Expansion**

The Group has set aside a reserve for expanding its investments in new projects in the exploration phase, which is generally susceptible to high risk, and for exploration of additional petroleum reserves. The reserve for expansion is set aside at no more than 35% of the net taxable income from its exploration and production activities.

#### **4.25 Revenue Recognition**

Sales revenues are recognized upon delivery of products and customer acceptance.

Interest income is recognized on a time proportion basis, taking into account the effective yield on the asset.

Revenues other than those mentioned above are recognized on an accrual basis.

#### **4.26 Deferred Income under Agreements (Take-or-Pay)**

Under the Gas Sales Agreements, the Group has obligations to supply minimum quantities of gas to a customer in each contract year. If in any contract year, the customer has not taken the minimum quantities of gas according to the Gas Sales Agreements, the customer shall pay for quantities of gas not taken (Take-or-Pay). If the customer is unable to take the minimum contracted quantities in a given year, the volume of gas that the customer has paid for but has not taken in that year (Make-up) can be taken free of charge in subsequent years. Payments received in advance under these agreements are recognized as deferred income. This deferred income is recognized in the statements of income when the gas is subsequently taken.

#### **4.27 Earnings per Share**

Basic earnings per share are calculated by dividing the income for the year attributable to ordinary shareholders less interest expense for subordinated capital debentures by the weighted average number of ordinary shares in issue during the year.

Diluted earnings per share are calculated by dividing the income for the year attributable to shareholders less interest expense for subordinated capital debentures by the weighted average number of ordinary shares in issue during the year, adjusted with dilutive potential ordinary shares. The Company assumes that all dilutive potential ordinary shares are converted into ordinary shares.

#### **4.28 Segment Reporting**

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker is a person responsible for allocating resources and assessing performance of the operating segments that makes strategic decisions.

In considering the segment reporting, the chief operating decision-maker considers product types as well as geographical areas classified by business segments which are identified by different business activities that are subject to risks and returns that are different from those of other business segments.

## 4.29 Financial Instruments

### Financial Assets and Financial Liabilities

The Group classifies its financial assets into 4 categories: (1) at fair value through statements of income, (2) held-to-maturity, (3) loans and receivables and (4) available for sale. The classification depends on the purpose for which the financial assets are acquired. Financial liabilities are classified as (1) at fair value through statements of income, and (2) at amortized cost.

Financial assets and financial liabilities are initially recognized at fair value. In case that financial assets or financial liabilities are not initially recognized at fair value through statements of income, they are recognized at the amount of fair value, net of the transaction costs directly attributable to the acquisition or the issue of such financial assets or financial liabilities. The subsequent measurement of financial assets or financial liabilities depends on their classification.

Loans and receivables, and held-to-maturity financial assets, as well as financial liabilities measured at amortized cost are initially recognized at fair value, net of the transaction cost and are subsequently measured at amortized cost using the effective interest method with gains or losses recognized in the statements of income.

### Impairment of Financial Assets

The Group assesses at each statements of financial position date whether a financial asset or group of financial assets is impaired. If there is objective evidence that an impairment loss has been incurred, the amount of impairment loss is measured as the difference between book value of financial assets and present value of future cash flows discounted using the original effective interest rate according to the contract. Impairment loss is recognized as gains or losses in the statements of income.

### Derivative Financial Instruments and Hedging

The Group recognizes derivative financial instruments in the statements of financial position at fair value and recognizes the changes in the fair value as gains or losses.

For instruments which the Group wishes to claim for hedge accounting as identified in the accounting standard, the hedging instrument effectiveness portion is offset against the hedged item's fair value. When the Group enters into the fair value hedge instruments, the change in fair value of a hedge derivative as well as the change in the fair value of the hedged item attributable to the risk being hedged are recognized as gains or losses.

For cash flow hedges, the effective portion of the gain or loss on the hedging instrument is recognized within other comprehensive income (loss) by presenting in a separate item. Amounts taken to other comprehensive income (loss) are transferred to the statements of income when the hedged transaction affects profit or loss. The ineffective portion is immediately recognized as gains or losses when incurred.

## 5. Business Acquisition

On January 31, 2018, the Company and PTTEP International Limited (PTTEPI), a subsidiary of the Group, had signed an Agreement for the Assignment and Transfer of the 22.2222% participating interests in the Bongkot Project, consisting of Blocks B15, B16 and B17 from Shell Integrated Gas Thailand Pte. Limited and Block G12/48 from Thai Energy Company Limited respectively.

The transaction was completed on June 21, 2018. As a result, the Group's participating interests of Block B15, B16 and B17 of Bongkot Project and Block G12/48 increased from 44.4445% to 66.6667%. The Group is still the operator of the project and classifies the investment as joint operation.

Details of acquired net assets on acquisition date and goodwill are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	Consolidated	Consolidated
	Fair value	Fair value
Cash and cash equivalents	0.50	16.33
Other accounts receivable	0.42	13.84
Inventories	0.44	14.36
Materials and supplies	14.57	479.38
Other current assets	0.48	15.73
Property, plant and equipment	1,317.90	43,343.98
Intangible assets	0.18	5.79
Other non-current assets	0.02	0.71
Trade accounts payable	(6.38)	(209.72)
Accrued expenses	(15.88)	(522.19)
Other current liabilities	(2.10)	(69.15)
Provision for decommissioning costs	(243.47)	(8,007.39)
Provision for remuneration for the renewal of petroleum production	(125.42)	(4,124.80)
Deferred income	(3.73)	(122.52)
Net assets	937.53	30,834.35
<u>Add</u> Deferred tax assets from the effect of accounting	91.04	2,994.12
Goodwill	76.66	2,521.18
Total considerations	1,105.23	36,349.65

	Unit : Million US Dollar	Unit : Million Baht
	The Company	The Company
	Fair value	Fair value
Cash and cash equivalents	0.22	7.17
Other accounts receivable	0.42	13.80
Inventories	0.44	14.36
Materials and supplies	14.23	467.88
Other current assets	0.44	14.62
Property, plant and equipment	1,292.74	42,516.64
Intangible assets	0.17	5.45
Other non-current assets	0.02	0.71
Trade accounts payable	(5.98)	(196.58)
Accrued expenses	(13.74)	(451.83)
Other current liabilities	(1.99)	(65.52)
Provision for decommissioning costs	(241.74)	(7,950.36)
Provision for remuneration for the renewal of petroleum production	(125.42)	(4,124.80)
Deferred income	(1.42)	(46.58)
Net assets	918.39	30,204.96
<u>Add</u> Deferred tax assets from the effect of accounting	89.46	2,942.06
Goodwill	75.16	2,471.83
Total considerations	1,083.01	35,618.85

Goodwill of US Dollar 76.66 million (Baht 2,521.18 million) was a result of benefits which the Group will receive from acquisition of additional participating interests in the project in accordance with the Group's policy to increase its future production. Moreover, it can be used for tax benefit.

The fair value, which is classified as fair value level 3, is estimated using income approach based on discount rate of 3.4%.

**6. Montara divestment**

On July 15, 2018, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA), a subsidiary of the Group, signed the Agreement for the Sale of Montara Assets to divest a 100% stake in the Montara field (block AC/L 7 and AC/L 8), to Jadestone Energy (Eagle) Pty Ltd (Jadestone) with the assets selling value of US Dollar 195 million, the value will be adjusted for the change in working capital until the completion date of the sale.

On September 28, 2018, Jadestone had already fulfilled the Conditions Precedent specified in the agreement. As a result, PTTEP AAA transferred a 99% of legal right and all rights in risk and reward of Montara Assets including its related assets to Jadestone. PTTEP AAA still holds 1% of legal right and, according to the Operator and Transitional Services Agreement, the operatorship transfer to Jadestone is awaiting for approval from National Offshore Petroleum Titles Administrator (NOPTA) and National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), therefore PTTEP AAA is still the operator of Montara. However, if there is any claim regarding Montara oil spill in 2009, PTTEP AAA will be responsible for the claim.

The assets selling value after adjusting the change in working capital according to the agreement was US Dollar 114 million. During the year, the Group had received US Dollar 133 million and the difference will be settled gradually in the future. The Group recognized loss from assets divestment of US Dollar 58 million (Baht 1,886 million) which is presented as other expenses in the consolidated statements of income.

The Montara field is a part of Australian region, as disclosed in Note 42 – Segment information.

**7. Major Estimates and Assumptions**

In order to prepare the financial statements in conformity with the accounting standards, management is required to use estimates and assumptions which impact assets, liabilities, revenues and expenses. The data relating to the major assumptions and uncertainties in the estimate which may have an impact on the carrying amount of assets, liabilities, revenues and expenses presented in the financial statements are as follows:

**Estimation of Petroleum Reserves**

Petroleum reserves are key elements in the Group's investment decision-making process. They are also important elements in testing for impairment. Changes in proved reserves will also affect the present value of the net cash flows and depreciation calculated using the unit-of-production method.

Proved reserves are the quantities of petroleum that are demonstrated with reasonable certainty to be commercially producible in future years from known reservoirs under existing economic and operating conditions including government rules and regulations. The proved reserves have to be examined and assessed annually by the Group's geologists and reservoir engineers.

### **Exploration Costs**

Capitalized exploration drilling costs more than 12 months old are expensed unless (1) proved reserves are booked or (2) commercially producible quantities of reserves are found and they are subject to further exploration or appraisal activity. In making decisions about whether to continue capitalizing exploration drilling costs for a period longer than 12 months, it is necessary to make assumptions about the satisfaction of each condition in the present event. If there is a change in one of these assumptions in a subsequent period, the related capitalized exploration drilling costs would be expensed in that period.

### **Impairment of Assets**

The Company assesses the impairment of assets based on the estimate using the discounted future cash flows. The expected future cash flows are based on management's key assumptions in relation to selling price using the future oil price, estimated future production volume based on a proved and probable reserves and margin rate. These assumptions are based on management's judgment and past experience as well as the future prediction that is believed to be reasonable in the present situation. Changes in the information or new noticeable information may lead to the change in the assumptions and the discount rate for the estimation of the discounted future cash flows.

The assumption of selling price is determined from the short-term oil price based on forward oil price curve and long-term oil price based on demand and supply of oil in the world market.

### **Goodwill and Intangible Assets**

For recognition and measurement of goodwill and intangible assets as of the acquisition date as well as subsequent impairment testing, management uses estimated future cash flows from assets or cash-generating unit and appropriate discount rate to determine the present value of future cash flow.

### **Income Tax**

The Group is subject to income taxes in numerous jurisdictions. Significant judgments are required to determine the worldwide provision for income taxes due to the fact that there are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognizes liabilities for anticipated tax based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will affect the income tax and deferred tax provisions in the period in which such determination is made.

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. Management is required to make an estimate of the number of the deferred tax assets that should be recognized by considering the assumption about the probable future tax benefits in each period. There may be uncertainty associated with the assumption used for the future taxable income in terms of whether any change will affect the recognition of the deferred tax asset.

### **Lease**

In considering whether a lease agreement is an operating lease or a finance lease, management has exercised judgment in assessing terms and conditions of the agreement to ensure whether the risks and rewards of assets are transferred to the Group or not.

### **Employee Benefits**

The provision for employee benefits is estimated based on the amount of future benefits that employees will have earned in return for their services provided to the Group in the current and in future periods. The calculation is performed by an independent actuary using the Projected Unit Credit Method and the relevant assumptions which include financial and demographic assumptions as disclosed in Note 31.

### **Provisions**

The provisions, excluding the provision for employee benefit, are recognized when the Group has a present legal or constructive obligation as a result of a past event and it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated.

#### Provision for Decommissioning Costs

The Group records a provision for decommissioning costs whenever it is probable that there would be an obligation as a result of a past event and the amount of that obligation is reliably estimated by the Group's engineers and management's judgment. The Group recognizes provision for decommissioning costs as part of oil and gas properties, using the discounted present value before tax based on the estimated eventual costs that relate to the removal of the production facilities and amortized based on the unit of production of the proved reserve or the proved developed reserve. The Group recognizes an increase that reflects the passage of time from the unwinding discount in each period, as a finance cost in the statements of income.

The provisions are based on the current situation such as regulations, technologies and prices. The actual results could differ from these estimates as future confirming events occur.

#### Provision for Remuneration for the Renewal of Petroleum Production

The Group has entered into the Supplemental Petroleum Concession Agreement with the Ministry of Energy to extend the petroleum production period for another 10 years. As a result of this extension, the Group has to pay remuneration fee to the Ministry of Energy. The management has estimated the provision for remuneration using the discounted cash flows based on the duration of the new agreement and significant assumptions, such as sales volume data and oil price, etc.

## 8. Cash and Cash Equivalents

Cash and cash equivalents comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Cash on hand and at banks	625.04	700.04	20,282.30	22,877.97
Cash equivalents				
- Fixed deposits	2,009.35	518.29	65,203.14	16,938.01
- Debt securities	515.77	213.14	16,736.58	6,965.71
- Certificate of deposits	-	80.71	-	2,637.78
- Money market fund	29.94	-	971.54	-
Total	3,180.10	1,512.18	103,193.56	49,419.47

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Cash on hand and at banks	31.93	37.28	1,036.05	1,218.08
Cash equivalents				
- Fixed deposits	400.22	270.00	12,987.26	8,823.85
- Certificate of deposits	-	80.71	-	2,637.78
- Money market fund	29.94	-	971.54	-
Total	462.09	387.99	14,994.85	12,679.71

The interest rate on saving deposits held at call with banks for the year ended December 31, 2018 is between 0.00% – 2.50% per annum (during the year 2017: interest rate was between 0.00% - 2.50% per annum).

The interest rate on fixed deposits with banks for the year ended December 31, 2018 is between 0.83% – 6.08% per annum (during the year 2017: interest rate was between 0.20% - 12.09% per annum).

The interest rate on debt securities for the year ended December 31, 2018 is between 1.00% - 1.47% per annum (during the year 2017: interest rate was between 1.00% - 1.51% per annum).

The interest rate on certificate of deposits for the year ended December 31, 2018 is between 1.98% – 2.74% per annum (during the year 2017: interest rate was 2.17% per annum).

## 9. Short-term investments

Short-term investments comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Fixed deposits	770.66	2,502.87	25,007.80	81,796.02
Certificate of deposits	-	452.62	-	14,792.13
Debt securities (with embedded derivatives)	49.87	-	1,618.26	-
Total	820.53	2,955.49	26,626.06	96,588.15

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Fixed deposits	412.83	794.70	13,396.28	25,971.59
Certificate of deposits	-	452.62	-	14,792.13
Debt securities (with embedded derivatives)	49.87	-	1,618.26	-
Total	462.70	1,247.32	15,014.54	40,763.72

The interest rate on fixed deposits with banks that have maturity more than 3 months but within 12 months for the year ended December 31, 2018 is between 1.64% – 3.10% per annum (during the year 2017: interest rate was between 0.90% - 2.30% per annum).

The interest rate on certificate of deposits that have maturity more than 3 months but within 12 months for the year ended December 31, 2018 is between 1.87% – 2.03% per annum (during the year 2017: interest rate was between 1.87% - 2.03% per annum).

Short-term investment in debt securities (with embedded derivatives) that have maturity within 12 months and will be held to maturity, is a financial asset with embedded derivative. The Group classified this short-term investment in debt securities as financial asset measured at the fair value because the embedded derivatives can significantly modify the cash flow of the main instrument. The change in fair value will be recognized through profit or loss.

Movements of short-term investment in debt securities (with embedded derivatives) for the year are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	<u>Consolidated</u>	<u>Consolidated</u>
Balance as at January 1, 2018	-	-
Increase in investment	50.00	1,614.75
Loss on changes in fair value	(0.13)	(3.35)
Currency translation differences	-	6.86
Balance as at December 31, 2018	<u>49.87</u>	<u>1,618.26</u>

	Unit : Million US Dollar	Unit : Million Baht
	<u>The Company</u>	<u>The Company</u>
Balance as at January 1, 2018	-	-
Increase in investment	50.00	1,614.75
Loss on changes in fair value	(0.13)	(3.35)
Currency translation differences	-	6.86
Balance as at December 31, 2018	<u>49.87</u>	<u>1,618.26</u>

#### 10. Investments in Trading Securities

Movements in the investments in trading securities for the year are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	<u>Consolidated</u>	<u>Consolidated</u>
Balance as at January 1, 2018	0.21	6.78
Increase in investment	80.00	2,583.60
Decrease	(10.00)	(322.95)
Gain on changes in fair value	0.43	15.21
Foreign exchange differences	(0.09)	(2.99)
Currency translation differences	-	9.69
Balance as at December 31, 2018	<u>70.55</u>	<u>2,289.34</u>

	Unit : Million US Dollar	Unit : Million Baht
	<u>The Company</u>	<u>The Company</u>
Balance as at January 1, 2018	0.20	6.51
Increase in investment	80.00	2,583.60
Decrease	(10.00)	(322.95)
Gain on changes in fair value	0.43	15.22
Foreign exchange differences	(0.09)	(2.99)
Currency translation differences	-	9.69
Balance as at December 31, 2018	<u>70.54</u>	<u>2,289.08</u>

## 11. Investments in Available-for-sale Securities

Investments in available-for-sale securities comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Current portion of investments in available-for-sale securities	10.45	-	339.10	-
Non-current portion of investments in available-for-sale securities	0.56	0.71	18.07	23.31
<b>Total</b>	<b>11.01</b>	<b>0.71</b>	<b>357.17</b>	<b>23.31</b>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Current portion of investments in available-for-sale securities	10.45	-	339.10	-
Non-current portion of investments in available-for-sale securities	-	-	-	-
<b>Total</b>	<b>10.45</b>	<b>-</b>	<b>339.10</b>	<b>-</b>

Movements in the investments in available-for-sale securities for the year are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	Consolidated	Consolidated
Balance as at January 1, 2018	0.71	23.31
Increase in investment	10.44	337.30
Unrealized loss on remeasuring available-for-sale securities	(0.14)	(5.16)
Currency translation differences	-	1.72
<b>Balance as at December 31, 2018</b>	<b>11.01</b>	<b>357.17</b>

	Unit : Million US Dollar	Unit : Million Baht
	The Company	The Company
Balance as at January 1, 2018	-	-
Increase in investment	10.44	337.30
Unrealized gain on remeasuring available-for-sale securities	0.01	0.19
Currency translation differences	-	1.61
<b>Balance as at December 31, 2018</b>	<b>10.45</b>	<b>339.10</b>

## 12. Account Receivable - Parent Company

Account receivable - parent company comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Sales of petroleum products	637.13	541.66	20,674.75	17,701.80
Gas pipeline construction service	-	24.91	-	814.17
Total	637.13	566.57	20,674.75	18,515.97

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Sales of petroleum products	399.09	296.63	12,950.47	9,694.09
Gas pipeline construction service	-	24.91	-	814.17
Total	399.09	321.54	12,950.47	10,508.26

The analysis of account receivable – parent company based on outstanding age groups is shown below.

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Not yet due	633.54	538.30	20,558.19	17,592.25
Past due				
- Up to 3 months	-	-	-	-
- Over 3 months but not more than 6 months	0.21	-	6.92	-
- Over 6 months but not more than 12 months	0.91	-	29.59	-
- Over 12 months <sup>1</sup>	2.47	28.27	80.05	923.72
Total	637.13	566.57	20,674.75	18,515.97

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Not yet due	395.70	294.18	12,840.45	9,614.04
Past due				
- Up to 3 months	-	-	-	-
- Over 3 months but not more than 6 months	0.01	-	0.38	-
- Over 6 months but not more than 12 months	0.91	-	29.59	-
- Over 12 months up <sup>1</sup>	2.47	27.36	80.05	894.22
Total	399.09	321.54	12,950.47	10,508.26

<sup>1</sup> The Group has demanded for payment from the parent company for this overdue amount and the overdue amount is expected to be collected within 12 months from the statements of financial position date.

### 13. Trade Accounts Receivable

Trade accounts receivable comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Binh Son Refining & Petrochemical Co.,Ltd.	3.07	7.78	99.65	254.38
Myanmar Oil and Gas Enterprise	43.64	31.98	1,416.02	1,045.26
Petco Trading Labuan Company Limited	5.01	5.10	162.51	166.78
Petro-Diamond Singapore (Pte) Ltd.	-	2.86	-	93.55
Petroliam Nasional Berhad	13.90	11.78	450.93	384.85
PetroVietnam Oil Corporation	3.96	6.83	128.57	223.14
PTT International Trading London Ltd.	-	14.14	-	462.17
PV Oil Singapore Pte Ltd.	-	3.40	-	111.22
Repsol Trading Singapore PTE LTD.	2.76	-	89.66	-
SembCorp Gas Pte. Ltd.	5.00	17.23	162.28	563.05
Star Petroleum Refining Plc.	9.27	6.79	300.93	221.92
Vietnam National Oil and Gas Group	0.38	0.51	12.42	16.70
Electricity Generating Authority of Thailand	0.03	0.73	0.95	23.68
Others	0.23	0.30	7.35	9.71
Total	87.25	109.43	2,831.27	3,576.41

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	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Star Petroleum Refining Plc.	0.92	1.35	29.95	44.01
Electricity Generating Authority of Thailand	0.01	0.18	0.24	5.92
Others	0.06	0.07	1.84	2.43
Total	0.99	1.60	32.03	52.36

The analysis of trade accounts receivable based on outstanding age groups is shown below.

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Not yet due	87.06	109.26	2,825.23	3,570.66
Past due				
- Up to 3 months	-	-	-	-
- Over 3 months but not more than 6 months	0.19	-	6.04	-
- Over 6 months but not more than 12 months	-	-	-	-
- Over 12 months	-	0.17	-	5.75
Total	87.25	109.43	2,831.27	3,576.41

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Not yet due	0.99	1.60	32.03	52.36
Past due				
- Up to 3 months	-	-	-	-
- Over 3 months but not more than 6 months	-	-	-	-
- Over 6 months but not more than 12 months	-	-	-	-
- Over 12 months	-	-	-	-
Total	0.99	1.60	32.03	52.36

## 14. Inventories

Inventories comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Inventories	25.17	19.31	816.86	631.23
<u>Less</u> Allowance for decrease in net realizable value	(1.77)	(0.12)	(57.48)	(4.20)
Total	<u>23.40</u>	<u>19.19</u>	<u>759.38</u>	<u>627.03</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Inventories	4.27	3.05	138.60	99.57
<u>Less</u> Allowance for decrease in net realizable value	-	-	-	-
Total	<u>4.27</u>	<u>3.05</u>	<u>138.60</u>	<u>99.57</u>

## 15. Materials and Supplies

Materials and supplies comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Materials and supplies	278.07	317.88	9,023.34	10,388.87
<u>Less</u> Allowance for damage and obsolescence	(19.25)	(19.82)	(624.52)	(647.87)
Total	<u>258.82</u>	<u>298.06</u>	<u>8,398.82</u>	<u>9,741.00</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Materials and supplies	111.70	104.89	3,624.60	3,427.75
<u>Less</u> Allowance for damage and obsolescence	(10.30)	(6.67)	(334.12)	(217.92)
Total	<u>101.40</u>	<u>98.22</u>	<u>3,290.48</u>	<u>3,209.83</u>

## 16. Other Current Assets

Other current assets comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Prepaid expenses	17.26	27.26	560.20	890.77
Accrued income	24.17	12.44	784.17	406.67
Withholding tax and VAT	11.46	7.61	371.96	248.73
Others	12.67	21.36	411.03	697.93
Total	<u>65.56</u>	<u>68.67</u>	<u>2,127.36</u>	<u>2,244.10</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Prepaid expenses	9.40	7.41	304.97	242.32
Accrued income	17.40	14.91	564.48	487.43
Withholding tax and VAT	3.83	3.44	124.46	112.38
Others	0.13	2.86	4.11	93.36
Total	<u>30.76</u>	<u>28.62</u>	<u>998.02</u>	<u>935.49</u>

## 17. Significant Transactions with Related Parties

Significant transactions with related parties are summarized as follows:

## 17.1 Revenues and Expenses with Related Parties

Significant transactions with related parties for the years are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Parent company - PTT Public Company Limited (PTT)				
Sales revenue (world market reference price)	4,485.55	3,727.50	145,157.05	126,362.47
Purchase and other expenses	24.79	36.46	800.62	1,236.40
Subsidiaries, associates, joint ventures and joint operations				
Interest income	0.60	0.57	19.43	19.51
Rental and service expenses	34.74	36.01	1,121.91	1,221.36
Other related parties				
Sales revenue (world market reference price)	55.93	14.14	1,803.20	461.95
Purchase and other expenses	28.59	-	923.30	-
Interest income	3.27	0.99	105.51	32.61
Director and executive management				
Short - term benefits	6.40	4.95	204.94	168.40
Post - employment and other long - term benefits	0.19	0.18	6.18	5.95

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Parent company - PTT Public Company Limited (PTT)				
Sales revenue (world market reference price)	2,819.85	2,148.14	91,304.53	72,788.65
Purchase and other expenses	14.65	24.21	473.25	820.98
Subsidiaries, associates and joint operations				
Interest income	42.17	42.98	1,383.55	1,471.87
Management and service fees	0.32	0.32	10.45	10.98
Rental and service expenses	34.02	34.65	1,098.70	1,175.18
Other related parties				
Purchase and other expenses	12.50	-	403.75	-
Director and executive management				
Short - term benefits	6.40	4.95	204.94	168.40
Post - employment and other long - term benefits	0.19	0.18	6.18	5.95

#### 17.2 Account receivable – Related parties

Account receivable - related parties comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Parent company - PTT Public Company Limited (PTT)				
Account receivable – parent company	637.13	566.57	20,674.75	18,515.97
Other related parties				
Trade accounts receivable	-	14.14	-	462.17

  

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Parent company - PTT Public Company Limited (PTT)				
Account receivable – parent company	399.09	321.54	12,950.47	10,508.26

**17.3 Short-term Loans to Related Parties**

Short-term loans to related parties comprised:

Loans to	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
<b>Subsidiary</b>				
PTTEP Treasury Center Company Limited	1,175.45	6,778.68	38,143.18	221,533.32
Total	1,175.45	6,778.68	38,143.18	221,533.32

**17.4 Long-term Loans to Related Parties**

Long-term loans to related parties comprised:

Loans to	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
<b>Associate</b>				
Energy Complex Company Limited	17.88	17.75	580.00	580.00
<b>Related Party</b>				
PTTGL Investment Limited	77.62	92.75	2,518.81	3,031.15
Total	95.50	110.50	3,098.81	3,611.15

Loans to	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
<b>Subsidiary</b>				
PTTEP Treasury Center Company Limited	5,400.66	7.21	175,250.35	235.59
<b>Associate</b>				
Energy Complex Company Limited	17.87	17.75	580.00	580.00
Total	5,418.53	24.96	175,830.35	815.59

The Company has provided loans to subsidiary for the year ended December 31, 2018 with an interest rate between 3.19% - 3.47% per annum (during the year 2017: interest rate was between 2.40% - 2.61% per annum). The subsidiary shall occasionally repay the loans.

The Company has provided loans to an associate for the year ended December 31, 2018 with an interest rate of 3.35% per annum (during the year 2017: interest rate was 3.35% per annum).

The Group has provided loans to related party for the year ended December 31, 2018 with an interest rate between 3.64% - 4.30% per annum (during the year 2017: interest rate was 3.25% per annum).

Movements in the long-term loans to related parties for the year are as follows:

	Unit : Million US Dollar Consolidated	Unit : Million Baht Consolidated
	Unit : Million US Dollar The Company	Unit : Million Baht The Company
Balance as at January 1, 2018	110.50	3,611.15
Decrease	(15.13)	(488.57)
Foreign exchange differences	0.13	4.08
Currency translation differences	-	(27.85)
Balance as at December 31, 2018	<u>95.50</u>	<u>3,098.81</u>
Balance as at January 1, 2018	24.96	815.59
Increase	5,400.61	174,412.83
Decrease	(7.44)	(240.23)
Foreign exchange differences	0.40	13.08
Currency translation differences	-	829.08
Balance as at December 31, 2018	<u>5,418.53</u>	<u>175,830.35</u>

## 18. Investments in Subsidiaries, Associates, Joint Ventures and Joint Operations

## 18.1 Changes of Investments in Subsidiaries, Associates and Joint Ventures

Changes of investments in subsidiaries, associates and joint ventures are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	<u>Consolidated</u>	<u>Consolidated</u>
Balance as at January 1, 2018	231.37	7,561.23
Share of net profit after income taxes	7.93	256.25
Dividends received from associates	(2.49)	(80.34)
Dividends received from joint ventures	(2.95)	(95.26)
Share of other comprehensive income	0.34	10.83
Increase in investment	4.06	131.15
Decrease in investment	(1.05)	(33.87)
Currency translation differences	-	(52.61)
Balance as at December 31, 2018	<u>237.21</u>	<u>7,697.38</u>
	Unit : Million US Dollar	Unit : Million Baht
	<u>The Company</u>	<u>The Company</u>
Balance as at January 1, 2018	682.78	22,313.89
Increase in investment	177.75	5,740.49
Decrease in investment	(39.24)	(1,267.35)
Currency translation differences	-	(136.33)
Balance as at December 31, 2018	<u>821.29</u>	<u>26,650.70</u>

## 18.2 Investments in Subsidiaries

Details of subsidiaries are as follows:

List of subsidiaries	Registered country	Type of business	Participating interest (%) (including indirect holding)	
			Dec 31, 2018	Dec 31, 2017
1. PTTEP International Limited (PTTEPI)	Thailand	Petroleum	100	100
2. PTTEP Offshore Investment Company Limited (PTTEPO)	Cayman Islands	Petroleum	100	100
3. PTTEP Services Limited (PTTEP Services)	Thailand	Human resource support	100	100
4. PTTEP Siam Limited (PTTEPS)	Thailand	Petroleum	100	100
5. PTTEP HK Holding Limited (PTTEP HK)	Hong Kong	Petroleum	100	100
6. PTTEP Treasury Center Company Limited (PTTEP TC)	Thailand	Treasury center for the Group's business	100	100
7. PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH) <sup>1</sup>	Thailand	Petroleum	100	-
8. PTTEP Business Center Company Limited (PTTEP BC)	Thailand	Petroleum	100	100
9. PTTEP Energy Development Company Limited (PTTEP ED) <sup>2</sup>	Thailand	Petroleum	100	-
10. EP-Tech Ventures Holding Company Limited (EP-Tech) <sup>3</sup>	Thailand	Petroleum-related Technology	100	-
11. AI and Robotics Ventures Company Limited (ARV) <sup>4</sup>	Thailand	Technology	100	-
12. PTTEP Southwest Vietnam Company Limited (PTTEP SV)	Cayman Islands	Petroleum	100	100
13. PTTEP Kim Long Vietnam Company Limited (PTTEP KV)	Cayman Islands	Petroleum	100	100
14. PTTEP Hoang-Long Company Limited (PTTEP HL)	Cayman Islands	Petroleum	100	100
15. PTTEP Hoan-Vu Company Limited (PTTEP HV)	Cayman Islands	Petroleum	100	100
16. PTTEP Algeria Company Limited (PTTEP AG)	Cayman Islands	Petroleum	100	100
17. PTTEP Holding Company Limited (PTTEPH)	Cayman Islands	Petroleum	100	100
18. PTTEP Indonesia Company Limited (PTTEP ID)	Cayman Islands	Petroleum	100	100
19. PTTEP Africa Investment Limited (PTTEP AI)	Cayman Islands	Petroleum	100	100
20. PTTEP Rommana Company Limited (PTTEPR) <sup>5</sup>	Cayman Islands	Petroleum	-	100
21. PTTEP Australia Pty Ltd (PTTEP AU)	Commonwealth of Australia	Petroleum	100	100
22. PTTEP Australia Offshore Pty Ltd (PTTEP AO)	Commonwealth of Australia	Petroleum	100	100
23. PTTEP South Asia Limited (PTTEP SA)	Cayman Islands	Petroleum	100	100
24. PTTEP Semai II Limited (PTTEP SM)	Cayman Islands	Petroleum	100	100

List of subsidiaries	Registered country	Type of business	Participating interest (%) (including indirect holding)	
			Dec 31, 2018	Dec 31, 2017
25. PTTEP Australia Perth Pty Ltd (PTTEP AP)	Commonwealth of Australia	Petroleum	100	100
26. PTTEP Australia Browse Basin Pty Ltd (PTTEP AB)	Commonwealth of Australia	Petroleum	100	100
27. PTTEP Australia Timor Sea Pty Ltd (PTTEP AT)	Commonwealth of Australia	Petroleum	100	100
28. PTTEP Australasia (Operations) Pty Ltd (PTTEP AAO)	Commonwealth of Australia	Petroleum	100	100
29. PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA)	Commonwealth of Australia	Petroleum	100	100
30. PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS)	Commonwealth of Australia	Petroleum	100	100
31. PTTEP International Holding Company Limited (PTTEP IH)	Cayman Islands	Petroleum	100	100
32. PTTEP Southwest Vietnam Pipeline Company Limited (PTTEP SVPC)	Cayman Islands	Gas pipeline transportation	100	100
33. PTTEP FLNG Holding Company Limited (PTTEP FH) <sup>6</sup>	Hong Kong	Petroleum	100	100
34. PTTEP Netherland Holding Limited (PTTEP NL)	Cayman Islands	Petroleum	100	100
35. JV Marine Limited (JV Marine)	Cayman Islands	Petroleum	100	100
36. PTTEP South Mandar Limited (PTTEP SMD)	Cayman Islands	Petroleum	100	100
37. PTTEP South Sageri Limited (PTTEP SS)	Cayman Islands	Petroleum	100	100
38. PTTEP Sadang Limited (PTTEP SD)	Cayman Islands	Petroleum	100	100
39. PTTEP Malunda Limited (PTTEP ML)	Cayman Islands	Petroleum	100	100
40. PTTEP Netherlands Coöperatie U.A. (PTTEP NC)	Netherlands	Petroleum	100	100
41. PTTEP Canada Limited (PTTEP CA)	Canada	Petroleum	100	100
42. PTTEP Canada International Finance Limited (PTTEP CIF)	Canada	Investment funding for the Group's business	100	100
43. Cove Energy Limited (Cove)	United Kingdom of Great Britain and Northern Ireland	Petroleum	100	100
44. Cove Energy Mozambique Rovuma Onshore Limited (CEMROL) <sup>7</sup>	Republic of Cyprus	Petroleum	100	100

List of subsidiaries	Registered country	Type of business	Participating interest (%) (including indirect holding)	
			Dec 31, 2018	Dec 31, 2017
45. Cove Energy East Africa Limited (CEEAL)	Republic of Cyprus	Petroleum	100	100
46. PTTEP Mozambique Area 1 Limited (PTTEP MZA1)	Republic of Cyprus	Petroleum	100	100
47. Cove Energy Kenya Limited (CEKL) <sup>8</sup>	Republic of Kenya	Petroleum	100	100
48. PTTEP Netherlands Holding Coöperatie U.A. (PTTEP NH)	Netherlands	Petroleum	100	100
49. PTTEP Brazil Investment B.V. (PTTEP BI)	Netherlands	Petroleum	100	100
50. PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL)	Federative Republic of Brazil	Petroleum	100	100
51. Sinphuhorm Holdings Limited (SHL)	Cayman Islands	Petroleum	100	100
52. PTTEP SP Limited (PTTEP SP)	United Kingdom of Great Britain and Northern Ireland	Petroleum	100	100
53. PTTEP G7 Limited (PTTEP G7)	Thailand	Petroleum	100	100
54. PTTEP HK Offshore Limited (PTTEP HKO)	Hong Kong	Petroleum	100	100
55. PTTEP MENA Limited (PTTEP MENA) <sup>9</sup>	Hong Kong	Petroleum	100	-
56. PTTEP Mexico E&P Limited, S.de R.L. de C.V. (PTTEP MEP)	Mexico	Petroleum	100	100

<sup>1</sup> On May 8, 2018, the Company established PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH), as disclosed in Note 18.6 - Significant Transactions during the Year.

<sup>2</sup> On May 9, 2018, the Group established PTTEP Energy Development Company Limited (PTTEP ED), as disclosed in Note 18.6 - Significant Transactions during the Year.

<sup>3</sup> On June 4, 2018, the Group established EP-Tech Ventures Holding Company Limited (EP-Tech), as disclosed in Note 18.6 - Significant Transactions during the Year.

<sup>4</sup> On September 21, 2018, the Group established AI and Robotics Ventures Company Limited (ARV), as disclosed in Note 18.6 - Significant Transactions during the Year.

<sup>5</sup> On June 29, 2018, PTTEP Rommana Company Limited (PTTEPR) received the approval of dissolution of the company from the registrar, as disclosed in Note 18.6 - Significant Transactions during the Year.

<sup>6</sup> On August 24, 2017, the Company approved for the registration for the dissolution of PTTEP FLNG Holding Company Limited (PTTEP FH). It is currently in the process of the dissolution.

<sup>7</sup> On May 22, 2017, the Company approved for the registration for the dissolution of Cove Energy Mozambique Rovuma Onshore Limited (CEMROL). It is currently in the process of the dissolution.

<sup>8</sup> On May 22, 2017, the Company approved for the registration for the dissolution of Cove Energy Kenya Limited (CEKL). It is currently in the process of the dissolution.

<sup>9</sup> On September 19, 2018, the Group established and registered as a shareholder of PTTEP MENA Limited (PTTEP MENA), as disclosed in Note 18.6 - Significant Transactions during the Year.

Investments in subsidiaries accounted for using the cost method for the Company's financial statements are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
PTTEP International Limited	516.38	516.38	16,756.56	16,875.89
PTTEP Services Limited	0.08	0.01	2.51	0.21
PTTEP Siam Limited	99.79	99.79	3,238.20	3,261.26
PTTEP Offshore Investment Company Limited	0.005	0.005	0.16	0.16
PTTEP HK Holding Limited	16.87	1.70	547.49	55.57
PTTEP Treasury Center Company Limited	0.07	0.07	2.40	2.42
PTTEP Business Center Company Limited	-	39.24	-	1,282.49
PTTEP Energy Holding (Thailand) Company Limited	162.51	-	5,273.39	-
<b>Total</b>	<b>795.71</b>	<b>657.20</b>	<b>25,820.71</b>	<b>21,478.00</b>

### 18.3 Investments in Associates

Details of associates are as follows:

List of associates <sup>1</sup>	Registered country	Country of operation	Type of business	Participating interest (%) (including indirect holding)	
				Dec 31, 2018	Dec 31, 2017
1. Energy Complex Company Limited (Energy Complex)	Thailand	Thailand	Property rental services	50	50
2. PTT Digital Solutions Company Limited (PTT Digital)	Thailand	Thailand	Information technology and communication services	20	20
3. PTTEP AP Group's Associates <sup>2</sup>	Commonwealth of Australia	Commonwealth of Australia	Air base services	50	50
4. PTT Global LNG Company Limited (PTT GL)	Thailand	Thailand	Petroleum	50	50
5. Leismer Aerodrome Limited (LAL)	Canada	Canada	Air transportation	32	-

<sup>1</sup> All investments in associates have been assessed as immaterial to the Group.

<sup>2</sup> PTTEP AP's group associates are Mungalalu Truscott Airbase Pty Ltd and Troughton Island Pty Ltd.

Investments in associates accounted for using the equity method for the consolidated financial statements and using the cost method for the Company's financial statements are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Energy Complex Company Limited	44.29	40.23	1,437.02	1,314.60
PTT Digital Solutions Company Limited	10.84	9.25	351.89	302.25
PTTEP AP Group's associates	7.14	7.04	231.54	229.97
PTT Global LNG Company Limited	153.66	156.13	4,986.26	5,102.58
Leismer Aerodrome Limited	3.87	-	125.65	-
Total	219.80	212.65	7,132.36	6,949.40

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Energy Complex Company Limited	24.79	24.79	804.42	810.14
PTT Digital Solutions Company Limited	0.79	0.79	25.57	25.75
Total	25.58	25.58	829.99	835.89

Details of share of associates are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	Consolidated	Consolidated
Aggregate carrying amount of share of associates	219.80	7,132.36
Aggregate amounts of the reporting entity's share of;		
Profit from continuing operations	5.24	169.33
Other comprehensive income	0.34	10.83
Total comprehensive income for the year ended Dec 31, 2018	5.58	180.16

## 18.4 Investments in Joint Ventures

Details of joint ventures are as follows:

List of joint ventures <sup>1</sup>	Registered country	Country of operation	Type of business	Participating interest (%) (including indirect holding)	
				Dec 31, 2018	Dec 31, 2017
Erawan 2 FSO Bahamas Limited (Erawan 2) <sup>2</sup>	Bahamas	Thailand	FSO rental services	13.11	13.11

<sup>1</sup> All investments in joint ventures have been assessed as immaterial to the Group.

<sup>2</sup> Erawan 2 has a 100% shareholding in Asia Pacific Marine Services (EF) B.V.

Investments in joint ventures accounted for using the equity method for the consolidated financial statements are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Erawan 2 FSO Bahamas Limited	17.41	18.72	565.02	611.83
Total	17.41	18.72	565.02	611.83

Details of share of joint ventures are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	Consolidated	Consolidated
Aggregate carrying amount of share of joint ventures	17.41	565.02
Aggregate amounts of the reporting entity's share of;		
Profit from continuing operations	2.69	86.92
Total comprehensive income for year ended Dec 31, 2018	2.69	86.92

## 18.5 Investments in Joint Operations

Details of Joint Operations are as follows:

List of joint operations	Registered country	Country of operation	Type of business	Participating interest (%) (including indirect holding)	
				Dec 31, 2018	Dec 31, 2017
1. Carigali – PTTEPI Operating Company Sdn Bhd. (CPOC)	Malaysia	Malaysia	Petroleum	50	50
2. Moattama Gas Transportation Company (MGTC)	Bermuda	Republic of the Union of Myanmar	Gas pipeline transportation	25.5	25.5
3. Taninthayi Pipeline Company LLC (TPC)	Cayman Islands	Republic of the Union of Myanmar	Gas pipeline transportation	19.3178	19.3178
4. Orange Energy Limited (Orange)	Thailand	Thailand	Petroleum	53.9496	53.9496
5. B8/32 Partners Limited (B8/32 Partners)	Thailand	Thailand	Petroleum	25.0009	25.0009
6. Hoang-Long Joint Operating Company	Socialist Republic of Vietnam	Socialist Republic of Vietnam	Petroleum	28.5	28.5
7. Hoan-Vu Joint Operating Company	Socialist Republic of Vietnam	Socialist Republic of Vietnam	Petroleum	25	25
8. Leismer Aerodrome Limited (LAL) <sup>1</sup>	Canada	Canada	Air transportation	-	32
9. Groupement Bir Seba (GBRS)	People's Democratic Republic of Algeria	People's Democratic Republic of Algeria	Petroleum	35	35
10. Andaman Transportation Limited (ATL)	Cayman Islands	Republic of the Union of Myanmar	Gas pipeline transportation	80	80
11. Natuna 2 B.V. (Natuna 2)	Netherlands	Republic of Indonesia	Petroleum	50	50
12. Mozambique LNG1 Company Pte. Ltd. (MZ LNG1) <sup>2</sup>	Singapore	Republic of the Mozambique	Petroleum	-	8.5

<sup>1</sup> During 2018, the Group revisited the classification of the investment according to current situations. As a result, the investment is classified as investment in associate, accounted for using the equity method.

<sup>2</sup> During 2018, the Group revisited the classification of the investment according to current situations. As a result, the investment is classified as other long-term investment, accounted for using the cost method.

## 18.6 Significant Transactions during the Year

### ■ PTTEP Services Limited

On January 23, 2018, PTTEP Services Limited (PTTEP Services), a subsidiary of the Group, increased its authorized share capital of Baht 9,000,000 by issuing of 900,000 newly issued ordinary shares, at the par value of Baht 10 each.

### ■ PTTEP HK Holding Limited

On April 27, 2018, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, increased its authorized share capital by Hong Kong Dollar (HK Dollar) 207,976,286 by increasing its par value per share to HK Dollar 26,080.

On May 4, 2018, PTTEP HK increased its authorized share capital by HK Dollar 15,699,800 by increasing its par value per share to HK Dollar 27,650.

On May 23, 2018, PTTEP HK increased its authorized share capital by HK Dollar 4,082,364 by increasing its par value per share to HK Dollar 28,059.

On July 2, 2018, PTTEP HK increased its authorized share capital by HK Dollar 15,695,000 by increasing its par value per share to HK Dollar 29,628.

On August 10, 2018, PTTEP HK increased its authorized share capital by HK Dollar 197,949,209 by increasing its par value per share to HK Dollar 49,423 per share.

On October 1, 2018, PTTEP HK increased its authorized share capital by HK Dollar 15,654,400 by increasing its par value per share to HK Dollar 50,988.

On December 17, 2018, PTTEP HK increased its authorized share capital by HK Dollar 19,207,326 by increasing its par value per share to HK Dollar 52,909.

### ■ PTTEP Mexico E&P Limited, S. de R.L. de C.V.

On April 27, 2018, PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP), a subsidiary of the Group, increased its authorized share capital by Mexican Peso (MXN) 499,909,600 by issuing of 499,906,600 newly issued ordinary shares, at the par value of MXN 1 each.

On May 23, 2018, PTTEP MEP increased its authorized share capital by MXN 10,271,456 by issuing of 10,271,456 newly issued ordinary shares, at the par value of MXN 1 each.

On August 10, 2018, PTTEP MEP increased its authorized share capital by MXN 470,212,882 by issuing of 470,212,882 newly ordinary shares, at the par value of MXN 1 each.

■ **PTTEP HK Offshore Limited**

On May 4, 2018, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, increased its authorized share capital by HK Dollar 15,699,800 by increasing its par value per share to HK Dollar 6,851.65.

On July 2, 2018, PTTEP HKO increased its authorized share capital by HK Dollar 15,695,000 by increasing its par value per share to HK Dollar 8,421.15.

On October 1, 2018, PTTEP HKO increased its authorized share capital by HK Dollar 15,654,400 by increasing its par value per share to HK Dollar 9,987.

On December 17, 2018, PTTEP HKO increased its authorized share capital by HK Dollar 19,207,326 by increasing its par value per share to HK Dollar 11,907.

■ **PTTEP Energy Holding (Thailand) Company Limited**

On May 8, 2018, the Company established PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH) with a registered capital of Baht 1,000,000. The registered capital comprises 10,000 ordinary shares with a par value of Baht 100 per share. The Company has shareholding interests of 100%.

On June 27, 2018, PTTEP EH increased its authorized share capital by Baht 23,000,000 by issuing of 230,000 newly issued ordinary shares, at the par value of Baht 100 each.

On September 17, 2018, PTTEP EH increased its authorized share capital by Baht 5,246,723,000 by issuing of 52,467,230 newly issued ordinary shares, at the par value of Baht 100 each.

On December 21, 2018, PTTEP EH increased its authorized share capital by Baht 57,500,000 by issuing of 575,000 newly issued ordinary shares, at the par value of Baht 100 each.

■ **PTTEP Energy Development Company Limited**

On May 9, 2018, the Group established PTTEP Energy Development Company Limited (PTTEP ED) with a registered capital of Baht 1,000,000. The registered capital comprises 10,000 ordinary shares with a par value of Baht 100 per share. PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH) has shareholding interests of 100%.

On June 28, 2018, PTTEP ED increased its authorized share capital by Baht 22,000,000 by issuing of 220,000 newly issued ordinary shares, at the par value of Baht 100 each.

On December 25, 2018, PTTEP ED increased its authorized share capital by Baht 57,500,000 by issuing of 575,000 newly issued ordinary shares, at the par value of Baht 100 each.

■ **PTTEP Netherlands Coöperatie U.A.**

On May 30, 2018, PTTEP Netherlands Coöperatie U.A. (PTTEP NC), a subsidiary of the Group, increased its authorized share capital by US Dollar 9,000,000.

On September 27, 2018, PTTEP NC increased its authorized share capital by US Dollar 19,000,000.

■ **PTTEP Canada Limited**

On May 30, 2018, PTTEP Canada Limited (PTTEP CA), a subsidiary of the Group, increased its authorized share capital by Canadian Dollar (CAD) 11,607,300 by issuing of 11,607,300 newly issued ordinary shares, at the par value of CAD 1 each.

On September 27, 2018, PTTEP CA increased its authorized share capital by CAD 24,133,250 by issuing of 24,133,250 newly issued ordinary shares, at the par value of CAD 1 each.

■ **EP-Tech Ventures Holding Company Limited**

On June 4, 2018, the Group established EP-Tech Ventures Holding Company Limited (EP-Tech) with a registered capital of Baht 1,000,000. The registered capital comprises 10,000 ordinary shares with a par value of Baht 100 per share. PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH) has shareholding interests of 100%.

On September 19, 2018, EP-Tech increased its authorized share capital by Baht 30,000,000 by issuing of 300,000 newly issued ordinary shares, at the par value of Baht 100 each.

■ **Cove Energy Limited**

On June 6, 2018, Cove Energy Limited (Cove), a subsidiary of the Group, decreased its authorized share capital by Pound Sterling (GBP) 4,450,729 by decreasing of 445,072,947 ordinary shares, at the par value of GBP 0.01 each.

■ **PTTEP Rommana Company Limited**

On June 29, 2018, PTTEP Rommana Company Limited (PTTEPR) received the approval of dissolution of the Company from the registrar.

■ **PTTEP Business Center Company Limited**

On September 18, 2018, the Group has the shareholding restructure of PTTEP Business Center Company Limited (PTTEP BC), a subsidiary of the Group, by changing shareholders from the Company and PTTEP International Limited (PTTEPI) with shareholding interests of 25% and 75%, respectively to PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH) with shareholding interests of 100%. The shareholding restructure was subject to the transaction under common control and there is no impact on the consolidated financial statements.

■ **PTTEP MENA Limited**

On September 19, 2018, the Group established and registered as a shareholder in PTTEP MENA Limited (PTTEP MENA) with a registered capital of US Dollar 50,000. The registered capital comprises 500 ordinary shares with a par value of US Dollar 100 per share. PTTEP Business Center Company Limited (PTTEP BC) has shareholding interests of 100%.

■ **AI and Robotics Ventures Company Limited**

On September 21, 2018, the Group established AI and Robotics Ventures Company Limited (ARV) with a registered capital of Baht 5,000,000. The registered capital comprises 50,000 ordinary shares with a par value of Baht 100 per share. EP-Tech Ventures Holding Company Limited (EP-Tech), a subsidiary of the Group, has shareholding interests of 100%.

On November 5, 2018, ARV increased its authorized share capital by Baht 25,000,000 by issuing of 250,000 newly issued ordinary shares, at the par value of Baht 100 each.

■ **PTTEP SP Limited**

On October 3, 2018, PTTEP SP Limited (PTTEP SP), a subsidiary of the Group, decreased its authorized share capital of US Dollar 34,000,000 by cancelling of 34,000,000 ordinary shares, at the par value of US Dollar 1 each.

■ **PTTEP G7 Limited**

On November 12, 2018, PTTEP G7 Limited (PTTEP G7), a subsidiary of the Group, increased its authorized share capital by Baht 82,500,000 by issuing of 825,000 newly issued ordinary shares, at the par value of Baht 100 each.

■ **PTTEP FLNG Holding Company Limited**

On December 17, 2018, PTTEP FLNG Holding Company Limited (PTTEP FH), a subsidiary of the Group, increased its authorized share capital by HK Dollar 25,335,922 by increasing its par value per share to HK Dollar 2,534.59.

## 19. Other long-term investments

Other long-term investments accounted for using the cost method in the consolidated and the Company's financial statements are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>
Sarn Palung Social Enterprise Company Limited	0.01	0.01	0.37	0.37
Mozambique LNG1 Company Pte. Ltd.	0.21	-	6.89	-
Total	<u>0.22</u>	<u>0.01</u>	<u>7.26</u>	<u>0.37</u>

  

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>
Sarn Palung Social Enterprise Company Limited	0.01	0.01	0.37	0.37
Total	<u>0.01</u>	<u>0.01</u>	<u>0.37</u>	<u>0.37</u>

## 20. Property, Plant and Equipment

Unit : Million US Dollar

	Consolidated			
	Oil and Gas Properties	Pipeline	Others	Total
<u>Historical cost</u>				
Balance as at January 1, 2017	24,872.30	874.62	131.78	25,878.70
Increase	1,421.45	19.10	2.09	1,442.64
Transfer	24.71	-	-	24.71
Decrease	(92.64)	-	(2.48)	(95.12)
Currency translation differences	0.41	-	0.13	0.54
Balance as at December 31, 2017	26,226.23	893.72	131.52	27,251.47
Acquisition	1,317.90	-	-	1,317.90
Increase	1,061.60	0.68	3.90	1,066.18
Transfer	55.97	-	-	55.97
Decrease	(194.75)	(3.29)	(4.02)	(202.06)
Decrease from divestment of assets	(2,627.38)	-	-	(2,627.38)
Currency translation differences	(0.02)	-	-	(0.02)
Balance as at December 31, 2018	25,839.55	891.11	131.40	26,862.06
<u>Accumulated depreciation</u>				
Balance as at January 1, 2017	(16,120.99)	(188.50)	(71.20)	(16,380.69)
Depreciation for the year	(1,575.18)	(30.28)	(10.33)	(1,615.79)
Decrease	7.90	-	2.38	10.28
Currency translation differences	(0.15)	-	(0.01)	(0.16)
Balance as at December 31, 2017	(17,688.42)	(218.78)	(79.16)	(17,986.36)
Depreciation for the year	(1,818.50)	(29.65)	(8.89)	(1,857.04)
Decrease	23.41	-	3.38	26.79
Decrease from divestment of assets	1,492.80	-	-	1,492.80
Currency translation differences	0.02	-	0.01	0.03
Balance as at December 31, 2018	(17,990.69)	(248.43)	(84.66)	(18,323.78)
<u>Allowance for impairment of assets</u>				
Balance as at January 1, 2017	(1,222.87)	(5.25)	-	(1,228.12)
Transfer	(2.62)	-	-	(2.62)
Balance as at December 31, 2017	(1,225.49)	(5.25)	-	(1,230.74)
Transfer	(4.07)	-	-	(4.07)
Decrease	5.28	-	-	5.28
Decrease from divestment of assets	894.40	-	-	894.40
Balance as at December 31, 2018	(329.88)	(5.25)	-	(335.13)
Net book value as at December 31, 2017	7,312.32	669.69	52.36	8,034.37
Net book value as at December 31, 2018	7,518.98	637.43	46.74	8,203.15

Depreciation included in the statement of income for the year ended December 31, 2017

US Dollar 1,615.79 million

Depreciation included in the statement of income for the year ended December 31, 2018

US Dollar 1,857.04 million

Unit : Million Baht

	Consolidated			
	Oil and Gas Properties	Pipeline	Others	Total
<u>Historical cost</u>				
Balance as at January 1, 2017	891,189.62	31,338.16	4,721.76	927,249.54
Increase	48,208.32	648.04	70.74	48,927.10
Transfer	837.91	-	-	837.91
Decrease	(3,141.72)	-	(84.30)	(3,226.02)
Currency translation differences	(79,997.07)	(2,778.37)	(410.17)	(83,185.61)
Balance as at December 31, 2017	857,097.06	29,207.83	4,298.03	890,602.92
Acquisition	43,343.98	-	-	43,343.98
Increase	34,284.58	22.05	125.84	34,432.47
Transfer	1,807.46	-	-	1,807.46
Decrease	(6,289.46)	(106.37)	(129.74)	(6,525.57)
Decrease from divestment of assets	(84,851.26)	-	-	(84,851.26)
Currency translation differences	(6,903.22)	(206.93)	(30.49)	(7,140.64)
Balance as at December 31, 2018	838,489.14	28,916.58	4,263.64	871,669.36
<u>Accumulated depreciation</u>				
Balance as at January 1, 2017	(577,625.24)	(6,753.99)	(2,551.08)	(586,930.31)
Depreciation for the year	(53,452.52)	(1,029.76)	(350.61)	(54,832.89)
Decrease	268.09	-	80.64	348.73
Currency translation differences	52,735.99	633.70	234.19	53,603.88
Balance as at December 31, 2017	(578,073.68)	(7,150.05)	(2,586.86)	(587,810.59)
Depreciation for the year	(58,837.46)	(958.12)	(287.07)	(60,082.65)
Decrease	755.95	-	109.28	865.23
Decrease from divestment of assets	48,209.91	-	-	48,209.91
Currency translation differences	4,150.12	46.60	17.84	4,214.56
Balance as at December 31, 2018	(583,795.16)	(8,061.57)	(2,746.81)	(594,603.54)
<u>Allowance for impairment of assets</u>				
Balance as at January 1, 2017	(43,815.86)	(188.28)	-	(44,004.14)
Transfer	(88.91)	-	-	(88.91)
Currency translation differences	3,854.87	16.55	-	3,871.42
Balance as at December 31, 2017	(40,049.90)	(171.73)	-	(40,221.63)
Transfer	(131.58)	-	-	(131.58)
Decrease	170.46	-	-	170.46
Decrease from divestment of assets	28,884.69	-	-	28,884.69
Currency translation differences	421.81	1.22	-	423.03
Balance as at December 31, 2018	(10,704.52)	(170.51)	-	(10,875.03)
Net book value as at December 31, 2017	238,973.48	21,886.05	1,711.17	262,570.70
Net book value as at December 31, 2018	243,989.46	20,684.50	1,516.83	266,190.79

Depreciation included in the statement of income for the year ended December 31, 2017

Baht 54,832.89 million

Depreciation included in the statement of income for the year ended December 31, 2018

Baht 60,082.65 million

Unit : Million US Dollar

	The Company		
	Oil and Gas Properties	Others	Total
<u>Historical cost</u>			
Balance as at January 1, 2017	11,008.33	91.01	11,099.34
Increase	641.94	1.90	643.84
Decrease	(6.70)	(2.49)	(9.19)
Balance as at December 31, 2017	11,643.57	90.42	11,733.99
Acquisition	1,292.74	-	1,292.74
Increase	380.30	3.16	383.46
Decrease	(126.38)	(4.02)	(130.40)
Balance as at December 31, 2018	13,190.23	89.56	13,279.79
<u>Accumulated depreciation</u>			
Balance as at January 1, 2017	(7,866.90)	(52.96)	(7,919.86)
Depreciation for the year	(675.45)	(7.91)	(683.36)
Decrease	4.52	2.38	6.90
Balance as at December 31, 2017	(8,537.83)	(58.49)	(8,596.32)
Depreciation for the year	(898.48)	(6.55)	(905.03)
Decrease	0.24	3.38	3.62
Balance as at December 31, 2018	(9,436.07)	(61.66)	(9,497.73)
Net book value as at December 31, 2017	3,105.74	31.93	3,137.67
Net book value as at December 31, 2018	3,754.16	27.90	3,782.06

Depreciation included in the statement of income for the year ended December 31, 2017 US Dollar 683.36 million

Depreciation included in the statement of income for the year ended December 31, 2018 US Dollar 905.03 million

Unit : Million Baht

	The Company		
	Oil and Gas Properties	Others	Total
<u>Historical cost</u>			
Balance as at January 1, 2017	394,435.35	3,260.96	397,696.31
Increase	21,771.48	64.39	21,835.87
Decrease	(227.34)	(84.30)	(311.64)
Currency translation differences	(35,456.81)	(285.93)	(35,742.74)
Balance as at December 31, 2018	380,522.68	2,955.12	383,477.80
Acquisition	42,516.64	-	42,516.64
Increase	12,281.76	101.89	12,383.65
Decrease	(4,081.58)	(129.62)	(4,211.20)
Currency translation differences	(3,218.62)	(21.03)	(3,239.65)
Balance as at December 31, 2018	428,020.88	2,906.36	430,927.24
<u>Accumulated depreciation</u>			
Balance as at January 1, 2017	(281,875.83)	(1,897.69)	(283,773.52)
Depreciation for the year	(22,918.78)	(268.64)	(23,187.42)
Decrease	153.42	80.64	234.06
Currency translation differences	25,617.01	173.96	25,790.97
Balance as at December 31, 2017	(279,024.18)	(1,911.73)	(280,935.91)
Depreciation for the year	(29,137.28)	(211.55)	(29,348.83)
Decrease	7.88	109.28	117.16
Currency translation differences	1,954.61	13.04	1,967.65
Balance as at December 31, 2018	(306,198.97)	(2,000.96)	(308,199.93)
Net book value as at December 31, 2017	101,498.50	1,043.39	102,541.89
Net book value as at December 31, 2018	121,821.91	905.40	122,727.31

Depreciation included in the statement of income for the year ended December 31, 2017

Baht 23,187.42 million

Depreciation included in the statement of income for the year ended December 31, 2018

Baht 29,348.83 million

## 21. Goodwill

	Unit : Million US Dollar	Unit : Million Baht
	Consolidated	Consolidated
<u>Historical cost</u>		
Balance as at January 1, 2017	1,134.08	40,635.07
Currency translation differences	-	(3,572.03)
Balance as at December 31, 2017	1,134.08	37,063.04
Acquisition	76.66	2,521.18
Decrease from divestment of assets	(7.31)	(236.20)
Currency translation differences	-	(296.84)
Balance as at December 31, 2018	1,203.43	39,051.18
<u>Allowance for impairment of assets</u>		
Balance as at January 1, 2017	(119.70)	(4,289.14)
Currency translation differences	-	377.04
Balance as at December 31, 2017	(119.70)	(3,912.10)
Decrease from divestment of assets	7.31	236.20
Currency translation differences	-	28.79
Balance as at December 31, 2018	(112.39)	(3,647.11)
Net book value as at December 31, 2017	1,014.38	33,150.94
Net book value as at December 31, 2018	1,091.04	35,404.07
	Unit : Million US Dollar	Unit : Million Baht
	The Company	The Company
<u>Historical cost</u>		
Balance as at January 1, 2017	-	-
Increase	-	-
Balance as at December 31, 2017	-	-
Acquisition	75.16	2,471.83
Currency translation differences	-	(32.98)
Balance as at December 31, 2018	75.16	2,438.85
Net book value as at December 31, 2017	-	-
Net book value as at December 31, 2018	75.16	2,438.85

## 22. Intangible Assets

Unit : Million US Dollar

	Consolidated		
	Other intangible assets	Development cost	Total
<u>Historical cost</u>			
Balance as at January 1, 2017	157.42	3.24	160.66
Increase	1.55	4.63	6.18
Currency translation differences	0.02	-	0.02
Balance as at December 31, 2017	158.99	7.87	166.86
Acquisition	0.18	-	0.18
Increase	8.00	3.69	11.69
Decrease	(0.36)	(0.30)	(0.66)
Currency translation differences	(0.01)	-	(0.01)
Balance as at December 31, 2018	166.80	11.26	178.06
<u>Accumulated amortization</u>			
Balance as at January 1, 2017	(68.85)	-	(68.85)
Amortization for the period	(13.99)	(0.02)	(14.01)
Currency translation differences	(0.01)	-	(0.01)
Balance as at December 31, 2017	(82.85)	(0.02)	(82.87)
Amortization for the period	(13.14)	(0.09)	(13.23)
Decrease	0.12	-	0.12
Currency translation differences	0.01	-	0.01
Balance as at December 31, 2018	(95.86)	(0.11)	(95.97)
Net book value as at December 31, 2017	76.14	7.85	83.99
Net book value as at December 31, 2018	70.94	11.15	82.09

Unit : Million US Dollar

	Consolidated		
	Other intangible assets	Development cost	Total
<u>Historical cost</u>			
Balance as at January 1, 2017	5,640.75	116.10	5,756.85
Increase	52.70	156.89	209.59
Currency translation differences	(497.36)	(15.91)	(513.27)
Balance as at December 31, 2017	5,196.09	257.08	5,453.17
Acquisition	5.79	-	5.79
Increase	258.36	119.32	377.68
Decrease	(11.56)	(9.65)	(21.21)
Currency translation differences	(36.17)	(1.29)	(37.46)
Balance as at December 31, 2018	5,412.51	365.46	5,777.97
<u>Accumulated amortization</u>			
Balance as at January 1, 2017	(2,467.10)	-	(2,467.10)
Amortization for the period	(474.93)	(0.48)	(475.41)
Currency translation differences	234.14	0.01	234.15
Balance as at December 31, 2017	(2,707.89)	(0.47)	(2,708.36)
Amortization for the period	(424.42)	(3.08)	(427.50)
Decrease	4.10	-	4.10
Currency translation differences	17.64	0.03	17.67
Balance as at December 31, 2018	(3,110.57)	(3.52)	(3,114.09)
Net book value as at December 31, 2017	2,488.20	256.61	2,744.81
Net book value as at December 31, 2018	2,301.94	361.94	2,663.88

Unit : Million US Dollar

	The Company		
	Other intangible assets	Development cost	Total
<u>Historical cost</u>			
Balance as at January 1, 2017	139.92	3.24	143.16
Increase	0.75	4.63	5.38
Currency translation differences	-	-	-
Balance as at December 31, 2017	140.67	7.87	148.54
Acquisition	0.17	-	0.17
Increase	6.32	3.69	10.01
Decrease	(0.07)	(0.30)	(0.37)
Currency translation differences	-	-	-
Balance as at December 31, 2018	147.09	11.26	158.35
<u>Accumulated amortization</u>			
Balance as at January 1, 2017	(62.19)	-	(62.19)
Amortization for the period	(12.39)	(0.02)	(12.41)
Currency translation differences	-	-	-
Balance as at December 31, 2017	(74.58)	(0.02)	(74.60)
Amortization for the period	(12.08)	(0.09)	(12.17)
Decrease	0.02	-	0.02
Currency translation differences	-	-	-
Balance as at December 31, 2018	(86.64)	(0.11)	(86.75)
Net book value as at December 31, 2017	66.09	7.85	73.94
Net book value as at December 31, 2018	60.45	11.15	71.60

Unit : Million US Dollar

	The Company		
	Other intangible assets	Development cost	Total
<u>Historical cost</u>			
Balance as at January 1, 2017	5,013.35	116.10	5,129.45
Increase	25.63	156.89	182.52
Currency translation differences	(441.64)	(15.91)	(457.55)
Balance as at December 31, 2017	4,597.34	257.08	4,854.42
Acquisition	5.45	-	5.45
Increase	204.09	119.32	323.41
Decrease	(2.24)	(9.65)	(11.89)
Currency translation differences	(31.62)	(1.29)	(32.91)
Balance as at December 31, 2018	4,773.02	365.46	5,138.48
<u>Accumulated amortization</u>			
Balance as at January 1, 2017	(2,228.26)	-	(2,228.26)
Amortization for the period	(420.81)	(0.48)	(421.29)
Currency translation differences	211.43	0.01	211.44
Balance as at December 31, 2017	(2,437.64)	(0.47)	(2,438.11)
Amortization for the period	(390.04)	(3.08)	(393.12)
Decrease	0.51	-	0.51
Currency translation differences	15.62	0.03	15.65
Balance as at December 31, 2018	(2,811.55)	(3.52)	(2,815.07)
Net book value as at December 31, 2017	2,159.70	256.61	2,416.31
Net book value as at December 31, 2018	1,961.47	361.94	2,323.41

## 23. Exploration and Evaluation Assets

	Unit : Million US Dollar	Unit : Million Baht
	<u>Consolidated</u>	<u>Consolidated</u>
<u>Historical cost</u>		
Balance as at January 1, 2017	4,981.33	178,484.00
Increase	22.85	774.80
Transfer	(24.71)	(837.91)
Decrease	(1.37)	(46.31)
Currency translation differences	120.12	(11,760.31)
Balance as at December 31, 2017	5,098.22	166,614.27
Increase	60.94	1,968.02
Transfer	(55.97)	(1,807.46)
Decrease	(0.07)	(2.36)
Currency translation differences	(147.32)	(5,957.47)
Balance as at December 31, 2018	4,955.80	160,815.00
<u>Allowance for impairment of assets</u>		
Balance as at January 1, 2017	(1,165.86)	(41,773.33)
Increase	(558.21)	(18,504.89)
Transfer	2.62	88.91
Currency translation differences	(69.79)	1,650.03
Balance as at January 31, 2017	(1,791.24)	(58,539.28)
Transfer	4.07	131.58
Currency translation differences	143.72	5,077.89
Balance as at December 31, 2018	(1,643.45)	(53,329.81)
Net book value as at December 31, 2017	3,306.98	108,074.99
Net book value as at December 31, 2018	3,312.35	107,485.19

	Unit : Million US Dollar	Unit : Million Baht
	The Company	The Company
<u>Historical cost</u>		
Balance as at January 1, 2017	140.45	5,032.51
Increase	4.86	164.65
Currency translation differences	-	(448.37)
Balance as at December 31, 2017	145.31	4,748.79
Increase	4.58	147.87
Currency translation differences	-	(32.87)
Balance as at December 31, 2018	149.89	4,863.79
Net book value as at December 31, 2017	145.31	4,748.79
Net book value as at December 31, 2018	149.89	4,863.79

#### 24. Carried Costs under Petroleum Sharing Contract

As at December 31, 2018, the Group presented carried costs paid for the foreign governments under oil and gas properties, exploration and evaluation assets and other non-current assets in the statements of financial position and exploration expenses in the statements of income for the following projects:

Unit : Million US Dollar				
Consolidated				
Projects	Carried Costs			
	Oil and Gas Properties	Exploration and Evaluation Assets	Other Non-current Assets	Exploration Expenses (Cumulative since 2004 – December 31, 2018)
Vietnam 52/97	-	-	1.01	-
Vietnam B & 48/95	-	-	1.06	-
Algeria 433a & 416b	7.95	-	-	12.22
Algeria Hassi Ber Rekaiz	0.16	75.67	-	25.96
Myanmar MOGE 3	-	-	-	0.56
Mozambique Rovuma Offshore Area 1	16.06	47.61	0.04	15.55
Sarawak SK410B	0.03	0.12	-	0.83
Sarawak SK417	-	-	-	0.26
Sarawak SK438	-	-	-	0.25

Unit : Million Baht

Consolidated				
Projects	Carried Costs			
	Oil and Gas Properties	Exploration and Evaluation Assets	Other Non-current Assets	Exploration Expenses (Cumulative since 2004 – December 31, 2018)
Vietnam 52/97	-	-	32.74	-
Vietnam B & 48/95	-	-	34.26	-
Algeria 433a & 416b	257.99	-	-	406.77
Algeria Hassi Ber Rekaiz	5.17	2,455.54	-	838.26
Myanmar MOGE 3	-	-	-	19.35
Mozambique Rovuma Offshore Area 1	521.01	1,544.83	1.22	489.00
Sarawak SK410B	0.86	4.04	-	27.61
Sarawak SK417	-	-	-	8.51
Sarawak SK438	-	-	-	8.14

Unit : Million US Dollar

The Company			
Project	Carried Costs		
	Oil and Gas Properties	Exploration and Evaluation Assets	Exploration Expenses (Cumulative since 2010 – December 31, 2018)
Algeria Hassi Ber Rekaiz	0.16	75.67	25.96

Unit : Million Baht

The Company			
Project	Carried Costs		
	Oil and Gas Properties	Exploration and Evaluation Assets	Exploration Expenses (Cumulative since 2010 – December 31, 2018)
Algeria Hassi Ber Rekaiz	5.17	2,455.54	838.26

## 25. Income Taxes and Deferred Taxes

Income tax rates for the Group are as follows:

	<u>Tax Rate (%)</u>
Petroleum income tax on petroleum businesses in Thailand	
pursuant to Petroleum Income Tax Act, B.E. 2514 and 2532	50
Corporate income tax under Revenue Code <sup>(1)</sup>	20
Corporate income tax in the Republic of the Union of Myanmar	25
Income tax from the Petroleum business in the Malaysia - Thailand	
Joint Development Area under the Petroleum Income Tax Act (No.5), B.E. 2541	
and Petroleum Income tax in Malaysia	
- From the first to the eighth accounting period	0
- From the ninth to the fifteenth accounting period	10
- From the sixteenth accounting period onwards	20
Corporate income tax in the Socialist Republic of Vietnam	50
Corporate income tax in Australia	30
Petroleum resource rent tax in Australia	40
Corporate income tax in Canada	27
Corporate income tax in the Netherlands	25
Corporate income tax in the Republic of Kenya	30
Corporate income tax in the Republic of Mozambique	32
Corporate income tax in Indonesia	
- Corporate income tax	30
- Income tax from the profit distribution	20
Corporate income tax in the Federative Republic of Brazil	34
Corporate income tax in the People's Democratic Republic of Algeria	38
Petroleum Income tax in Malaysia	38
Corporate income tax in Mexico	30

(1) The Royal Decree issued under Revenue Code Governing (No. 586) B.E. 2558 governs the reduction of the corporate income tax rate from 20% to 10% for International Headquarters (IHQ), which provides services to affiliated enterprises or domestic and overseas branch in Treasury Center (TC) and exempt from the corporate income tax for certain income. The Group has applied such tax rates to calculate the corporate income tax for the fiscal year 2018.

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## 25.1 Deferred tax assets and liabilities comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Deferred tax assets	462.55	416.12	15,009.67	13,599.08
Deferred tax liabilities	(854.02)	(963.02)	(27,712.72)	(31,472.39)
	<u>(391.47)</u>	<u>(546.90)</u>	<u>(12,703.05)</u>	<u>(17,873.31)</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Deferred tax assets	315.46	202.52	10,236.75	6,618.65
Deferred tax liabilities	-	(146.79)	-	(4,797.14)
	<u>315.46</u>	<u>55.73</u>	<u>10,236.75</u>	<u>1,821.51</u>

## 25.2 The income taxes in the consolidated and the Company statements of income comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Income Taxes :				
Current income tax expenses	841.73	508.62	27,120.93	17,208.41
Prior year income tax expenses recognized in current period	19.96	7.77	774.44	266.22
	<u>861.69</u>	<u>516.39</u>	<u>27,895.37</u>	<u>17,474.63</u>
Deferred Taxes :				
Change in temporary differences	(114.99)	(175.86)	(3,671.18)	(5,963.43)
Tax effect of currency translation on tax base	(14.04)	(160.96)	(459.90)	(5,524.25)
	<u>(129.03)</u>	<u>(336.82)</u>	<u>(4,131.08)</u>	<u>(11,487.68)</u>
Total	<u>732.66</u>	<u>179.57</u>	<u>23,764.29</u>	<u>5,986.95</u>

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	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Income Taxes :				
Current income tax expenses	521.96	290.92	16,895.60	9,808.99
Prior year income tax expenses recognized in current period	0.04	9.18	2.62	312.21
	<u>522.00</u>	<u>300.10</u>	<u>16,898.22</u>	<u>10,121.20</u>
Deferred Taxes :				
Change in temporary differences	(154.25)	(155.00)	(5,001.95)	(5,249.71)
Tax effect of currency translation on tax base	(12.97)	(94.81)	(424.87)	(3,254.91)
	<u>(167.22)</u>	<u>(249.81)</u>	<u>(5,426.82)</u>	<u>(8,504.62)</u>
Total	<u>354.78</u>	<u>50.29</u>	<u>11,471.40</u>	<u>1,616.58</u>

25.3 The income tax on the Group's profit before income taxes differ from the theoretical amount that would arise using the basic tax rate of the country in which the Company is located are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Profit before income taxes	1,852.27	773.46	59,970.58	26,577.76
Tax calculated at a tax rate of 50%	926.13	386.73	29,985.29	13,288.88
Tax effect of :				
(Gain) loss from the entities not subject to tax	(3.98)	18.56	(128.74)	637.82
Nondeductible expenses	451.95	389.67	14,632.69	13,390.06
Adjustment in respect of prior year	19.96	7.77	774.44	266.22
Results of operations of associates and joint venture, net of tax	(3.96)	(4.87)	(128.12)	(167.44)
Tax credit on petroleum royalty	(449.75)	(345.65)	(14,561.41)	(11,877.17)
Tax credit on foreign corporate income tax	(11.59)	(12.55)	(375.16)	(431.29)
Deferred tax on functional currency	(14.04)	(160.96)	(459.90)	(5,524.25)
Differences in tax rate of the Group's operating countries	(193.55)	(108.89)	(6,266.62)	(3,741.62)
Others	11.49	9.76	291.82	145.74
<b>Income taxes</b>	<b>732.66</b>	<b>179.57</b>	<b>23,764.29</b>	<b>5,986.95</b>

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	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Profit before income taxes	1,166.30	866.45	37,747.03	29,324.00
Tax calculated at a tax rate of 50%	583.15	433.23	18,873.52	14,662.00
Tax effect of :				
Gain from the entities not subject to tax	(33.15)	(55.24)	(1,072.85)	(1,869.47)
Nondeductible expenses	170.03	15.70	5,502.95	531.24
Adjustment in respect of prior year	0.04	9.18	2.62	312.21
Tax credit on petroleum royalty	(354.06)	(270.10)	(11,464.12)	(9,141.07)
Deferred tax on functional currency	(12.97)	(94.81)	(424.87)	(3,254.91)
Differences in tax rate on profit before income tax	1.63	6.16	52.67	208.24
Others	0.11	6.17	1.48	168.34
<b>Income taxes</b>	<b>354.78</b>	<b>50.29</b>	<b>11,471.40</b>	<b>1,616.58</b>

25.4 Changes in deferred tax assets and liabilities are as follows:

Unit : Million US Dollar

	Consolidated					
	As at Jan 1, 2018	Statement of income	Statement of comprehensive income	Others	Currency translation differences	As at Dec 31, 2018
<b>Deferred tax assets :</b>						
Decommissioning costs	610.81	95.80	-	121.73	-	828.34
Provision for employee benefit	69.04	4.60	0.77	-	0.02	74.43
Property, plant and equipment and intangible assets	61.21	(53.41)	-	-	-	7.80
Petroleum resource rent tax in Australia	69.33	(0.90)	-	(68.43)	-	-
Loss carried forward	205.31	56.36	3.10	-	-	264.77
Unrealized foreign exchange	0.78	(0.78)	-	-	-	-
Financial derivative	1.59	(1.43)	(0.14)	-	-	0.02
Allowance for impairment of assets	122.29	(7.55)	-	-	-	114.74
Others	93.16	(13.65)	-	63.48	-	142.99
	<u>1,233.52</u>	<u>79.04</u>	<u>3.73</u>	<u>116.78</u>	<u>0.02</u>	<u>1,433.09</u>
Tax effect of currency translation on tax base	63.33	14.07	-	-	-	77.40
<b>Total</b>	<u>1,296.85</u>	<u>93.11</u>	<u>3.73</u>	<u>116.78</u>	<u>0.02</u>	<u>1,510.49</u>

	Consolidated					
	As at Jan 1, 2018	Statement of income	Statement of comprehensive income	Others	Currency translation differences	As at Dec 31, 2018
<b>Deferred tax liabilities :</b>						
Property, plant and equipment and intangible assets	1,841.93	(43.67)	-	94.17	-	1,892.43
Financial derivative	-	3.63	-	-	-	3.63
Others	0.97	4.09	(0.04)	-	-	5.02
	<u>1,842.90</u>	<u>(35.95)</u>	<u>(0.04)</u>	<u>94.17</u>	<u>-</u>	<u>1,901.08</u>
Tax effect of currency translation on tax base	0.85	0.03	-	-	-	0.88
Total	<u>1,843.75</u>	<u>(35.92)</u>	<u>(0.04)</u>	<u>94.17</u>	<u>-</u>	<u>1,901.96</u>
Net	<u>(546.90)</u>	<u>129.03</u>	<u>3.77</u>	<u>22.61</u>	<u>0.02</u>	<u>(391.47)</u>

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Unit : Million Baht

	Consolidated					As at Dec 31, 2018
	As at Jan 1, 2018	Statement of income	Statement of comprehensive income	Others	Currency translation differences	
<b>Deferred tax assets :</b>						
Decommissioning costs	19,961.75	3,092.44	-	3,946.79	(121.47)	26,879.51
Provision for employee benefit	2,256.14	147.41	24.76	-	(17.32)	2,410.99
Property, plant and equipment and intangible assets	2,000.45	(1,744.03)	-	-	(3.39)	253.03
Petroleum resource rent tax in Australia	2,265.76	(29.40)	-	(2,234.49)	(1.87)	-
Loss carried forward	6,709.78	539.37	100.57	-	1,242.10	8,591.82
Unrealized foreign exchange	25.45	(25.43)	-	-	(0.02)	-
Financial derivative	51.96	(46.23)	(4.58)	-	(0.39)	0.76
Allowance for impairment of assets	3,996.48	(243.78)	-	-	(29.34)	3,723.36
Others	3,044.75	(439.07)	(0.04)	2,101.36	(67.02)	4,639.98
	<u>40,312.52</u>	<u>1,251.28</u>	<u>120.71</u>	<u>3,813.66</u>	<u>1,,001.28</u>	<u>46,499.45</u>
Tax effect of currency translation on tax base	<u>2,069.53</u>	<u>460.90</u>	<u>-</u>	<u>-</u>	<u>(19.01)</u>	<u>2,511.42</u>
Total	<u>42,382.05</u>	<u>1,712.18</u>	<u>120.71</u>	<u>3,813.66</u>	<u>982.27</u>	<u>49,010.87</u>

	Consolidated					
	As at Jan 1, 2018	Statement of income	Statement of comprehensive income	Others	Currency translation differences	As at Dec 31, 2018
<b>Deferred tax liabilities :</b>						
Property, plant and equipment and intangible assets	60,195.63	(2,543.70)	-	3,054.03	702.72	61,408.68
Financial derivative	0.29	117.52	-	-	0.08	117.89
Others	31.80	6.28	(1.45)	-	122.26	158.89
	<u>60,227.72</u>	<u>(2,419.90)</u>	<u>(1.45)</u>	<u>3,054.03</u>	<u>825.06</u>	<u>61,685.46</u>
Tax effect of currency translation on tax base	27.64	1.00	-	-	(0.18)	28.46
Total	<u>60,255.36</u>	<u>(2,418.90)</u>	<u>(1.45)</u>	<u>3,054.03</u>	<u>824.88</u>	<u>61,713.92</u>
Net	<u>(17,873.31)</u>	<u>4,131.08</u>	<u>122.16</u>	<u>759.63</u>	<u>157.39</u>	<u>(12,703.05)</u>

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Unit : Million US Dollar

	The Company				As at Dec 31, 2018
	As at Jan 1, 2018	Statement of income	Statement of comprehensive income	Others	
<b>Deferred tax assets :</b>					
Decommissioning costs	461.45	60.31	-	120.87	642.63
Provision for employee benefit	64.80	4.15	0.09	-	69.04
Loss carried forward	178.54	0.83	3.10	-	182.47
Financial derivative	1.01	(0.87)	(0.14)	-	-
Others	42.68	(12.38)	-	63.47	93.77
	<u>748.48</u>	<u>52.04</u>	<u>3.05</u>	<u>184.34</u>	<u>987.91</u>
Tax effect of currency translation on tax base	50.35	12.97	-	-	63.32
Total	<u>798.83</u>	<u>65.01</u>	<u>3.05</u>	<u>184.34</u>	<u>1,051.23</u>
<b>Deferred tax liabilities :</b>					
Property, plant and equipment and intangible assets	742.87	(105.75)	-	94.88	732.00
Others	0.23	3.54	-	-	3.77
	<u>743.10</u>	<u>(102.21)</u>	<u>-</u>	<u>94.88</u>	<u>735.77</u>
Tax effect of currency translation on tax base	-	-	-	-	-
Total	<u>743.10</u>	<u>(102.21)</u>	<u>-</u>	<u>94.88</u>	<u>735.77</u>
Net	<u>55.73</u>	<u>167.22</u>	<u>3.05</u>	<u>89.46</u>	<u>315.46</u>

	The Company					As at Dec 31, 2018
	As at Jan 1, 2018	Statement of income	Statement of comprehensive income	Others	Currency translation differences	
<b>Deferred tax assets :</b>						
Decommissioning costs	15,080.45	1,955.50	-	3,919.32	(102.40)	20,852.87
Provision for employee benefit	2,117.71	134.38	2.98	-	(14.88)	2,240.19
Loss carried forward	5,834.94	26.89	100.59	-	(41.17)	5,921.25
Financial derivative	33.00	(28.17)	(4.57)	-	(0.26)	-
Others	1,395.13	(401.24)	(0.06)	2,099.45	(50.00)	3,043.28
	<u>24,461.23</u>	<u>1,687.36</u>	<u>98.94</u>	<u>6,018.77</u>	<u>(208.71)</u>	<u>32,057.59</u>
Tax effect of currency translation on tax base	1,645.73	424.87	-	-	(15.77)	2,054.83
Total	<u>26,106.96</u>	<u>2,112.23</u>	<u>98.94</u>	<u>6,018.77</u>	<u>(224.48)</u>	<u>34,112.42</u>
<b>Deferred tax liabilities :</b>						
Property, plant and equipment and intangible assets	24,277.79	(3,429.07)	-	3,076.71	(171.91)	23,753.52
Others	7.66	114.48	-	-	0.01	122.15
	<u>24,285.45</u>	<u>(3,314.59)</u>	<u>-</u>	<u>3,076.71</u>	<u>(171.90)</u>	<u>23,875.67</u>
Tax effect of currency translation on tax base	-	-	-	-	-	-
Total	<u>24,285.45</u>	<u>(3,314.59)</u>	<u>-</u>	<u>3,076.71</u>	<u>(171.90)</u>	<u>23,875.67</u>
Net	<u>1,821.51</u>	<u>5,426.82</u>	<u>98.94</u>	<u>2,942.06</u>	<u>(52.58)</u>	<u>10,236.75</u>

## 26. Prepaid Expenses

Prepaid expenses comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Prepayments for the construction of				
a gas pipeline <sup>1</sup>	13.04	14.40	423.28	470.78
Prepayments for rental fee	2.82	3.50	91.49	114.27
Others	4.01	2.93	130.01	95.69
Total	<u>19.87</u>	<u>20.83</u>	<u>644.78</u>	<u>680.74</u>

<sup>1</sup> Prepayments for investment in the Myanmar Zawtika pipeline project to facilitate the construction of onshore gas pipeline, the Group will amortize these prepayments as expenses in accordance with Facilities, services and information sharing agreement.

## 27. Financial Derivatives

Financial derivatives comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
<b>Financial derivative assets</b>				
<u>Financial derivative assets - Current</u>				
Oil price hedge	38.92	0.002	1,262.88	0.05
Forward foreign exchange	2.94	0.07	95.36	2.37
Interest rate swap	-	0.65	-	21.12
Cross currency and interest rate swap	2.90	-	94.22	-
Total financial derivative assets - Current	<u>44.76</u>	<u>0.72</u>	<u>1,452.46</u>	<u>23.54</u>
<u>Financial derivative assets - Non - current</u>				
Cross currency and interest rate swap	22.10	19.46	717.10	635.98
Total financial derivative assets - Non - current	<u>22.10</u>	<u>19.46</u>	<u>717.10</u>	<u>635.98</u>

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>
<b>Financial derivative liabilities</b>				
<u>Financial derivative liabilities - Current</u>				
Oil price hedge	0.82	6.38	26.56	208.62
Forward foreign exchange	3.06	12.43	99.23	406.22
Interest rate swap	-	0.41	-	13.44
Cross currency and interest rate swap	6.81	6.30	220.95	205.77
Total financial derivative liabilities - Current	<u>10.69</u>	<u>25.52</u>	<u>346.74</u>	<u>834.05</u>
<u>Financial derivative liabilities - Non - current</u>				
Cross currency and interest rate swap	-	7.46	-	243.77
Total financial derivative liabilities - Non - current	<u>-</u>	<u>7.46</u>	<u>-</u>	<u>243.77</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>
<b>Financial derivative assets</b>				
<u>Financial derivative assets - Current</u>				
Forward foreign exchange	2.74	0.05	88.75	1.77
Interest rate swap	-	0.65	-	21.12
Cross currency and interest rate swap	2.90	-	94.22	-
Total financial derivative assets - Current	<u>5.64</u>	<u>0.70</u>	<u>182.97</u>	<u>22.89</u>
<u>Financial derivative assets - Non - current</u>				
Cross currency and interest rate swap	22.10	19.46	717.10	635.98
Total financial derivative assets - Non - current	<u>22.10</u>	<u>19.46</u>	<u>717.10</u>	<u>635.98</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>	<u>Dec 31, 2018</u>	<u>Dec 31, 2017</u>
<b>Financial derivative liabilities</b>				
<u>Financial derivative liabilities - Current</u>				
Forward foreign exchange	2.81	11.27	91.08	368.29
Interest rate swap	-	0.41	-	13.44
Cross currency and interest rate swap	<u>6.81</u>	<u>6.30</u>	<u>220.95</u>	<u>205.77</u>
Total financial derivative liabilities - Current	<u>9.62</u>	<u>17.98</u>	<u>312.03</u>	<u>587.50</u>
<u>Financial derivative liabilities - Non - current</u>				
Cross currency and interest rate swap	<u>-</u>	<u>7.46</u>	<u>-</u>	<u>243.77</u>
Total financial derivative liabilities - Non - current	<u>-</u>	<u>7.46</u>	<u>-</u>	<u>243.77</u>

Cash flow hedges

The Company entered into the foreign exchange forward that were being used to hedge cash flow risk of highly probable forecast transactions, as well as cross currency and interest rate swaps to fix the US Dollar interest rate and US Dollar redemption value to reduce the impact of foreign exchange rates volatility, with matching critical terms, i.e. the interest payment interval, maturity date on the currency leg of the swap with the underlying Thai Baht debentures or debt issuance.

In 2018, the Company follows the accounting for hedge on cross currency and interest rate swaps in which the effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognized in other comprehensive income. The amounts that had been recognized in other comprehensive income shall be reclassified to statements of income in the same period when the underlying debt affects the statements of income. The gain or loss relating to the ineffective portion is recognized immediately in the statements of income. The Company had reclassified gain or loss previously recognized in other comprehensive income to the statements of income during 2018 amount of US Dollar 2.86 million.

## 28. Other Non-current Assets

Other non-current assets comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Carried cost for PetroVietnam in projects:				
- Vietnam B & 48/95	1.06	1.06	34.26	34.51
- Vietnam 52/97	1.01	1.01	32.74	32.97
Deposits	5.22	4.79	169.30	156.50
Prepaid assessed tax <sup>1</sup>	59.90	59.90	1,943.84	1,957.68
Long-term land usage fee	24.29	-	788.30	-
Others	22.40	3.34	726.86	109.14
Total	<u>113.88</u>	<u>70.10</u>	<u>3,695.30</u>	<u>2,290.80</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Deposits	4.50	4.35	146.02	142.15
Long-term land usage fee	6.07	-	197.08	-
Others	1.35	1.26	43.82	41.14
Total	<u>11.92</u>	<u>5.61</u>	<u>386.92</u>	<u>183.29</u>

<sup>1</sup> Prepaid assessed tax includes penalty for Natuna 2 B.V., which is a joint operation of the Group, as disclosed in Note 45 - Commitments and Contingent Liabilities under "Contingent liabilities".

## 29. Loans and Debentures

29.1 Loans and debentures are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
<u>Current portion of long-term financial liabilities</u>				
Current portion of debentures	406.75	399.71	13,198.88	13,062.90
Finance lease with maturity date within 1 Year	0.26	-	8.67	-
Total	407.01	399.71	13,207.55	13,062.90
<u>Long-term financial liabilities</u>				
Debentures	1,537.77	1,938.72	49,900.27	63,359.16
Total debentures	1,537.77	1,938.72	49,900.27	63,359.16
Long-term loans				
Long-term loans from financial Institutions	-	568.73	-	18,586.64
Finance lease	0.99	-	31.98	-
Total long-term loans	0.99	568.73	31.98	18,586.64
Total	1,538.76	2,507.45	49,932.25	81,945.80
	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
<u>Current portion of long-term financial liabilities</u>				
Current portion of debentures	406.75	399.71	13,198.88	13,062.90
Finance lease with maturity date within 1 Year	0.26	-	8.67	-
Total	407.01	399.71	13,207.55	13,062.90
<u>Long-term financial liabilities</u>				
Debentures	351.01	752.28	11,390.10	24,585.35
Total debentures	351.01	752.28	11,390.10	24,585.35
Long-term loans				
Finance lease	0.99	-	31.98	-
Total long-term loans	0.99	-	31.98	-
Total	352.00	752.28	11,422.08	24,585.35



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The carrying value of unsecured and unsubordinated debentures comprised:

	Interest rates (% per annum)	Effective interest rates (% per annum)	Maturity date	Unit : Million US Dollar		Unit : Million Baht	
				Consolidated		Consolidated	
				Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Maturity date within 1 year							
- Debentures Baht 2,500 million <sup>1</sup>	4.625	4.625	March 27, 2018	-	76.50	-	2,500.00
- Debentures US Dollar 323.45 million <sup>2</sup>	3.707	3.847	September 16, 2018	-	323.21	-	10,562.90
- Debentures Baht 5,000 million <sup>3</sup>	4.80	4.873	May 29, 2019	154.08	-	4,999.75	-
- Debentures Baht 8,200 million <sup>4</sup>	3.91	3.976	June 6, 2019	252.67	-	8,199.13	-
Maturity date over 1 year but not exceeding 3 years							
- Debentures Baht 5,000 million <sup>3</sup>	4.80	4.873	May 29, 2019	-	152.97	-	4,999.13
- Debentures Baht 8,200 million <sup>4</sup>	3.91	3.976	June 6, 2019	-	250.82	-	8,197.07
- Debentures US Dollar 700 million <sup>2</sup>	5.692	5.815	April 5, 2021	699.52	-	22,699.25	-
Maturity date over 3 years but not exceeding 5 years							
- Debentures US Dollar 700 million <sup>2</sup>	5.692	5.815	April 5, 2021	-	699.31	-	22,853.99
Maturity date over 5 years							
- Debentures Baht 11,400 million <sup>5</sup>	4.82	4.89	June 6, 2029	351.01	348.49	11,390.10	11,389.15
- Debentures US Dollar 490 million <sup>2</sup>	6.35	6.507	June 12, 2042	487.24	487.13	15,810.92	15,919.82
Total Carrying Value				<u>1,944.52</u>	<u>2,338.43</u>	<u>63,099.15</u>	<u>76,422.06</u>

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	Interest rates (% per annum)	Effective interest rates (% per annum)	Maturity date	Unit : Million US Dollar		Unit : Million Baht	
				The Company		The Company	
				Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Maturity date within 1 year							
- Debentures Baht 2,500 million <sup>1</sup>	4.625	4.625	March 27, 2018	-	76.50	-	2,500.00
- Debentures US Dollar 323.45 million <sup>2</sup>	3.707	3.847	September 16, 2018	-	323.21	-	10,562.90
- Debentures Baht 5,000 million <sup>3</sup>	4.80	4.873	May 29, 2019	154.08	-	4,999.75	-
- Debentures Baht 8,200 million <sup>4</sup>	3.91	3.976	June 6, 2019	252.67	-	8,199.13	-
Maturity date over 1 year but not exceeding 3 years							
- Debentures Baht 5,000 million <sup>3</sup>	4.80	4.873	May 29, 2019	-	152.97	-	4,999.13
- Debentures Baht 8,200 million <sup>4</sup>	3.91	3.976	June 6, 2019	-	250.82	-	8,197.07
Maturity date over 5 years							
- Debentures Baht 11,400 million <sup>5</sup>	4.82	4.89	June 6, 2029	351.01	348.49	11,390.10	11,389.15
Total Carrying Value				<u>757.76</u>	<u>1,151.99</u>	<u>24,588.98</u>	<u>37,648.25</u>

<sup>1</sup> On September 27, 2005, the Company entered into a Cross Currency Swap transaction with a financial institution to swap Thai Baht debenture for US Dollar 60.82 million. Under this agreement, the interest rate was charged at the rate of 3.85% per annum. On May 2, 2007, the Company swapped the US Dollar debenture with the same financial institution for Baht 2,500 million. Under this agreement, the interest rate was reduced to 3.30% per annum until the expiration date. In May 2011, the Company swapped Thai Baht debenture of Baht 2,500 million for US Dollar 82.92 million with a financial institution at the exchange rate of Baht 30.15 per US Dollar. Under this agreement, the interest rate was charged at the rate of 3.30% per annum.

<sup>2</sup> The Company has Optional Redemption rights. The redemption price is the sum of the debenture par value, accrued interest, and interest payable up to the day before the maturity date plus an applicable premium whereby the applicable premium is the higher of the following:

(1) 1.00% per annum of the debenture par value or

(2) Present value that is higher than the debenture par value. Present value is the debenture par value and the interest receivable if the debenture is redeemed on the maturity date minus accrued interest and interest payable to the date of early redemption discounted using Treasury Rate at the early redemption date plus 0.35% per annum.

<sup>3</sup> In June 2011, the Company entered into a Cross Currency Swap transaction with a financial institution to swap Thai Baht debenture for US Dollar 161.81 million at the average exchange rate of Baht 30.90 per US Dollar. Under this agreement, the average interest rate was charged at the rate of 4.93% per annum.

<sup>4</sup> On June 6, 2014, the Company entered into a Cross Currency Swap transaction with a financial institution to swap Thai Baht debentures for US Dollar 251.07 million at the average exchange rate of Baht 32.66 per US Dollar. Under this agreement, the average interest rate was charged at the rate of 3.013% per annum.

<sup>5</sup> On June 6, 2014, the Company entered into a Cross Currency Swap transaction with a financial institution to swap Thai Baht debentures for US Dollar 349.05 million at the average exchange rate of Baht 32.66 per US Dollar. Under this agreement, the average interest rate was charged at the rate of 4.989% per annum.



Long-term loans from financial institutions comprised:

	Interest rates (% per annum)	Effective interest rates (% per annum)	Maturity date	Unit : Million US Dollar		Unit : Million Baht	
				Consolidated		Consolidated	
				Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Maturity date over 3 years but not exceeding 5 years							
- Loan US Dollar 500 million <sup>1</sup>	LIBOR + 1.35	2.562	March 30, 2021	-	494.56	-	16,162.55
- Loan US Dollar 75 million <sup>1</sup>	LIBOR + 1.35	2.567	March 30, 2021	-	74.17	-	2,424.09
Total Carrying Value				-	568.73	-	18,586.64

<sup>1</sup> On April 23, 2018, PTTEP Offshore Investment Company Limited (PTTEPO) made a repayment on long-term unsecured and unsubordinated loans before its maturity date, together with the outstanding interest.



	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Finance lease liabilities				
- Within 1 year	0.31	-	10.03	-
- Over 1 year but not exceeding 3 years	1.04	-	33.92	-
Deferred financing fee	(0.10)	-	(3.30)	-
Total present value of finance lease liabilities	1.25	-	40.65	-

### 30. Short-term Provision

Short-term provision comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Provision for decommissioning costs	33.60	-	1,090.30	-
Provision for remuneration for the renewal of petroleum production	89.07	63.42	2,890.32	2,072.75
Other provisions	11.00	-	357.09	-
Total	133.67	63.42	4,337.71	2,072.75

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Provision for decommissioning costs	4.68	-	151.94	-
Provision for remuneration for the renewal of petroleum production	88.99	63.32	2,887.69	2,069.36
Total	93.67	63.32	3,039.63	2,069.36

## 31. Provision for Employee Benefits

Provision for employee benefits are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Statement of financial position				
Retirement benefits	126.34	115.83	4,099.80	3,785.58
Long service award	8.92	7.94	289.48	259.42
Liabilities in the statement of financial position	<u>135.26</u>	<u>123.77</u>	<u>4,389.28</u>	<u>4,045.00</u>
Statement of income				
Retirement benefits	12.25	11.10	395.47	376.36
Long service award	1.15	1.13	37.09	38.51
Total	<u>13.40</u>	<u>12.23</u>	<u>432.56</u>	<u>414.87</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Statement of financial position				
Retirement benefits	112.59	106.58	3,653.72	3,483.27
Long service award	8.91	7.92	289.04	258.75
Liabilities in the statement of financial position	<u>121.50</u>	<u>114.50</u>	<u>3,942.76</u>	<u>3,742.02</u>
Statement of income				
Retirement benefits	10.71	9.82	345.73	333.00
Long service award	1.15	1.13	37.29	38.47
Total	<u>11.86</u>	<u>10.95</u>	<u>383.02</u>	<u>371.47</u>

The movements of provision for retirement benefits during the year are as follows:

	Unit : Million US Dollar Consolidated	Unit : Million Baht Consolidated
Balance as at January 1, 2018	115.83	3,785.58
Current service cost	8.35	269.48
Interest cost	3.90	125.99
Loss from actuarial assumption of employee benefit obligations	3.70	121.11
Benefits paid	(6.22)	(200.93)
Foreign exchange differences	0.78	25.24
Currency translation differences	-	(26.67)
Balance as at December 31, 2018	<u>126.34</u>	<u>4,099.80</u>

	Unit : Million US Dollar The Company	Unit : Million Baht The Company
Balance as at January 1, 2018	106.58	3,483.27
Current service cost	7.10	229.22
Interest cost	3.61	116.51
Loss from actuarial assumption of employee benefit obligations	0.18	6.02
Benefits paid	(5.58)	(180.23)
Foreign exchange differences	0.70	22.71
Currency translation differences	-	(23.78)
Balance as at December 31, 2018	<u>112.59</u>	<u>3,653.72</u>

Expenses recognized in the statements of income for the years are as follows:

	Unit : Million US Dollar Consolidated		Unit : Million Baht Consolidated	
	2018	2017	2018	2017
Current service cost	8.35	7.56	269.48	256.35
Interest cost	3.90	3.54	125.99	120.01
Total	<u>12.25</u>	<u>11.10</u>	<u>395.47</u>	<u>376.36</u>
Long service award	1.15	1.13	37.09	38.51
Expenses recognized in the statement of income	<u>13.40</u>	<u>12.23</u>	<u>432.56</u>	<u>414.87</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Current service cost	7.10	6.53	229.22	221.61
Interest cost	3.61	3.29	116.51	111.39
Total	10.71	9.82	345.73	333.00
Long service award	1.15	1.13	37.29	38.47
Expenses recognized in the statement of income	11.86	10.95	383.02	371.47

Details of (gain) loss from actuarial assumption of employee benefit obligations recognized in the statement of comprehensive income are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Change in demographic assumptions	2.12	-	69.55	-
Change in financial assumptions	2.59	-	84.62	-
Experience adjustments	(1.01)	-	(33.06)	-
Total	3.70	-	121.11	-

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Change in demographic assumptions	1.80	-	58.98	-
Change in financial assumptions	2.82	-	92.16	-
Experience adjustments	(4.44)	-	(145.12)	-
Total	0.18	-	6.02	-

#### Major Actuarial Assumptions for Retirement Benefits

##### The Group's financial assumptions

	% per annum	
	2018	2017
Discount rate	3.2	3.5
Inflation rate	2.5	3.0
Credit interest rate on provident funds	3.4 – 4.3	3.4 – 3.9

The Group's demographic assumptions

- Mortality assumption: The mortality rate is from the Thailand Mortality Ordinary 2017 (TMO17) issued by the Office of the Insurance Commission. The TMO17 contains the results of the most recent mortality investigation of policyholders of life insurance companies in Thailand. It is reasonable to assume that these rates would reflect of the mortality rate of the working population in Thailand.
- Turnover rate assumption:

Age-related scale	% per annum	
	2018	2017
Prior to age 30	3.0 - 14.0	3.0 – 16.0
Age 30 - 39	3.0 - 8.0	3.0 – 10.0
Age 40 thereafter	0.0 - 5.0	0.0 - 5.0

The turnover rate above reflects the rate at which employees voluntarily resign from service. It does not include death, disability, and early retirement. The calculation for the employee benefits is based on these assumptions.

**Impact on Defined Retirement Benefit Obligation Plans**

	Unit : Million US Dollar		Unit : Million Baht	
	Increase (Decrease)		Increase (Decrease)	
	2018	2017	2018	2017
Discount rate				
Increase 1%	(12.36)	(11.47)	(400.92)	(374.72)
Decrease 1%	14.67	13.60	475.88	444.34

The above sensitivity analysis is based on a change in assumption of the discount rate without other changes in the underlying assumptions. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligations to the change in major assumptions, the same method - present value of the defined benefit obligation calculated with the projected unit credit method - has been applied as when calculating the pension liability recognized within the statements of financial position.

As of December 31, 2018, the weighted average duration of the defined retirement benefit obligation is 20 years. (2017: 20 years)

Maturity analysis of undiscounted retirement benefits:

	Unit : Million US Dollar		Unit : Million Baht	
	31 December 2018		31 December 2018	
	Consolidated	The Company	Consolidated	The Company
Less than 1 year	10.76	6.35	349.17	206.24
Over 1 to 5 years	26.85	24.56	871.36	796.99
Over 5 to 10 years	64.82	59.89	2,103.39	1,943.31
Over 10 years	320.99	290.34	10,416.11	9,421.39
Total	423.42	381.14	13,740.03	12,367.93

On December 13, 2018, the National Legislative Assembly (NLA) has passed an amendment bill to the labour protection law, and it is in the process of publishing in the Royal Gazette. The amendment bill to the labour protection law defines the additional compensation of not less than the 400 day's pay based on the latest hiring rate for the employee being laid off by the employer after serving 20 years or more. The amendment bill changes the retirement benefit plan, in which the Company's provision for retirement benefits will increase by Baht 572.74 million in the consolidated financial statements and Baht 497.67 million in the Company's financial statements. The Group will recognize the effect from the amendment bill as past service cost in the statement of income in the period which it becomes effective.

### 32. Provision for Decommissioning Cost

Provision for decommissioning costs are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Provision for decommissioning costs	2,277.25	2,275.43	73,896.52	74,363.23
<u>Less</u> Current portion	(33.60)	-	(1,090.30)	-
Non-current portion of provision for decommissioning costs	2,243.65	2,275.43	72,806.22	74,363.23

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Provision for decommissioning costs	1,375.34	1,211.05	44,629.50	39,578.09
<u>Less</u> Current portion	(4.68)	-	(151.94)	-
Non-current portion of provision for decommissioning costs	1,370.66	1,211.05	44,477.56	39,578.09

Movements of provision for decommissioning costs during the year are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
Balance as at January 1, 2018	2,275.43		74,363.23	
Acquisition	243.47		8,007.39	
Additional provision	36.98		1,194.30	
Abandonment cost incurred during the year	(22.58)		(729.43)	
Accretion expenses	83.43		2,697.44	
Reversal of provision	(165.11)		(5,332.17)	
Divestment of assets	(174.37)		(5,631.25)	
Currency translation differences	-		(672.99)	
Balance as at December 31, 2018	2,277.25		73,896.52	

  

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
Balance as at January 1, 2018	1,211.05		39,578.09	
Acquisition	241.74		7,950.36	
Additional provision	0.19		6.05	
Abandonment cost incurred during the year	(3.14)		(101.37)	
Accretion expenses	47.57		1,539.41	
Reversal of provision	(122.07)		(3,942.06)	
Currency translation differences	-		(400.98)	
Balance as at December 31, 2018	1,375.34		44,629.50	

### 33. Provision for Remuneration for the Renewal of Petroleum Production

Provision for remuneration for the renewal of petroleum production are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Provision for remuneration for the renewal of petroleum production	327.73	258.44	10,634.84	8,446.02
<u>Less</u> Current portion	(89.07)	(63.42)	(2,890.32)	(2,072.75)
Non-current portion of provision for remuneration for the renewal of petroleum production	238.66	195.02	7,744.52	6,373.27

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	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Provision for remuneration for the renewal of petroleum production	327.39	258.01	10,623.78	8,432.09
<u>Less</u> Current portion	<u>(88.99)</u>	<u>(63.32)</u>	<u>(2,887.69)</u>	<u>(2,069.36)</u>
Non-current portion of provision for remuneration for the renewal of petroleum production	<u>238.40</u>	<u>194.69</u>	<u>7,736.09</u>	<u>6,362.73</u>

Movements of provision for remuneration for the renewal of petroleum production during the year are as follows:

	Unit : Million US Dollar	Unit : Million Baht
	Consolidated	Consolidated
Balance as at January 1, 2018	258.44	8,446.02
Acquisition	125.42	4,124.80
Abandonment cost incurred during the year	(81.12)	(2,619.81)
Accretion expenses	25.03	815.54
Reversal of provision	(0.04)	(1.40)
Currency translation differences	-	(130.31)
Balance as at December 31, 2018	<u>327.73</u>	<u>10,634.84</u>

	Unit : Million US Dollar	Unit : Million Baht
	The Company	The Company
Balance as at January 1, 2018	258.01	8,432.09
Acquisition	125.42	4,124.80
Abandonment cost incurred during the year	(81.06)	(2,617.86)
Accretion expenses	25.02	814.96
Currency translation differences	-	(130.21)
Balance as at December 31, 2017	<u>327.39</u>	<u>10,623.78</u>

## 34. Fair Value

## 34.1 Fair value estimation

The following table presents the financial assets and liabilities that are measured at fair value.

	Unit : Million US Dollar				Unit : Million Baht			
	Consolidated				Consolidated			
	Dec 31, 2018				Dec 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>								
Short-term investments								
- Debt securities (with embedded derivatives)	-	49.87	-	49.87	-	1,618.26	-	1,618.26
Investments in trading securities	70.55	-	-	70.55	2,289.34	-	-	2,289.34
Investments in available-for-sale securities	11.01	-	-	11.01	357.17	-	-	357.17
Financial derivatives								
- Oil price hedge	-	38.92	-	38.92	-	1,262.88	-	1,262.88
- Forward foreign exchange	-	2.94	-	2.94	-	95.36	-	95.36
- Cross currency and interest rate swap	-	25.00	-	25.00	-	811.32	-	811.32
<b>Total assets</b>	<b>81.56</b>	<b>116.73</b>	<b>-</b>	<b>198.29</b>	<b>2,646.51</b>	<b>3,787.82</b>	<b>-</b>	<b>6,434.33</b>
<b>Financial liabilities</b>								
Deferred considerations acquired through								
business acquisition	-	-	465.97	465.97	-	-	15,120.70	15,120.70
Financial derivatives								
- Oil price hedge	-	0.82	-	0.82	-	26.56	-	26.56
- Forward foreign exchange	-	3.06	-	3.06	-	99.23	-	99.23
- Cross currency and interest rate swap	-	6.81	-	6.81	-	220.95	-	220.95
<b>Total liabilities</b>	<b>-</b>	<b>10.69</b>	<b>465.97</b>	<b>476.66</b>	<b>-</b>	<b>346.74</b>	<b>15,120.70</b>	<b>15,467.44</b>

	Unit : Million US Dollar				Unit : Million Baht			
	Consolidated				Consolidated			
	Dec 31, 2017				Dec 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>								
Investments in trading securities	0.21	-	-	0.21	6.78	-	-	6.78
Investments in available-for-sale securities	0.71	-	-	0.71	23.31	-	-	23.31
Financial derivatives								
- Oil price hedge	-	0.002	-	0.002	-	0.05	-	0.05
- Forward foreign exchange	-	0.07	-	0.07	-	2.37	-	2.37
- Interest rate swap	-	0.65	-	0.65	-	21.12	-	21.12
- Cross currency and interest rate swap	-	19.46	-	19.46	-	635.98	-	635.98
Total assets	<u>0.92</u>	<u>20.18</u>	<u>-</u>	<u>21.10</u>	<u>30.09</u>	<u>659.52</u>	<u>-</u>	<u>689.61</u>
<b>Financial liabilities</b>								
Financial derivatives								
- Oil price hedge	-	6.38	-	6.38	-	208.62	-	208.62
- Forward foreign exchange	-	12.43	-	12.43	-	406.22	-	406.22
- Interest rate swap	-	0.41	-	0.41	-	13.44	-	13.44
- Cross currency and interest rate swap	-	13.76	-	13.76	-	449.54	-	449.54
Total liabilities	<u>-</u>	<u>32.98</u>	<u>-</u>	<u>32.98</u>	<u>-</u>	<u>1,077.82</u>	<u>-</u>	<u>1,077.82</u>

	Unit : Million US Dollar				Unit : Million Baht			
	The Company				The Company			
	Dec 31, 2018				Dec 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>								
Short-term investments								
- Debt securities (with embedded derivatives)	-	49.87	-	49.87	-	1,618.26	-	1,618.26
Investments in trading securities	70.54	-	-	70.54	2,289.08	-	-	2,289.08
Investments in available-for-sale securities	10.45	-	-	10.45	339.10	-	-	339.10
Financial derivatives								
- Forward foreign exchange	-	2.74	-	2.74	-	88.75	-	88.75
- Cross currency and interest rate swap	-	25.00	-	25.00	-	811.32	-	811.32
<b>Total assets</b>	<b>80.99</b>	<b>77.61</b>	<b>-</b>	<b>158.60</b>	<b>2,628.18</b>	<b>2,518.33</b>	<b>-</b>	<b>5,146.51</b>
<b>Financial liabilities</b>								
Deferred considerations acquired through								
business acquisition	-	-	465.97	465.97	-	-	15,120.70	15,120.70
Financial derivatives								
- Forward foreign exchange	-	2.81	-	2.81	-	91.08	-	91.08
- Cross currency and interest rate swap	-	6.81	-	6.81	-	220.95	-	220.95
<b>Total liabilities</b>	<b>-</b>	<b>9.62</b>	<b>465.97</b>	<b>475.59</b>	<b>-</b>	<b>312.03</b>	<b>15,120.70</b>	<b>15,432.73</b>

	Unit : Million US Dollar				Unit : Million Baht			
	The Company				The Company			
	Dec 31, 2017				Dec 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>								
Investments in trading securities	0.20	-	-	0.20	6.51	-	-	6.51
Financial derivatives								
- Forward foreign exchange	-	0.05	-	0.05	-	1.77	-	1.77
- Interest rate swap	-	0.65	-	0.65	-	21.12	-	21.12
- Cross currency and interest rate swap	-	19.46	-	19.46	-	635.98	-	635.98
Total assets	0.20	20.16	-	20.36	6.51	658.87	-	665.38
<b>Financial liabilities</b>								
Financial derivatives								
- Forward foreign exchange	-	11.27	-	11.27	-	368.29	-	368.29
- Interest rate swap	-	0.41	-	0.41	-	13.44	-	13.44
- Cross currency and interest rate swap	-	13.76	-	13.76	-	449.54	-	449.54
Total liabilities	-	25.44	-	25.44	-	831.27	-	831.27

Level 1: Fair value based on quoted prices in an active market for identical assets and liabilities.

Level 2: Fair value based on inputs other than quoted prices in Level 1 or based on information from reliable source that can be used in the computation of fair value of assets and liabilities.

Level 3: Fair value based on internal valuation model or that are not based on observable market data (that is, unobservable inputs).

### 34.2 Valuation Techniques Used to Derive Level 2 Fair Values

Valuation techniques used to derive level 2 fair values of financial derivative instruments are as follows:

- The fair value of debt securities (with embedded derivatives) is calculated based on debt securities value with reference to the performance return of other debt security funds.
- Oil price hedge comprises oil price swaps and options. The fair value of oil price swaps is assessed based on the price level which is calculated using the market price of future contracts. The fair value of oil price options is calculated using premium which requires various variable factors, such as the price level of swap, timing of exercise, and price volatility.
- The fair value of forward foreign exchange contracts is calculated using forward foreign exchange rates that are quoted in an active market.
- The fair value of interest rate swaps is calculated using forward interest rates extracted from observable yield curves in an interest market.
- The fair value of cross currency and interest rate swaps is calculated using forward interest rates derived from the yield curves in an observable interest market and forward foreign exchange rates that are quoted in an active market.

The discount factors do not significantly impact the level 2 fair value of derivative instruments.

### 34.3 Valuation Techniques Used to Derive Level 3 Fair Values

Valuation techniques and assumptions used to derive level 3 fair values of deferred considerations acquired through business acquisition is disclosed in Note 5 – Business Acquisition.

34.4 The details of fair value of long-term liabilities calculated by using the discounted cash flow based on a discounted rate of borrowing with similar terms are as follows:

	Unit : Million US Dollar	
	Consolidated	
	December 31, 2018	
	Book Value	Fair Value
Unsecured and unsubordinated debentures – Baht	757.76	806.32
Unsecured and unsubordinated debentures – US Dollar	1,186.76	1,320.52

	Unit : Million Baht	
	Consolidated	
	December 31, 2018	
	Book Value	Fair Value
Unsecured and unsubordinated debentures – Baht	24,588.98	26,164.83
Unsecured and unsubordinated debentures – US Dollar	38,510.17	42,850.60

	Unit : Million US Dollar	
	The Company	
	December 31, 2018	
	Book Value	Fair Value
Unsecured and unsubordinated debentures – Baht	757.76	806.32

	Unit : Million Baht	
	The Company	
	December 31, 2018	
	Book Value	Fair Value
Unsecured and unsubordinated debentures – Baht	24,588.98	26,164.83

The fair value of Baht debentures is calculated using the reference price in the secondary market of Thai Bond Market Association that are quoted in an active market and classified as level 2 fair value.

The fair value of US Dollar debentures is calculated using the reference observable price in the secondary market of foreign bond that are quoted in an active market and classified as level 2 fair value.

The fair value of the following financial assets and liabilities approximates their book value.

Consolidated	The Company
<b>Financial assets</b>	<b>Financial assets</b>
<ul style="list-style-type: none"> <li>● Cash and cash equivalents</li> <li>● Short-term investments</li> <li>● Account receivable – parent company</li> <li>● Trade and other accounts receivables</li> <li>● Other current assets</li> <li>● Long-term loans to related parties</li> <li>● Other non-current assets</li> </ul>	<ul style="list-style-type: none"> <li>● Cash and cash equivalents</li> <li>● Short-term investments</li> <li>● Account receivable – parent company</li> <li>● Trade and other accounts receivables</li> <li>● Short-term loans to related parties</li> <li>● Other current assets</li> <li>● Long-term loans to related parties</li> <li>● Other non-current assets</li> </ul>
<b>Financial liabilities</b>	<b>Financial liabilities</b>
<ul style="list-style-type: none"> <li>● Trade accounts payable and working capital to co-venturers</li> <li>● Accrued expenses and interests payable</li> <li>● Other current liabilities</li> <li>● Long-term loans</li> <li>● Other non-current liabilities</li> </ul>	<ul style="list-style-type: none"> <li>● Trade accounts payable and working capital to co-venturers</li> <li>● Accrued expenses and interests payable</li> <li>● Other current liabilities</li> <li>● Long-term loans</li> <li>● Other non-current liabilities</li> </ul>

## 35. Subordinated capital debentures

In July 2017, The Group has carried out a capital structure management with respect to US Dollar subordinated capital debentures as follows :

	Unit : Million US Dollar			Unit : Million Baht		
	Before restructuring	(redeemed) /reissued	After restructuring	Before restructuring	(redeemed) /reissued	After restructuring
<b>PTTEP</b>						
Issuance and offering value	1,000.00	(854.69)	145.31	-	-	-
Net value from finance cost	995.53	(850.88) <sup>(1)</sup>	144.65	32,206.55	(27,526.73) <sup>(1)</sup>	4,679.82
<b>PTTEP TC</b>						
Issuance and offering value	-	854.69 <sup>(2)</sup>	854.69	-	-	-
Net value from finance cost	-	853.47	853.47	-	28,570.16	28,570.16
<b>Total</b>						
Issuance and offering value	1,000.00	-	1,000.00	-	-	-
Net value from finance cost	995.53	2.59	998.12	32,206.55	1,043.43	33,249.98

(1) The Company redeemed the subordinated capital debentures with the payment of US Dollar 874.31 million (Baht 28,310.98 million)

(2) PTTEP Treasury Center Company Limited (PTTEP TC), a subsidiary of the Group, issued and offered the subordinated capital debentures, fully guaranteed by the Company, in the same amount as what was redeemed by the Company. The subordinated capital debentures will be settled upon the liquidation of the issuing company (perpetual), or as per the redemption rights stipulated in the offering memorandum. The subordinated capital debentures were issued in the two following series:

- Series 1: Issued and offered on July 17, 2017 in the amount of US Dollar 500 million with an initial fixed interest rate of 4.6% until July 17, 2022. The right to early redeem in full amount shall be first exercisable on July 17, 2022. Subsequent interest rates and redeemable rights are stipulated in the offering memorandum.
- Series 2 : Issued and offered on July 26, 2017 in the amount of US Dollar 354.69 million with an initial fixed interest rate of 4.875% until June 18, 2019. The right to early redeem in full amount shall be first exercisable on June 18, 2019. Subsequent interest rates and redeemable rights are stipulated in the offering memorandum.

These subordinated capital debentures pay the distributions semi-annually. However, PTTEP TC may elect to defer the payment of a distribution at its sole discretion without any limit as to the number of times. The deferred distributions will not bear additional interest. In case that they are deferred from and including the date falling 12 months from the date on which it is first deferred, they will be constituted as the principal of the securities. However, if PTTEP TC elects to defer distributions of those 2 series, both the Company, as a guarantor, and PTTEP TC are restricted from declaring any dividends. Also, they will procure that no distribution or other payment is declared, paid or made on any of its Junior Securities or its Parity Securities. Additionally, both the Company and PTTEP TC will be restricted from redeeming, reducing, cancelling, or buying-back of its Junior Securities or its Parity Securities. These subordinated capital debentures are legally subordinated to all other capital debentures issued by PTTEP TC, except for equity. As a result, in case of PTTEP TC's liquidation, these subordinated capital debentures holders shall have rights to be repaid in the principle and accumulated return from PTTEP TC with the amount not over than PTTEP TC's net assets after the repayment of other debts and commitment made by PTTEP TC, except for equity.

In 2018, no subordinated capital debentures were issued.

## 36. Financial Assets and Financial Liabilities

Financial assets and financial liabilities are classified as follows:

Unit : Million US Dollar

	Consolidated									
	Dec 31, 2018					Dec 31, 2017				
	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets
<b>Financial assets</b>										
Cash and cash equivalents	-	-	3,180.10	-	-	-	-	1,512.18	-	-
Short-term investments	-	-	-	-	820.53	-	-	-	-	2,955.49
Investments in trading securities	70.55	-	-	-	-	0.21	-	-	-	-
Investments in available-for- sale securities	-	-	-	11.01	-	-	-	-	0.71	-
Account receivable - parent company	-	-	637.13	-	-	-	-	566.57	-	-
Trade and other accounts receivable	-	-	558.64	-	-	-	-	188.03	-	-
Other current assets	-	-	73.24	-	-	-	-	86.86	-	-
Long-term loans to related parties	-	-	95.50	-	-	-	-	110.50	-	-
Financial derivative assets	41.86	25.00	-	-	-	0.72	19.46	-	-	-
Other non-current assets	-	-	89.04	-	-	-	-	69.10	-	-
<b>Total financial assets</b>	<b>112.41</b>	<b>25.00</b>	<b>4,633.65</b>	<b>11.01</b>	<b>820.53</b>	<b>0.93</b>	<b>19.46</b>	<b>2,533.24</b>	<b>0.71</b>	<b>2,955.49</b>

Unit : Million US Dollar

	Consolidated					
	Dec 31, 2018			Dec 31, 2017		
	Fair value through statement of income	Derivative hedging instruments	Amortized cost	Fair value through statement of income	Derivative hedging instruments	Amortized cost
<b>Financial liabilities</b>						
Trade accounts payable and working capital to co-venturers	-	-	120.23	-	-	130.99
Current portion of long-term debts	-	-	407.01	-	-	399.71
Accrued expenses and interest payable	-	-	612.70	-	-	515.06
Deferred considerations acquired through business acquisition	-	-	465.97	-	-	-
Other current liabilities	-	-	18.99	-	-	17.56
Financial derivative liabilities	3.88	6.81	-	19.22	13.76	-
Debentures and long-term loans	-	-	1,538.75	-	-	2,507.45
Other non-current liabilities	-	-	0.13	-	-	0.73
Total financial liabilities	3.88	6.81	3,163.78	19.22	13.76	3,571.50

Unit : Million Baht

	Consolidated									
	Dec 31, 2018					Dec 31, 2017				
	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets
<b>Financial assets</b>										
Cash and cash equivalents	-	-	103,193.56	-	-	-	-	49,419.47	-	-
Short-term investments	-	-	-	-	26,626.06	-	-	-	-	96,588.15
Investments in trading securities	2,289.34	-	-	-	-	6.78	-	-	-	-
Investments in available-for- sale securities	-	-	-	357.17	-	-	-	-	23.31	-
Account receivable - parent company	-	-	20,674.75	-	-	-	-	18,515.97	-	-
Trade and other accounts receivable	-	-	18,127.65	-	-	-	-	6,144.97	-	-
Other current assets	-	-	2,376.55	-	-	-	-	2,838.63	-	-
Long-term loans to related parties	-	-	3,098.81	-	-	-	-	3,611.15	-	-
Financial derivative assets	1,358.25	811.31	-	-	-	23.54	635.98	-	-	-
Other non-current assets	-	-	2,889.17	-	-	-	-	2,258.14	-	-
<b>Total financial assets</b>	<b>3,647.59</b>	<b>811.31</b>	<b>150,360.49</b>	<b>357.17</b>	<b>26,626.06</b>	<b>30.32</b>	<b>635.98</b>	<b>82,788.33</b>	<b>23.31</b>	<b>96,588.15</b>

Unit : Million Baht

	Consolidated					
	Dec 31, 2018			Dec 31, 2017		
	Fair value through statement of income	Derivative hedging instruments	Amortized cost	Fair value through statement of income	Derivative hedging instruments	Amortized cost
<b>Financial liabilities</b>						
Trade accounts payable and working capital to co-venturers	-	-	3,901.58	-	-	4,280.98
Current portion of long-term debts	-	-	13,207.55	-	-	13,062.90
Accrued expenses and interest payable	-	-	19,892.09	-	-	16,832.51
Deferred considerations acquired through business acquisition	-	-	15,120.70	-	-	-
Other current liabilities	-	-	616.17	-	-	573.77
Financial derivative liabilities	125.79	220.95	-	628.28	449.54	-
Debentures and long-term loans	-	-	49,932.25	-	-	81,945.80
Other non-current liabilities	-	-	4.11	-	-	23.83
Total financial liabilities	<u>125.79</u>	<u>220.95</u>	<u>102,674.45</u>	<u>628.28</u>	<u>449.54</u>	<u>116,719.79</u>

Unit : Million US Dollar

	The Company									
	Dec 31, 2018					Dec 31, 2017				
	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets
<b>Financial assets</b>										
Cash and cash equivalents	-	-	462.09	-	-	-	-	387.99	-	-
Short-term investments	-	-	-	-	462.70	-	-	-	-	1,247.32
Investments in trading securities	70.54	-	-	-	-	0.20	-	-	-	-
Investments in available-for- sale securities	-	-	-	10.45	-	-	-	-	-	-
Account receivable - parent company	-	-	399.09	-	-	-	-	321.54	-	-
Trade and other accounts receivable	-	-	435.61	-	-	-	-	41.11	-	-
Short-term loans to related parties	-	-	1,175.45	-	-	-	-	6,778.68	-	-
Other current assets	-	-	71.29	-	-	-	-	33.81	-	-
Long-term loans to related parties	-	-	5,418.53	-	-	-	-	24.96	-	-
Financial derivative assets	2.74	25.00	-	-	-	0.70	19.46	-	-	-
Other non-current assets	-	-	4.62	-	-	-	-	4.48	-	-
<b>Total financial assets</b>	<b>73.28</b>	<b>25.00</b>	<b>7,966.68</b>	<b>10.45</b>	<b>462.70</b>	<b>0.90</b>	<b>19.46</b>	<b>7,592.57</b>	<b>-</b>	<b>1,247.32</b>

Unit : Million US Dollar

	The Company					
	Dec 31, 2018			Dec 31, 2017		
	Fair value through statement of income	Derivative hedging instruments	Amortized cost	Fair value through statement of income	Derivative hedging instruments	Amortized cost
<b>Financial liabilities</b>						
Trade accounts payable and working capital to co-venturers	-	-	31.64	-	-	29.98
Current portion of long-term debts	-	-	407.01	-	-	399.71
Accrued expenses and interest payable	-	-	293.21	-	-	254.71
Deferred considerations acquired through business acquisition	-	-	465.97	-	-	-
Other current liabilities	-	-	5.73	-	-	7.05
Financial derivative liabilities	2.81	6.81	-	11.68	13.76	-
Debentures and long-term loans	-	-	351.99	-	-	752.28
Total financial liabilities	<u>2.81</u>	<u>6.81</u>	<u>1,555.55</u>	<u>11.68</u>	<u>13.76</u>	<u>1,443.73</u>

Unit : Million Baht

	The Company									
	Dec 31, 2018					Dec 31, 2017				
	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets	Fair value through statement of income	Derivative hedging instruments	Loans and accounts receivable	Available- for-sale financial assets	Held-to- maturity financial assets
<b>Financial assets</b>										
Cash and cash equivalents	-	-	14,994.85	-	-	-	-	12,679.71	-	-
Short-term investments	-	-	-	-	15,014.54	-	-	-	-	40,763.72
Investments in trading securities	2,289.08	-	-	-	-	6.51	-	-	-	-
Investments in available-for- sale securities	-	-	-	339.10	-	-	-	-	-	-
Account receivable - parent company	-	-	12,950.47	-	-	-	-	10,508.26	-	-
Trade and other accounts receivable	-	-	14,135.53	-	-	-	-	1,343.45	-	-
Short-term loans to related parties	-	-	38,143.18	-	-	-	-	221,533.32	-	-
Other current assets	-	-	2,313.30	-	-	-	-	1,105.00	-	-
Long-term loans to related parties	-	-	175,830.35	-	-	-	-	815.59	-	-
Financial derivative assets	88.75	811.31	-	-	-	22.89	635.98	-	-	-
Other non-current assets	-	-	149.86	-	-	-	-	146.35	-	-
<b>Total financial assets</b>	<b>2,377.83</b>	<b>811.31</b>	<b>258,517.54</b>	<b>339.10</b>	<b>15,014.54</b>	<b>29.40</b>	<b>635.98</b>	<b>248,131.68</b>	<b>-</b>	<b>40,763.72</b>

Unit : Million Baht

	The Company					
	Dec 31, 2018			Dec 31, 2017		
	Fair value through statement of income	Derivative hedging instruments	Amortized cost	Fair value through statement of income	Derivative hedging instruments	Amortized cost
<b>Financial liabilities</b>						
Trade accounts payable and working capital to co-venturers	-	-	1,026.66	-	-	979.71
Current portion of long-term debts	-	-	13,207.55	-	-	13,062.90
Accrued expenses and interest payable	-	-	9,514.72	-	-	8,324.16
Deferred considerations acquired through business acquisition	-	-	15,120.70	-	-	-
Other current liabilities	-	-	185.92	-	-	230.25
Financial derivative liabilities	91.08	220.95	-	381.73	449.54	-
Debentures and long-term loans	-	-	11,422.08	-	-	24,585.35
Total financial liabilities	91.08	220.95	50,477.63	381.73	449.54	47,182.37

**37. Share Capital**

As at December 31, 2018, the Company's registered capital consists of 3,969.98 million ordinary shares at Baht 1 per share, with a total of Baht 3,969.98 million. The details of the change in the issued and fully paid-up ordinary shares are as follows:

Unit : Million Shares

Ordinary shares issued and fully paid-up

Balance as at January 1, 2018	3,969.98
New ordinary shares issued during the year	-
Balance as at December 31, 2018	<u>3,969.98</u>

Unit : Million Shares

Ordinary shares issued and fully paid-up

Balance as at January 1, 2017	3,969.98
New ordinary shares issued during the year	-
Balance as at December 31, 2017	<u>3,969.98</u>

**38. Legal Reserve**

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Balance as at January 1	15.05	15.05	397.00	397.00
Appropriation during the year	-	-	-	-
Balance as at December 31	<u>15.05</u>	<u>15.05</u>	<u>397.00</u>	<u>397.00</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Balance as at January 1	15.05	15.05	397.00	397.00
Appropriation during the year	-	-	-	-
Balance as at December 31	<u>15.05</u>	<u>15.05</u>	<u>397.00</u>	<u>397.00</u>

Under the Public Limited Company Act., B.E. 2535, the Company is required to set aside a legal reserve at least 5 % of its net profit until the reserve is not less than 10% percent of the registered capital. The legal reserve is non-distributable by the Company. The Company has fully set aside the legal reserve as required by the law.

**39. Petroleum Royalties and Remuneration**

Petroleum royalties and remuneration for the years comprised:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Petroleum royalties	469.66	367.86	15,204.94	12,472.10
Special remuneration benefits	-	-	-	-
Total	469.66	367.86	15,204.94	12,472.10

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Petroleum royalties	354.06	270.10	11,464.12	9,152.09
Special remuneration benefits	-	-	-	-
Total	354.06	270.10	11,464.12	9,152.09

**40. Expenses by Nature**

Significant expenses by nature of the Group which comprise the expenses based on its percentage of interest in each project for the years are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	2018	2017	2018	2017
Salary, wages and employees' benefits	195.32	178.62	6,311.70	6,047.32
Repair and maintenance	143.90	119.04	4,960.36	4,037.21
Exploration well and projects write-off	0.67	25.94	21.47	858.04
Geological and geophysical expenses	29.28	23.05	945.52	781.69
Logistic	128.01	130.89	4,134.15	4,439.13

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	2018	2017	2018	2017
Salary, wages and employees' benefits	146.76	126.00	4,742.62	4,263.60
Repair and maintenance	67.80	47.21	2,189.64	1,600.98
Geological and geophysical expenses	-	0.46	-	15.49
Logistic	53.23	56.09	1,719.00	1,902.45



	Unit : US Dollar		Unit : Baht	
	The Company		The Company	
	2018	2017	2018	2017
Profit attributable to shareholders (Unit : million)	811.52	816.17	26,275.64	27,707.42
<u>Less:</u> Interest expenses for subordinated capital debentures (Unit : million)	(17.40)	(46.01)	(564.10)	(1,554.42)
Redemption of subordinated capital debentures (Unit : million)	-	(23.43)	-	(784.24)
Income tax for subordinated capital debentures (Unit : million)	3.10	0.98	100.76	18.53
Profit used to determine basic earnings per share (Unit : million)	797.22	747.71	25,812.30	25,387.29
Weighted average number of ordinary shares in issue during the year (million shares)	3,969.98	3,969.98	3,969.98	3,969.98
Basic earnings per share	0.20	0.19	6.50	6.39

The Group has no potential dilutive ordinary shares in issue during the year, so no diluted earnings per share is presented.

## 42. Segment Information

Unit : Million US Dollar

	Consolidated financial statements for the year ended December 31, 2018								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
Revenues - Third parties	303.65	357.68	-	-	-	107.56	-	-	768.89
- Related parties	3,745.36	596.39	143.80	-	55.93	288.81	-	(288.81)	4,541.48
Other revenues - Third parties	20.77	1.89	0.76	-	-	0.77	109.16	(95.07)	38.28
Interest income	0.69	0.37	0.23	-	-	0.12	0.06	(0.06)	1.41
<b>Total Revenues</b>	<b>4,070.47</b>	<b>956.33</b>	<b>144.79</b>	<b>-</b>	<b>55.93</b>	<b>397.26</b>	<b>109.22</b>	<b>(383.94)</b>	<b>5,350.06</b>
Operating expenses	435.98	392.63	70.17	-	13.76	20.43	7.61	(295.50)	645.08
Administrative expenses	34.99	38.32	22.00	4.27	7.08	4.33	80.44	(85.25)	106.18
Exploration expenses									
- Write-off of exploration assets	0.60	(0.08)	-	0.15	-	-	-	-	0.67
- Geological and geophysical	1.60	9.01	1.34	21.20	11.86	-	-	-	45.01
Depreciation, depletion and amortization	1,371.23	339.72	62.82	0.01	25.98	30.62	2.31	(2.34)	1,830.35
Petroleum royalties and remuneration	469.66	-	-	-	-	-	-	-	469.66
(Gain) loss on foreign exchange	7.00	3.36	0.77	1.17	(0.25)	0.26	(0.72)	-	11.59
Other expenses	-	-	80.80	-	-	-	-	(23.03)	57.77
Finance costs	103.60	37.63	3.34	-	0.54	3.02	-	(38.45)	109.68
Share of gain of associates and joint ventures	-	-	(0.10)	-	-	-	(7.83)	-	(7.93)
<b>Total Expenses</b>	<b>2,424.66</b>	<b>820.59</b>	<b>241.14</b>	<b>26.80</b>	<b>58.97</b>	<b>58.66</b>	<b>81.81</b>	<b>(444.57)</b>	<b>3,268.06</b>
Segment profit (loss)	1,645.81	135.74	(96.35)	(26.80)	(3.04)	338.60	27.41	60.63	2,082.00
Depreciation - general									(18.16)
Administrative expenses - general									(184.05)
Operating profit									1,879.79
Other income, net									12.50
Interest income									81.94
Finance costs									(128.89)
Loss on foreign exchange									(7.04)
Gain on financial derivatives									13.97
Profit before income taxes									1,852.27
Income tax - Project	(572.77)	(76.96)	(54.90)	-	2.85	(108.38)	(3.83)		(813.99)
- Group									81.33
<b>Net Profit (Loss)</b>	<b>1,073.04</b>	<b>58.78</b>	<b>(151.25)</b>	<b>(26.80)</b>	<b>(0.19)</b>	<b>230.22</b>	<b>23.58</b>		<b>1,119.61</b>

(UNOFFICIAL TRANSLATION)

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Unit : Million US Dollar

	Consolidated financial statements as at December 31, 2018								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
<b>Assets</b>									
Segment assets	7,011.03	2,529.36	391.64	319.47	2,837.64	706.06	34.82		13,830.02
Investments under equity method	-	-	7.14	-	-	-	230.07		237.21
Unallocated assets									5,504.13
<b>Total assets</b>									<b>19,571.36</b>
<b>Liabilities</b>									
Segment liabilities	4,500.68	332.93	38.18	4.09	42.34	118.44	29.42		5,066.08
Unallocated liabilities									2,484.77
<b>Total liabilities</b>									<b>7,550.85</b>
<b>Capital Expenditures</b>	<b>2,154.77</b>	<b>274.07</b>	<b>14.03</b>	<b>27.01</b>	<b>49.67</b>	<b>0.68</b>	<b>13.32</b>		<b>2,533.55</b>

	Consolidated financial statements for the year ended December 31, 2018								
	Exploration and production					Pipeline	Others	Inter-company Elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
Revenues - Third parties	9,814.29	11,552.96	-	-	-	3,481.65	-	-	24,848.90
- Related parties	121,250.42	19,286.71	4,619.92	-	1,803.20	9,337.87	-	(9,337.87)	146,960.25
Other revenues - Third parties	676.95	59.65	24.79	-	0.04	24.85	3,528.96	(3,071.66)	1,243.58
Interest income	22.29	11.98	7.41	0.10	-	4.04	2.07	(2.07)	45.82
<b>Total Revenues</b>	<b>131,763.95</b>	<b>30,911.30</b>	<b>4,652.12</b>	<b>0.10</b>	<b>1,803.24</b>	<b>12,848.41</b>	<b>3,531.03</b>	<b>(12,411.60)</b>	<b>173,098.55</b>
Operating expenses	14,107.19	12,690.18	2,259.15	-	443.94	659.57	247.66	(9,552.26)	20,855.43
Administrative expenses	1,130.02	1,236.73	714.38	138.54	228.37	140.14	2,599.64	(2,753.28)	3,434.54
Exploration expenses									
- Write-off of exploration assets	19.16	(2.73)	-	5.04	-	-	-	-	21.47
- Geological and geophysical	50.14	292.07	43.45	702.49	371.44	-	-	-	1,459.59
Depreciation, depletion and amortization	44,409.76	10,971.34	2,015.59	0.35	837.13	989.57	74.83	(76.29)	59,222.28
Petroleum royalties and remuneration	15,204.94	-	-	-	-	-	-	-	15,204.94
(Gain) loss on foreign exchange	249.00	111.69	24.84	35.52	(7.88)	8.25	(22.87)	-	398.55
Other expenses	-	-	2,637.60	-	-	-	-	(751.37)	1,886.23
Finance costs	3,360.58	1,216.83	107.21	-	17.58	96.08	0.01	(1,241.83)	3,556.46
Share of gain of associates and joint ventures	-	-	(3.24)	-	-	-	(253.01)	-	(256.25)
<b>Total Expenses</b>	<b>78,530.79</b>	<b>26,516.11</b>	<b>7,798.98</b>	<b>881.94</b>	<b>1,890.58</b>	<b>1,893.61</b>	<b>2,646.26</b>	<b>(14,375.03)</b>	<b>105,783.24</b>
Segment profit (loss)	53,233.16	4,395.19	(3,146.86)	(881.84)	(87.34)	10,954.80	884.77	1,963.43	67,315.31
Depreciation - general									(586.73)
Administrative expenses - general									(5,970.02)
Operating profit									60,758.56
Other income, net									403.53
Interest income									2,645.53
Finance costs									(4,150.66)
Loss on foreign exchange									(225.68)
Gain on financial derivatives									539.30
Profit before income taxes									59,970.58
Income tax - Project	(18,532.58)	(2,483.43)	(1,792.70)	-	89.48	(3,532.25)	(123.59)		(26,375.07)
- Group									2,610.78
<b>Net Profit (Loss)</b>	<b>34,700.58</b>	<b>1,911.76</b>	<b>(4,939.56)</b>	<b>(881.84)</b>	<b>2.14</b>	<b>7,422.55</b>	<b>761.18</b>		<b>36,206.29</b>

Unit : Million Baht

	Consolidated financial statements as at December 31, 2018								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
<b>Assets</b>									
Segment assets	227,506.86	82,077.26	12,708.72	10,366.86	92,080.92	22,911.44	1,129.75		448,781.81
Investments under equity method	-	-	231.54	-	-	-	7,465.84		7,697.38
Unallocated assets									178,608.14
<b>Total assets</b>									<b>635,087.33</b>
<b>Liabilities</b>									
Segment liabilities	146,046.31	10,803.65	1,238.76	132.70	1,373.98	3,843.33	954.78		164,393.51
Unallocated liabilities									80,630.43
<b>Total liabilities</b>									<b>245,023.94</b>
Capital Expenditures	70,416.42	8,851.08	452.98	872.40	1,604.19	22.05	430.00		82,649.12

	Consolidated financial statements for the year ended December 31, 2017								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
Revenues - Third parties	227.66	311.91	-	-	-	77.80	-	-	617.37
- Related parties	2,929.11	538.37	220.58	-	53.58	253.62	-	(253.62)	3,741.64
Other revenues - Third parties	17.71	4.92	2.28	0.02	1.12	0.81	100.54	(86.14)	41.26
Interest income	0.07	0.15	0.09	0.01	-	0.07	0.05	(0.05)	0.39
<b>Total Revenues</b>	<b>3,174.55</b>	<b>855.35</b>	<b>222.95</b>	<b>0.03</b>	<b>54.70</b>	<b>332.30</b>	<b>100.59</b>	<b>(339.81)</b>	<b>4,400.66</b>
Operating expenses	371.64	376.72	92.78	-	20.25	20.84	9.42	(266.59)	625.06
Administrative expenses	49.51	36.16	12.71	2.89	6.18	4.02	73.16	(73.18)	111.45
Exploration expenses									
- Write-off of exploration assets	21.21	4.74	-	0.03	(0.04)	-	-	-	25.94
- Geological and geophysical	3.61	17.99	1.96	2.34	0.36	-	-	-	26.26
Depreciation, depletion and amortization	1,092.58	332.38	140.86	0.01	33.27	30.18	2.62	(1.02)	1,630.88
Petroleum royalties and remuneration	367.86	-	-	-	-	-	-	-	367.86
(Gain) loss on foreign exchange	(0.38)	(11.72)	0.18	0.04	0.10	0.18	(2.13)	-	(13.73)
Impairment loss on assets	-	-	-	558.21	-	-	-	-	558.21
Finance costs	75.70	35.80	5.37	-	0.58	11.23	-	(40.62)	88.06
Share of gain of associates and joint ventures	-	-	(0.06)	-	-	-	(9.69)	-	(9.75)
<b>Total Expenses</b>	<b>1,981.73</b>	<b>792.07</b>	<b>253.80</b>	<b>563.52</b>	<b>60.70</b>	<b>66.45</b>	<b>73.38</b>	<b>(381.41)</b>	<b>3,410.24</b>
Segment profit (loss)	1,192.82	63.28	(30.85)	(563.49)	(6.00)	265.85	27.21	41.60	990.42
Depreciation - general									(19.34)
Administrative expenses - general									(139.92)
Operating profit									831.16
Other income, net									12.02
Interest income									59.19
Finance costs									(138.17)
Gain on foreign exchange									37.67
Loss on financial derivatives									(28.41)
Profit before income taxes									773.46
Income tax - Project	(366.87)	(23.52)	(15.00)	-	3.03	(27.81)	(3.32)		(433.49)
- Group									253.92
Profit from continuing operations									593.89
Loss from discontinued operations – net of tax									(0.35)
<b>Net Profit (Loss)</b>	<b>825.95</b>	<b>39.76</b>	<b>(45.85)</b>	<b>(563.49)</b>	<b>(2.97)</b>	<b>238.04</b>	<b>23.89</b>		<b>593.54</b>

	Consolidated financial statements as at December 31, 2017								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
<b>Assets</b>									
Segment assets	5,717.90	2,632.89	818.82	303.29	2,818.51	704.36	65.43		13,061.20
Investments under equity method	-	-	7.04	-	-	-	224.33		231.37
Unallocated assets									5,927.25
<b>Total assets</b>									<b>19,219.82</b>
<b>Liabilities</b>									
Segment liabilities	3,582.20	358.01	186.48	2.09	40.62	50.60	20.34		4,240.34
Unallocated liabilities									3,462.83
<b>Total liabilities</b>									<b>7,703.17</b>
Capital Expenditures	1,000.17	349.81	56.73	6.70	45.79	4.70	7.77		1,471.67

	Consolidated financial statements for the year ended December 31, 2017								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
Revenues - Third parties	7,697.35	10,575.97	-	-	-	2,626.91	-	-	20,900.23
- Related parties	99,310.60	18,239.25	7,466.14	-	1,808.43	8,594.61	-	(8,594.61)	126,824.42
Other revenues - Third parties	600.91	174.52	79.15	0.59	37.12	27.35	3,404.69	(2,917.01)	1,407.32
Interest income	2.54	5.23	2.92	0.40	0.04	2.25	1.82	(1.81)	13.39
<b>Total Revenues</b>	<b>107,611.40</b>	<b>28,994.97</b>	<b>7,548.21</b>	<b>0.99</b>	<b>1,845.59</b>	<b>11,251.12</b>	<b>3,406.51</b>	<b>(11,513.43)</b>	<b>149,145.36</b>
Operating expenses	12,600.51	12,751.10	3,138.91	-	690.32	708.48	319.56	(9,034.87)	21,174.01
Administrative expenses	1,676.86	1,217.87	430.21	97.34	208.95	135.99	2,473.62	(2,477.39)	3,763.45
Exploration expenses									
- Write-off of exploration assets	700.41	157.75	-	1.25	(1.37)	-	-	-	858.04
- Geological and geophysical	119.08	609.53	66.02	78.65	13.30	-	-	-	886.58
Depreciation, depletion and amortization	37,087.02	11,253.82	4,781.59	0.34	1,125.88	1,024.01	88.98	(34.61)	55,327.03
Petroleum royalties and remuneration	12,472.10	-	-	-	-	-	-	-	12,472.10
(Gain) loss on foreign exchange	15.95	(395.72)	5.76	0.83	3.22	6.07	(72.82)	-	(436.71)
Impairment loss on assets	-	-	-	18,504.89	-	-	-	-	18,504.89
Finance costs	2,568.47	1,214.66	182.14	-	19.63	383.09	-	(1,379.01)	2,988.98
Share of gain of associates and joint ventures	-	-	(2.06)	-	-	-	(326.66)	-	(328.72)
<b>Total Expenses</b>	<b>67,240.40</b>	<b>26,809.01</b>	<b>8,602.57</b>	<b>18,683.30</b>	<b>2,059.93</b>	<b>2,257.64</b>	<b>2,482.68</b>	<b>(12,925.88)</b>	<b>115,209.65</b>
Segment profit (loss)	40,371.00	2,185.96	(1,054.36)	(18,682.31)	(214.34)	8,993.48	923.83	1,412.45	33,935.71
Depreciation - general									(656.34)
Administrative expenses - general									(4,695.80)
Operating profit									28,583.57
Other income, net									403.76
Interest income									2,002.67
Finance costs									(4,687.52)
Gain on foreign exchange									1,209.24
Loss on financial derivatives									(933.96)
Profit before income taxes									26,577.76
Income tax - Project	(12,426.86)	(803.03)	(489.98)	-	104.00	(939.41)	(112.75)		(14,668.03)
- Group									8,681.08
Profit from continuing operations									20,590.81
Loss from discontinued operations – net of tax									(11.35)
<b>Net Profit (Loss)</b>	<b>27,944.14</b>	<b>1,382.93</b>	<b>(1,544.34)</b>	<b>(18,682.31)</b>	<b>(110.34)</b>	<b>8,054.07</b>	<b>811.08</b>		<b>20,579.46</b>

	Consolidated financial statements as at December 31, 2017								
	Exploration and production					Pipeline	Others	Inter-company elimination	Group's total business
	Thailand	Other Southeast Asia	Australia	America	Africa	Southeast Asia			
<b>Assets</b>									
Segment assets	186,866.17	86,045.33	26,759.68	9,911.68	92,111.62	23,019.23	2,138.22		426,851.93
Investments under equity method	-	-	229.97	-	-	-	7,331.26		7,561.23
Unallocated assets									193,708.13
<b>Total assets</b>									<b>628,121.29</b>
<b>Liabilities</b>									
Segment liabilities	117,069.40	11,700.13	6,094.40	68.27	1,327.60	1,653.66	664.79		138,578.25
Unallocated liabilities									113,168.32
<b>Total liabilities</b>									<b>251,746.57</b>
Capital Expenditures	33,920.65	11,863.72	1,924.15	227.20	1,552.84	159.51	263.42		49,911.49

The Group is organized into the following business segments:

- Exploration and production: The Group operates in oil and gas exploration and production both domestically and overseas, either as an operator or as a joint venture partner with international oil and gas companies. Most domestic projects are located in the Gulf of Thailand. Overseas projects are located in Southeast Asia, Australia, America and Africa. As at the financial statements date, the Group had 22 projects in the production phase and 18 projects in the exploration phases.
- Overseas pipelines: The Group has investments with its joint venture partners to operate pipelines to transport natural gas from the exploration and production projects where the Group has working interests i.e., Yadana, Yetagun and Zawtika projects.
- The Group's other operations consist mainly of investments in projects strategically connected to the energy business and other operations. These do not constitute a separately reportable segment.

#### 43. Risk Management

The Group exposes to various risks from its business and operation as follows:

##### Market Risk

Market risk is the situation whereby changes in commodity prices, interest rates, and foreign exchange rates may positively or adversely impact the Group's revenues, cash flows, assets, and liabilities.

The Group uses various financial instruments for the purpose of managing the risk exposure on the fluctuation in the commodity prices, interest rates and foreign exchange rates.

##### ■ Price Risk

The Group's product prices vary with those of world oil prices, which are subject to various factors beyond its control, for instance, market demand and supply, political and economic stability of various countries, OPEC's production policy, oil reserves in each country and the seasonal changes of the global climate.

Fluctuations in world oil prices directly affect the prices of the Group's crude oil and condensate. However, because of built-in natural gas pricing mechanisms found in the Gas Sale Agreement (GSA) which cushion natural gas prices from oil prices volatility (Natural Hedge), when the reference oil prices change, the typical prices of natural gas, which is the main product of the Groups, do change in the same direction. Most of the Group's contractual natural gas prices are adjusted every 6 or 12 months depending on the gas price formula of each project, the natural gas price will move correspondingly to a certain degree compared to the prices of crude oil and condensate.

In 2018, the crude oil price has continued to increase from prior year and rised to its highest level in early October at US Dollar 84 per barrel as a result of positive factors from the coordination between OPEC and non-OPEC to continuously reduce crude oil production. According to the OPEC meeting in December 2018, major oil producers have reached a deal to extend the reduction of crude oil production until June 2019 by cut oil production around 1.2 million barrels per day. Moreover, the United States of America's reinstated sanctions on Iran have raised the concern over the market supply, in which it is expected in decreasing in Iran's crude oil exports by 0.2 - 1.0 million barrels per day. In addition, the increase in global

demand on crude oil around 1.3 million barrels per day from the economic expansion, and the unrest from geopolitical factors in the Middle East affect the increase in oil price. However, there are negative factors which put the crude oil price under pressure. The increase in crude oil rigs in the United States of America resulted in an increase crude oil production in the United States of America at its highest level record at 11.7 million barrels per day. Moreover, there are an economic factor from trade war between the United States of America and China, which resulted from tariff barriers, and also an increase in policy interest rate by the Federal Reserve. The average Dubai crude oil price for the year is approximately US Dollar 69.7 per barrel

The Group has managed the oil price risk by analyzing the impact of the level of oil price changes to revenue and net profit of the Group annually. The risk mitigation plan is reviewed by the Risk Management Committee and the Board of Directors in order to be used as the Group's operation framework.

As at December 31, 2018, the Group entered into oil price hedging derivatives for the years 2019 and 2020 totaling 9.81 million barrels.

■ **Interest Rate Risk**

The Group is exposed to the risk from changes in interest rate that will affect future cash flows and fair values of financial instruments. Some of the Group's debts are subject to floating interest rates, resulting in a higher interest expense if the market interest rates increase. In order to manage the interest rate risk, the Group has a policy to maintain a proper proportion between fixed interest rate debts and floating interest rate debts and to use the financial instruments, such as interest rate swap to swap from floating interest rate to fixed interest rate. The Group also considers costs, market conditions, and acceptable risk before entering into the financial instrument to prevent interest rate risk.

As at December 31, 2018, the Group's debts are fixed interest rate debts after entering into the interest rate swaps (in 2017, a proportion of fixed interest rate debts was 80% of total debts). The weighted average interest rates of total debts was 5.32% per annum (in 2017, it was 4.50% per annum).

The changes in the Group's interest rates on borrowing as at January 1, 2019 had no impact on the Group's profit before income taxes for the year 2019 since all debts are fixed interest rate debts after entering into the interest rate swaps (in 2018, if the floating interest rate on debt increased by 1% per annum, the profit before income taxes would decrease by approximately US Dollars 5.83 million). The calculation of the effect from the changes in the interest rate is based on the assumption that there is no changes in the principal amount, the debts portion, and all interest rates until December 31, 2018. However, the effect on the Group's profit before income taxes from the above analysis does not consider the effect from the changes in economic conditions, which may affect the the increase or decrease of the interest rate.

■ **Foreign Exchange Rate Risk**

The vast majority of the Group's domestic and overseas business (revenues and expenses) are in US Dollar and the Group has determined the US Dollar as the functional currency by considering from revenue and operating expenses used in the primary economic environment in which the entity operates. The Group is exposed to the exchange rate risks from transactions which are denominated in currencies that are not the Group's functional currency.

The Group is aware of the risks surrounding financial assets and liabilities denominated in foreign currencies. As a result, the Group has a policy of asset and liability management by which the structure and features of transactions regarding assets, liabilities and equity are aligned with each other. In addition, the Group has considered managing foreign exchange rate risk with financial derivatives together with the costs, consideration yields and risks arising in each interval.

The Group's profit before income taxes is sensitive to changes in foreign currency that impacts net monetary assets and liabilities denominated in currencies other than functional currency. If at December 31, 2018 and 2017, the other currencies had fluctuated 10% against the functional currency, the possible changes to the Group's profit before income taxes are as follows:

	Unit : Million US Dollar	
	Consolidated	
	Exposure of asset and liability position to the exchange rate	
	Baht to US Dollar	Canadian Dollar to US Dollar
For the year ended December 31, 2018		
Profit before income taxes increase		
(10% US Dollar appreciation)	8	1
Profit before income taxes decrease		
(10% US Dollar depreciation)	(8)	(1)
For the year ended December 31, 2017		
Profit before income taxes increase (decrease)		
(10% US Dollar appreciation)	(25)	2
Profit before income taxes increase (decrease)		
(10% US Dollar depreciation)	25	(2)

**Credit Risk**

The Group's policy to manage its credit risk is to enter into transactions with the customers who have good credit profiles. The majority of sales is made with PTT Public Company Limited, the parent company. In addition, the Group carefully assesses and regularly reviews the credit profiles of its customers.

The Group places deposits with the banks which are rated at investment grade level. The Group regularly assesses credit quality and stability of these banks by taking into account of their credit rating, investment portfolio, and other financial ratios which demonstrate their performance and the ability to control their business risks, such as debt to deposit ratio, non-performing loan to total loan ratio. These factors are used to manage risks and to consider the amount of bank deposit limit in order to ensure that deposits are well-diversified and to avoid concentration risks with individual bank together with the consideration yields and acceptable risk in each time interval.

Before entering into financial derivative contracts, the Group has assessed the financial position and credit worthiness, including setting up credit exposure limit, of counterparty bank in the same way as when the Group assesses banks before placing deposit as described above. Currently all banks in which the Group has entered into financial derivative contracts are rated at investment grade level. In addition, the Group has adjusted, based on the timing and type of transactions, the outstanding balance of each derivative financial instrument made with banks to reflect the risk-adjusted exposure and has diversified transactions to avoid concentration risks with individual bank together with the costs, consideration yields and risks arising in each interval. The Group's maximum exposure to credit risks is the fair value of financial assets.

Liquidity Risk

Liquidity risk is the risk that suitable sources of funding for the Group's business activities may not be available. The Group's contractual maturity of liabilities and interest, including the derivative contracts are as follows:

	Unit : Million US Dollar				
	Within 1 year	Over 1 year but not exceeding 3 years	Over 3 years but exceeding 5 years	Over 5 years	Total
Trade accounts payable and working capital to co-venturers	120.24	-	-	-	120.24
Accrued expenses	596.43	-	-	-	596.43
Deferred considerations acquired through business acquisition	465.97	-	-	-	465.97
Other current liabilities	18.99	-	-	-	18.99
Debentures with fixed interest rate					
Principal	406.78	700.00	-	841.31	1,948.09
Interest paid*	96.53	155.86	96.10	668.76	1,017.25
Cash outflow from foreign currency and interest rate swap **	438.38	35.36	35.31	446.23	955.28
Cash inflow from foreign currency and interest rate swap **	432.31	33.91	33.87	444.51	944.60
Cash outflow from forward foreign exchange **	1,206.36	-	-	-	1,206.36
Cash inflow from forward foreign exchange **	1,208.77	-	-	-	1,208.77

The major assumptions for the data presented in the table above are that all the interest expenses are calculated based on the nominal interest rate and there is no change in aggregate principal amounts of loans other than repayment at scheduled maturity.

- Thai Baht liabilities were equivalent to US Dollar at the weighted average exchange rate between weighted average buying and selling rates announced by the Bank of Thailand on December 28, 2018 at Baht 32.4498 per US Dollar.

\* Interest paid represents the interest payment due within one year.

\*\*The Group enters into derivative contracts whose cash inflow and cash outflow are not qualified for the net settlement, therefore the Group separates cash inflow from cash receipt and cash outflow from cash payment for each type of derivative contract.

The Group manages its liquidity risks by preparing cash flow forecasts and adjusting financial forecasts on a regular basis, entering into financing program, issuing short-term debt securities in order to access Thailand's capital market, as well as entering into short-term credit facilities with commercial banks with the interest rate agreed in advance.

The outstanding principal amount and undrawn facilities are summarized below:

	Unit : Million US Dollar	
	Credit limit	Undrawn amount
	<u>                    </u>	<u>                    </u>
Short-term committed bank credit facility	616.34	616.34
Short-term uncommitted bank credit facility	440.63	440.63

Thai Baht credit facility is translated to US Dollar using the weighted average exchange rate between weighted average buying and selling rates announced by the Bank of Thailand on December 28, 2018 at Baht 32.4498 per US Dollar.

The Company's International Credit Rating is comparable with the Sovereign Rating of Thailand and the National Credit Rating is at the AAA. As a result, the Company can access to the source of fund for the long-term loan at the interest rate approximate the market interest rate. For the years 2018 and 2017, the Company's credit ratings as assigned by prominent credit rating agencies are as follows:

	2018		2017	
	<u>Foreign</u> <u>Currency</u>	<u>Domestic</u> <u>Currency</u>	<u>Foreign</u> <u>Currency</u>	<u>Domestic</u> <u>Currency</u>
Rating Agency				
Moody's	Baa1	Baa1	Baa1	Baa1
Standard and Poor's	BBB+	BBB+	BBB+	BBB+
Japan Credit Rating	-	-	A-	A
TRIS Rating (National Rating)	-	AAA	-	AAA

#### 44. Dividends

On April 2, 2018, the Annual General Meeting of the Shareholders approved payment of a dividend for the year 2017 of Baht 4.25 per share. The Company made an interim dividend payment for the first half-year operations of 2017 at the rate of Baht 1.50 per share on August 25, 2017 and for the second half-year operations of 2017 at the rate of Baht 2.75 per share on April 12, 2018.

The Company estimated the dividend to its shareholders for the year 2018 at Baht 5 per share. The Company made an interim dividend payment for the first half-year operations of 2018 at the rate of Baht 1.75 per share on August 24, 2018. The remaining dividend for the second half-year operations of 2018 at the rate of Baht 3.25 per share will be paid upon approval by the Annual General Meeting of the Shareholders.

#### 45. Commitments and Contingent Liabilities

- Commitment under operating leases – the Group as a lessee

The future minimum lease payments for the non-cancellable operating leases are as follows:

	Unit : Million US Dollar		Unit : Million Baht	
	Consolidated		Consolidated	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Within 1 year	20.22	21.16	656.25	691.73
Over 1 year but not exceeding 5 years	41.00	49.68	1,330.37	1,623.50
Over 5 years	18.08	27.54	586.55	900.09
Total	<u>79.30</u>	<u>98.38</u>	<u>2,573.17</u>	<u>3,215.32</u>

	Unit : Million US Dollar		Unit : Million Baht	
	The Company		The Company	
	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017
Within 1 year	7.23	9.83	234.50	321.23
Over 1 year but not exceeding 5 years	1.71	6.89	55.75	225.25
Over 5 years	-	-	-	-
Total	<u>8.94</u>	<u>16.72</u>	<u>290.25</u>	<u>546.48</u>

- Commitment from loan agreements
  - The Company has a subordinated loan agreement with Energy Complex Company Limited (Energy Complex), with the loan limit of Baht 1,250 million. The agreement shall continue for 13 years and 6 months effective from April 2, 2009. The total value of loans provided to Energy Complex as at December 31, 2018 was US Dollar 17.87 million (Baht 580 million).

- Commitment from the guarantee of debentures and subordinated capital debentures of subsidiaries
  - The Company has commitment for the guarantee of unsecured and unsubordinated debenture of US Dollar 490 million and US Dollar 700 million for PTTEP Canada International Finance Limited (PTTEP CIF).
  - The Company has commitment for the guarantee of subordinated capital debentures of US Dollar 500 million and US Dollar 354.69 million for PTTEP Treasury Center Company Limited (PTTEP TC).

- Obligation under Gas Sale Agreement

According to the Gas Sales Agreement (GSA) of MTJDA B-17 Project, if PTTEP International Limited (PTTEPI) and the joint operation partner, as the sellers, fail to deliver the quantity of natural gas notified by the buyer on the agreed upon date, the buyer has the right to take the deficient quantity of natural gas (Shortfall) at a price equal to 75% of the current price applicable at the time the Shortfall occurred.

As at December 31, 2018, PTTEPI had an obligation for the Shortfall as per GSA mentioned above with the approximate total cost for PTTEPI of US Dollar 0.24 million (Baht 7.79 million). Currently, the negotiation between the buyer (PTT) and the seller is in process.

- Contingent liabilities

- On August 26, 2010, PTTEP Australasia (PTTEP AA) received a letter from the Government of Indonesia (GoI) claiming compensation for damages relating to the Montara oil spill incident in the Timor Sea in 2009. PTTEP AA rejected the claim on the basis that the scientific evidence was considered unproven and unsubstantiated.

On March 11, 2016, PTTEP AA received a letter from a firm of Australia lawyers representing a group of West Timorese seaweed farmers, notifying PTTEP AA of their intention to commence a legal action for compensation relating to the incident. Subsequently, on August 9, 2016, PTTEP AA was notified of a claim made in the Sydney Registry of the Federal Court of Australia seeking damages on behalf of a group of seaweed farmers (Class Action). The Statement of Claim as filed does not quantify the claim, and no supporting evidence has yet been presented to the court. PTTEP AA has appointed lawyers to defend against the claim.

On July 14, 2017, the Company received the official Statement of Claim filed by the Ministry of Environment and Forestry on behalf of GoI to the Indonesian court seeking approximately US Dollar 2.1 billion for damages related to the incident. The lawsuit was filed against the company as a joint defendant.

On February 6, 2018, the GoI requested to revoke the lawsuit with the reason to amend the claim and the court has dismissed the case.

The Company considers that the claims from representative of West Timorese seaweed farmers related to Montara oil spill incident remain unproven due to insufficient evidence to support the claim.

- The Indonesia Tax Office (ITO) issued a letter to Natuna 2 B.V., a joint operation of the Group, to assess for Transfer Tax (TT) and Branch Profit Tax (BPT) on Share Purchase Agreement of Natuna 2 B.V. in 2013, between PTTEP Netherlands Holding Cooperatie U.A., and Pertamina Hulu Energi Oil and Gas, as buyers, and HESS (Luxembourg) Exploration and Production Holding S.A.R.L., as a seller. The total amount of assessed TT, BPT and applicable penalty was approximately US Dollar 119.80 million in which US Dollar 59.90 million (Baht 1,943.84 million) was the Group's proportion.

In February 2016, Natuna 2 B.V. made an advance payment equivalent to assessed tax and penalty amount together with a submission of objection letter to ITO to prevent additional penalty that may arise during the appeal. In 2017, ITO rejected the objection and Natuna 2 B.V. brought the case to the tax court of Indonesia to object ITO's order and tax assessment. Currently, the case is under the court proceeding. Natuna 2 B.V. will recover this advance payment back if it wins the case. As at December 31, 2018, the Group has recognized this payment as an advance for tax obligation as part of other non-current assets - others in the statements of financial position.

- As at December 31, 2018, the Company had contingent liabilities in the form of letters of guarantee amounting to US Dollar 38.70 million (Baht 1,255.74 million) for the Company's financial statement and US Dollar 102.19 million (Baht 3,316.17 million) for the consolidated financial statement.

#### 46. Significant Events during the Reporting Period

- On December 13, 2018, PTTEP Energy Development Company Limited (PTTEP ED), a subsidiary of the Group, obtained the exploration and production rights, and also the operatorship of Blocks G1/61 (the Erawan field) and G2/61 (the Bongkot field), in which PTTEP ED holds 60% and 100% participating interests, respectively. The signing in the Production Sharing Contract is expected to be completed within the first quarter of 2019.

#### 47. Events after the Reporting Date

- On January 12, 2019, PTTEP MENA Limited (PTTEP MENA), a subsidiary of the Group, and its partners have signed the concession agreement to obtain the exploration and production rights of the exploration blocks Offshore 1 and Offshore 2 located on the northwestern coast of the Emirate of Abu Dhabi, the United Arab Emirates. PTTEP MENA holds 30% participating interests during the exploration period.
- On February 4, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, increased its authorized share capital by HK Dollar 205,000,262 by increasing its par value per share to HK Dollar 73,409.

- On February 4, 2019, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, increased its authorized share capital by HK Dollar 172,631,800 by increasing its par value per share to HK Dollar 29,171.
- On February 4, 2019, PTTEP Mexico E&P Limited, S. de R.L. de C.V. (PTTEP MEP), a subsidiary of the Group, increased its authorized share capital by Mexican Peso (MXN) 78,535,050 by issuing of 78,535,050 newly issued ordinary shares, at the par value of MXN 1 each.
- On February 11, 2019, PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH), a subsidiary of the Group, increased its authorized share capital by Baht 2,325,000,000 by issuing of 23,250,000 newly issued ordinary shares, at the par value of Baht 100 each.
- On February 11, 2019, PTTEP Energy Development Company Limited (PTTEP ED), a subsidiary of the Group, increased its authorized share capital by Baht 2,325,000,000 by issuing of 23,250,000 newly issued ordinary shares, at the par value of Baht 100 each.
- On February 15, 2019, PTTEP SP Limited (PTTEP SP), a subsidiary of the Group, had signed the Share Purchase Agreement (“SPA”) to acquire 33.8% stake in APICO LLC from Tatex Thailand LLC and Tatex Thailand II LLC with total transaction value of approximately US Dollar 64 million, to be adjusted for working capital until the completion date which is subject to the completion conditions as prescribed in the SPA. The closing date is expected to be within the first half of 2019.

APICO LLC holds 35% participating interests in block EU1 and E5 North (Sinphuhorm project) and 100% participating interests in block L15/43 and L27/43. The Group is currently the operator with a 55% participating interest in the Sinphuhorm project. After the completion of the transaction, the Group’s stake (both direct and indirect) in this project will increase to 66.83%.

- The Company’s Board of Directors authorized for the issue of these financial statements on February 20, 2019.
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