Forging Ahead

What began as our first domestic project has blossomed into some 40 projects in 15 countries. From a handful of office employees to a headcount of some 4,000.

From apprenticeship to international acceptance.

Our 35 years in the pursuit of energy security and the stewardship of society, communities, and the environment speaks volumes for our determination and commitment.
Armed with conviction, explorer spirit, international collaboration, and breakthrough technology and innovation, Thailand’s Energy Partner of Choice is now poised for bolder steps for sustainability and fresh challenges.
The financial statements of PTT Exploration and Production Public Company Limited and subsidiaries being consolidated 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 interpretations and accounting treatment 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 Company’s Board of Directors are responsible for the integrity and objectivity of the financial statements of PTT Exploration and Production Public Company Limited and subsidiaries in providing reasonable assurance that the financial statements truly and fairly present financial position, results of operation and cash flows. The books and records of the Company accurately reflect all transactions to safeguard the Company’s assets and the control systems are in place to prevent fraud and irregularity. The financial statements have been prepared by adoption of the appropriate accounting policy which is applied on the consistency basis and in accordance with Thai Financial Reporting Standards. In addition, significant information has been adequately disclosed in the notes to financial statements, in which the independent auditor expresses an opinion on the financial statements of PTT Exploration and Production Public Company Limited and subsidiaries in the auditor’s report.

(Signed) (Mr. Prajya Phinyawat)                    (Signed) (Mr. Phongsthorn Thavisin)
Chairman                                     President and Chief Executive Officer

February 18, 2020
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, 2019, 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, 2019, 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 (TFRSs).

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 (TSAs). 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 Standard Rules as determined by the State Audit Commission and the ethical requirements set out in the Thailand Federation of Accounting Professions’ Code of Ethics for Professional Accountants that are relevant to the State Audit Office of the Kingdom of Thailand’s audit of the consolidated and the Company’s financial statements, and has fulfilled other ethical responsibilities in accordance with the State Audit Standard Rules and these ethical requirements. The State Audit Office of the Kingdom of Thailand believes that the audit evidence
the State Audit Office of the Kingdom of Thailand has 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 identifies the followings as 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 businesses 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 calculations of depreciation, depletion, and amortization expenses as described in Note 4.12, Significant Accounting Policies – Property, Plant and Equipment, Note 8, Major Estimates and Assumptions – Estimation of Petroleum Reserves, and Note 21, 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 estimate 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 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 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 2018 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 2019.

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 8, Major Estimates and Assumptions – Provision for Decommissioning Costs and Note 32, Provision for Decommissioning Costs. As at December 31, 2019, 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 3,010.27 million and US Dollar 1,584.35 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 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 those who are responsible for inspecting and controlling 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.

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 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 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 6, Business Acquisition in Murphy Oil Corporation in Malaysia, and Note 7, Business Acquisition in Partex Holding B.V., the Group acquired the 100% shareholding interests of Murphy Oil Corporation (Murphy) in Malaysia through the acquisition of 100% shares interests in Murphy’s subsidiaries, which are Murphy Sabah Oil Co., Ltd. (Murphy Sabah) and Murphy Sarawak Oil Co., Ltd. (Murphy Sarawak), as well as, the Group acquired the 100% shareholding interests of Partex Holding B.V. (Partex) which operated in petroleum business, located in Middle East region. According to the acquisition of Murphy and Partex, the Group has to pay the total considerations for the acquisition of US Dollar 2,130.86 million, and US Dollar 716.16 million, respectively, with the fair value of the acquired identifiable net assets of US Dollar 1,519.70 million, and US Dollar 510.70 million, respectively. The Group’s management assesses that the participating interests acquired is the business combination according to the definition under Thai Financial Reporting Standard (TFRS) 3, Business Combinations.

According to TFRS 3, Business Combinations, the Group has to recognize and measure the fair value on the acquisition date of the identifiable assets acquired, liabilities assumed, and the considerations transferred (the value of considerations for the acquisition), and recognize the deferred tax assets or liabilities, and goodwill, as well as disclose relevant information in accordance with the TFRS. The Group enlisted an independent valuer to estimate the fair value of the participating interests acquired. The fair value estimation requires the selection of valuation techniques, and various assumptions, which may vary with individual judgement and experience of the valuer. The information which the valuer obtained and used in the fair value calculation 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. Examining the Sales and Purchase Agreement of the acquisition of 100% shareholding interests in Murphy Sabah and Murphy Sarawak and the 100% shareholding interests in Partex and inquiring the Group’s management to obtain an understanding of the nature and objective of the transaction, as well as significant content, terms, and conditions in the agreement, and evaluating whether the management’s
exercise of judgement regarding the acquisition to determine the participating interest is appropriate in accordance with the definition in TFRS 3, Business Combinations.

2. Examining the evidence of payments and related documents used in transaction recording to assess the appropriateness of the identification of the assets acquired and liabilities assumed, as well as the considerations transferred.

3. Communicating with the auditors of the companies within the Group regarding risks, as well as reviewing their significant audit regarding the recognition and measurement of the identifiable assets, liabilities assumed and the considerations transferred (the value of considerations for the acquisition) on the acquisition date as follows;

3.1 Evaluating the knowledge, capabilities, and objectivity of the independent valuer associated with the preparation of Purchase Price Allocation report.

3.2 Validating the fair value estimation of the identifiable assets acquired and liabilities assumed in the Purchase Price Allocation report prepared by the independent valuer by assessing the appropriateness of the information used in the estimation, as well as the significant assumptions which the independent valuer used in the fair value estimation.

3.3 Evaluating independently by the independent expert from the auditors of the companies within the Group regarding the appropriateness of the fair value valuating techniques and discount rates used in the preparation of Purchase Price Allocation report.

4. Reviewing the relevant presentation and disclosures in accordance with TFRS.

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 TFRSs, and for such internal control as management determines is necessary to enable the preparation of the 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’s 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.

**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 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 Standard Rules and TSAs 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 the State Audit Standard Rules and TSAs, 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 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 Standard Rules and relevant ethical requirements regarding independence, and to communicate 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 State Audit Office of the Kingdom of Thailand’s report unless law or regulation precludes 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 Jumpathes
(Pasutnicha Jumpathes)
Deputy Auditor General

(Signed) Buddhachard Tanjong
(Buddhachard Tanjong)
Director of Financial and Procurement
Audit Office No. 15

State Audit Office of the Kingdom of Thailand
February 18, 2020
## Financial Statements

### Statements of Financial Position

**PTT Exploration and Production Public Company Limited and Subsidiaries**

As at December 31, 2019

#### Consolidated

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>January 1, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>January 1, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit: US Dollar</td>
<td>Unit: Baht</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>2,822,897,310</td>
<td>3,180,095,315</td>
<td>1,512,181,292</td>
<td>85,121,635,618</td>
<td>103,193,560,790</td>
<td>49,419,466,004</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>200,000,000</td>
<td>820,529,928</td>
<td>2,955,491,269</td>
<td>6,030,799,292</td>
<td>26,626,058,762</td>
<td>96,588,154,097</td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>213,702,922</td>
<td>70,550,255</td>
<td>207,592</td>
<td>6,443,997,154</td>
<td>2,289,343,959</td>
<td>6,784,308</td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>534,837,021</td>
<td>637,129,582</td>
<td>566,568,454</td>
<td>16,127,473,638</td>
<td>20,674,748,268</td>
<td>18,515,974,561</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>258,925,878</td>
<td>87,250,589</td>
<td>109,434,304</td>
<td>7,807,650,023</td>
<td>2,831,266,994</td>
<td>3,576,412,993</td>
</tr>
<tr>
<td>Other accounts receivable</td>
<td>121,500,856</td>
<td>471,385,978</td>
<td>78,595,277</td>
<td>3,663,730,318</td>
<td>15,296,380,912</td>
<td>2,568,562,127</td>
</tr>
<tr>
<td>Inventories</td>
<td>32,094,999</td>
<td>23,401,706</td>
<td>19,186,294</td>
<td>967,792,479</td>
<td>759,381,456</td>
<td>627,025,615</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>298,241,328</td>
<td>258,824,758</td>
<td>298,063,802</td>
<td>8,993,167,938</td>
<td>8,398,820,043</td>
<td>9,740,997,301</td>
</tr>
<tr>
<td>Current tax assets</td>
<td>55,338,391</td>
<td>44,251,011</td>
<td>89,006,743</td>
<td>1,668,672,379</td>
<td>1,435,933,751</td>
<td>2,908,820,568</td>
</tr>
<tr>
<td>Other current assets</td>
<td>60,704,038</td>
<td>23,136,199</td>
<td>46,919,770</td>
<td>1,830,469,347</td>
<td>750,765,770</td>
<td>1,533,380,944</td>
</tr>
<tr>
<td>Accrued interests receivable</td>
<td>7,233,299</td>
<td>18,743,848</td>
<td>19,793,398</td>
<td>218,112,866</td>
<td>608,234,720</td>
<td>646,866,335</td>
</tr>
<tr>
<td>Financial derivative assets</td>
<td>12,342,074</td>
<td>44,760,255</td>
<td>720,444</td>
<td>372,162,847</td>
<td>1,452,462,783</td>
<td>23,544,769</td>
</tr>
<tr>
<td>Others</td>
<td>95,472,046</td>
<td>65,558,388</td>
<td>68,666,897</td>
<td>2,878,863,203</td>
<td>2,127,357,369</td>
<td>2,244,095,699</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>4,713,290,162</td>
<td>5,756,067,812</td>
<td>5,764,835,536</td>
<td>142,124,527,102</td>
<td>186,783,416,327</td>
<td>188,400,085,321</td>
</tr>
<tr>
<td><strong>Non-current Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>524,264</td>
<td>556,840</td>
<td>713,347</td>
<td>15,808,658</td>
<td>18,069,366</td>
<td>23,312,828</td>
</tr>
<tr>
<td>Investments in associates</td>
<td>227,626,116</td>
<td>219,796,334</td>
<td>212,644,091</td>
<td>6,863,837,299</td>
<td>7,132,361,802</td>
<td>6,946,866,335</td>
</tr>
<tr>
<td>Investments in joint ventures</td>
<td>225,370,160</td>
<td>17,412,037</td>
<td>18,721,333</td>
<td>6,795,811,001</td>
<td>565,017,696</td>
<td>611,830,253</td>
</tr>
<tr>
<td>Other long-term investments</td>
<td>345,337</td>
<td>223,807</td>
<td>11,307</td>
<td>10,413,300</td>
<td>7,262,505</td>
<td>369,529</td>
</tr>
<tr>
<td>Long-term loans to related parties</td>
<td>86,056,526</td>
<td>95,495,279</td>
<td>110,497,369</td>
<td>2,594,918,018</td>
<td>3,098,805,811</td>
<td>3,116,154,952</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>10,661,984,455</td>
<td>8,203,148,334</td>
<td>8,034,374,696</td>
<td>321,501,441,133</td>
<td>266,190,788,685</td>
<td>262,570,703,080</td>
</tr>
<tr>
<td>Goodwill</td>
<td>2,060,856,097</td>
<td>1,844,224,269</td>
<td>1,667,584,174</td>
<td>62,143,047,441</td>
<td>40,375,432,767</td>
<td>38,157,717,250</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>131,976,248</td>
<td>82,092,341</td>
<td>83,988,319</td>
<td>3,976,111,392</td>
<td>2,663,882,715</td>
<td>2,744,814,987</td>
</tr>
<tr>
<td>Exploration and evaluation assets</td>
<td>2,639,496,065</td>
<td>3,071,909,369</td>
<td>3,066,535,679</td>
<td>78,991,955,905</td>
<td>99,682,947,548</td>
<td>100,217,187,484</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>961,729,427</td>
<td>462,550,222</td>
<td>416,116,927</td>
<td>28,999,956,905</td>
<td>15,009,674,962</td>
<td>13,599,080,791</td>
</tr>
<tr>
<td><strong>Total Non-current Assets</strong></td>
<td>4,713,290,162</td>
<td>5,756,067,812</td>
<td>5,764,835,536</td>
<td>142,124,527,102</td>
<td>186,783,416,327</td>
<td>188,400,085,321</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>22,201,502,032</td>
<td>19,484,121,880</td>
<td>19,132,582,757</td>
<td>669,464,008,107</td>
<td>632,256,471,822</td>
<td>625,270,274,000</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
### Statements of Financial Position

PTT Exploration and Production Public Company Limited and Subsidiaries
As at December 31, 2019

#### Consolidated

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018 (Restated)</th>
<th>January 1, 2018 (Brought forward) (Restated)</th>
<th>December 31, 2019</th>
<th>December 31, 2018 (Restated)</th>
<th>January 1, 2018 (Brought forward) (Restated)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities and Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>107,064,556</td>
<td>102,655,689</td>
<td>115,352,784</td>
<td>3,228,424,080</td>
<td>3,331,159,471</td>
<td>3,769,834,227</td>
</tr>
<tr>
<td>Working capital to co-venturers</td>
<td>12,439,988</td>
<td>17,578,681</td>
<td>15,640,555</td>
<td>375,115,360</td>
<td>570,425,258</td>
<td>511,147,634</td>
</tr>
<tr>
<td>Current portion of long-term financial liabilities</td>
<td>18,281,361</td>
<td>407,014,532</td>
<td>399,710,434</td>
<td>551,256,111</td>
<td>13,207,553,411</td>
<td>13,062,902,055</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td>-</td>
<td>465,971,435</td>
<td>-</td>
<td>-</td>
<td>15,120,695,026</td>
<td>-</td>
</tr>
<tr>
<td>Financial derivative liabilities</td>
<td>15,213,837</td>
<td>10,685,306</td>
<td>25,521,108</td>
<td>458,757,976</td>
<td>346,736,397</td>
<td>834,053,133</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>133,969,338</td>
<td>57,364,252</td>
<td>60,545,450</td>
<td>4,039,710,172</td>
<td>1,861,456,007</td>
<td>1,978,679,428</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td>2,050,843,096</td>
<td>2,485,780,331</td>
<td>1,601,255,755</td>
<td>61,841,112,387</td>
<td>80,663,143,813</td>
<td>52,330,497,859</td>
</tr>
<tr>
<td><strong>Non-current Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debentures</td>
<td>2,704,746,265</td>
<td>1,537,766,538</td>
<td>1,938,720,566</td>
<td>81,558,909,291</td>
<td>49,900,266,673</td>
<td>63,359,158,676</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>1,358,709,648</td>
<td>781,885,385</td>
<td>890,888,365</td>
<td>40,970,525,919</td>
<td>25,372,049,810</td>
<td>29,115,045,481</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>245,248,060</td>
<td>135,263,864</td>
<td>123,772,502</td>
<td>7,395,204,113</td>
<td>4,389,278,210</td>
<td>4,044,996,125</td>
</tr>
<tr>
<td>Provision for decommissioning costs</td>
<td>2,967,512,233</td>
<td>2,243,654,819</td>
<td>2,275,432,888</td>
<td>89,482,353,377</td>
<td>72,806,223,203</td>
<td>74,363,225,090</td>
</tr>
<tr>
<td>Provision for remuneration for the renewal of petroleum production</td>
<td>190,757,774</td>
<td>133,674,387</td>
<td>63,423,986</td>
<td>3,965,259,111</td>
<td>4,337,711,471</td>
<td>2,072,753,762</td>
</tr>
<tr>
<td><strong>Total Non-current Liabilities</strong></td>
<td>8,309,485,166</td>
<td>4,992,942,233</td>
<td>6,029,780,389</td>
<td>250,564,181,268</td>
<td>162,020,127,907</td>
<td>197,058,728,211</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>10,360,328,262</td>
<td>7,478,722,564</td>
<td>7,631,036,144</td>
<td>312,405,293,655</td>
<td>242,683,271,720</td>
<td>249,389,226,070</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subordinated capital debentures</td>
<td>150,683,762</td>
<td>150,683,762</td>
<td>150,683,762</td>
<td>150,683,762</td>
<td>150,683,762</td>
<td>150,683,762</td>
</tr>
<tr>
<td>Share collection</td>
<td>81,000,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
</tr>
<tr>
<td>Subordinated capital debentures</td>
<td>81,000,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
<td>122,900,000,000</td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>10,360,328,262</td>
<td>7,478,722,564</td>
<td>7,631,036,144</td>
<td>312,405,293,655</td>
<td>242,683,271,720</td>
<td>249,389,226,070</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td>22,201,502,032</td>
<td>12,005,399,316</td>
<td>11,501,546,613</td>
<td>357,058,714,452</td>
<td>389,573,200,102</td>
<td>375,881,047,930</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
## Statements of Financial Position

**PTT Exploration and Production Public Company Limited and Subsidiaries**

As at December 31, 2019

### The Company

<table>
<thead>
<tr>
<th>Assets</th>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>9</td>
<td>715,768,020</td>
<td>462,093,407</td>
<td>21,583,266,339</td>
<td>14,994,853,673</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>10</td>
<td>200,000,000</td>
<td>462,699,928</td>
<td>6,030,799,292</td>
<td>15,014,635,178</td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>11</td>
<td>210,414</td>
<td>70,541,991</td>
<td>6,344,815</td>
<td>2,289,075,812</td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>12</td>
<td>-</td>
<td>10,450,000</td>
<td>-</td>
<td>339,100,750</td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>13,18.2</td>
<td>353,316,880</td>
<td>390,091,972</td>
<td>10,653,915,949</td>
<td>12,950,467,667</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>14</td>
<td>1,185,691</td>
<td>987,080</td>
<td>35,753,312</td>
<td>32,030,591</td>
</tr>
<tr>
<td>Other accounts receivable</td>
<td></td>
<td>72,758,047</td>
<td>434,624,804</td>
<td>2,193,945,891</td>
<td>14,103,502,101</td>
</tr>
<tr>
<td>Short-term loans to related party</td>
<td>18.3</td>
<td>362,000,567</td>
<td>1,175,450,888</td>
<td>10,915,763,811</td>
<td>38,143,164,822</td>
</tr>
<tr>
<td>Inventories</td>
<td>15</td>
<td>5,329,916</td>
<td>4,271,210</td>
<td>160,718,274</td>
<td>138,600,061</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>16</td>
<td>98,727,775</td>
<td>101,402,073</td>
<td>2,977,036,991</td>
<td>3,290,480,304</td>
</tr>
<tr>
<td>Current tax assets</td>
<td></td>
<td>15,036,646</td>
<td>24,436,122</td>
<td>453,414,956</td>
<td>792,948,075</td>
</tr>
<tr>
<td>Other current assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working capital from co-venturers</td>
<td></td>
<td>7,845,461</td>
<td>2,883,927</td>
<td>236,572,005</td>
<td>93,582,934</td>
</tr>
<tr>
<td>Accrued interests receivable</td>
<td></td>
<td>280,983,685</td>
<td>48,917,142</td>
<td>8,472,781,050</td>
<td>1,587,353,078</td>
</tr>
<tr>
<td>Financial derivative assets</td>
<td>27</td>
<td>253,020</td>
<td>5,638,411</td>
<td>7,629,569</td>
<td>182,965,483</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>65,417,724</td>
<td>30,755,680</td>
<td>1,916,036,937</td>
<td>998,016,666</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td></td>
<td>2,176,957,846</td>
<td>3,234,244,645</td>
<td>65,643,979,191</td>
<td>104,950,697,195</td>
</tr>
<tr>
<td><strong>Non-current Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments in associates</td>
<td>19.3</td>
<td>25,577,427</td>
<td>25,577,427</td>
<td>771,261,656</td>
<td>829,983,238</td>
</tr>
<tr>
<td>Investments in subsidiaries</td>
<td>19.2</td>
<td>924,403,328</td>
<td>795,711,719</td>
<td>27,874,454,685</td>
<td>25,820,712,047</td>
</tr>
<tr>
<td>Other long-term investment</td>
<td>20</td>
<td>47,837</td>
<td>11,307</td>
<td>1,442,466</td>
<td>366,916</td>
</tr>
<tr>
<td>Long-term loans to related parties</td>
<td>18.4</td>
<td>6,410,306,980</td>
<td>5,418,528,669</td>
<td>193,296,373,984</td>
<td>175,830,348,003</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>21</td>
<td>3,305,867,193</td>
<td>3,782,063,076</td>
<td>99,685,107,639</td>
<td>122,727,313,550</td>
</tr>
<tr>
<td>Goodwill</td>
<td>22</td>
<td>75,157,587</td>
<td>75,157,587</td>
<td>2,266,301,616</td>
<td>2,438,851,117</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>23</td>
<td>78,178,825</td>
<td>71,600,170</td>
<td>2,357,404,014</td>
<td>2,323,413,531</td>
</tr>
<tr>
<td>Exploration and evaluation assets</td>
<td>24</td>
<td>-</td>
<td>149,886,527</td>
<td>-</td>
<td>4,863,129,694</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>25.1</td>
<td>639,817,402</td>
<td>315,463,776</td>
<td>19,293,051,670</td>
<td>10,236,746,710</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred remuneration under agreement</td>
<td></td>
<td>11,302,332</td>
<td>13,060,045</td>
<td>340,810,484</td>
<td>423,796,265</td>
</tr>
<tr>
<td>Financial derivative assets</td>
<td>27</td>
<td>64,096,092</td>
<td>22,098,578</td>
<td>1,932,753,308</td>
<td>717,095,155</td>
</tr>
<tr>
<td>Others</td>
<td>28</td>
<td>11,674,428</td>
<td>11,923,493</td>
<td>352,030,635</td>
<td>386,915,351</td>
</tr>
<tr>
<td><strong>Total Non-current Assets</strong></td>
<td></td>
<td>11,546,429,431</td>
<td>10,681,082,374</td>
<td>348,170,992,177</td>
<td>346,599,334,577</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td></td>
<td>13,723,387,277</td>
<td>13,915,327,019</td>
<td>413,814,971,368</td>
<td>451,550,031,772</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
## Statements of Financial Position

PTT Exploration and Production Public Company Limited and Subsidiaries

As at December 31, 2019

The Company

### Liabilities and Equity

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>23,474,448</td>
<td>30,527,462</td>
<td>707,848,423</td>
<td>990,611,039</td>
</tr>
<tr>
<td>Working capital to co-venturers</td>
<td>1,145,615</td>
<td>1,110,819</td>
<td>34,544,868</td>
<td>36,045,896</td>
</tr>
<tr>
<td>Current portion of long-term financial liabilities</td>
<td>298,557</td>
<td>407,014,532</td>
<td>9,002,691</td>
<td>13,207,553,411</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>285,824,345</td>
<td>288,067,227</td>
<td>8,618,746,275</td>
<td>9,347,733,288</td>
</tr>
<tr>
<td>Accrued interests payable</td>
<td>3,064,423</td>
<td>5,145,915</td>
<td>92,404,594</td>
<td>166,984,084</td>
</tr>
<tr>
<td>Income tax payable</td>
<td>679,934,364</td>
<td>522,663,759</td>
<td>20,502,738,410</td>
<td>16,960,351,476</td>
</tr>
<tr>
<td>Short-term provisions</td>
<td>97,890,430</td>
<td>93,671,595</td>
<td>2,951,787,688</td>
<td>3,039,627,557</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td>-</td>
<td>465,971,435</td>
<td>-</td>
<td>15,120,695,026</td>
</tr>
<tr>
<td>Financial derivative liabilities</td>
<td>12,026,567</td>
<td>9,615,920</td>
<td>362,649,045</td>
<td>312,034,992</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>53,898,088</td>
<td>29,716,745</td>
<td>1,625,242,763</td>
<td>964,303,412</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td>1,157,556,837</td>
<td>1,853,505,409</td>
<td>34,904,964,757</td>
<td>60,145,940,181</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-current Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debentures</td>
<td>377,762,214</td>
<td>351,006,573</td>
<td>11,391,040,460</td>
<td>11,390,104,509</td>
</tr>
<tr>
<td>Long-term loans</td>
<td>761,949</td>
<td>985,476</td>
<td>22,975,809</td>
<td>31,978,536</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>179,375,616</td>
<td>121,503,357</td>
<td>5,408,891,691</td>
<td>3,942,763,602</td>
</tr>
<tr>
<td>Provision for decommissioning costs</td>
<td>1,571,621,696</td>
<td>1,370,656,206</td>
<td>47,390,675,072</td>
<td>44,477,564,365</td>
</tr>
<tr>
<td>Provision for remuneration for the renewal of petroleum production</td>
<td>174,922,380</td>
<td>238,401,631</td>
<td>5,274,608,833</td>
<td>7,736,093,019</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>3,044,711</td>
<td>3,503,193</td>
<td>91,810,205</td>
<td>113,678,016</td>
</tr>
<tr>
<td>Deferred income</td>
<td>25,281,990</td>
<td>23,048,355</td>
<td>762,353,022</td>
<td>747,915,257</td>
</tr>
<tr>
<td><strong>Total Non-current Liabilities</strong></td>
<td>2,332,770,556</td>
<td>2,109,104,791</td>
<td>70,342,355,092</td>
<td>68,440,097,304</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>3,490,327,393</td>
<td>3,962,610,200</td>
<td>105,247,319,849</td>
<td>128,586,037,485</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>3,969,985,400 ordinary shares of Baht 1 each</td>
<td>3,969,985,400</td>
<td>3,969,985,400</td>
<td>3,969,985,400</td>
</tr>
<tr>
<td>Issued and paid-up share capital</td>
<td>150,683,762</td>
<td>150,683,762</td>
<td>3,969,985,400</td>
<td>3,969,985,400</td>
</tr>
<tr>
<td>Share premium</td>
<td>3,439,036,612</td>
<td>3,439,036,612</td>
<td>105,417,619,764</td>
<td>105,417,619,764</td>
</tr>
<tr>
<td>Subordinated capital debentures</td>
<td>156,570,483</td>
<td>301,226,483</td>
<td>4,981,992,349</td>
<td>9,661,771,205</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>15,048,319</td>
<td>15,048,319</td>
<td>396,998,540</td>
<td>396,998,540</td>
</tr>
<tr>
<td>Appropriated</td>
<td>431,231,212</td>
<td>431,231,212</td>
<td>16,900,000,000</td>
<td>16,900,000,000</td>
</tr>
<tr>
<td>Unappropriated</td>
<td>5,597,858,914</td>
<td>200,224,792,852</td>
<td>187,500,874,929</td>
<td></td>
</tr>
<tr>
<td>Other components of equity</td>
<td>17,631,517</td>
<td>15,732,737,386</td>
<td>(883,255,551)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Equity</strong></td>
<td>10,233,059,884</td>
<td>9,952,716,819</td>
<td>308,567,651,519</td>
<td>322,963,994,287</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td>13,723,387,277</td>
<td>13,915,327,019</td>
<td>413,814,971,368</td>
<td>451,550,031,772</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>6,046,416,158</td>
<td>5,202,809,857</td>
</tr>
<tr>
<td><strong>Revenue from pipeline transportation</strong></td>
<td>116,396,137</td>
<td>107,563,734</td>
</tr>
<tr>
<td><strong>Other income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on foreign exchange</td>
<td>108,597,530</td>
<td>-</td>
</tr>
<tr>
<td>Gain on financial derivatives</td>
<td>-</td>
<td>13,966,633</td>
</tr>
<tr>
<td>Interest income</td>
<td>86,234,821</td>
<td>83,352,666</td>
</tr>
<tr>
<td>Other income</td>
<td>55,390,651</td>
<td>50,784,060</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>6,413,035,297</td>
<td>5,458,476,950</td>
</tr>
</tbody>
</table>

## Expenses

<table>
<thead>
<tr>
<th></th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating expenses</strong></td>
<td>750,682,327</td>
<td>645,084,154</td>
</tr>
<tr>
<td><strong>Exploration expenses</strong></td>
<td>128,097,990</td>
<td>45,685,474</td>
</tr>
<tr>
<td><strong>Administrative expenses</strong></td>
<td>383,776,512</td>
<td>290,233,637</td>
</tr>
<tr>
<td><strong>Petroleum royalties</strong></td>
<td>546,334,209</td>
<td>469,663,029</td>
</tr>
<tr>
<td><strong>Depreciation, depletion and amortization</strong></td>
<td>2,026,055,587</td>
<td>1,848,510,539</td>
</tr>
<tr>
<td><strong>Other expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on foreign exchange</td>
<td>-</td>
<td>18,632,091</td>
</tr>
<tr>
<td>Loss on financial derivatives</td>
<td>109,399,724</td>
<td>-</td>
</tr>
<tr>
<td>Other expenses</td>
<td>-</td>
<td>57,768,001</td>
</tr>
<tr>
<td><strong>Finance costs</strong></td>
<td>234,978,741</td>
<td>238,564,895</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>4,179,325,090</td>
<td>3,614,141,820</td>
</tr>
</tbody>
</table>

## Profit before income taxes

<table>
<thead>
<tr>
<th></th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share of profit of associates and joint ventures</strong></td>
<td>12,351,839</td>
<td>7,932,268</td>
</tr>
<tr>
<td><strong>Profit before income taxes</strong></td>
<td>2,246,062,046</td>
<td>1,852,267,398</td>
</tr>
<tr>
<td><strong>Income taxes</strong></td>
<td>(676,998,045)</td>
<td>(732,658,187)</td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td>1,569,064,001</td>
<td>1,119,609,211</td>
</tr>
</tbody>
</table>

## Earnings per share

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic earnings per share</strong></td>
<td>0.38</td>
<td>0.27</td>
<td>11.72</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
**Statements of Comprehensive Income**

PTT Exploration and Production Public Company Limited and Subsidiaries

For the Year Ended December 31, 2019

Consolidated

<table>
<thead>
<tr>
<th>Notes</th>
<th>Unit: US Dollar</th>
<th>2019</th>
<th>2018</th>
<th>Unit: Baht</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Profit for the year</td>
<td>1,569,064,001</td>
<td>1,119,609,211</td>
<td>48,802,537,906</td>
<td>36,206,290,331</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other comprehensive income (loss)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Items that will be reclassified subsequently to profit or loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exchange differences on translating financial statements</td>
<td>5</td>
<td>3,666,799</td>
<td>(4,808,840)</td>
<td>(2,296,043,900)</td>
<td>(498,522,049)</td>
</tr>
<tr>
<td></td>
<td>Loss on remeasuring available-for-sale securities</td>
<td></td>
<td>(38,246)</td>
<td>(150,837)</td>
<td>(1,306,085)</td>
<td>(5,158,138)</td>
</tr>
<tr>
<td></td>
<td>Income taxes relating to remeasuring of available-for-sale securities</td>
<td></td>
<td>1,134</td>
<td>(1,134)</td>
<td>37,087</td>
<td>(37,087)</td>
</tr>
<tr>
<td></td>
<td>Gain on cash flow hedges</td>
<td></td>
<td>15,188,878</td>
<td>705,714</td>
<td>455,066,446</td>
<td>15,136,434</td>
</tr>
<tr>
<td></td>
<td>Income taxes relating to cash flow hedges</td>
<td></td>
<td>(3,037,776)</td>
<td>(141,143)</td>
<td>(92,552,256)</td>
<td>(3,027,287)</td>
</tr>
<tr>
<td></td>
<td>Share of other comprehensive income of associates and joint ventures</td>
<td></td>
<td>4,408,259</td>
<td>336,094</td>
<td>137,371,586</td>
<td>10,828,716</td>
</tr>
<tr>
<td></td>
<td>Total Items that will be reclassified subsequently to profit or loss</td>
<td></td>
<td>20,189,048</td>
<td>(4,060,146)</td>
<td>(1,797,427,122)</td>
<td>(480,779,411)</td>
</tr>
<tr>
<td></td>
<td>Items that will not be reclassified subsequently to profit or loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exchange differences on translating financial statements</td>
<td></td>
<td>-</td>
<td>-</td>
<td>(22,753,270,182)</td>
<td>(2,349,073,515)</td>
</tr>
<tr>
<td></td>
<td>Loss from changes in actuarial assumptions of provision for employee benefits</td>
<td>31</td>
<td>(26,651,682)</td>
<td>(3,702,983)</td>
<td>(805,495,659)</td>
<td>(121,107,966)</td>
</tr>
<tr>
<td></td>
<td>Income taxes from changes in actuarial assumptions of provision for employee benefits</td>
<td></td>
<td>12,021,516</td>
<td>774,275</td>
<td>363,224,671</td>
<td>25,323,046</td>
</tr>
<tr>
<td></td>
<td>Share of other comprehensive loss of associates and joint ventures</td>
<td></td>
<td>(30,753)</td>
<td>-</td>
<td>(940,226)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Items that will not be reclassified subsequently to profit or loss</td>
<td></td>
<td>(14,660,919)</td>
<td>(2,928,708)</td>
<td>(23,196,481,396)</td>
<td>(2,444,858,435)</td>
</tr>
<tr>
<td></td>
<td>Other comprehensive income (loss) for the year - net of tax</td>
<td>5,528,129</td>
<td>(6,988,854)</td>
<td>(24,993,908,518)</td>
<td>(2,925,637,846)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total comprehensive income for the year</td>
<td>1,574,592,130</td>
<td>1,112,620,357</td>
<td>23,808,629,388</td>
<td>33,280,652,485</td>
<td></td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
## Statements of Income

PTT Exploration and Production Public Company Limited and Subsidiaries
For the Year Ended December 31, 2019

The Company

<table>
<thead>
<tr>
<th>Notes</th>
<th>2019 Unit: US Dollar</th>
<th>2018</th>
<th>2019 Unit: Baht</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>3,239,250,217</td>
<td>2,832,497,051</td>
<td>100,507,846,760</td>
<td>91,712,945,783</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on foreign exchange</td>
<td>48,348,320</td>
<td>-</td>
<td>1,503,434,335</td>
<td>-</td>
</tr>
<tr>
<td>Gain on financial derivatives</td>
<td>-</td>
<td>4,659,465</td>
<td>-</td>
<td>166,844,469</td>
</tr>
<tr>
<td>Interest income</td>
<td>315,066,394</td>
<td>92,885,998</td>
<td>4,633,760,042</td>
<td>3,723,159,334</td>
</tr>
<tr>
<td>Other income</td>
<td>144,354,658</td>
<td>115,177,833</td>
<td>4,463,376,042</td>
<td>3,723,159,334</td>
</tr>
<tr>
<td>Dividends received from related parties</td>
<td>46,175,204</td>
<td>66,297,020</td>
<td>1,412,601,869</td>
<td>2,167,208,482</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>3,793,194,793</strong></td>
<td><strong>3,111,517,367</strong></td>
<td><strong>117,662,793,631</strong></td>
<td><strong>100,790,016,766</strong></td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>279,559,667</td>
<td>235,458,276</td>
<td>8,647,466,649</td>
<td>7,628,665,176</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td>259,142</td>
<td>11,874,628</td>
<td>7,929,998</td>
<td>371,826,640</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>18.1</td>
<td>376,337,875</td>
<td>11,644,182,377</td>
<td>9,192,753,402</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>404,906,293</td>
<td>354,062,131</td>
<td>12,563,481,576</td>
<td>11,464,123,929</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>1,050,260,840</td>
<td>916,664,049</td>
<td>32,585,816,321</td>
<td>29,724,240,162</td>
</tr>
<tr>
<td>Other expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on foreign exchange</td>
<td>-</td>
<td>11,539,391</td>
<td>-</td>
<td>395,104,181</td>
</tr>
<tr>
<td>Loss on financial derivatives</td>
<td>73,572,180</td>
<td>-</td>
<td>2,302,963,481</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>2,293,181,397</strong></td>
<td><strong>1,945,219,376</strong></td>
<td><strong>71,121,831,584</strong></td>
<td><strong>63,042,983,711</strong></td>
</tr>
<tr>
<td><strong>Profit before income taxes</strong></td>
<td><strong>1,500,013,396</strong></td>
<td><strong>1,166,297,991</strong></td>
<td><strong>46,540,962,047</strong></td>
<td><strong>37,747,033,055</strong></td>
</tr>
<tr>
<td>Income taxes</td>
<td>25.2</td>
<td>(364,292,665)</td>
<td>(354,782,123)</td>
<td>(11,265,866,207)</td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td><strong>1,135,720,731</strong></td>
<td><strong>811,515,868</strong></td>
<td><strong>35,275,095,840</strong></td>
<td><strong>26,275,635,704</strong></td>
</tr>
<tr>
<td><strong>Earnings per share</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic earnings per share</td>
<td>41</td>
<td>0.28</td>
<td>0.20</td>
<td>8.80</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
### Statements of Comprehensive Income

**PTT Exploration and Production Public Company Limited and Subsidiaries**  
**For the Year Ended December 31, 2019**

**The Company**

<table>
<thead>
<tr>
<th>Note</th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>1,135,720,731</td>
<td>811,515,868</td>
</tr>
<tr>
<td>Other comprehensive income (loss)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will be reclassified subsequently to profit or loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Loss) gain on remeasuring available-for-sale securities</td>
<td>(5,670)</td>
<td>5,670</td>
</tr>
<tr>
<td>Income taxes relating to remeasuring of available-for-sale securities</td>
<td>1,134</td>
<td>(1,134)</td>
</tr>
<tr>
<td>Gain on cash flow hedges</td>
<td>13,053,896</td>
<td>705,714</td>
</tr>
<tr>
<td>Income taxes relating to cash flow hedges</td>
<td>(2,610,779)</td>
<td>(141,143)</td>
</tr>
<tr>
<td>Total Items that will be reclassified subsequently to profit or loss</td>
<td>10,438,581</td>
<td>569,107</td>
</tr>
<tr>
<td>Item that will not be reclassified subsequently to profit or loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange differences on translating financial statements</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Loss from changes in actuarial assumptions of provision for employee benefits</td>
<td>31</td>
<td>(24,116,038)</td>
</tr>
<tr>
<td>Income taxes from changes in actuarial assumptions of provision for employee benefits</td>
<td>12,058,019</td>
<td>92,042</td>
</tr>
<tr>
<td>Total Items that will not be reclassified subsequently to profit or loss</td>
<td>(12,058,019)</td>
<td>(92,042)</td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year - net of tax</td>
<td>(1,619,438)</td>
<td>477,065</td>
</tr>
<tr>
<td>Total comprehensive income for the year</td>
<td>1,134,101,293</td>
<td>811,992,933</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
<table>
<thead>
<tr>
<th>Note</th>
<th>Issued and paid-up share capital</th>
<th>Share premium</th>
<th>Subordinated capital debentures</th>
<th>Legal reserve</th>
<th>Reserve for expansion</th>
<th>Unappropriated</th>
<th>Exchange differences on translating financial statements</th>
<th>Other comprehensive income (loss)</th>
<th>Share of other comprehensive income of associates and joint ventures</th>
<th>Total other components of equity</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Balance - as at January 1, 2018</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>1,154,811,834</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>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</td>
<td>(49,172,853) (567,987) - 21,328,012 (4,265,602) 3,613,640 (29,064,790) 11,516,652,613</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reclassification and adjustment</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(15,106,000)</td>
</tr>
<tr>
<td></td>
<td>Reclassified and adjusted balance - as at January 1, 2018</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>1,154,811,834</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>6,339,799,664 (49,172,853) (567,987) - 21,328,012 (4,265,602) 3,613,640 (29,064,790) 11,501,546,613</td>
<td>(15,106,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changes in equity for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,754,733</td>
</tr>
<tr>
<td></td>
<td>Interest expenses for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(57,696,014)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(57,696,014)</td>
</tr>
<tr>
<td></td>
<td>Income tax for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,754,733</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,754,733</td>
</tr>
<tr>
<td></td>
<td>Finance cost from issuance of subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>(124,302)</td>
<td>-</td>
<td>-</td>
<td>4,754,733</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(124,302)</td>
</tr>
<tr>
<td></td>
<td>Dividends paid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(555,702,071)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(555,702,071)</td>
</tr>
<tr>
<td></td>
<td>Profit for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(1,119,609,211)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,119,609,211</td>
</tr>
<tr>
<td></td>
<td>Other comprehensive income (loss) for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(2,928,708) (4,808,840) (150,837) (1,134) 705,714 (141,143) 336,094 (4,960,146) (6,988,854)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,119,609,211</td>
</tr>
<tr>
<td></td>
<td>Balance - as at December 31, 2018</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>1,154,687,532</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>6,339,799,664 (53,981,693) (718,824) (1,134) 22,033,726 (4,406,745) 3,949,734 (33,124,936) 12,005,399,316</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>12,005,399,316</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
<table>
<thead>
<tr>
<th>Notes</th>
<th>Issued and paid-up share capital</th>
<th>Subordinated capital debentures</th>
<th>Legal reserve</th>
<th>Reserve for expansion</th>
<th>Unappropriated</th>
<th>Exchange differences on translating financial statements</th>
<th>Income taxes relating to remeasuring of available-for-sale securities</th>
<th>Income taxes relating to cash flow hedges</th>
<th>Cash flow hedges</th>
<th>Share of other comprehensive income (loss)</th>
<th>Total other components of equity</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retained earnings</td>
<td>Other components of equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance - as at January 1, 2019</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>1,154,687,532</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>6,862,942,815</td>
<td>(53,981,693)</td>
<td>(718,824)</td>
<td>(1,134)</td>
<td>22,033,726</td>
<td>(4,406,745)</td>
<td>12,020,505,316</td>
</tr>
<tr>
<td>Reclassification and adjustment</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reclassified and adjusted balance - as at January 1, 2019</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>1,154,687,532</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>6,847,836,815</td>
<td>(53,981,693)</td>
<td>(718,824)</td>
<td>(1,134)</td>
<td>22,033,726</td>
<td>(4,406,745)</td>
<td>12,005,399,316</td>
</tr>
<tr>
<td>Changes in equity for the year</td>
<td>Deferral income tax of surplus from business combination under common control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expenses for subordinated capital debentures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redemption of subordinated capital debentures</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit for the year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance - as at December 31, 2019</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>187,434,503</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>7,630,675,250</td>
<td>(50,314,894)</td>
<td>(757,070)</td>
<td></td>
<td>37,222,604</td>
<td>(7,444,521)</td>
<td>11,841,173,770</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
<table>
<thead>
<tr>
<th>Note</th>
<th>Retained earnings</th>
<th>Other components of equity</th>
<th>Other comprehensive income (loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Issued and paid-up share capital</td>
<td>Subordinated capital debentures</td>
<td>Legal reserve</td>
</tr>
<tr>
<td>Balance - as at January 1, 2018</td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>38,234,354,686</td>
</tr>
<tr>
<td>Reclassification and adjustment</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reclassified and adjusted balance - as at January 1, 2018</td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>38,234,354,686</td>
</tr>
<tr>
<td>Changes in equity for the year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expenses for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Finance cost from issuance of subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>(2,600,765)</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balance - as at December 31, 2018</td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>38,231,753,921</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
## Statements of Changes in Equity (Continued)
PTT Exploration and Production Public Company Limited and Subsidiaries
For the Year Ended December 31, 2019

### Consolidated

<table>
<thead>
<tr>
<th>Notes</th>
<th>Issued and paid-up share capital</th>
<th>Share premium</th>
<th>Subordinated capital debentures</th>
<th>Legal reserve</th>
<th>Reserve for expansion</th>
<th>Unappropriated</th>
<th>Exchange differences on translating financial statements</th>
<th>Income taxes relating to remeasuring of available-for-sale securities</th>
<th>Income taxes relating to cash flow hedges</th>
<th>Cash flow hedges</th>
<th>Share of other comprehensive income of associates and joint ventures</th>
<th>Total other components of equity</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>38,231,753,921</td>
<td>396,998,540</td>
<td>16,900,000,000</td>
<td>223,433,839,506</td>
<td>222,900,331,939</td>
<td>928,581,429</td>
<td>(24,750,495)</td>
<td>(37,087)</td>
<td>(100,035,148)</td>
<td>133,109,860</td>
<td>1,756,510,538</td>
</tr>
<tr>
<td>Balance - as at January 1, 2019</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9,956,962</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9,956,962</td>
<td></td>
</tr>
<tr>
<td>Reclassification and adjustment</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(1,662,969,359)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(1,662,969,359)</td>
</tr>
<tr>
<td>Reclassified and adjusted balance - as at January 1, 2019</td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>38,231,753,921</td>
<td>396,998,540</td>
<td>16,900,000,000</td>
<td>222,900,331,939</td>
<td>(716,290,408)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(32,930,010,641)</td>
</tr>
<tr>
<td>Changes in equity for the year</td>
<td>9,956,962</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deferred income tax of surplus from business combination under common control</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest expenses for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Redemption of subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>44</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balance - as at December 31, 2019</td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>6,018,033,688</td>
<td>396,998,540</td>
<td>16,300,000,000</td>
<td>247,150,263,826</td>
<td>(1,274,708,425)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>357,058,714,452</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
# Statements of Changes in Equity

PTT Exploration and Production Public Company Limited and Subsidiaries
For the Year Ended December 31, 2019

The Company

| Issued and paid-up share capital | Subordinated shares | Legal reserve | Reserve for expansion | Unappropriated | Available-for-sale securities | Income taxes relating to remeasuring of available-for-sale securities | Cash flow hedges | Income taxes relating to cash flow hedges | Total other components of equity | Total equity |
|--------------------------------|--------------------|--------------|----------------------|----------------|-------------------------------|--------------------------------|----------------|----------------|----------------------------------|----------------|----------|
| 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 |
| 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 | - | - | - | - | - | - | (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 |
| 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 | (4,406,746) | 17,631,517 |

Notes to financial statements are an integral part of these financial statements.
<table>
<thead>
<tr>
<th>Notes</th>
<th>Issued and paid-up share capital</th>
<th>Share premium</th>
<th>Subordinated capital debentures</th>
<th>Legal reserve</th>
<th>Reserve for expansion</th>
<th>Unappropriated</th>
<th>Available-for-sale securities</th>
<th>Income taxes relating to remeasuring of available-for-sale securities</th>
<th>Cash flow hedges</th>
<th>Income taxes relating to cash flow hedges</th>
<th>Total other components of equity</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance - as at January 1, 2019</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>301,226,483</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>5,597,858,914</td>
<td>5,670</td>
<td>(1,134)</td>
<td>22,033,726</td>
<td>(4,406,745)</td>
<td>17,631,517</td>
<td>9,952,716,819</td>
</tr>
<tr>
<td>Changes in equity for the year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expenses for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(13,632,287)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(13,632,287)</td>
<td></td>
</tr>
<tr>
<td>Redemption of subordinated capital debentures</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>(144,656,000)</td>
<td>-</td>
<td>-</td>
<td>(649,000)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(145,305,000)</td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,939,552</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,939,552</td>
<td></td>
</tr>
<tr>
<td>Dividends paid</td>
<td>44</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(697,760,493)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(697,760,493)</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,135,720,731</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,135,720,731</td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(12,058,019)</td>
<td>(5,670)</td>
<td>1,134</td>
<td>13,053,896</td>
<td>(2,610,779)</td>
<td>10,438,581</td>
<td>(1,619,438)</td>
</tr>
<tr>
<td>Balance - as at December 31, 2019</td>
<td>150,683,762</td>
<td>3,439,036,612</td>
<td>301,226,483</td>
<td>15,048,319</td>
<td>431,231,212</td>
<td>6,012,419,398</td>
<td>-</td>
<td>-</td>
<td>35,087,622</td>
<td>(7,017,524)</td>
<td>28,070,098</td>
<td>10,233,059,884</td>
</tr>
</tbody>
</table>
## Statements of Changes in Equity (Continued)

PTT Exploration and Production Public Company Limited and Subsidiaries

For the Year Ended December 31, 2019

The Company

<table>
<thead>
<tr>
<th></th>
<th>Retained earnings</th>
<th>Other components of equity</th>
<th>Other comprehensive income (loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Exchange differences on translating financial statement</td>
<td>Income taxes relating to remeasuring of available-for-sale securities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Available-for-sale securities</td>
<td>Cash flow hedges</td>
</tr>
<tr>
<td>Issued and paid-up share capital</td>
<td>3,969,985,400</td>
<td>856,493,540</td>
<td>-</td>
</tr>
<tr>
<td>Share premium</td>
<td>105,417,619,764</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subordinated capital debentures</td>
<td>9,661,771,205</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Legal reserve</td>
<td>396,998,540</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reserve for expansion</td>
<td>16,900,000,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unappropriated</td>
<td>179,555,557,529</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(564,099,593)</td>
<td>-</td>
</tr>
<tr>
<td>Interest expenses for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balance - as at December 31, 2019</td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>9,661,771,205</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
## The Company

### Statements of Changes in Equity (Continued)

PTT Exploration and Production Public Company Limited and Subsidiaries  
For the Year Ended December 31, 2019

### Balance - as at January 1, 2019

<table>
<thead>
<tr>
<th>Notes</th>
<th>Issued and paid-up share capital</th>
<th>Share premium</th>
<th>Subordinated capital debentures</th>
<th>Legal reserve</th>
<th>Reserve for expansion</th>
<th>Unappropriated</th>
<th>Exchange differences on translating financial statement</th>
<th>Available-for-sale securities</th>
<th>Income taxes relating to remeasuring of available-for-sale securities</th>
<th>Cash flow hedges</th>
<th>Income taxes relating to cash flow hedges</th>
<th>Total other components of equity</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>9,661,771,205</td>
<td>396,998,540</td>
<td>16,900,000,000</td>
<td>187,500,874,929</td>
<td>(1,492,579,975)</td>
<td>185,437</td>
<td>(37,087)</td>
<td>772,751,404</td>
<td>(163,575,330)</td>
<td>(883,255,551)</td>
<td>322,963,994,287</td>
</tr>
</tbody>
</table>

### Changes in equity for the year

<table>
<thead>
<tr>
<th>Notes</th>
<th>Interest expenses for subordinated capital debentures</th>
<th>Redemption of subordinated capital debentures</th>
<th>Income tax for subordinated capital debentures</th>
<th>Dividends paid</th>
<th>Profit for the year</th>
<th>Other comprehensive income (loss) for the year</th>
<th>Balance - as at December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,969,985,400</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(4,679,778,856)</td>
<td>-</td>
<td>-</td>
<td>4,981,992,349</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(21,834,529,501)</td>
<td>-</td>
<td>-</td>
<td>396,998,540</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>16,900,000,000</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>200,224,792,852</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>(24,245,850,157)</td>
</tr>
</tbody>
</table>

### Balance - as at December 31, 2019

<table>
<thead>
<tr>
<th>Notes</th>
<th>Issued and paid-up share capital</th>
<th>Share premium</th>
<th>Subordinated capital debentures</th>
<th>Legal reserve</th>
<th>Reserve for expansion</th>
<th>Unappropriated</th>
<th>Exchange differences on translating financial statement</th>
<th>Available-for-sale securities</th>
<th>Income taxes relating to remeasuring of available-for-sale securities</th>
<th>Cash flow hedges</th>
<th>Income taxes relating to cash flow hedges</th>
<th>Total other components of equity</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,969,985,400</td>
<td>105,417,619,764</td>
<td>9,661,771,205</td>
<td>396,998,540</td>
<td>16,900,000,000</td>
<td>187,500,874,929</td>
<td>(1,492,579,975)</td>
<td>185,437</td>
<td>(37,087)</td>
<td>772,751,404</td>
<td>(163,575,330)</td>
<td>(883,255,551)</td>
<td>308,567,651,519</td>
</tr>
</tbody>
</table>

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, 2019

### Consolidated

<table>
<thead>
<tr>
<th>Cash flows from operating activities</th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2019</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td>2,246,062,046</td>
<td>1,852,267,398</td>
</tr>
<tr>
<td>Adjustment to reconcile profit before income taxes to net cash provided by (used in) operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of profit of associates and joint ventures</td>
<td>(12,351,839)</td>
<td>(7,932,268)</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>2,026,055,587</td>
<td>1,848,510,539</td>
</tr>
<tr>
<td>(Reversal of) increase in allowance for decrease in value of inventory to net realizable value</td>
<td>(1,363,744)</td>
<td>1,642,796</td>
</tr>
<tr>
<td>Write-off of exploration assets</td>
<td>76,756,433</td>
<td>673,405</td>
</tr>
<tr>
<td>Loss on disposal of assets</td>
<td>19,049,055</td>
<td>17,369,216</td>
</tr>
<tr>
<td>Other amortized expenses</td>
<td>32,049,621</td>
<td>11,974,556</td>
</tr>
<tr>
<td>Loss (gain) on financial derivatives</td>
<td>3,541,237</td>
<td>(5,457,190)</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>35,252,078</td>
<td>13,395,278</td>
</tr>
<tr>
<td>Other provision</td>
<td>8,133,535</td>
<td>11,004,545</td>
</tr>
<tr>
<td>(Gain) loss on foreign exchange</td>
<td>(8,014,338)</td>
<td>8,005,626</td>
</tr>
<tr>
<td>Interest income less than interest expenses</td>
<td>147,107,031</td>
<td>147,261,911</td>
</tr>
<tr>
<td>Loss from divestment of asset</td>
<td>-</td>
<td>57,768,001</td>
</tr>
<tr>
<td><strong>Net cash flows provided by operating activities</strong></td>
<td><strong>3,519,605,501</strong></td>
<td><strong>3,276,866,668</strong></td>
</tr>
</tbody>
</table>

### Changes in operating assets (increase) decrease

| Investments in trading securities | (128,999,785) | (70,000,000) | (4,003,506,473) | (2,260,653,329) |
| Account receivable - parent company | 103,165,691   | (70,110,255) | 3,201,745,735  | (2,264,214,009) |
| Trade accounts receivable          | 11,815,123     | 22,358,808  | 722,078,676    | 722,078,676    |
| Other accounts receivable          | 7,791,561      | 8,229,120   | 265,759,818    | 265,759,818    |
| Inventories                        | (2,463,831)    | (8,167,391) | (76,464,913)   | (76,464,913)   |
| Materials and supplies             | (12,286,838)   | 17,796,849  | (381,321,841)  | (381,321,841)  |
| Working capital from co-venturers  | (37,137,150)   | 23,619,877  | 726,805,036    | 726,805,036    |
| Other current assets               | (18,304,834)   | 11,004,545  | 359,903,221    | 359,903,221    |
| Rights to receive reimbursement from decommissioning funds | (26,903,288) | (30,364,855) | (834,943,161) | (980,634,427) |
| Prepaid expenses                   | 637,546        | 401,257     | 19,786,246     | 12,958,572     |
| Other non-current assets           | 40,332,784     | (5,902,396) | 190,818,148    | 190,818,148    |
| **Changes in operating liabilities increase (decrease)** | **4,623,044,101** | **3,921,014,000** | **143,410,968,134** | **126,860,809,826** |

## Notes to financial statements

Financial Report 2019
PTT Exploration and Production Public Company Limited

(Unofficial Translation)
## Statements of Cash Flows

PTT Exploration and Production Public Company Limited and Subsidiaries

For the Year Ended December 31, 2019

### Consolidated

#### Cash flows from investing activities

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash paid for short-term investments</td>
<td>(744,750,000)</td>
<td>(1,652,634,859)</td>
<td>(23,113,305,629)</td>
<td>(53,371,921,365)</td>
</tr>
<tr>
<td>Cash received from investing in short-term investments</td>
<td>1,365,410,338</td>
<td>3,786,110,314</td>
<td>42,375,490,353</td>
<td>122,272,612,620</td>
</tr>
<tr>
<td>Cash paid (received) for investment in available-for-sale securities</td>
<td>10,444,330</td>
<td>10,444,330</td>
<td>324,139,633</td>
<td>(337,300,134)</td>
</tr>
<tr>
<td>Cash received for long-term loans to related parties</td>
<td>10,800,587</td>
<td>15,128,483</td>
<td>335,196,063</td>
<td>488,575,078</td>
</tr>
<tr>
<td>Cash paid for business acquisition</td>
<td>(2,713,300,641)</td>
<td>(652,851,992)</td>
<td>(84,207,246,710)</td>
<td>(21,083,886,123)</td>
</tr>
<tr>
<td>Cash prepayment for business acquisition</td>
<td>-</td>
<td>(397,779,587)</td>
<td>-</td>
<td>(12,846,310,693)</td>
</tr>
<tr>
<td>Net cash (paid) received from divestment of asset</td>
<td>(19,626,748)</td>
<td>133,091,954</td>
<td>(609,115,844)</td>
<td>4,298,210,984</td>
</tr>
<tr>
<td>Cash paid for investment in joint venture</td>
<td>(79,411,697)</td>
<td>-</td>
<td>(2,464,540,889)</td>
<td>-</td>
</tr>
<tr>
<td>Cash received from investment in joint venture</td>
<td>-</td>
<td>1,048,800</td>
<td>-</td>
<td>33,871,046</td>
</tr>
<tr>
<td>Dividends received in other long-term investments</td>
<td>(36,530)</td>
<td>-</td>
<td>(1,133,712)</td>
<td>-</td>
</tr>
<tr>
<td>Cash paid for investment in joint venture</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dividends received from related parties</td>
<td>14,716,091</td>
<td>5,437,332</td>
<td>456,713,672</td>
<td>175,598,906</td>
</tr>
<tr>
<td>Interest received from short-term investments</td>
<td>15,376,377</td>
<td>39,796,666</td>
<td>477,205,647</td>
<td>1,285,235,233</td>
</tr>
<tr>
<td>Interest received from loans</td>
<td>5,218,266</td>
<td>3,335,083</td>
<td>161,948,823</td>
<td>107,706,654</td>
</tr>
<tr>
<td>Increase in property, plant and equipment</td>
<td>(1,063,093,098)</td>
<td>(1,081,484,756)</td>
<td>(32,993,079,128)</td>
<td>(34,926,601,616)</td>
</tr>
<tr>
<td>Increase in intangible assets</td>
<td>(26,146,817)</td>
<td>(11,694,808)</td>
<td>(811,466,087)</td>
<td>(377,684,387)</td>
</tr>
<tr>
<td>Increase in exploration and evaluation assets</td>
<td>(119,228,176)</td>
<td>(60,772,959)</td>
<td>(3,700,244,754)</td>
<td>(1,962,665,601)</td>
</tr>
<tr>
<td><strong>Net cash flows (used in) provided by investing activities</strong></td>
<td>(3,343,627,718)</td>
<td>116,285,341</td>
<td>(103,769,438,562)</td>
<td>3,755,440,602</td>
</tr>
</tbody>
</table>

#### Cash flows from financing activities

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash received from short-term loan</td>
<td>259,580,550</td>
<td>-</td>
<td>8,056,078,675</td>
<td>-</td>
</tr>
<tr>
<td>Cash paid for repayment of short-term loan</td>
<td>(258,825,547)</td>
<td>-</td>
<td>(8,032,647,151)</td>
<td>-</td>
</tr>
<tr>
<td>Cash received from issuance of debentures</td>
<td>1,130,045,316</td>
<td>-</td>
<td>35,070,940,278</td>
<td>-</td>
</tr>
<tr>
<td>Cash paid for repayment of debentures</td>
<td>(418,199,073)</td>
<td>(403,742,006)</td>
<td>(12,978,802,274)</td>
<td>(13,038,867,283)</td>
</tr>
<tr>
<td>Cash received from long-term loans</td>
<td>600,000,000</td>
<td>-</td>
<td>18,620,991,444</td>
<td>-</td>
</tr>
<tr>
<td>Cash paid for repayment of long-term loans</td>
<td>(7,784,707)</td>
<td>(575,134,857)</td>
<td>(241,598,267)</td>
<td>(18,574,007,559)</td>
</tr>
<tr>
<td>Interest paid for debentures and loans</td>
<td>(109,932,149)</td>
<td>(128,371,867)</td>
<td>(3,411,742,705)</td>
<td>(4,145,775,533)</td>
</tr>
<tr>
<td>Cash paid for redemption of subordinated capital debentures</td>
<td>(990,846,095)</td>
<td>-</td>
<td>(30,750,894,282)</td>
<td>-</td>
</tr>
<tr>
<td>Interest paid for subordinated capital debentures</td>
<td>(53,610,567)</td>
<td>(57,696,014)</td>
<td>(1,663,803,190)</td>
<td>(1,863,295,513)</td>
</tr>
<tr>
<td>Finance costs paid for issuance of debentures and long-term loans</td>
<td>(7,613,542)</td>
<td>-</td>
<td>(236,286,174)</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs paid for issuance of subordinated capital debentures</td>
<td>-</td>
<td>(1,226,264)</td>
<td>-</td>
<td>(39,602,266)</td>
</tr>
<tr>
<td>Net cash received (paid) for financial derivative contracts</td>
<td>1,353,260</td>
<td>(2,395,365)</td>
<td>41,998,395</td>
<td>(77,358,436)</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>(697,760,493)</td>
<td>(555,702,071)</td>
<td>(21,654,986,972)</td>
<td>(17,946,424,798)</td>
</tr>
<tr>
<td><strong>Net cash flows used in financing activities</strong></td>
<td>(553,593,047)</td>
<td>(1,724,269,444)</td>
<td>(17,180,752,369)</td>
<td>(55,685,331,390)</td>
</tr>
</tbody>
</table>

Net (decrease) increase in cash and cash equivalents (377,615,264) 1,668,883,565 (11,784,423,950) 54,128,150,345

### Cash and cash equivalents at the beginning of the year

<table>
<thead>
<tr>
<th>Amount (Unit: US Dollar)</th>
<th>Amount (Unit: Baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,180,095,315</td>
<td>103,193,560,790</td>
</tr>
</tbody>
</table>

### Adjustment for the effect of exchange rate changes

<table>
<thead>
<tr>
<th>Amount (Unit: US Dollar)</th>
<th>Amount (Unit: Baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,802,480,051</td>
<td>103,547,616,349</td>
</tr>
</tbody>
</table>

### Cash and cash equivalents at the end of the year

<table>
<thead>
<tr>
<th>Amount (Unit: US Dollar)</th>
<th>Amount (Unit: Baht)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,822,897,310</td>
<td>103,193,560,790</td>
</tr>
</tbody>
</table>

### Supplementary cash flow information

Unpaid for outstanding payable from purchases of assets 246,424,994 644,480,659 7,647,796,187 20,813,533,539

---

Notes to financial statements are an integral part of these financial statements.
## Statements of Cash Flows

PTT Exploration and Production Public Company Limited and Subsidiaries
For the Year Ended December 31, 2019

The Company

<table>
<thead>
<tr>
<th>Cash flows from operating activities</th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profit before income taxes</strong></td>
<td>1,500,013,396</td>
<td>46,540,962,047</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Adjustment to reconcile profit before income taxes to net cash provided by (used in) operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>1,050,260,840</td>
<td>32,585,816,321</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Loss on disposal of assets</td>
<td>2,647,971</td>
<td>79,178,715</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other amortized expenses</td>
<td>18,947,870</td>
<td>574,645,123</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Income recognized from deferred income</td>
<td>(1,110,595)</td>
<td>(34,467,284)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Loss (gain) on financial derivatives</td>
<td>9,047,624</td>
<td>288,510,615</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Dividends received from related parties</td>
<td>(46,175,204)</td>
<td>(2,260,653,329)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>31,251,247</td>
<td>980,361,471</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other provision</td>
<td>9,763,436</td>
<td>295,081,965</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Loss (gain) on foreign exchange</td>
<td>2,730,310</td>
<td>84,735,149</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Interest income (higher) less than interest expenses</td>
<td>(207,477,753)</td>
<td>(6,427,981,296)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,369,899,142</td>
<td>73,554,970,571</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Changes in operating assets (increase) decrease</strong></td>
<td>1,950,647,605</td>
<td>63,186,081,755</td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>70,000,000</td>
<td>2,172,449,002</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>47,660,691</td>
<td>1,479,148,877</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>(204,007)</td>
<td>(6,331,368)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other accounts receivable</td>
<td>(39,228,443)</td>
<td>(1,217,454,170)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Inventories</td>
<td>(395,264)</td>
<td>(12,267,012)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>(668,562)</td>
<td>(20,748,824)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Working capital from co-venturers</td>
<td>(4,978,989)</td>
<td>(154,522,858)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other current assets</td>
<td>(32,651,005)</td>
<td>(1,013,323,479)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>426,414</td>
<td>13,233,762</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,369,899,142</td>
<td>73,554,970,571</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Changes in operating liabilities increase (decrease)</strong></td>
<td>1,950,647,605</td>
<td>63,186,081,755</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>(4,001,597)</td>
<td>(124,189,504)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Working capital to co-venturers</td>
<td>(32,647)</td>
<td>(1,013,323,479)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>(1,310,792)</td>
<td>(40,680,415)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>(32,651,005)</td>
<td>(1,013,323,479)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Deferred income</td>
<td>972,957</td>
<td>30,195,709</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Provision</td>
<td>(90,231,073)</td>
<td>(2,719,222,979)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>(5,993,041)</td>
<td>(140,098,728)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Interest received from bank deposits</td>
<td>25,862,231</td>
<td>418,215,547</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Cash paid for income taxes</td>
<td>(518,342,197)</td>
<td>(9,748,096,483)</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Net cash flows provided by operating activities</strong></td>
<td>1,839,705,731</td>
<td>50,496,507,670</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
</tbody>
</table>

Notes to financial statements are an integral part of these financial statements.
Statements of Cash Flows
PTT Exploration and Production Public Company Limited and Subsidiaries
For the Year Ended December 31, 2019

The Company

<table>
<thead>
<tr>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td></td>
</tr>
<tr>
<td>Cash paid for short-term investments</td>
<td>(744,750,000)</td>
</tr>
<tr>
<td>Cash received from investing in short-term investments</td>
<td>1,007,580,338</td>
</tr>
<tr>
<td>Cash received (paid) for investment in available-for-sale securities</td>
<td>10,444,330</td>
</tr>
<tr>
<td>Decrease in short-term loans to related party</td>
<td>814,909,261</td>
</tr>
<tr>
<td>Cash received from long-term loans to related parties</td>
<td>205,200,000</td>
</tr>
<tr>
<td>Cash paid for long-term loans to related parties</td>
<td>(1,195,617,478)</td>
</tr>
<tr>
<td>Cash prepayment for business acquisition</td>
<td>(397,779,587)</td>
</tr>
<tr>
<td>Cash paid for investment in subsidiaries</td>
<td>(128,691,609)</td>
</tr>
<tr>
<td>Decrease in investment in subsidiaries</td>
<td>-</td>
</tr>
<tr>
<td>Cash paid for investment in other long-term investment</td>
<td>(36,530)</td>
</tr>
<tr>
<td>Dividends received from related parties</td>
<td>46,175,204</td>
</tr>
<tr>
<td>Interest received from short-term investments</td>
<td>9,848,587</td>
</tr>
<tr>
<td>Interest received from loans</td>
<td>47,953,529</td>
</tr>
<tr>
<td>Increase in property, plant and equipment</td>
<td>(264,756,583)</td>
</tr>
<tr>
<td>Increase in intangible assets</td>
<td>(19,469,000)</td>
</tr>
<tr>
<td>Increase in exploration and evaluation assets</td>
<td>-</td>
</tr>
<tr>
<td>Net cash flows used in investing activities</td>
<td>(282,608,762)</td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td></td>
</tr>
<tr>
<td>Cash received from short-term loan</td>
<td>259,580,550</td>
</tr>
<tr>
<td>Cash paid for repayment of short-term loan</td>
<td>(258,825,547)</td>
</tr>
<tr>
<td>Cash paid for repayment of debentures</td>
<td>(418,199,073)</td>
</tr>
<tr>
<td>Cash paid for repayment of long-term loans</td>
<td>(266,900)</td>
</tr>
<tr>
<td>Interest paid for debentures and loans</td>
<td>(32,294,311)</td>
</tr>
<tr>
<td>Cash paid for redemption of subordinated capital debentures</td>
<td>(145,305,000)</td>
</tr>
<tr>
<td>Interest paid for subordinated capital debentures</td>
<td>(13,632,287)</td>
</tr>
<tr>
<td>Net cash received (paid) for financial derivative contracts</td>
<td>876,960</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>(697,760,493)</td>
</tr>
<tr>
<td>Net cash flows used in financing activities</td>
<td>(1,305,826,101)</td>
</tr>
<tr>
<td>Net increase in cash and cash equivalents</td>
<td>251,270,868</td>
</tr>
<tr>
<td>Cash and cash equivalents at the beginning of the year</td>
<td>462,093,407</td>
</tr>
<tr>
<td>Adjustment for the effect of exchange rate changes</td>
<td>713,364,275</td>
</tr>
<tr>
<td>Cash and cash equivalents at the end of the year</td>
<td>715,768,020</td>
</tr>
</tbody>
</table>

Supplementary cash flow information
- Unpaid for outstanding payable from purchases of assets: 35,521,871
- Long-term loans to related parties for interest rollover: 18,004

Notes to financial statements are an integral part of these financial statements.
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, 6th and 19th – 36th 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, midstream oil and gas business, foreign gas pipeline transportation and investment in projects strategically connected to the energy business.

As at December 31, 2019, the Group had operations relating to the exploration and production of petroleum in 15 countries and had investments in exploration and production projects with participating interests as follows:

<table>
<thead>
<tr>
<th>Project</th>
<th>Country</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bongkot</td>
<td>Thailand</td>
<td>PTT Exploration and Production Plc.</td>
<td>66.6667</td>
</tr>
<tr>
<td>Arthit</td>
<td>Thailand</td>
<td>PTT Exploration and Production Plc.</td>
<td>80</td>
</tr>
<tr>
<td>Contract 4 (B12/27)</td>
<td>Thailand</td>
<td>Chevron Thailand Exploration and Production, Ltd.</td>
<td>45</td>
</tr>
<tr>
<td>Sinphuhorm (E5 North)</td>
<td>Thailand</td>
<td>PTTEP SP Limited</td>
<td>20</td>
</tr>
<tr>
<td>S1</td>
<td>Thailand</td>
<td>PTTEP Siam Limited</td>
<td>25</td>
</tr>
<tr>
<td>Contract 3 (B10, B11, B12 and B13)</td>
<td>Thailand</td>
<td>Chevron Thailand Exploration and Production, Ltd.</td>
<td>5</td>
</tr>
<tr>
<td>E5</td>
<td>Thailand</td>
<td>ExxonMobil Exploration and Production Khorat Inc.</td>
<td>20</td>
</tr>
<tr>
<td>Algeria Hassi Bir Rekaiz</td>
<td>People's Democratic Republic of Algeria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Country</td>
<td>Operator</td>
<td>Participating interest</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2019</td>
</tr>
<tr>
<td><strong>PTTEP International Limited (PTTEPI)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yadana</td>
<td>Republic of the Union of Myanmar</td>
<td>Total E&amp;P Myanmar</td>
<td>25.5</td>
</tr>
<tr>
<td>Yetagun</td>
<td>Republic of the Union of Myanmar</td>
<td>Petronas Carigali Myanmar (Hong Kong) Ltd.</td>
<td>19.31784</td>
</tr>
<tr>
<td><strong>PTTEP 1</strong></td>
<td>Thailand</td>
<td>PTTEP International Limited</td>
<td>100</td>
</tr>
<tr>
<td>G4/43</td>
<td>Thailand</td>
<td>Chevron Offshore (Thailand) Ltd.</td>
<td>21.375</td>
</tr>
<tr>
<td>G9/43</td>
<td>Thai - Kingdom of Cambodia</td>
<td>PTTEP International Limited</td>
<td>100</td>
</tr>
<tr>
<td>L22/43</td>
<td>Thailand</td>
<td>PTTEP International Limited</td>
<td>100</td>
</tr>
<tr>
<td>L53/43 &amp; L54/43</td>
<td>Thailand</td>
<td>PTTEP International Limited</td>
<td>100</td>
</tr>
<tr>
<td>G4/48</td>
<td>Thailand</td>
<td>Chevron Pattani, Ltd.</td>
<td>5</td>
</tr>
<tr>
<td>Bongkot (G12/48)</td>
<td>Thailand</td>
<td>PTTEP International Limited</td>
<td>66.6667</td>
</tr>
<tr>
<td>Contract 4 (G7/50)</td>
<td>Thailand</td>
<td>Chevron Pattani, Ltd.</td>
<td>60</td>
</tr>
<tr>
<td>Arthit (G8/50)</td>
<td>Thailand</td>
<td>PTTEP International Limited</td>
<td>80</td>
</tr>
<tr>
<td>Zawtika</td>
<td>Republic of the Union of Myanmar</td>
<td>PTTEP International Limited</td>
<td>80</td>
</tr>
<tr>
<td>Myanmar M3</td>
<td>Republic of the Union of Myanmar</td>
<td>PTTEP International Limited</td>
<td>80</td>
</tr>
<tr>
<td>Myanmar M11</td>
<td>Republic of the Union of Myanmar</td>
<td>PTTEP International Limited</td>
<td>100</td>
</tr>
<tr>
<td>MTJDA</td>
<td>Thailand – Malaysia</td>
<td>Carigali-PTTEPI Operating Company Sdn Bhd.</td>
<td>50</td>
</tr>
<tr>
<td><strong>PTTEP Offshore Investment Company Limited (PTTEPO)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B8/32 &amp; 9A</td>
<td>Thailand</td>
<td>Chevron Offshore (Thailand) Ltd.</td>
<td>25.001</td>
</tr>
<tr>
<td><strong>PTTEP Southwest Vietnam Company Limited (PTTEP SV)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam 52/97</td>
<td>Socialist Republic of Vietnam</td>
<td>Vietnam Oil and Gas Group</td>
<td>7</td>
</tr>
<tr>
<td>Project</td>
<td>Country</td>
<td>Operator</td>
<td>Participating interest</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------------</td>
<td>----------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>PTTEP Kim Long Vietnam Company Limited (PTTEP KV)</strong></td>
<td>Vietnam B &amp; 48/95</td>
<td>Vietnam Oil and Gas Group</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>Socialist Republic of</td>
<td>Vietnam</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>Vietnam</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PTTEP Hoang-Long Company Limited (PTTEP HL)</strong></td>
<td>Vietnam 16-1</td>
<td>Hoang-Long Joint Operating Company</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>Socialist Republic of</td>
<td>Vietnam</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>Vietnam</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PTTEP Hoan-Vu Company Limited (PTTEP HV)</strong></td>
<td>Vietnam 9-2</td>
<td>Hoan-Vu Joint Operating Company</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Socialist Republic of</td>
<td>Vietnam</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Vietnam</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PTTEP Algeria Company Limited (PTTEP AG)</strong></td>
<td>Algeria 433a &amp; 416b</td>
<td>Groupement Bir Seba</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>People’s Democratic</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Republic of Algeria</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PTTEP Siam Limited (PTTEPS)</strong></td>
<td>Sinphuhorm (EU-1)</td>
<td>PTTEP SP Limited</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>B6/27</td>
<td>PTTEP Siam Limited</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>S1</td>
<td>PTTEP Siam Limited</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td><strong>PTTEP South Asia Limited (PTTEP SA)</strong></td>
<td>Myanmar MD-7</td>
<td>PTTEP South Asia Limited</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Republic of the Union</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>of Myanmar</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Myanmar MOGE 3</td>
<td>PTTEP South Asia Limited</td>
<td>77.5</td>
</tr>
<tr>
<td></td>
<td>Republic of the Union</td>
<td></td>
<td>77.5</td>
</tr>
<tr>
<td></td>
<td>of Myanmar</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PTTEP Canada Limited (PTTEP CA)</strong></td>
<td>Mariana Oil Sands</td>
<td>PTTEP Canada Limited</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Canada</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>
### Project Details

**PTTEP Australia Perth Pty Limited (PTTEP AP)**

<table>
<thead>
<tr>
<th>Block</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC/RL7, AC/RL12 and AC/P54</td>
<td>PTTEP Australasia (Ashmore Cartier) Pty Ltd</td>
<td>100 100</td>
</tr>
<tr>
<td>AC/L3</td>
<td>PTTEP Australasia (Ashmore Cartier) Pty Ltd</td>
<td>100 100</td>
</tr>
<tr>
<td>AC/RL10</td>
<td>PTTEP Australia Timor Sea Pty Ltd</td>
<td>90 90</td>
</tr>
<tr>
<td>AC/RL4 (Tenacious)</td>
<td>PTTEP Australia Timor Sea Pty Ltd</td>
<td>100 100</td>
</tr>
<tr>
<td>AC/RL6 (Audacious), AC/RL6 (exclusive of Audacious)</td>
<td>PTTEP Australia Timor Sea Pty Ltd</td>
<td>100 100</td>
</tr>
<tr>
<td>AC/RL4 (exclusive of Tenacious), AC/RL5</td>
<td>PTTEP Australia Timor Sea Pty Ltd</td>
<td>100 100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project</th>
<th>Country</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTTEP Mozambique Area 1 Limited (PTTEP MZA1)</td>
<td>Mozambique Area 1 ⁵</td>
<td>Anadarko Mozambique Area 1 Limitada</td>
<td>8.5 8.5</td>
</tr>
</tbody>
</table>

**Natuna 2 B.V. (Natuna)**

<table>
<thead>
<tr>
<th>Project</th>
<th>Country</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natuna Sea A</td>
<td>Republic of Indonesia</td>
<td>Premier Oil Natuna Sea BV</td>
<td>11.5 11.5</td>
</tr>
</tbody>
</table>

**PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL)**

<table>
<thead>
<tr>
<th>Project</th>
<th>Country</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barreirinhas AP 1</td>
<td>Federative Republic of Brazil</td>
<td>Shell Brasil Petroleo Ltda.</td>
<td>25 25</td>
</tr>
<tr>
<td>Brazil BM-ES-23</td>
<td>Federative Republic of Brazil</td>
<td>Petróleo Brasileiro S.A. (Petrobas)</td>
<td>20 20</td>
</tr>
<tr>
<td>Project</td>
<td>Country</td>
<td>Operator</td>
<td>Participating interest</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>----------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>PTTEP SP Limited (PTTEP SP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract 4 (B12/27)</td>
<td>Thailand</td>
<td>Chevron Thailand Exploration and Production, Ltd.</td>
<td>15</td>
</tr>
<tr>
<td>Sinphuhorm (E5 North and EU-1)</td>
<td>Thailand</td>
<td>PTTEP SP Limited</td>
<td>35</td>
</tr>
<tr>
<td>PTTEP G7 Limited (PTTEP G7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract 4 (G7/50)</td>
<td>Thailand</td>
<td>Chevron Pattani, Ltd.</td>
<td>-</td>
</tr>
<tr>
<td>PTTEP HK Offshore Limited (PTTEP HKO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarawak SK 410B</td>
<td>Malaysia</td>
<td>PTTEP HK Offshore Limited</td>
<td>42.5</td>
</tr>
<tr>
<td>Sarawak SK 417</td>
<td>Malaysia</td>
<td>PTTEP HK Offshore Limited</td>
<td>80</td>
</tr>
<tr>
<td>Sarawak SK 438</td>
<td>Malaysia</td>
<td>PTTEP HK Offshore Limited</td>
<td>80</td>
</tr>
<tr>
<td>Peninsular PM 407 6</td>
<td>Malaysia</td>
<td>PTTEP HK Offshore Limited</td>
<td>55</td>
</tr>
<tr>
<td>Peninsular PM 415 6</td>
<td>Malaysia</td>
<td>PTTEP HK Offshore Limited</td>
<td>70</td>
</tr>
<tr>
<td>PTTEP Mexico E&amp;P Limited, S. de R.L. de C.V. (PTTEP MEP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico block 12 (2.4)</td>
<td>Mexico</td>
<td>PC Carigali Mexico Operations, S.A. de C.V.</td>
<td>20</td>
</tr>
<tr>
<td>Mexico block 29 (2.4)</td>
<td>Mexico</td>
<td>Repsol Exploración México, S.A. de C.V.</td>
<td>16.67</td>
</tr>
<tr>
<td>PTTEP Energy Development Company Limited (PTTEP ED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1/61 7</td>
<td>Thailand</td>
<td>PTTEP Energy Development Company Limited</td>
<td>60</td>
</tr>
<tr>
<td>G2/61 7</td>
<td>Thailand</td>
<td>PTTEP Energy Development Company Limited</td>
<td>100</td>
</tr>
<tr>
<td>PTTEP MENA Limited (PTTEP MENA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abu Dhabi Offshore 1 8</td>
<td>United Arab Emirates</td>
<td>Eni Abu Dhabi B.V.</td>
<td>30</td>
</tr>
<tr>
<td>Abu Dhabi Offshore 2 8</td>
<td>United Arab Emirates</td>
<td>Eni Abu Dhabi B.V.</td>
<td>30</td>
</tr>
</tbody>
</table>
PTTEP Sabah Oil Limited (PTTEP SBO) ⁹
Malaysia Block K ** Malaysia
Malaysia Block H *** Malaysia

** Details of operators and participating interests in Malaysia Block K project are as follows:

<table>
<thead>
<tr>
<th>Block</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PTTEP Sabah Oil Limited</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>SNP</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>Sabah Shell Petroleum Co.Ltd.</td>
<td>6.366</td>
</tr>
</tbody>
</table>

*** Details of operators and participating interests in Malaysia Block H project are as follows:

<table>
<thead>
<tr>
<th>Block</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PTTEP Sabah Oil Limited</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>42</td>
</tr>
</tbody>
</table>

PTTEP Sarawak Oil Limited (PTTEP SKO) ⁹
Sarawak SK 314A Malaysia PTTEP Sarawak Oil Limited 59.5 -
Sarawak SK 405B Malaysia PTTEP Sarawak Oil Limited 59.5 -
Sarawak SK 309 and SK 311 ****

**** Details of operators and participating interests in Sarawak SK 309 and Sarawak SK 311 projects are as follows:

<table>
<thead>
<tr>
<th>Block</th>
<th>Operator</th>
<th>Participating interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Patricia</td>
<td>PTTEP Sarawak Oil Limited</td>
<td>42</td>
</tr>
<tr>
<td>Others</td>
<td>PTTEP Sarawak Oil Limited</td>
<td>59.5</td>
</tr>
</tbody>
</table>
On September 10, 2019, PTTEP International Limited (PTTEPI), received the official approval from the Director General of the Department of Mineral Fuels to receive the transfer of the 100% participating interests in concessions blocks no. G7/50 from PTTEP G7 Limited (PTTEP G7). As a result, PTTEPI’s participating interests in the concessions blocks no. G7/50 increased from 45% to 60%. The transaction is a business combination under a common control.

On September 26, 2019, PTTEP International Limited (PTTEPI) submitted a request to terminate and return 100% of the exploration blocks of Myanmar M11 project after fulfillment of the requirements of the Production Sharing Contract. The termination will be effective after receiving the official approval from the Government of the Republic of the Union of Myanmar.

PTTEP Offshore Investment Company Limited (PTTEPO has shareholding in Orange Energy Limited and B8/32 Partners Limited, which hold the project’s concession.

On February 28, 2019, PTTEP South Asia Limited (PTTEP SA) received the official approval from the Government of the Republic of the Union of Myanmar to receive the transfer of the participating interests in Myanmar MOGE 3 project from other partners. As a result, its participating interests increased from 75% to 77.5% and PTTEP SA is the operator of the project.

Changed project name from Mozambique Rovuma Offshore Area 1 to Mozambique Area 1.

On March 21, 2019, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, entered into the Production Sharing Contract to obtain the exploration and production rights of 2 offshore exploration blocks located in the coast of Peninsula, Malaysia, which are PM 407 and PM 415, in which PTTEP HKO holds 55% and 70% participating interests, respectively. PTTEP HKO is the operator of the 2 blocks.

On February 25, 2019, PTTEP Energy Development Company Limited (PTTEP ED), a subsidiary of the Group, entered into the Production Sharing Contract of blocks G1/61 and G2/61. PTTEP ED holds 60% and 100% participating interests, respectively. PTTEP ED is the operator of the 2 blocks.
On January 12, 2019, PTTEP MENA Limited (PTTEP MENA), a subsidiary of the Group, and other partners 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 March 21, 2019, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, signed the Share Sale and Purchase Agreement to acquire the 100% shareholding interests of Murphy Oil Corporation (Murphy) in Malaysia through acquisition of shares in Murphy’s subsidiaries, which are Murphy Sabah Oil Co., Ltd. (Murphy Sabah) and Murphy Sarawak Oil Co., Ltd. (Murphy Sarawak). The acquisition was completed on July 10, 2019 as disclosed in Note 6 - Business acquisition in Murphy Oil Corporation in Malaysia.

On June 17, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, signed the Share Sale and Purchase Agreement to acquire the 100% shareholding interests of Partex Holding B.V. (Partex). The acquisition was completed on November 4, 2019 as disclosed in Note 7 - Business acquisition in Partex Holding B.V.

2. Basis of Financial Statement 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. Therefore, 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.


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, 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
  Thai Accounting Standard No. 29 (Revised 2018) Financial reporting in hyperinflationary economies
  Thai Accounting Standard No. 33 (Revised 2018) Earnings per share
<table>
<thead>
<tr>
<th>Thai Accounting Standard No. 34 (Revised 2018)</th>
<th>Interim financial reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai Accounting Standard No. 36 (Revised 2018)</td>
<td>Impairment of assets</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 37 (Revised 2018)</td>
<td>Provisions, contingent liabilities and contingent assets</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 38 (Revised 2018)</td>
<td>Intangible assets</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 40 (Revised 2018)</td>
<td>Investment property</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 41 (Revised 2018)</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 1</td>
<td>First-time adoption of Thai financial reporting standards</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 2 (Revised 2018)</td>
<td>Share-based payment</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 3 (Revised 2018)</td>
<td>Business combinations</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 4 (Revised 2018)</td>
<td>Insurance contracts</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 5 (Revised 2018)</td>
<td>Non-current assets held for sale and discontinued operations</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 6 (Revised 2018)</td>
<td>Exploration for and evaluation of mineral resources</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 8 (Revised 2018)</td>
<td>Operating segments</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 10 (Revised 2018)</td>
<td>Consolidated financial statements</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 11 (Revised 2018)</td>
<td>Joint arrangements</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 12 (Revised 2018)</td>
<td>Disclosure of interests in other entities</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 13 (Revised 2018)</td>
<td>Fair value measurement</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 15</td>
<td>Revenue from contracts with customers</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 10 (Revised 2018)</td>
<td>Government assistance – no specific relation to operating activities</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 15 (Revised 2018)</td>
<td>Operating leases – incentives</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 25 (Revised 2018)</td>
<td>Income taxes – changes in the tax status of an entity or its shareholders</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 27 (Revised 2018)</td>
<td>Evaluating the substance of transactions involving the legal form of a lease</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 29 (Revised 2018)</td>
<td>Service concession arrangements:</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 32 (Revised 2018)</td>
<td>Disclosures</td>
</tr>
<tr>
<td>Thai Financial Reporting Interpretations Committee No. 1 (Revised 2018)</td>
<td>Intangible assets – web site costs</td>
</tr>
<tr>
<td></td>
<td>Changes in existing decommissioning, restoration and similar liabilities</td>
</tr>
</tbody>
</table>
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 underlying principle of the new accounting standards is that the Group will recognise revenue to depict the transfer of goods or services to customers and the customer has control of these. It replaces the principles of transferring the significant risks and rewards of ownership of the goods or services to the buyer.

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

<table>
<thead>
<tr>
<th>Thai Accounting Standard No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Presentation of financial statements</td>
</tr>
<tr>
<td>2</td>
<td>Inventories</td>
</tr>
<tr>
<td>7</td>
<td>Statement of cash flows</td>
</tr>
<tr>
<td>8</td>
<td>Accounting policies, changes in accounting estimates and errors</td>
</tr>
<tr>
<td>10</td>
<td>Events after the reporting period</td>
</tr>
<tr>
<td>12</td>
<td>Income taxes</td>
</tr>
<tr>
<td>16</td>
<td>Property, plant and equipment</td>
</tr>
<tr>
<td>19</td>
<td>Employee benefits</td>
</tr>
<tr>
<td>20</td>
<td>Accounting for government grants and disclosure of government assistance</td>
</tr>
<tr>
<td>21</td>
<td>The effects of changes in foreign exchange rates</td>
</tr>
<tr>
<td>23</td>
<td>Borrowing costs</td>
</tr>
<tr>
<td>24</td>
<td>Related party disclosures</td>
</tr>
<tr>
<td>26</td>
<td>Accounting and reporting by retirement benefit plans</td>
</tr>
<tr>
<td>27</td>
<td>Separate financial statements</td>
</tr>
<tr>
<td>28</td>
<td>Investments in associates and joint ventures</td>
</tr>
<tr>
<td>29</td>
<td>Financial reporting in hyperinflationary economies</td>
</tr>
<tr>
<td>32</td>
<td>Financial instruments presentation</td>
</tr>
<tr>
<td>33</td>
<td>Earnings per share</td>
</tr>
<tr>
<td>34</td>
<td>Interim financial reporting</td>
</tr>
<tr>
<td>36</td>
<td>Impairment of assets</td>
</tr>
<tr>
<td>Standard No.</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 37</td>
<td>Provisions, contingent liabilities and contingent assets</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 38</td>
<td>Intangible assets</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 40</td>
<td>Investment property</td>
</tr>
<tr>
<td>Thai Accounting Standard No. 41</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 1</td>
<td>First-time adoption of Thai financial reporting standards</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 2</td>
<td>Share-based payment</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 3</td>
<td>Business combinations</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 4</td>
<td>Insurance contracts</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 5</td>
<td>Non-current assets held for sale and discontinued operations</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 6</td>
<td>Exploration for and evaluation of mineral resources</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 7</td>
<td>Financial instruments: disclosures</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 8</td>
<td>Operating segments</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 9</td>
<td>Financial instruments</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 10</td>
<td>Consolidated financial statements</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 11</td>
<td>Joint arrangements</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 12</td>
<td>Disclosure of interests in other entities</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 13</td>
<td>Fair value measurement</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 15</td>
<td>Revenue from contracts with customers</td>
</tr>
<tr>
<td>Thai Financial Reporting Standard No. 16</td>
<td>Leases</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 10</td>
<td>Government assistance – no specific relation to operating activities</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 25</td>
<td>Income taxes – changes in the tax status of an entity or its shareholders</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 29</td>
<td>Service concession arrangements: disclosures</td>
</tr>
<tr>
<td>Thai Standing Interpretations Committee No. 32</td>
<td>Intangible assets – web site costs</td>
</tr>
<tr>
<td>Thai Financial Reporting Interpretations Committee No. 1</td>
<td>Changes in existing decommissioning, restoration and similar liabilities</td>
</tr>
<tr>
<td>Thai Financial Reporting Interpretations Committee No. 5</td>
<td>Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds</td>
</tr>
</tbody>
</table>
Thai Financial Reporting Interpretations Committee No. 7 Applying the restatement approach under TAS 29 Financial reporting in hyperinflationary economies

Thai Financial Reporting Interpretations Committee No. 10 Interim financial reporting and impairment

Thai Financial Reporting Interpretations Committee No. 12 Service concession arrangements

Thai Financial Reporting Interpretations Committee No. 14 The limit on a defined benefit asset, minimum funding requirements and their interaction under TAS 19 Employee benefits

Thai Financial Reporting Interpretations Committee No. 16 Hedges of a net investment in a foreign operation

Thai Financial Reporting Interpretations Committee No. 17 Distributions of non-cash assets to owners

Thai Financial Reporting Interpretations Committee No. 19 Extinguishing financial liabilities with equity instruments

Thai Financial Reporting Interpretations Committee No. 20 Stripping costs in the production phase of a surface mine

Thai Financial Reporting Interpretations Committee No. 21 Levies

Thai Financial Reporting Interpretations Committee No. 22 Foreign currency transactions and advance consideration

Thai Financial Reporting Interpretations Committee No. 23 Uncertainty over income tax treatments

The Group's management has assessed impact to the financial statements from the new and revised accounting standards, financial reporting standards, interpretation to accounting standards and interpretation to financial reporting standards that are not yet effective for the year ended December 31, 2019. Other than the new financial reporting standards related to financial instruments and Thai Financial Reporting Standard No.16, Lease, the new or revised accounting standards, financial reporting standards, interpretation to accounting standards and interpretation to financial reporting standards have no significant impact to the financial statements presented.

- Financial instruments

The new accounting standards, financial reporting standards and interpretation to financial reporting standards related to financial instruments are:

- 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 and interpretation to accounting standards in 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

These new financial reporting standards related to financial instruments address the classification, measurement, derecognition of financial assets and financial liabilities, impairment of financial assets, hedge accounting, and presentation and disclosure of financial instruments.

On January 1, 2020, the Group will apply the new financial reporting standards on financial instruments by applying modified retrospective approach. From the preliminary assessment, the management expect that the Group will be significantly affected on the following areas.

- Classification of financial liabilities and equity

  Financial instruments issued by the Group must be classified as financial liabilities or equity securities by considering contractual obligations.

  - Where the Group has a contractual obligation to deliver cash or another financial asset to another entity without the right to avoid or indefinitely postpone the payment, it is considered a financial liability unless that payment can be settled by issuing a fixed number of the Group’s own equity instruments in exchange with a fixed amount of cash.
Where the group has no contractual obligation or has an unconditional right to postpone the settlement of the obligation, it is considered an equity instrument.

Currently, the Group has subordinated capital debentures which are classified as equity since the Group has considered that the subordinated capital debentures will be settled upon the winding-up of the issuing company or as per the redemption rights stipulated. The issuer 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 be accumulated but will not bear additional interest. However, in accordance with paragraph 25 of TAS 32, Financial instruments: presentation, which will be effective for the periods beginning on or after January 1, 2020 onwards, there are certain conditions in the indenture of subordinated capital debentures, which can be interpreted as the debentures' holders will have the right to redeem the debentures prior to the liquidation, as such, the subordinated capital debentures must be classified as financial liabilities. However, in accordance with an announcement issued by the Federation of Accounting Professions (TFAC) no. 95/2562, it allows the classification of the subordinated capital debentures which was issued and paid-up before December 31, 2019 as a part of equity. The relief is granted until December 31, 2022.

On December 31, 2019, the Group has subordinated capital debentures of US Dollar 187.43 million (Baht 6,018.03 million) in the consolidated financial statements, and US Dollar 156.57 million (Baht 4,981.99 million) in the Company’s financial statements. The Group will classify these subordinated capital debentures as a part of equity for the periods beginning on or after January 1, 2020.

Thailand Financial Reporting Standard No.16, Leases

According to TFRS 16, Leases, the Group, as a lessee, must change the recognition of lease contract. A right-of-use asset and a lease liability will be recognised in the statements of financial position, with exception on short-term and low-value assets leases.

On January 1, 2020, the Group will apply TFRS 16, Leases, by recognising a cumulative effect as an adjustment to opening retained earnings (Modified retrospective approach). Hence, comparative financial statements will not be restated. From the preliminary impact assessment, the management expect that, by compared to operating lease recognition according to Thai Accounting Standards No. 17, Leases, (TAS 17), the Group will be affected by the classification of expenses and cash flow activities, and the recognition of time value of money in the statements of income. However, there will be no effect to leases which the Group currently reported as finance lease liabilities under TAS 17. The Group’s management is currently evaluating the impact of adopting the financial reporting standard 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 statement 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 19.
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.

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 statement of income and statement 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 objective evidence 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 statement 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 19.
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 committed to make 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 19.
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 statement of financial position date are translated into functional currency at the exchange rate ruling on the statement 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 statement 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 statement 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 allowance for decrease in value of investment is carried out when there is a factor indicating that the value of investments might be decreased. If the carrying value of the investments is higher than its recoverable amount, the Group will recognize the loss on decrease in value 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 Investment 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 the closing price at the last 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 20.

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. Capitalization shall cease when substantially all of the activities necessary to prepare the qualifying assets for its intended use or sale are completed.

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 publishing 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 statement 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.

  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.

  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.
- **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 is 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 statement 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.

### 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, concession rights in midstream oil and gas business, 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

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 statement 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 Group 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. The employee benefits obligation is calculated 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 Benefits” 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

Revenue from contracts with customers is recognized when the Group complete performance obligations at a point in time by transferring petroleum product to a customer and the control over the product is transferred to a customer whom the product is physically possessed. The revenue is measured at the fair value of the consideration which the Group expects to be entitled in exchange for petroleum product, provided that collectability of the consideration is probable. Inter-company sales revenue is excluded in the consolidated financial statements.

Interest income is recognized on an effective interest rate basis.

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 outstanding 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 outstanding 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. Reclassification and Adjustment

The Group has reclassified and adjusted exploration and evaluation assets from business acquisition in the current year and comparative consolidated financial statements. However, there is no impact on the consolidated statements of income for the periods ended 31 December 2019 and consolidated statements of cash flows for the period ended 31 December 2019. The effects of increase (decrease) on the consolidated financial statements are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2018</td>
<td>Jan 1, 2018</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td><strong>Statements of financial position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td>153.20</td>
<td>4,971.38</td>
</tr>
<tr>
<td>Exploration and evaluation assets</td>
<td>-240.44</td>
<td>-7,802.24</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>-72.13</td>
<td>-2,340.67</td>
</tr>
<tr>
<td>Retain earnings - unappropriated</td>
<td>-15.11</td>
<td>-533.51</td>
</tr>
<tr>
<td>Other components of shareholders’ equity</td>
<td>-</td>
<td>43.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2018</td>
<td></td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td><strong>Statement of comprehensive income for the year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will be reclassified subsequently to profit or loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange differences on translating financial statement</td>
<td>-</td>
<td>3.49</td>
</tr>
<tr>
<td>Total items that will be reclassified subsequently to profit or loss</td>
<td>-</td>
<td>3.49</td>
</tr>
<tr>
<td>Other comprehensive income (loss) for the year - net of tax</td>
<td>-</td>
<td>3.49</td>
</tr>
<tr>
<td>Total comprehensive income (loss) for the year</td>
<td>-</td>
<td>3.49</td>
</tr>
</tbody>
</table>
6. Business Acquisition in Murphy Oil Corporation in Malaysia

On March 21, 2019, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, signed the Share Sale and Purchase Agreement (SSPA) to acquire the 100% shareholding interests of Murphy Oil Corporation (Murphy) in Malaysia through acquisition of shares in Murphy's subsidiaries, which are Murphy Sabah Oil Co., Ltd. (Murphy Sabah) and Murphy Sarawak Oil Co., Ltd. (Murphy Sarawak), with total acquisition value of approximately US Dollar 2,130.86 million (Baht 65,724.27 million). Moreover, according to the SSPA, there may be contingent consideration of not exceeding US Dollar 100 million if there is significant petroleum found from exploration of SK405B project. The acquisition was completed on July 10, 2019.

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated Fair Value</strong></td>
<td><strong>Consolidated Fair Value</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>58.90</td>
<td>1,816.86</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>138.04</td>
<td>4,257.70</td>
</tr>
<tr>
<td>Other accounts receivable</td>
<td>59.09</td>
<td>1,822.63</td>
</tr>
<tr>
<td>Inventories</td>
<td>7.78</td>
<td>240.00</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>19.60</td>
<td>604.51</td>
</tr>
<tr>
<td>Current tax assets</td>
<td>16.50</td>
<td>508.89</td>
</tr>
<tr>
<td>Other current assets</td>
<td>11.26</td>
<td>347.26</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>1,627.38</td>
<td>50,194.82</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>2.49</td>
<td>76.71</td>
</tr>
<tr>
<td>Exploration and Evaluation Assets</td>
<td>410.46</td>
<td>12,660.24</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>98.13</td>
<td>3,026.87</td>
</tr>
<tr>
<td>Rights to receive reimbursement from decommissioning funds</td>
<td>48.64</td>
<td>1,500.26</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>4.39</td>
<td>135.49</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>(6.28)</td>
<td>(193.74)</td>
</tr>
<tr>
<td>Working capital to co-venturers</td>
<td>(67.41)</td>
<td>(2,079.09)</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>(92.05)</td>
<td>(2,839.08)</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>(35.80)</td>
<td>(1,104.31)</td>
</tr>
<tr>
<td></td>
<td>Unit: Million US Dollar</td>
<td>Unit: Million Baht</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Consolidated Fair Value</td>
<td>Consolidated Fair Value</td>
</tr>
<tr>
<td>Long-term loans</td>
<td>(150.14)</td>
<td>(4,631.07)</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>(17.92)</td>
<td>(552.65)</td>
</tr>
<tr>
<td>Provision for decommissioning costs</td>
<td>(268.65)</td>
<td>(8,286.43)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,864.41</td>
<td>57,505.87</td>
</tr>
<tr>
<td><strong>Less</strong> Deferred tax liabilities from the effect of accounting</td>
<td>(344.71)</td>
<td>(10,632.18)</td>
</tr>
<tr>
<td><strong>Net identifiable assets</strong></td>
<td>1,519.70</td>
<td>46,873.69</td>
</tr>
<tr>
<td>Goodwill</td>
<td>611.16</td>
<td>18,850.58</td>
</tr>
<tr>
<td><strong>Total consideration</strong></td>
<td>2,130.86</td>
<td>65,724.27</td>
</tr>
</tbody>
</table>

Goodwill of US Dollar 611.16 million (Baht 18,850.58 million) arises primarily from the recognition of deferred tax liabilities arising from the difference between the fair value of net identifiable assets acquired from the acquisition and the book value which is the tax base of these net assets. The fair value of the identifiable assets acquired and liabilities assumed may be adjusted to reflect new information obtained about facts and circumstances that existed as of the acquisition date, however, the measurement period shall not exceed one year from the date which the Group has control.

The fair value of total considerations transferred on the acquisition date of US Dollar 2,130.86 million (Baht 65,724.27 million) consists of cash payment on acquisition date of US Dollar 2,123.76 million (Baht 65,505.43 million) and deferred consideration of US Dollar 7.10 million (Baht 218.84 million), which is the fair value discounted from deferred consideration of US Dollar 7.48 million (Baht 230.70 million). The fair value is measured by using income approach based on discount rate at 2.8% and other probability assumptions which is classified as fair value level 3. The deferred consideration is presented in other non-current liabilities in the consolidated financial statements.

7. **Business Acquisition in Partex Holding B.V.**

On June 17, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, signed the Share Purchase Agreement (SPA) to acquire the 100% shareholding interests of Partex Holding B.V. (Partex) from Calouste Gulbenkian Foundation with the total acquisition value of approximately US Dollar 716.16 million (Baht 21,604.53 million). The value may be adjusted according to conditions in the SPA. The acquisition was completed on November 4, 2019.
Details of acquired net identifiable assets on acquisition date and goodwill are as follows:

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated</strong></td>
<td><strong>Consolidated</strong></td>
</tr>
<tr>
<td><strong>Fair Value</strong></td>
<td><strong>Fair Value</strong></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>139.12</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>45.52</td>
</tr>
<tr>
<td>Other accounts receivable</td>
<td>0.80</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>13.88</td>
</tr>
<tr>
<td>Other current assets</td>
<td>0.57</td>
</tr>
<tr>
<td>Investment in joint venture</td>
<td>82.96</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>469.08</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>36.71</td>
</tr>
<tr>
<td>Exploration and evaluation assets</td>
<td>97.71</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>58.89</td>
</tr>
<tr>
<td>Trade accounts payable</td>
<td>(59.70)</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>(11.88)</td>
</tr>
<tr>
<td>Tax payables</td>
<td>(12.95)</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>(0.14)</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>(152.54)</td>
</tr>
<tr>
<td>Provision for employee benefit</td>
<td>(44.89)</td>
</tr>
<tr>
<td>Provision for decommissioning costs</td>
<td>(62.60)</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>(4.01)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>596.53</td>
</tr>
<tr>
<td><strong>Less Deferred tax liabilities from the effect of accounting</strong></td>
<td>(85.83)</td>
</tr>
<tr>
<td><strong>Net identifiable assets</strong></td>
<td>510.70</td>
</tr>
<tr>
<td><strong>Goodwill</strong></td>
<td>205.46</td>
</tr>
<tr>
<td><strong>Total consideration</strong></td>
<td>716.16</td>
</tr>
</tbody>
</table>

Goodwill of US Dollar 205.46 million (Baht 6,197.97 million) arises primarily from the recognition of deferred tax liabilities arising from the difference between the fair value of net assets acquired from the acquisition and the book value which is the tax base of these net assets. The fair value of the identifiable assets acquired and liabilities assumed may be adjusted to reflect new information.
obtained about facts and circumstances that existed as of the acquisition date, however, the measurement period shall not exceed one year from the date which the Group has control.

The fair value of total considerations transferred on the acquisition date of US Dollar 716.16 million (Baht 21,604.53 million) was fully paid in cash by PTTEP HK on the acquisition date.

8. 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 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, 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 calculation.

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, except for the provision for employee benefits, 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.
# 9. Cash and Cash Equivalents

Cash and cash equivalents comprised:

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Cash on hand and at banks</td>
<td>1,867.51</td>
</tr>
<tr>
<td>Cash equivalents</td>
<td></td>
</tr>
<tr>
<td>- Fixed deposits</td>
<td>900.56</td>
</tr>
<tr>
<td>- Debt securities</td>
<td>19.68</td>
</tr>
<tr>
<td>- Money market fund</td>
<td>35.15</td>
</tr>
<tr>
<td>Total</td>
<td>2,822.90</td>
</tr>
<tr>
<td></td>
<td>56,312.82</td>
</tr>
</tbody>
</table>

The interest rate on saving deposits held at call with banks for the year ended December 31, 2019 is between 0.00% - 2.65% per annum (during the year 2018: interest rate was between 0.00% - 2.50% per annum).

The interest rate on fixed deposits with banks for the year ended December 31, 2019 is between 0.50% - 5.77% per annum (during the year 2018: interest rate was between 0.83% - 6.08% per annum).

The interest rate on debt securities for the year ended December 31, 2019 is between 1.11% - 1.77% per annum (during the year 2018: interest rate was between 1.00% - 1.47% per annum).
10. Short-term investments

Short-term investments comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Fixed deposits</td>
<td>200.00</td>
<td>770.66</td>
</tr>
<tr>
<td>Debt securities (with embedded derivatives)</td>
<td>-</td>
<td>49.87</td>
</tr>
<tr>
<td>Total</td>
<td>200.00</td>
<td>820.53</td>
</tr>
</tbody>
</table>

The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Fixed deposits</td>
<td>200.00</td>
<td>412.83</td>
</tr>
<tr>
<td>Debt securities (with embedded derivatives)</td>
<td>-</td>
<td>49.87</td>
</tr>
<tr>
<td>Total</td>
<td>200.00</td>
<td>462.70</td>
</tr>
</tbody>
</table>

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, 2019 is between 2.63% - 3.60% per annum (during the year 2018: interest rate was between 1.64% - 3.10% 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:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>-</td>
<td>49.87</td>
</tr>
<tr>
<td>Decrease</td>
<td>(50.00)</td>
<td>(1,551.75)</td>
</tr>
<tr>
<td>Gain on changes in fair value</td>
<td>0.13</td>
<td>4.05</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(70.56)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## 11. Investments in Trading Securities

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Consolidated</strong></td>
<td><strong>Consolidated</strong></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>70.55</td>
<td>2,289.34</td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>1,250.18</td>
<td>38,799.23</td>
<td></td>
</tr>
<tr>
<td>Decrease</td>
<td>(1,119.02)</td>
<td>(34,728.73)</td>
<td></td>
</tr>
<tr>
<td>Gain on changes in fair value</td>
<td>0.47</td>
<td>15.04</td>
<td></td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>11.52</td>
<td>357.52</td>
<td></td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(288.40)</td>
<td></td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>213.70</td>
<td>6,444.00</td>
<td></td>
</tr>
</tbody>
</table>

|                                | Unit: Million US Dollar | Unit: Million Baht |          |
|                                | **The Company**        | **The Company**    |          |
| Balance as at January 1, 2019  | 70.54                   | 2,289.08           |          |
| Decrease                       | (70.00)                 | (2,172.45)         |          |
| Loss on changes in fair value  | (0.34)                  | (10.14)            |          |
| Foreign exchange differences   | 0.01                    | 0.35               |          |
| Currency translation differences| -                       | (100.50)           |          |
| Balance as at December 31, 2019| 0.21                    | 6.34               |          |
12. Investments in Available-for-sale Securities

Investments in available-for-sale securities comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Current portion of investments in available-for-sale securities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current portion of investments in available-for-sale securities</td>
<td>0.52</td>
<td>0.56</td>
</tr>
<tr>
<td>Total</td>
<td>0.52</td>
<td>11.01</td>
</tr>
</tbody>
</table>

Current portion of investments in available-for-sale securities

|                                | Unit: Million US Dollar | Unit: Million Baht |
|                                | The Company             | The Company        |
| Dec 31, 2019                   | Dec 31, 2018            | Dec 31, 2019       |
| Current portion of investments in available-for-sale securities | -                       | 10.45              |
| Total                          | -                       | 10.45              |

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, 2019  |                        | 11.01              |
| Decrease                       | (10.44)                 | (324.14)           |
| Loss on changes in fair value  | (0.05)                  | (1.31)             |
| Currency translation differences|                        |                   |
| Balance as at December 31, 2019|                        | 0.52               |

|                                | Unit: Million US Dollar | Unit: Million Baht |
|                                | The Company             | The Company        |
| Balance as at January 1, 2019  |                        | 10.45              |
| Decrease                       | (10.44)                 | (324.14)           |
| Loss on changes in fair value  | (0.01)                  | (0.19)             |
| Currency translation differences|                        |                   |
| Balance as at December 31, 2019|                        | -                  |
13. Account Receivable - Parent Company

Account receivable - parent company comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Sales of petroleum products</td>
<td>534.84</td>
<td>637.13</td>
</tr>
<tr>
<td>Total</td>
<td>534.84</td>
<td>637.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Sales of petroleum products</td>
<td>353.32</td>
<td>399.09</td>
</tr>
<tr>
<td>Total</td>
<td>353.32</td>
<td>399.09</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Not yet due</td>
<td>505.14</td>
<td>633.54</td>
</tr>
<tr>
<td>Past due</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Up to 3 months</td>
<td>0.75</td>
<td>-</td>
</tr>
<tr>
<td>- Over 3 months but not more than 6 months</td>
<td>-</td>
<td>0.21</td>
</tr>
<tr>
<td>- Over 6 months but not more than 12 months</td>
<td>27.91</td>
<td>0.91</td>
</tr>
<tr>
<td>- Over 12 months</td>
<td>2.14</td>
<td>2.47</td>
</tr>
<tr>
<td></td>
<td>535.94</td>
<td>637.13</td>
</tr>
<tr>
<td>Less Allowance for doubtful accounts</td>
<td>(1.10)</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>534.84</td>
<td>637.13</td>
</tr>
<tr>
<td></td>
<td>Unit: Million US Dollar</td>
<td>Unit: Million Baht</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Not yet due</td>
<td>323.99</td>
<td>9,769.57</td>
</tr>
<tr>
<td>Past due</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Up to 3 months</td>
<td>0.45</td>
<td>13.55</td>
</tr>
<tr>
<td>- Over 3 months but not more than 6 months</td>
<td>-</td>
<td>- 0.38</td>
</tr>
<tr>
<td>- Over 6 months but not more than 12 months</td>
<td>27.90</td>
<td>841.21</td>
</tr>
<tr>
<td>- Over 12 months</td>
<td>2.08</td>
<td>62.72</td>
</tr>
<tr>
<td></td>
<td>354.42</td>
<td>10,687.05</td>
</tr>
<tr>
<td>Less Allowance for doubtful accounts</td>
<td>(1.10)</td>
<td>(33.13)</td>
</tr>
<tr>
<td>Total</td>
<td>353.32</td>
<td>10,653.92</td>
</tr>
</tbody>
</table>

(Notes to Financial Statement)
14. **Trade Accounts Receivable**

Trade accounts receivable comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>ADNOC-Abu Dhabi National Oil Company</td>
<td>4.73</td>
<td>-</td>
</tr>
<tr>
<td>Binh Son Refining &amp; Petrochemical Co., Ltd.</td>
<td>12.26</td>
<td>3.07</td>
</tr>
<tr>
<td>Hengyuan Refining Company Berhad</td>
<td>87.68</td>
<td>-</td>
</tr>
<tr>
<td>Itochu Corporation</td>
<td>5.11</td>
<td>-</td>
</tr>
<tr>
<td>Myanmar Oil and Gas Enterprise</td>
<td>37.19</td>
<td>43.64</td>
</tr>
<tr>
<td>Oman Trading International</td>
<td>28.45</td>
<td>-</td>
</tr>
<tr>
<td>Petco Trading Labuan Company Limited</td>
<td>6.56</td>
<td>5.01</td>
</tr>
<tr>
<td>Petroliam Nasional Berhad</td>
<td>34.63</td>
<td>13.90</td>
</tr>
<tr>
<td>Petron Malaysia Refining &amp; Marketing</td>
<td>21.08</td>
<td>-</td>
</tr>
<tr>
<td>PetroVietnam Oil Corporation</td>
<td>4.08</td>
<td>3.96</td>
</tr>
<tr>
<td>PT Pertamina (Persero)</td>
<td>0.98</td>
<td>-</td>
</tr>
<tr>
<td>Repsol Trading Singapore PTE LTD.</td>
<td>-</td>
<td>2.76</td>
</tr>
<tr>
<td>SembCorp Gas Pte Ltd.</td>
<td>4.97</td>
<td>5.00</td>
</tr>
<tr>
<td>Star Petroleum Refining Pte.</td>
<td>4.60</td>
<td>9.27</td>
</tr>
<tr>
<td>Vietnam National Oil and Gas Group</td>
<td>0.52</td>
<td>0.38</td>
</tr>
<tr>
<td>VITOL CENTRAL ASIA S.A.</td>
<td>5.33</td>
<td>-</td>
</tr>
<tr>
<td>Electricity Generating Authority of Thailand</td>
<td>-</td>
<td>0.03</td>
</tr>
<tr>
<td>Others</td>
<td>0.76</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>258.93</td>
<td>87.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Star Petroleum Refining Pte.</td>
<td>1.13</td>
<td>0.92</td>
</tr>
<tr>
<td>Electricity Generating Authority of Thailand</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>Others</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1.19</td>
<td>0.99</td>
</tr>
</tbody>
</table>
The analysis of trade accounts receivable based on outstanding age groups is shown below.

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Not yet due</td>
<td>258.74</td>
<td>7,801.95</td>
</tr>
<tr>
<td></td>
<td>87.06</td>
<td>2,825.23</td>
</tr>
<tr>
<td>Past due</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Up to 3 months</td>
<td>0.003</td>
<td>0.09</td>
</tr>
<tr>
<td>- Over 3 months but not more than 6 months</td>
<td>- 0.19</td>
<td>- 6.04</td>
</tr>
<tr>
<td>- Over 6 months but not more than 12 months</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>- Over 12 months</td>
<td>0.19</td>
<td>5.61</td>
</tr>
<tr>
<td>Total</td>
<td>258.93</td>
<td>7,807.65</td>
</tr>
<tr>
<td></td>
<td>87.25</td>
<td>2,831.27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Not yet due</td>
<td>1.19</td>
<td>35.75</td>
</tr>
<tr>
<td></td>
<td>0.99</td>
<td>32.03</td>
</tr>
<tr>
<td>Past due</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Up to 3 months</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Over 3 months but not more than 6 months</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>- Over 6 months but not more than 12 months</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>- Over 12 months</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1.19</td>
<td>35.75</td>
</tr>
<tr>
<td></td>
<td>0.99</td>
<td>32.03</td>
</tr>
</tbody>
</table>
15. **Inventories**

Inventories comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Inventories</td>
<td>32.50</td>
<td>980.08</td>
</tr>
<tr>
<td>Less Allowance for decrease in net realizable value</td>
<td>(0.41)</td>
<td>(12.29)</td>
</tr>
<tr>
<td>Total</td>
<td>32.09</td>
<td>967.79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Inventories</td>
<td>5.33</td>
<td>160.72</td>
</tr>
<tr>
<td>Less Allowance for decrease in net realizable value</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>5.33</td>
<td>160.72</td>
</tr>
</tbody>
</table>

16. **Materials and Supplies**

Materials and supplies comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>321.25</td>
<td>9,686.88</td>
</tr>
<tr>
<td>Less Allowance for damage and obsolescence</td>
<td>(23.01)</td>
<td>(693.71)</td>
</tr>
<tr>
<td>Total</td>
<td>298.24</td>
<td>8,993.17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>111.63</td>
<td>3,366.12</td>
</tr>
<tr>
<td>Less Allowance for damage and obsolescence</td>
<td>(12.90)</td>
<td>(389.08)</td>
</tr>
<tr>
<td>Total</td>
<td>98.73</td>
<td>2,977.04</td>
</tr>
</tbody>
</table>
17. **Other Current Assets**

Other current assets comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>18.25</td>
<td>550.36</td>
</tr>
<tr>
<td></td>
<td>17.26</td>
<td>560.20</td>
</tr>
<tr>
<td>Accrued income</td>
<td>25.56</td>
<td>770.87</td>
</tr>
<tr>
<td></td>
<td>24.17</td>
<td>784.17</td>
</tr>
<tr>
<td>Withholding tax and VAT</td>
<td>14.09</td>
<td>424.77</td>
</tr>
<tr>
<td></td>
<td>11.46</td>
<td>371.96</td>
</tr>
<tr>
<td>Others</td>
<td>37.57</td>
<td>1,132.86</td>
</tr>
<tr>
<td></td>
<td>12.67</td>
<td>411.03</td>
</tr>
<tr>
<td>Total</td>
<td>95.47</td>
<td>2,878.86</td>
</tr>
<tr>
<td></td>
<td>65.56</td>
<td>2,127.36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>9.40</td>
<td>283.43</td>
</tr>
<tr>
<td></td>
<td>9.40</td>
<td>304.97</td>
</tr>
<tr>
<td>Accrued income</td>
<td>35.29</td>
<td>1,064.16</td>
</tr>
<tr>
<td></td>
<td>17.40</td>
<td>564.48</td>
</tr>
<tr>
<td>Withholding tax and VAT</td>
<td>4.31</td>
<td>130.08</td>
</tr>
<tr>
<td></td>
<td>3.83</td>
<td>124.46</td>
</tr>
<tr>
<td>Others</td>
<td>14.54</td>
<td>438.37</td>
</tr>
<tr>
<td></td>
<td>0.13</td>
<td>4.11</td>
</tr>
<tr>
<td>Total</td>
<td>63.54</td>
<td>1,916.04</td>
</tr>
<tr>
<td></td>
<td>30.76</td>
<td>998.02</td>
</tr>
</tbody>
</table>

18. **Significant Transactions with Related Parties**

Significant transactions with related parties are summarized as follows:

**18.1 Revenues and Expenses with Related Parties**

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Parent company - PTT Public Company Limited (PTT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales (world market reference price)</td>
<td>4,917.40</td>
<td>4,485.55</td>
</tr>
<tr>
<td>Purchase and other expenses</td>
<td>4.71</td>
<td>24.79</td>
</tr>
<tr>
<td></td>
<td>152,646.96</td>
<td>145,157.05</td>
</tr>
<tr>
<td></td>
<td>146.33</td>
<td>800.62</td>
</tr>
</tbody>
</table>
### Subsidiaries, associates, joint ventures and joint operations

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Interest income</td>
<td>0.63</td>
<td>0.60</td>
</tr>
<tr>
<td>Rental and service expenses</td>
<td>42.23</td>
<td>34.74</td>
</tr>
</tbody>
</table>

### Other related parties

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Sales (world market reference price)</td>
<td>66.79</td>
<td>55.93</td>
</tr>
<tr>
<td>Purchase and other expenses</td>
<td>49.84</td>
<td>28.59</td>
</tr>
<tr>
<td>Interest income</td>
<td>3.14</td>
<td>3.27</td>
</tr>
</tbody>
</table>

### Director and executive management

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Short - term benefits</td>
<td>7.65</td>
<td>6.40</td>
</tr>
<tr>
<td>Post - employment and other long - term benefits</td>
<td>0.55</td>
<td>0.19</td>
</tr>
</tbody>
</table>

### Parent company - PTT Public Company Limited (PTT)

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Sales (world market reference price)</td>
<td>3,225.83</td>
<td>2,819.85</td>
</tr>
<tr>
<td>Purchase and other expenses</td>
<td>4.47</td>
<td>14.65</td>
</tr>
</tbody>
</table>

### Subsidiaries, associates and joint operations

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Interest income</td>
<td>275.78</td>
<td>42.17</td>
</tr>
<tr>
<td>Management and service fees</td>
<td>0.32</td>
<td>0.32</td>
</tr>
<tr>
<td>Rental and service expenses</td>
<td>41.10</td>
<td>34.02</td>
</tr>
</tbody>
</table>

### Other related parties

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Purchase and other expenses</td>
<td>20.09</td>
<td>12.50</td>
</tr>
</tbody>
</table>

### Director and executive management

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Short - term benefits</td>
<td>7.64</td>
<td>6.40</td>
</tr>
<tr>
<td>Post - employment and other long - term benefits</td>
<td>0.55</td>
<td>0.19</td>
</tr>
</tbody>
</table>
18.2 Account receivable - Related parties

Account receivable - related parties comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Parent company - PTT Public Company Limited (PTT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>534.84</td>
<td>637.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Parent company - PTT Public Company Limited (PTT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>353.32</td>
<td>399.09</td>
</tr>
</tbody>
</table>

18.3 Short-term Loans to Related Parties

Short-term loans to related parties comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Subsidiary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTTEP Treasury Center Company Limited</td>
<td>362.00</td>
<td>1,175.45</td>
</tr>
<tr>
<td>Total</td>
<td>362.00</td>
<td>1,175.45</td>
</tr>
</tbody>
</table>
### 18.4 Long-term Loans to Related Parties

Long-term loans to related parties comprised:

<table>
<thead>
<tr>
<th>Borrowers</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONSOLIDATED</td>
<td>CONSOLIDATED</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td><strong>Associate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Complex Company Limited</td>
<td>19.24</td>
<td>17.88</td>
</tr>
<tr>
<td><strong>Related Party</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTTGL Investment Limited</td>
<td>66.82</td>
<td>77.62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>86.06</td>
<td>95.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Borrowers</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td><strong>Subsidiary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTTPEP Treasury Center Company Limited</td>
<td>6,391.07</td>
<td>5,400.66</td>
</tr>
<tr>
<td><strong>Associate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Complex Company Limited</td>
<td>19.24</td>
<td>17.87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,410.31</td>
<td>5,418.53</td>
</tr>
</tbody>
</table>

The Company has provided loans to subsidiary for the year ended December 31, 2019 with an interest rate of 4.62% per annum (during the year 2018: interest rate was between 3.19% - 3.47% per annum). The subsidiary shall occasionally repay the loans.

The Company has provided loans to an associate for the year ended December 31, 2019 with an interest rate of 3.35% per annum (during the year 2018: interest rate was 3.35% per annum).

The Group has provided loans to related party for the year ended December 31, 2019 with an interest rate between 4.01% - 4.67% per annum (during the year 2018: interest rate was 3.64% - 4.30% per annum).
Movements in the long-term loans to related parties for the year are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>95.50</td>
<td>3,098.81</td>
</tr>
<tr>
<td>Decrease</td>
<td>(10.80)</td>
<td>(335.20)</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>1.36</td>
<td>42.23</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td></td>
<td>(210.92)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>86.06</strong></td>
<td><strong>2,594.92</strong></td>
</tr>
</tbody>
</table>

The Company:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>5,418.53</td>
<td>175,830.35</td>
</tr>
<tr>
<td>Increase</td>
<td>1,195.62</td>
<td>37,105.97</td>
</tr>
<tr>
<td>Decrease</td>
<td>(205.20)</td>
<td>(6,368.38)</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>1.36</td>
<td>42.23</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td></td>
<td>(13,313.80)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>6,410.31</strong></td>
<td><strong>193,296.37</strong></td>
</tr>
</tbody>
</table>

19. Investments in Subsidiaries, Associates, Joint Ventures and Joint Operations

19.1 Changes of Investments in Subsidiaries, Associates and Joint Ventures

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>237.21</td>
<td>7,697.38</td>
</tr>
<tr>
<td>Share of net profit after income taxes</td>
<td>12.35</td>
<td>380.41</td>
</tr>
<tr>
<td>Dividends received from associates</td>
<td>(2.81)</td>
<td>(87.13)</td>
</tr>
<tr>
<td>Dividends received from joint ventures</td>
<td>(11.91)</td>
<td>(369.58)</td>
</tr>
<tr>
<td>Share of other comprehensive income</td>
<td>4.38</td>
<td>136.43</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>82.96</td>
<td>2,502.52</td>
</tr>
<tr>
<td>Increase in investment</td>
<td>130.63</td>
<td>4,054.04</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>0.19</td>
<td>(654.42)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>453.00</strong></td>
<td><strong>13,659.65</strong></td>
</tr>
</tbody>
</table>
The Company

<table>
<thead>
<tr>
<th>The Company</th>
<th>The Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>821.29</td>
</tr>
<tr>
<td>Increase in investments</td>
<td>128.69</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>949.98</td>
</tr>
</tbody>
</table>

19.2 Investments in Subsidiaries

Details of subsidiaries are as follows:

<table>
<thead>
<tr>
<th>List of subsidiaries</th>
<th>Registered country</th>
<th>Type of business</th>
<th>Participating interest (%) (including indirect holding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PTTEP International Limited (PTTEPI)</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>2. PTTEP Offshore Investment Company Limited (PTTEPO)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>3. PTTEP Services Limited (PTTEP Services)</td>
<td>Thailand</td>
<td>Human resource support</td>
<td>100</td>
</tr>
<tr>
<td>4. PTTEP Siam Limited (PTTEPS)</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>5. PTTEP HK Holding Limited (PTTEP HK)</td>
<td>Hong Kong</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>6. PTTEP Treasury Center Company Limited (PTTEP TC)</td>
<td>Thailand</td>
<td>Treasury center for the Group’s business</td>
<td>100</td>
</tr>
<tr>
<td>7. PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH)</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>8. PTTEP Business Center Company Limited (PTTEP BC)</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>9. PTTEP Energy Development Company Limited (PTTEP ED)</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>11. AI and Robotics Ventures Company Limited (ARV)</td>
<td>Thailand</td>
<td>Technology</td>
<td>100</td>
</tr>
<tr>
<td>12. PTTEP Southwest Vietnam Company Limited (PTTEP SV)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>13. PTTEP Kim Long Vietnam Company Limited (PTTEP KV)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>List of subsidiaries</td>
<td>Registered country</td>
<td>Type of business</td>
<td>Participating interest (%) (including indirect holding)</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>--------------------</td>
<td>----------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>14. PTTEP Hoang-Long Company Limited (PTTEP HL)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>15. PTTEP Hoan-Vu Company Limited (PTTEP HV)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>16. PTTEP Algeria Company Limited (PTTEP AG)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>17. PTTEP Holding Company Limited (PTTEPH)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>18. PTTEP Indonesia Company Limited (PTTEP ID)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>19. PTTEP Africa Investment Limited (PTTEP AI)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>20. PTTEP Australia Pty Ltd (PTTEP AU)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>21. PTTEP Australia Offshore Pty Ltd (PTTEP AO)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>22. PTTEP South Asia Limited (PTTEP SA)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>23. PTTEP Semai II Limited (PTTEP SM)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>24. PTTEP Australia Perth Pty Ltd (PTTEP AP)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>25. PTTEP Australia Browse Basin Pty Ltd (PTTEP AB)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>26. PTTEP Australia Timor Sea Pty Ltd (PTTEP AT)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>27. PTTEP Australasia (Operations) Pty Ltd (PTTEP AAO)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>28. PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>29. PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS)</td>
<td>Commonwealth of Australia</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>30. PTTEP International Holding Company Limited (PTTEP IH)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>31. PTTEP Southwest Vietnam Pipeline Company Limited (PTTEP SVPC)</td>
<td>Cayman Islands</td>
<td>Gas pipeline transportation</td>
<td>100 100</td>
</tr>
<tr>
<td>32. PTTEP FLNG Holding Company Limited (PTTEP FH)</td>
<td>Hong Kong</td>
<td>Petroleum</td>
<td>100 100</td>
</tr>
<tr>
<td>List of subsidiaries</td>
<td>Registered country</td>
<td>Type of business</td>
<td>Participating interest (%) (Dec 31, 2019)</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>-----------------------------------------</td>
<td>-------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>33. PTTEP Netherland Holding Limited (PTTEP NL)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>34. JV Marine Limited (JV Marine)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>35. PTTEP South Mandar Limited (PTTEP SMD)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>36. PTTEP South Sageri Limited (PTTEP SS)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>37. PTTEP Sadang Limited (PTTEP SD)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>38. PTTEP Malunda Limited (PTTEP ML)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>39. PTTEP Netherlands Coöperatie U.A. (PTTEP NC)</td>
<td>Netherlands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>40. PTTEP Canada Limited (PTTEP CA)</td>
<td>Canada</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>41. PTTEP Canada International Finance Limited (PTTEP CIF)</td>
<td>Canada</td>
<td>Investment funding for the Group’s business</td>
<td>100</td>
</tr>
<tr>
<td>42. Cove Energy Limited (Cove)</td>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>43. Cove Energy Mozambique Rovuma Onshore Limited (CEMROL)</td>
<td>Republic of Cyprus</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>44. Cove Energy East Africa Limited (CEEAL)</td>
<td>Republic of Cyprus</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>45. PTTEP Mozambique Area 1 Limited (PTTEP MZA1)</td>
<td>Republic of Cyprus</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>46. Cove Energy Kenya Limited (CEKL)</td>
<td>Republic of Kenya</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>47. PTTEP Netherlands Holding Coöperatie U.A. (PTTEP NH)</td>
<td>Netherlands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>48. PTTEP Brazil Investment B.V. (PTTEP BI)</td>
<td>Netherlands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>49. PTTEP Brazil Investments in Oil and Gas Exploration and Production Limited (PTTEP BL)</td>
<td>Republic of Brazil</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>50. Sinphuhorm Holdings Limited (SHL)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>51. PTTEP SP Limited (PTTEP SP)</td>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>52. PTTEP G7 Limited (PTTEP G7)</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>53. PTTEP HK Offshore Limited (PTTEP HKO)</td>
<td>Hong Kong</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>54. PTTEP MENA Limited (PTTEP MENA)</td>
<td>Hong Kong</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>List of subsidiaries</td>
<td>Registered country</td>
<td>Type of business</td>
<td>Participating interest (%) (including indirect holding)</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------</td>
<td>------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>55. PTTEP Mexico E&amp;P Limited, S.de R.L. de C.V. (PTTEP MEP)</td>
<td>Mexico</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>56. PTTEP Sabah Oil Limited (PTTEP SBO)</td>
<td>Bahamas</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>57. PTTEP Sarawak Oil Limited (PTTEP SKO)</td>
<td>Bahamas</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>58. Partex Holding B.V. (PHBV)</td>
<td>Netherlands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>59. Partex Oil and Gas (Holdings) Corporation (POGHO)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>60. Partex (Kazakhstan) Corporation (PKC)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>61. Partex (Angola) Corporation (PANG)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>62. Partex (Brazil) Corporation (PBC)</td>
<td>Cayman Islands</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>63. Partex Gas Corporation (PGO)</td>
<td>Republic of Panama</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>64. Partex Services Corporation (PGO)</td>
<td>Republic of Panama</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>65. Participations and Explorations Corporation (PEC)</td>
<td>Republic of Panama</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>66. Partex (Oman) Corporation (POC)</td>
<td>Republic of Panama</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>67. Partex Services Portugal – Serviços para a Indústria Petrolífera, S.A. (PSP)</td>
<td>Portugal</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>68. Partex Brasil Ltda. (PBL)</td>
<td>Brazil</td>
<td>Petroleum</td>
<td>100</td>
</tr>
<tr>
<td>69. Partex Brasil Operações Petrolíferas Ltda (PBO)</td>
<td>Brazil</td>
<td>Human resource support</td>
<td>100</td>
</tr>
</tbody>
</table>

1. 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.

2. 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.

3. 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.

4. On July 10, 2019, PTTEP HK Offshore Limited (PTTEP HKO), a subsidiary of the Group, acquired shares in Murphy Sabah Oil Co., Ltd. (Murphy Sabah) and Murphy Sarawak Oil Co., Ltd. (Murphy Sarawak) as disclosed in Note 6 - Business acquisition in Murphy Oil Corporation in Malaysia and proceeded to change the name to PTTEP Sabah Oil Limited (PTTEP SBO) and PTTEP Sarawak Oil Limited (PTTEP SKO), respectively.

5. On November 4, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, acquired the 100% shareholding interests of Partex Holding B.V. as disclosed in Note 7 - Business acquisition in Partex Holding B.V.
Investments in subsidiaries accounted for using the cost method for the Company’s financial statements are as follows:

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>PTTEP International Limited</td>
<td>516.38</td>
</tr>
<tr>
<td>PTTEP Services Limited</td>
<td>0.08</td>
</tr>
<tr>
<td>PTTEP Siam Limited</td>
<td>99.79</td>
</tr>
<tr>
<td>PTTEP Offshore Investment Company Limited</td>
<td>0.005</td>
</tr>
<tr>
<td>PTTEP HK Holding Limited</td>
<td>35.89</td>
</tr>
<tr>
<td>PTTEP Treasury Center Company Limited</td>
<td>0.07</td>
</tr>
<tr>
<td>PTTEP Energy Holding (Thailand) Company Limited</td>
<td>272.18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>924.40</strong></td>
</tr>
</tbody>
</table>

19.3 Investments in Associates

Details of associates are as follows:

<table>
<thead>
<tr>
<th>List of associates¹</th>
<th>Registered country</th>
<th>Country of operation</th>
<th>Type of business</th>
<th>Participating interest (%) (including indirect holding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Energy Complex Company Limited (Energy Complex)</td>
<td>Thailand</td>
<td>Thailand</td>
<td>Property rental services</td>
<td>50</td>
</tr>
<tr>
<td>2. PTT Digital Solutions Company Limited (PTT Digital)</td>
<td>Thailand</td>
<td>Thailand</td>
<td>Information technology and communication services</td>
<td>20</td>
</tr>
<tr>
<td>3. PTTEP AP Group’s Associates ²</td>
<td>Commonwealth of Australia</td>
<td>Commonwealth of Australia</td>
<td>Air base services</td>
<td>50</td>
</tr>
<tr>
<td>4. PTT Global LNG Company Limited (PTT GL)</td>
<td>Thailand</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>50</td>
</tr>
<tr>
<td>5. Leismer Aerodrome Limited (LAL)</td>
<td>Canada</td>
<td>Canada</td>
<td>Air transportation</td>
<td>32</td>
</tr>
</tbody>
</table>

¹ All investments in associates have been assessed as immaterial to the Group.
² 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:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Energy Complex Company Limited</td>
<td>53.62</td>
<td>44.29</td>
</tr>
<tr>
<td>PTT Digital Solutions Company Limited</td>
<td>13.70</td>
<td>10.84</td>
</tr>
<tr>
<td>PTTEP AP Group’s associates</td>
<td>4.97</td>
<td>7.14</td>
</tr>
<tr>
<td>PTT Global LNG Company Limited</td>
<td>151.50</td>
<td>153.66</td>
</tr>
<tr>
<td>Leismer Aerodrome Limited</td>
<td>3.84</td>
<td>3.87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>227.63</strong></td>
<td><strong>219.80</strong></td>
</tr>
</tbody>
</table>

|                                | Unit: Million US Dollar | Unit: Million Baht |
|                                | Dec 31, 2019 | Dec 31, 2018 | Dec 31, 2019 | Dec 31, 2018 |
| Energy Complex Company Limited | 24.79        | 24.79        | 747.50       | 804.42       |
| PTT Digital Solutions Company Limited | 0.79  | 0.79      | 23.76        | 25.57        |
| **Total**                      | **25.58**   | **25.58**   | **771.26**   | **829.99**   |

Details of share of associates are as follows:

|                                | Unit: Million US Dollar | Unit: Million Baht |
|                                | Dec 31, 2019 | Dec 31, 2018 | Dec 31, 2019 | Dec 31, 2018 |
| Aggregate carrying amount of share of associates | **227.63** | **6,863.84** |
| Aggregate amounts of the reporting entity’s share of; | | | | |
| Profit from continuing operations | 6.07 | 187.36 |
| Other comprehensive income | 4.38 | 136.43 |
| **Total comprehensive income for the year ended Dec 31, 2019** | **10.45** | **323.79** |
19.4 Investments in Joint Ventures

Details of joint ventures are as follows:

<table>
<thead>
<tr>
<th>List of joint ventures</th>
<th>Registered country</th>
<th>Country of operation</th>
<th>Type of business</th>
<th>Participating interest (%) (including indirect holding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Erawan 2 FSO Bahamas Ltd. (Erawan 2 FSO Bahamas)</td>
<td>Bahamas</td>
<td>Thailand</td>
<td>FSO rental services</td>
<td>13.11 13.11</td>
</tr>
<tr>
<td>2. APICO LLC</td>
<td>United States of America</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>72.8215 -</td>
</tr>
<tr>
<td>3. Oman LNG LLC (OLNG)</td>
<td>Oman</td>
<td>Oman</td>
<td>Petroleum</td>
<td>2 -</td>
</tr>
</tbody>
</table>

1 All investments in joint ventures have been assessed as immaterial to the Group.
2 Erawan 2 has a 100% shareholding in Asia Pacific Marine Services (EF) B.V.
3 On June 4, 2019, PTTEP SP Limited (PTTEP SP), a subsidiary of the Group, acquired participating interests in APICO LLC as disclosed in Note 19.6 Significant transactions during the year.
4 On September 11, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, acquired participating interests in APICO LLC as disclosed in Note 19.6 Significant transactions during the year.
5 On November 4, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, acquired the 100% shareholding interests of Partex Holding B.V. as disclosed in Note 7 Business acquisition in Partex Holding B.V.

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

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Erawan 2 FSO Bahamas Ltd.</td>
<td>18.10 17.41</td>
</tr>
<tr>
<td>APICO LLC</td>
<td>127.38 -</td>
</tr>
<tr>
<td>Oman LNG LLC</td>
<td>79.89 -</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>225.37 17.41</strong></td>
</tr>
</tbody>
</table>

Details of share of joint ventures are as follows:

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Aggregate carrying amount of share of joint ventures</td>
<td>225.37</td>
</tr>
<tr>
<td>Aggregate amounts of the reporting entity’s share of:</td>
<td></td>
</tr>
<tr>
<td>Profit from continuing operations</td>
<td>6.28</td>
</tr>
<tr>
<td>Total comprehensive income for year ended Dec 31, 2019</td>
<td>6.28</td>
</tr>
</tbody>
</table>
### Investments in Joint Operations

Details of Joint Operations are as follows:

<table>
<thead>
<tr>
<th>List of joint operations</th>
<th>Registered country</th>
<th>Country of operation</th>
<th>Type of business</th>
<th>Participating interest (%) (including indirect holding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Moattama Gas Transportation Company (MGTC)</td>
<td>Bermuda</td>
<td>Republic of the Union of Myanmar</td>
<td>Gas pipeline transportation</td>
<td>25.5</td>
</tr>
<tr>
<td>3. Tininhayi Pipeline Company LLC (TPC)</td>
<td>Cayman Islands</td>
<td>Republic of the Union of Myanmar</td>
<td>Gas pipeline transportation</td>
<td>19.3178</td>
</tr>
<tr>
<td>4. Orange Energy Limited (Orange)</td>
<td>Thailand</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>53.9496</td>
</tr>
<tr>
<td>5. B8/32 Partners Limited (B8/32 Partners)</td>
<td>Thailand</td>
<td>Thailand</td>
<td>Petroleum</td>
<td>25.0009</td>
</tr>
<tr>
<td>9. Andaman Transportation Limited (ATL)</td>
<td>Cayman Islands</td>
<td>Republic of the Union of Myanmar</td>
<td>Gas pipeline transportation</td>
<td>80</td>
</tr>
<tr>
<td>10. Natuna 2 B.V. (Natuna)</td>
<td>Netherlands</td>
<td>Republic of Indonesia</td>
<td>Petroleum</td>
<td>50</td>
</tr>
<tr>
<td>11. Petroleum Development Oman LLC (PDO)</td>
<td>Oman</td>
<td>Oman</td>
<td>Petroleum</td>
<td>2</td>
</tr>
<tr>
<td>13. Private Oil Holdings Oman Limited (POHOL)</td>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>Oman</td>
<td>Petroleum</td>
<td>5</td>
</tr>
</tbody>
</table>

1 On November 4, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, acquired the 100% shareholding interests of Partex Holding B.V. as disclosed in Note 7 Business acquisition in Partex Holding B.V.
19.6 Significant Transactions during the Year

- **PTTEP HK Holding Limited**
  On February 4, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, increased its authorized share capital by Hong Kong Dollar (HK Dollar) 205,000,262 by increasing its par value per share to HK Dollar 73,409.
  On June 17, 2019, PTTEP HK increased its authorized share capital by HK Dollar 390,817,947 by increasing its par value per share to HK Dollar 112,491.

- **PTTEP HK Offshore Limited**
  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 June 17, 2019, PTTEP HKO increased its authorized share capital by HK Dollar 336,406,200 by increasing its par value per share to HK Dollar 62,810.

- **PTTEP Mexico E&P Limited, S. de R.L. de C.V.**
  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 June 17, 2019, PTTEP MEP increased its authorized share capital by MXN 133,179,208 by issuing of 133,179,208 newly issued ordinary shares, at the par value of MXN 1 each.

- **PTTEP Energy Holding (Thailand) Company Limited**
  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 March 25, 2019, PTTEP EH increased its authorized share capital by Baht 586,625,000 by issuing of 5,866,250 newly issued ordinary shares, at the par value of Baht 100 each.
  On October 10, 2019, PTTEP EH increased its authorized share capital by Baht 518,145,600 by issuing of 5,181,456 newly issued ordinary shares, at the par value of Baht 100 each.

- **PTTEP Energy Development Company Limited**
  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.
APICO LLC

On February 15, 2019, PTTEP SP Limited (PTTEP SP), a subsidiary of the Group, signed the Share Purchase Agreement (SPA) to acquire 33.83% participating interests in APICO LLC from Tatex Thailand LLC and Tatex Thailand II LLC with total transaction value of approximately US Dollar 64 million, before adjusting the change in working capital.

The transaction was completed on June 4, 2019. The acquisition value after adjusting the change in working capital according to the agreement was amounting to US Dollar 62.94 million (Baht 1,973.03 million) consisting of cash payment amounting to US Dollar 37.57 million (Baht 1,177.68 million) and contingent consideration if the conditions specified in the SPA are met amounting to US Dollar 25.37 million (Baht 795.35 million). The fair value of the investment in joint venture was US Dollar 61.16 million (Baht 1,917.29 million) which was resulted from discounting the contingent consideration value. The fair value is measured by using income approach based on discount rate of 2.91% and probability assumption which is classified as fair value level 3.

On July 31, 2019, PTTEP HK Holding Limited (PTTEP HK), a subsidiary of the Group, signed the Share Purchase Agreement (SPA) to acquire additional 38.99% participating interests in APICO LLC from Coastal Energy Company (Khorat) Limited with total transaction value of approximately US Dollar 74 million, before adjusting the change in working capital.

The transaction was completed on September 11, 2019. The acquisition value after adjusting the change in working capital according to the agreement was amounting to US Dollar 71.15 million (Baht 2,178.58 million) consisting of cash payment amounting to US Dollar 41.85 million (Baht 1,281.38 million) and contingent consideration if the conditions specified in the SPA are met amounting to US Dollar 29.30 million (Baht 897.20 million). The fair value of the investment was US Dollar 69.47 million (Baht 2,127.28 million) which was resulted from discounting the contingent consideration value. The fair value is measured by using income approach based on discount rate of 2.62% and probability assumption which is classified as fair value level 3.

The discounted value of contingent consideration if the conditions specified in the SPA are met is recognised in other non-current liabilities in the consolidated financial statements totalling US Dollar 51.86 million (Baht 1,563.84 million). After the completion of the additional acquisition, the Group’s participating interests in APICO LLC is 72.82% which is classified as investment in joint venture. Furthermore, the Group’s participating interests (both direct and indirect) in Sirphuhorm project is 80.48% and the Group is the operator of the project.
PTTEP G7 Limited
On March 7, 2019, PTTEP G7 Limited (PTTEP G7), a subsidiary of the Group, increased its authorized share capital by Baht 79,200,000 by issuing of 792,000 newly issued ordinary shares, at the par value of Baht 100 each.

PTTEP Netherlands Coöperatie U.A.
On March 25, 2019, PTTEP Netherlands Coöperatie U.A. (PTTEP NC), a subsidiary of the Group, increased its authorized share capital by US Dollar 20,000,000.
On December 9, 2019, PTTEP NC increased its authorized share capital by US Dollar 15,000,0000.

PTTEP Canada Limited
On March 25, 2019, PTTEP Canada Limited (PTTEP CA), a subsidiary of the Group, increased its authorized share capital by Canadian Dollar (CAD) 26,840,000 by issuing of 26,840,000 newly issued ordinary shares, at the par value of CAD 1 each.
On December 9, 2019, PTTEP CA increased its authorized share capital by CAD 19,852,500 by issuing of 19,852,500 newly issued ordinary shares, at the par value of CAD 1 each.

EP-Tech Ventures Holding Company Limited
On March 25, 2019, EP-Tech Ventures Holding Company Limited (EP-Tech), a subsidiary of the Group, increased its authorized share capital by Baht 586,625,000 by issuing of 5,866,250 newly issued ordinary shares, at the par value of Baht 100 each.

AI and Robotics Ventures Company Limited
On March 26, 2019, AI and Robotics Ventures Company Limited (ARV), a subsidiary of the Group, increased its authorized share capital by Baht 586,625,000 by issuing of 5,866,250 newly issued ordinary shares, at the par value of Baht 100 each.

PTTEP Business Center Company Limited
On October 11, 2019, PTTEP Business Center Company Limited (PTTEP BC), a subsidiary of the Group, increased its authorized share capital by Baht 518,145,600 by issuing of 51,814,560 newly issued ordinary shares, at the par value of Baht 10 each.

PTTEP MENA Limited
On October 16, 2019, PTTEP MENA Limited (PTTEP MENA), a subsidiary of the Group, increased its authorized share capital by US Dollar 17,000,000 by increasing its par value per share to US Dollar 34,100.
20. **Other long-term investments**

Other long-term investments are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Sarn Palung Social Enterprise Company Limited¹</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Mozambique LNG1 Company Pte. Ltd.³</td>
<td>-</td>
<td>0.21</td>
</tr>
<tr>
<td>Moz LNG1 Holding Company Ltd ²,³</td>
<td>0.30</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.35</strong></td>
<td><strong>0.22</strong></td>
</tr>
</tbody>
</table>

|                                | Unit: Million US Dollar | Unit: Million Baht |
|                                | The Company             | The Company        |
| Dec 31, 2019                   | Dec 31, 2018            | Dec 31, 2019       | Dec 31, 2018 |
| Sarn Palung Social Enterprise Company Limited¹ | 0.05                  | 0.01               | 1.44         | 0.37       |
| **Total**                      | **0.05**               | **0.01**           | **1.44**     | **0.37**   |

¹ On July 31, 2019, the Company paid for shares in Sarn Palung Social Enterprise Company Limited, which the Company has shareholding interests of 15% of the registered capital, by Baht 1,125,000. As at December 31, 2019, the Company paid 100% of the registered capital.

² On April 21, 2019, PTTEP Mozambique Area 1 Limited (PTTEP MZA1), a subsidiary of the Group, has invested with its participating interests in Moz LNG1 Holding Company Ltd, which was registered in the United Arab Emirates with a registered capital of US Dollar 999,999. The registered capital comprises 999,999 ordinary shares with a par value of US Dollar 1 each. PTTEP MZA1 has 85,000 shares with the aggregate value of US Dollar 85,000.

³ On May 7, 2019, PTTEP MZA1 transferred its participating interests of 212 shares at the par value of US Dollar 100 each in Mozambique LNG1 Company Pte. Ltd. to participating interests of 212,500 shares at the par value of US Dollar 1 each in Moz LNG1 Holding Company Ltd.
## 21. Property, Plant and Equipment

<table>
<thead>
<tr>
<th>Historical cost</th>
<th>Oil and Gas Properties</th>
<th>Pipeline</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance as at January 1, 2018</strong></td>
<td>26,226.23</td>
<td>893.72</td>
<td>131.52</td>
<td>27,251.47</td>
</tr>
<tr>
<td><strong>Business acquisition</strong></td>
<td>1,317.90</td>
<td>-</td>
<td>-</td>
<td>1,317.90</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td>1,061.60</td>
<td>0.68</td>
<td>3.90</td>
<td>1,066.18</td>
</tr>
<tr>
<td><strong>Transfer</strong></td>
<td>55.97</td>
<td>-</td>
<td>-</td>
<td>55.97</td>
</tr>
<tr>
<td><strong>Decrease</strong></td>
<td>(194.75)</td>
<td>(3.29)</td>
<td>(4.02)</td>
<td>(202.06)</td>
</tr>
<tr>
<td><strong>Decrease from divestment of assets</strong></td>
<td>(2,627.38)</td>
<td>-</td>
<td>-</td>
<td>(2,627.38)</td>
</tr>
<tr>
<td><strong>Currency translation differences</strong></td>
<td>(0.02)</td>
<td>-</td>
<td>-</td>
<td>(0.02)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>25,839.55</td>
<td>891.11</td>
<td>131.40</td>
<td>26,862.06</td>
</tr>
<tr>
<td><strong>Business acquisition</strong></td>
<td>2,081.24</td>
<td>-</td>
<td>15.22</td>
<td>2,096.46</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td>1,400.98</td>
<td>2.44</td>
<td>6.04</td>
<td>1,409.46</td>
</tr>
<tr>
<td><strong>Transfer</strong></td>
<td>996.12</td>
<td>-</td>
<td>-</td>
<td>996.12</td>
</tr>
<tr>
<td><strong>Decrease</strong></td>
<td>(58.96)</td>
<td>-</td>
<td>(6.29)</td>
<td>(65.25)</td>
</tr>
<tr>
<td><strong>Currency translation differences</strong></td>
<td>0.01</td>
<td>-</td>
<td>0.11</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>30,258.94</td>
<td>893.55</td>
<td>146.48</td>
<td>31,298.97</td>
</tr>
</tbody>
</table>

### Accumulated depreciation

<table>
<thead>
<tr>
<th>Accumulated depreciation</th>
<th>Oil and Gas Properties</th>
<th>Pipeline</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance as at January 1, 2018</strong></td>
<td>(17,688.42)</td>
<td>(218.78)</td>
<td>(79.16)</td>
<td>(17,986.36)</td>
</tr>
<tr>
<td><strong>Depreciation for the year</strong></td>
<td>(1,818.50)</td>
<td>(29.65)</td>
<td>(8.89)</td>
<td>(1,857.04)</td>
</tr>
<tr>
<td><strong>Decrease</strong></td>
<td>23.41</td>
<td>-</td>
<td>3.38</td>
<td>26.79</td>
</tr>
<tr>
<td><strong>Decrease from divestment of assets</strong></td>
<td>1,492.80</td>
<td>-</td>
<td>-</td>
<td>1,492.80</td>
</tr>
<tr>
<td><strong>Currency translation differences</strong></td>
<td>0.02</td>
<td>-</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>(17,990.69)</td>
<td>(248.43)</td>
<td>(84.66)</td>
<td>(18,323.78)</td>
</tr>
<tr>
<td><strong>Depreciation for the year</strong></td>
<td>(1,970.42)</td>
<td>(29.81)</td>
<td>(8.17)</td>
<td>(2,008.40)</td>
</tr>
<tr>
<td><strong>Decrease</strong></td>
<td>24.10</td>
<td>-</td>
<td>6.23</td>
<td>30.33</td>
</tr>
<tr>
<td><strong>Currency translation differences</strong></td>
<td>(0.01)</td>
<td>-</td>
<td>-</td>
<td>(0.01)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>(19,937.02)</td>
<td>(278.24)</td>
<td>(86.60)</td>
<td>(20,301.86)</td>
</tr>
</tbody>
</table>

### Allowance for impairment of assets

<table>
<thead>
<tr>
<th>Allowance for impairment of assets</th>
<th>Oil and Gas Properties</th>
<th>Pipeline</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance as at January 1, 2018</strong></td>
<td>(1,225.49)</td>
<td>(5.25)</td>
<td>-</td>
<td>(1,230.74)</td>
</tr>
<tr>
<td><strong>Transfer</strong></td>
<td>(4.07)</td>
<td>-</td>
<td>-</td>
<td>(4.07)</td>
</tr>
<tr>
<td><strong>Decrease</strong></td>
<td>5.28</td>
<td>-</td>
<td>-</td>
<td>5.28</td>
</tr>
<tr>
<td><strong>Decrease from divestment of assets</strong></td>
<td>894.40</td>
<td>-</td>
<td>-</td>
<td>894.40</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>(329.88)</td>
<td>(5.25)</td>
<td>-</td>
<td>(335.13)</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>(329.88)</td>
<td>(5.25)</td>
<td>-</td>
<td>(335.13)</td>
</tr>
</tbody>
</table>

Net book value as at December 31, 2018: $8,203.15 million

Depreciation included in the statement of income for the year ended December 31, 2018: US Dollar 1,857.04 million

Depreciation included in the statement of income for the year ended December 31, 2019: US Dollar 2,008.40 million
### Consolidated Oil and Gas Properties

<table>
<thead>
<tr>
<th></th>
<th>Oil and Gas Properties</th>
<th>Pipeline</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Historical cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>857,097.06</td>
<td>29,207.83</td>
<td>4,298.03</td>
<td>890,602.92</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>43,343.98</td>
<td></td>
<td></td>
<td>43,343.98</td>
</tr>
<tr>
<td>Increase</td>
<td>34,284.58</td>
<td>22.05</td>
<td>125.84</td>
<td>34,432.47</td>
</tr>
<tr>
<td>Transfer</td>
<td>1,807.46</td>
<td></td>
<td></td>
<td>1,807.46</td>
</tr>
<tr>
<td>Decrease</td>
<td>(6,289.46)</td>
<td>(106.37)</td>
<td>(129.74)</td>
<td>(6,525.57)</td>
</tr>
<tr>
<td>Decrease from divestment of assets</td>
<td>(84,851.26)</td>
<td></td>
<td></td>
<td>(84,851.26)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(6,903.22)</td>
<td></td>
<td></td>
<td>(7,140.64)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>838,489.14</td>
<td>28,916.58</td>
<td>4,263.64</td>
<td>871,669.36</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>63,886.42</td>
<td></td>
<td>459.09</td>
<td>64,345.51</td>
</tr>
<tr>
<td>Increase</td>
<td>43,479.35</td>
<td>75.62</td>
<td>187.44</td>
<td>43,742.41</td>
</tr>
<tr>
<td>Transfer</td>
<td>30,914.47</td>
<td></td>
<td></td>
<td>30,914.47</td>
</tr>
<tr>
<td>Decrease</td>
<td>(1,829.63)</td>
<td></td>
<td>(194.96)</td>
<td>(2,024.59)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(62,511.75)</td>
<td>(2,048.00)</td>
<td>(298.25)</td>
<td>(64,858.00)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>912,428.00</td>
<td>26,944.20</td>
<td>4,416.96</td>
<td>943,789.16</td>
</tr>
</tbody>
</table>

### Accumulated depreciation

<table>
<thead>
<tr>
<th></th>
<th>Oil and Gas Properties</th>
<th>Pipeline</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(578,073.68)</td>
<td>(7,150.05)</td>
<td>(2,586.86)</td>
<td>(587,810.59)</td>
</tr>
<tr>
<td>Depreciation for the year</td>
<td>(58,837.46)</td>
<td>(958.12)</td>
<td>(287.07)</td>
<td>(60,082.65)</td>
</tr>
<tr>
<td>Decrease</td>
<td>755.95</td>
<td></td>
<td>109.28</td>
<td>865.23</td>
</tr>
<tr>
<td>Decrease from divestment of assets</td>
<td>48,209.91</td>
<td></td>
<td></td>
<td>48,209.91</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>4,150.12</td>
<td>46.60</td>
<td>17.84</td>
<td>4,214.56</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>(583,795.16)</td>
<td>(8,061.57)</td>
<td>(2,746.81)</td>
<td>(594,603.54)</td>
</tr>
<tr>
<td>Depreciation for the year</td>
<td>(61,088.56)</td>
<td>(925.29)</td>
<td>(253.36)</td>
<td>(62,267.21)</td>
</tr>
<tr>
<td>Decrease</td>
<td>748.22</td>
<td></td>
<td>193.30</td>
<td>941.52</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>42,954.63</td>
<td>596.82</td>
<td>195.68</td>
<td>43,747.13</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>(601,180.87)</td>
<td>(8,390.04)</td>
<td>(2,611.19)</td>
<td>(612,182.10)</td>
</tr>
</tbody>
</table>

### Allowance for impairment of assets

<table>
<thead>
<tr>
<th></th>
<th>Oil and Gas Properties</th>
<th>Pipeline</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(40,049.90)</td>
<td>(171.73)</td>
<td>-</td>
<td>(40,221.63)</td>
</tr>
<tr>
<td>Transfer</td>
<td>(131.58)</td>
<td></td>
<td>-</td>
<td>(131.58)</td>
</tr>
<tr>
<td>Decrease</td>
<td>170.46</td>
<td></td>
<td>-</td>
<td>170.46</td>
</tr>
<tr>
<td>Decrease from divestment of assets</td>
<td>28,884.69</td>
<td></td>
<td>-</td>
<td>28,884.69</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>421.81</td>
<td>1.22</td>
<td>-</td>
<td>423.03</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>(10,704.52)</td>
<td>(170.51)</td>
<td>-</td>
<td>(10,875.03)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>757.35</td>
<td>12.06</td>
<td>-</td>
<td>769.41</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>(9,947.17)</td>
<td>(158.45)</td>
<td>-</td>
<td>(10,105.62)</td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>243,889.46</td>
<td>20,684.50</td>
<td>4,298.03</td>
<td>268,162.03</td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>301,299.96</td>
<td>18,395.71</td>
<td>1,805.77</td>
<td>321,491.44</td>
</tr>
</tbody>
</table>

Depreciation included in the statement of income for the year ended December 31, 2018 Baht 60,082.65 million
Depreciation included in the statement of income for the year ended December 31, 2019 Baht 62,267.21 million
### Oil and Gas Properties

<table>
<thead>
<tr>
<th></th>
<th>Oil and Gas Properties</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Historical cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>11,643.57</td>
<td>90.42</td>
<td>11,733.99</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>1,292.74</td>
<td>-</td>
<td>1,292.74</td>
</tr>
<tr>
<td>Increase</td>
<td>380.30</td>
<td>3.16</td>
<td>383.46</td>
</tr>
<tr>
<td>Decrease</td>
<td>(126.38)</td>
<td>(4.02)</td>
<td>(130.40)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>13,190.23</td>
<td>89.56</td>
<td>13,279.79</td>
</tr>
<tr>
<td>Increase</td>
<td>409.25</td>
<td>2.85</td>
<td>412.10</td>
</tr>
<tr>
<td>Transfer</td>
<td>149.89</td>
<td>-</td>
<td>149.89</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.06)</td>
<td>(6.13)</td>
<td>(6.19)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>13,749.31</td>
<td>86.28</td>
<td>13,835.59</td>
</tr>
<tr>
<td><strong>Accumulated depreciation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(8,537.83)</td>
<td>(58.49)</td>
<td>(8,596.32)</td>
</tr>
<tr>
<td>Depreciation for the year</td>
<td>(898.48)</td>
<td>(6.55)</td>
<td>(905.03)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.24</td>
<td>3.38</td>
<td>3.62</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>(9,436.07)</td>
<td>(61.66)</td>
<td>(9,497.73)</td>
</tr>
<tr>
<td>Depreciation for the year</td>
<td>(1,032.71)</td>
<td>(5.42)</td>
<td>(1,038.13)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.06</td>
<td>6.08</td>
<td>6.14</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>(10,468.72)</td>
<td>(61.00)</td>
<td>(10,529.72)</td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>3,754.16</td>
<td>27.90</td>
<td>3,782.06</td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>3,280.59</td>
<td>25.28</td>
<td>3,305.87</td>
</tr>
</tbody>
</table>

Depreciation included in the statement of income for the year ended December 31, 2018 US Dollar 905.03 million
Depreciation included in the statement of income for the year ended December 31, 2019 US Dollar 1,038.13 million
## Historical cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Oil and Gas Properties</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>380,522.68</td>
<td>2,955.12</td>
<td>383,477.80</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>42,516.64</td>
<td>-</td>
<td>42,516.64</td>
</tr>
<tr>
<td>Increase</td>
<td>12,281.76</td>
<td>101.89</td>
<td>12,383.65</td>
</tr>
<tr>
<td>Decrease</td>
<td>(4,081.58)</td>
<td>(129.62)</td>
<td>(4,211.20)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(3,218.62)</td>
<td>(21.03)</td>
<td>(3,239.65)</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>428,020.88</td>
<td>2,906.36</td>
<td>430,927.24</td>
</tr>
<tr>
<td>Increase</td>
<td>12,700.91</td>
<td>88.54</td>
<td>12,789.45</td>
</tr>
<tr>
<td>Transfer</td>
<td>4,651.73</td>
<td>-</td>
<td>4,651.73</td>
</tr>
<tr>
<td>Decrease</td>
<td>(1.98)</td>
<td>(190.37)</td>
<td>(192.35)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(30,775.14)</td>
<td>(202.73)</td>
<td>(30,977.87)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>414,596.40</td>
<td>2,601.80</td>
<td>417,198.20</td>
</tr>
</tbody>
</table>

## Accumulated depreciation

<table>
<thead>
<tr>
<th>Description</th>
<th>Oil and Gas Properties</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(279,024.18)</td>
<td>(1,911.73)</td>
<td>(280,935.91)</td>
</tr>
<tr>
<td>Depreciation for the year</td>
<td>(29,137.28)</td>
<td>(211.55)</td>
<td>(29,348.83)</td>
</tr>
<tr>
<td>Decrease</td>
<td>7.88</td>
<td>109.28</td>
<td>117.16</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>1,954.61</td>
<td>13.04</td>
<td>1,967.65</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>(306,198.97)</td>
<td>(2,000.96)</td>
<td>(308,199.93)</td>
</tr>
<tr>
<td>Depreciation for the year</td>
<td>(32,041.22)</td>
<td>(168.36)</td>
<td>(32,209.58)</td>
</tr>
<tr>
<td>Decrease</td>
<td>1.96</td>
<td>188.75</td>
<td>190.71</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>22,564.53</td>
<td>141.18</td>
<td>22,705.71</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>(315,673.70)</td>
<td>(1,839.39)</td>
<td>(317,513.09)</td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>121,821.91</td>
<td>905.40</td>
<td>122,727.31</td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>98,922.70</td>
<td>762.41</td>
<td>99,685.11</td>
</tr>
</tbody>
</table>

Depreciation included in the statement of income for the year ended December 31, 2018 Baht  29,348.83 million
Depreciation included in the statement of income for the year ended December 31, 2019 Baht  32,209.58 million

As at December 31, 2019, the net book value of assets held under finance leases included in property, plant and equipment amounting to US Dollar 122.43 million (Baht 3,691.76 million) for the consolidated financial statements and US Dollar 0.97 million (Baht 29.28 million) for the Company’s financial statements.
22. Goodwill

<table>
<thead>
<tr>
<th>Historical cost</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>1,134.08</td>
<td>37,063.04</td>
</tr>
<tr>
<td>Reclassification and adjustment</td>
<td>153.20</td>
<td>5,006.78</td>
</tr>
<tr>
<td>Reclassified and adjusted balance as at January 1, 2018</td>
<td>1,287.28</td>
<td>42,069.82</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>76.66</td>
<td>2,521.18</td>
</tr>
<tr>
<td>Decrease from divestment of assets</td>
<td>(7.31)</td>
<td>(236.20)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(332.24)</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>1,356.63</td>
<td>44,022.56</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>816.62</td>
<td>25,048.55</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(3,538.99)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>2,173.25</td>
<td>65,532.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allowance for impairment of assets</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(119.70)</td>
<td>(3,912.10)</td>
</tr>
<tr>
<td>Decrease from divestment of assets</td>
<td>7.31</td>
<td>236.20</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>28.79</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>(112.39)</td>
<td>(3,647.11)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>258.04</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>(112.39)</td>
<td>(3,389.07)</td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>1,244.24</td>
<td>40,375.45</td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>2,060.86</td>
<td>62,143.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Historical cost</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>75.16</td>
<td>2,471.83</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(32.98)</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>75.16</td>
<td>2,438.85</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(172.55)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>75.16</td>
<td>2,266.30</td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>75.16</td>
<td>2,438.85</td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>75.16</td>
<td>2,266.30</td>
</tr>
</tbody>
</table>
### 23. Intangible Assets

<table>
<thead>
<tr>
<th></th>
<th>Other Intangible Assets</th>
<th>Development Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Historical cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>158.99</td>
<td>7.87</td>
<td>166.86</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>0.18</td>
<td>-</td>
<td>0.18</td>
</tr>
<tr>
<td>Increase</td>
<td>8.00</td>
<td>3.69</td>
<td>11.69</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.36)</td>
<td>(0.30)</td>
<td>(0.66)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(0.01)</td>
<td>-</td>
<td>(0.01)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td><strong>166.80</strong></td>
<td><strong>11.26</strong></td>
<td><strong>178.06</strong></td>
</tr>
<tr>
<td>Business acquisition</td>
<td>39.20</td>
<td>-</td>
<td>39.20</td>
</tr>
<tr>
<td>Increase</td>
<td>19.61</td>
<td>6.57</td>
<td>26.18</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.01)</td>
<td>-</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>225.61</strong></td>
<td><strong>17.83</strong></td>
<td><strong>243.44</strong></td>
</tr>
<tr>
<td><strong>Accumulated amortization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(82.85)</td>
<td>(0.02)</td>
<td>(82.87)</td>
</tr>
<tr>
<td>Amortization for the year</td>
<td>(13.14)</td>
<td>(0.09)</td>
<td>(13.23)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.12</td>
<td>-</td>
<td>0.12</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td><strong>(95.86)</strong></td>
<td><strong>(0.11)</strong></td>
<td><strong>(95.97)</strong></td>
</tr>
<tr>
<td>Amortization for the year</td>
<td>(15.12)</td>
<td>(0.37)</td>
<td>(15.49)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(0.01)</td>
<td>-</td>
<td>(0.01)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>(110.98)</strong></td>
<td><strong>(0.48)</strong></td>
<td><strong>(111.46)</strong></td>
</tr>
<tr>
<td><strong>Net book value as at December 31, 2018</strong></td>
<td><strong>70.94</strong></td>
<td><strong>11.15</strong></td>
<td><strong>82.09</strong></td>
</tr>
<tr>
<td><strong>Net book value as at December 31, 2019</strong></td>
<td><strong>114.63</strong></td>
<td><strong>17.35</strong></td>
<td><strong>131.98</strong></td>
</tr>
</tbody>
</table>
### Other Intangible Assets

**Consolidated**

<table>
<thead>
<tr>
<th></th>
<th>Other Intangible Assets</th>
<th>Development Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Historical cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>5,196.09</td>
<td>257.08</td>
<td>5,453.17</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>5.79</td>
<td>-</td>
<td>5.79</td>
</tr>
<tr>
<td>Increase</td>
<td>258.36</td>
<td>119.32</td>
<td>377.68</td>
</tr>
<tr>
<td>Decrease</td>
<td>(11.56)</td>
<td>(9.65)</td>
<td>(21.21)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(36.17)</td>
<td>(1.29)</td>
<td>(37.46)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>5,412.51</td>
<td>365.46</td>
<td>5,777.97</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>1,184.21</td>
<td>-</td>
<td>1,184.21</td>
</tr>
<tr>
<td>Increase</td>
<td>608.75</td>
<td>203.89</td>
<td>812.64</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.28)</td>
<td>-</td>
<td>(0.28)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(402.11)</td>
<td>(31.65)</td>
<td>(433.76)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>6,803.08</td>
<td>537.70</td>
<td>7,340.78</td>
</tr>
<tr>
<td><strong>Accumulated amortization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(2,707.89)</td>
<td>(0.47)</td>
<td>(2,708.36)</td>
</tr>
<tr>
<td>Amortization for the year</td>
<td>(424.42)</td>
<td>(3.08)</td>
<td>(427.50)</td>
</tr>
<tr>
<td>Decrease</td>
<td>4.10</td>
<td>-</td>
<td>4.10</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>17.64</td>
<td>0.03</td>
<td>17.67</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>(3,110.57)</td>
<td>(3.52)</td>
<td>(3,114.09)</td>
</tr>
<tr>
<td>Amortization for the year</td>
<td>(468.26)</td>
<td>(11.66)</td>
<td>(479.92)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.28</td>
<td>-</td>
<td>0.28</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>231.98</td>
<td>0.58</td>
<td>232.56</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>(3,346.57)</td>
<td>(14.60)</td>
<td>(3,361.17)</td>
</tr>
<tr>
<td><strong>Net book value as at December 31, 2018</strong></td>
<td>2,301.94</td>
<td>361.94</td>
<td>2,663.88</td>
</tr>
<tr>
<td><strong>Net book value as at December 31, 2019</strong></td>
<td>3,456.51</td>
<td>523.10</td>
<td>3,979.61</td>
</tr>
</tbody>
</table>

Note: All figures are in Million Baht.
## Historical cost

<table>
<thead>
<tr>
<th></th>
<th>Other Intangible Assets</th>
<th>Development Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>140.67</td>
<td>7.87</td>
<td>148.54</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>0.17</td>
<td>-</td>
<td>0.17</td>
</tr>
<tr>
<td>Increase</td>
<td>6.32</td>
<td>3.69</td>
<td>10.01</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.07)</td>
<td>(0.30)</td>
<td>(0.37)</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>147.09</td>
<td>11.26</td>
<td>158.35</td>
</tr>
<tr>
<td>Increase</td>
<td>15.54</td>
<td>3.93</td>
<td>19.47</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.01)</td>
<td>-</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>162.62</td>
<td>15.19</td>
<td>177.81</td>
</tr>
</tbody>
</table>

## Accumulated amortization

<table>
<thead>
<tr>
<th></th>
<th>Other Intangible Assets</th>
<th>Development Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>(74.58)</td>
<td>(0.02)</td>
<td>(74.60)</td>
</tr>
<tr>
<td>Amortization for the year</td>
<td>(12.08)</td>
<td>(0.09)</td>
<td>(12.17)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.02</td>
<td>-</td>
<td>0.02</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>(86.64)</td>
<td>(0.11)</td>
<td>(86.75)</td>
</tr>
<tr>
<td>Amortization for the year</td>
<td>(12.52)</td>
<td>(0.37)</td>
<td>(12.89)</td>
</tr>
<tr>
<td>Decrease</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>(99.15)</td>
<td>(0.48)</td>
<td>(99.63)</td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>60.45</td>
<td>11.15</td>
<td>71.60</td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>63.47</td>
<td>14.71</td>
<td>78.18</td>
</tr>
<tr>
<td></td>
<td>Historical cost</td>
<td>Accumulated amortization</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Balance as at January 1, 2018</strong></td>
<td>4,597.34 257.08 4,854.42</td>
<td>(2,437.64) (0.47) (2,438.11)</td>
<td></td>
</tr>
<tr>
<td>Business acquisition</td>
<td>5.45 - 5.45</td>
<td>(390.04) (3.08) (393.12)</td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>204.09 119.32 323.41</td>
<td>0.51 - 0.51</td>
<td></td>
</tr>
<tr>
<td>Decrease</td>
<td>(2.24) (9.65) (11.89)</td>
<td>Currency translation differences</td>
<td></td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(31.62) (1.29) (32.91)</td>
<td>(351.37) (29.32) (380.69)</td>
<td></td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2018</strong></td>
<td>4,773.02 365.46 5,138.48</td>
<td>(2,811.55) (3.52) (2,815.07)</td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>482.15 122.09 604.24</td>
<td>Amortization for the year</td>
<td></td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.28) - (0.28)</td>
<td>(388.34) (11.66) (400.00)</td>
<td></td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(351.37) (29.32) (380.69)</td>
<td>Decrease</td>
<td></td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td>4,903.52 458.23 5,361.75</td>
<td>(209.86) 0.58 210.44</td>
<td></td>
</tr>
<tr>
<td>Net book value as at December 31, 2018</td>
<td>1,961.47 361.94 2,323.41</td>
<td>Balance as at December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Net book value as at December 31, 2019</td>
<td>1,913.77 443.63 2,357.40</td>
<td><strong>Unit: Million Baht</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Company
24. Exploration and Evaluation Assets

<table>
<thead>
<tr>
<th>Historical cost</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Balance as at January 1, 2018</td>
<td>5,098.22</td>
<td>166,614.27</td>
</tr>
<tr>
<td>Reclassification and adjustment</td>
<td>(240.44)</td>
<td>(7,857.80)</td>
</tr>
<tr>
<td>Reclassified and adjusted balance as at January 1, 2018</td>
<td>4,857.78</td>
<td>158,756.47</td>
</tr>
<tr>
<td>Increase</td>
<td>60.94</td>
<td>1,968.02</td>
</tr>
<tr>
<td>Transfer</td>
<td>(55.97)</td>
<td>(1,807.46)</td>
</tr>
<tr>
<td>Decrease</td>
<td>(0.07)</td>
<td>(2.36)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>(147.32)</td>
<td>(5,901.91)</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>4,715.36</td>
<td>153,012.76</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>508.17</td>
<td>15,607.92</td>
</tr>
<tr>
<td>Increase</td>
<td>119.22</td>
<td>3,700.24</td>
</tr>
<tr>
<td>Transfer</td>
<td>(996.12)</td>
<td>(30,914.47)</td>
</tr>
<tr>
<td>Decrease</td>
<td>(65.83)</td>
<td>(2,043.21)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>84.89</td>
<td>(7,720.10)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>4,365.69</td>
<td>131,643.14</td>
</tr>
</tbody>
</table>

| Allowance for impairment of assets   |                          |                    |
|                                      |                          |                    |
| Balance as at January 1, 2018        | (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)        |
| Currency translation differences     | (82.75)                 | 1,277.73           |
| Balance as at December 31, 2019      | (1,726.20)              | (52,052.08)        |
| Net book value as at December 31, 2018 | 3,071.91              | 99,682.95          |
| Net book value as at December 31, 2019 | 2,639.49              | 79,591.06          |
25. Income Taxes and Deferred Taxes

Income tax rates for the Group are as follows:

<table>
<thead>
<tr>
<th>Tax Rate (%)</th>
<th>Tax Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum income tax on petroleum businesses in Thailand pursuant to Petroleum Income Tax Act, B.E. 2514 and 2532</td>
<td>50</td>
</tr>
<tr>
<td>Corporate income tax under Revenue Code ((1)(2))</td>
<td>20</td>
</tr>
<tr>
<td>Corporate income tax in the Republic of the Union of Myanmar</td>
<td>25</td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td>- From the first to the eighth accounting period</td>
<td>0</td>
</tr>
<tr>
<td>- From the ninth to the fifteenth accounting period</td>
<td>10</td>
</tr>
<tr>
<td>- From the sixteenth accounting period onwards</td>
<td>20</td>
</tr>
<tr>
<td>Corporate income tax in the Socialist Republic of Vietnam</td>
<td>50</td>
</tr>
<tr>
<td>Corporate income tax in Australia</td>
<td>30</td>
</tr>
<tr>
<td>Petroleum resource rent tax in Australia</td>
<td>40</td>
</tr>
<tr>
<td>Corporate income tax in Canada</td>
<td>27 (2018), 26 (2019)</td>
</tr>
<tr>
<td>Corporate income tax in the Netherlands</td>
<td>25</td>
</tr>
<tr>
<td>Corporate income tax in the Republic of Kenya</td>
<td>30</td>
</tr>
<tr>
<td>Corporate income tax in the Republic of Mozambique</td>
<td>32</td>
</tr>
<tr>
<td>Corporate income tax in Indonesia</td>
<td></td>
</tr>
<tr>
<td>- Corporate income tax</td>
<td>30</td>
</tr>
<tr>
<td>- Income tax from the profit distribution</td>
<td>20</td>
</tr>
</tbody>
</table>
Corporate income tax in the Federative Republic of Brazil 34
Corporate income tax in People’s Democratic Republic of Algeria 38
Petroleum income tax in Malaysia (3) 38
Corporate income tax in Mexico 30
Corporate income tax in Sultanate of Oman 80
Corporate income tax in United Arab Emirates 55
Corporate income tax in Kazakhstan 30
Corporate income tax in Angola 25
Corporate income tax in Portugal 21
Corporate income tax in United Kingdom 19

(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 types of income. The Group has applied such tax rates to calculate the corporate income tax for January - May 2019.

(2) The Royal Decree issued under Revenue Code Governing (No. 674) B.E. 2561 governs the reduction and exemption of the corporate income tax rate for a Thai company which is an International Business Centre (IBC), incorporated for the purpose of providing supporting services, technical assistance, treasury center functions to affiliates or international trading. The reduction of the corporate income tax rates are from 20% to the followings;

- 8% if the IBC incurs expenditure of at least Baht 60 million paid to recipients in Thailand in the accounting period.
- 5% if the IBC incurs expenditure of at least Baht 300 million paid to recipients in Thailand in the accounting period.
- 3% if the IBC incurs expenditure of at least Baht 600 million paid to recipients in Thailand in the accounting period.

Besides, there were exemption of corporate income tax for certain types of income. The Group has applied such tax rates to calculate the corporate income tax for the period from June to December 2019.

(3) The petroleum income tax rate for marginal field which are approved to the tax reduction incentive to 25% tax rate.
### 25.1 Deferred tax assets and liabilities comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>961.73</td>
<td>462.55</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>(1,358.71)</td>
<td>(781.89)</td>
</tr>
<tr>
<td></td>
<td>(396.98)</td>
<td>(319.34)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>639.82</td>
<td>315.46</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>639.82</td>
<td>315.46</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Income Taxes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current income tax expenses</td>
<td>1,095.22</td>
<td>841.73</td>
</tr>
<tr>
<td>Prior year income tax expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recognized in current period</td>
<td>(5.59)</td>
<td>19.96</td>
</tr>
<tr>
<td></td>
<td>1,089.63</td>
<td>861.69</td>
</tr>
<tr>
<td>Deferred Taxes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in temporary differences</td>
<td>(386.75)</td>
<td>(114.99)</td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td>(25.88)</td>
<td>(14.04)</td>
</tr>
<tr>
<td></td>
<td>(412.63)</td>
<td>(129.03)</td>
</tr>
<tr>
<td></td>
<td>677.00</td>
<td>732.66</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated</strong></td>
<td><strong>Consolidated</strong></td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td>2,246.06</td>
</tr>
<tr>
<td>Tax calculated at a tax rate of 50%</td>
<td>1,123.03</td>
</tr>
<tr>
<td>(Gain) loss from the entities not subject to tax</td>
<td>29.06</td>
</tr>
<tr>
<td>Nondeductible expenses</td>
<td>26.61</td>
</tr>
<tr>
<td>Adjustment in respect of prior year</td>
<td>(8.73)</td>
</tr>
<tr>
<td>Results of operations of associates and joint ventures, net of tax</td>
<td>(6.17)</td>
</tr>
<tr>
<td>Tax credit on petroleum royalty</td>
<td>(505.32)</td>
</tr>
<tr>
<td>Tax credit on foreign corporate income tax</td>
<td>-</td>
</tr>
<tr>
<td>Deferred tax on functional currency</td>
<td>(25.88)</td>
</tr>
<tr>
<td>Differences in tax rate of the Group’s operating countries</td>
<td>29.37</td>
</tr>
<tr>
<td>Others</td>
<td>15.03</td>
</tr>
<tr>
<td>Income taxes</td>
<td>677.00</td>
</tr>
</tbody>
</table>
### Profit before income taxes

<table>
<thead>
<tr>
<th>Year</th>
<th>Profit before income taxes</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>1,500.01</td>
<td>46,540.96</td>
<td>37,747.03</td>
</tr>
<tr>
<td>2018</td>
<td>1,166.30</td>
<td>23,270.48</td>
<td>18,873.52</td>
</tr>
</tbody>
</table>

### Tax calculated at a tax rate of 50%

<table>
<thead>
<tr>
<th>Year</th>
<th>Tax calculated at a tax rate of 50%</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>750.01</td>
<td>23,270.48</td>
<td>18,873.52</td>
</tr>
<tr>
<td>2018</td>
<td>583.15</td>
<td>18,873.52</td>
<td></td>
</tr>
</tbody>
</table>

### Tax effect of:

- **Gain from the entities not subject to tax**
  - 2019: (23.09)
  - 2018: (33.15)
- **Nondeductible expenses**
  - 2019: (53.60)
  - 2018: 170.03
- **Adjustment in respect of prior year**
  - 2019: (3.41)
  - 2018: 0.04
- **Tax credit on petroleum royalty**
  - 2019: (404.91)
  - 2018: (354.06)
- **Deferred tax on functional currency**
  - 2019: 20.94
  - 2018: (12.97)
- **Differences in tax rate on profit before income tax**
  - 2019: 94.92
  - 2018: 1.63
- **Others**
  - 2019: (16.57)
  - 2018: 0.11

### Income taxes

<table>
<thead>
<tr>
<th>Year</th>
<th>Income taxes</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>364.29</td>
<td>11,265.87</td>
<td>11,471.40</td>
</tr>
<tr>
<td>2018</td>
<td>354.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25.4 Changes in deferred tax assets and liabilities are as follows:

<table>
<thead>
<tr>
<th>Deferred tax assets:</th>
<th>As at Jan 1, 2019</th>
<th>Statement of income</th>
<th>Statement of comprehensive income</th>
<th>Business acquisition</th>
<th>Currency translation differences</th>
<th>As at Dec 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decommissioning costs</td>
<td>828.34</td>
<td>75.25</td>
<td>-</td>
<td>112.56</td>
<td>-</td>
<td>1,016.15</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>74.43</td>
<td>16.78</td>
<td>12.02</td>
<td>-</td>
<td>0.15</td>
<td>103.38</td>
</tr>
<tr>
<td>Property, plant and equipment and intangible assets</td>
<td>7.80</td>
<td>(0.02)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7.78</td>
</tr>
<tr>
<td>Loss carried forward</td>
<td>264.77</td>
<td>29.55</td>
<td>2.94</td>
<td>0.51</td>
<td>-</td>
<td>297.77</td>
</tr>
<tr>
<td>Financial derivative</td>
<td>0.02</td>
<td>0.52</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.54</td>
</tr>
<tr>
<td>Provision for impairment loss on assets</td>
<td>114.74</td>
<td>10.69</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>125.43</td>
</tr>
<tr>
<td>Others</td>
<td>142.99</td>
<td>(16.54)</td>
<td>0.33</td>
<td>74.30</td>
<td>-</td>
<td>201.08</td>
</tr>
<tr>
<td></td>
<td>1,433.09</td>
<td>116.23</td>
<td>15.29</td>
<td>187.37</td>
<td>0.15</td>
<td>1,752.13</td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td>77.40</td>
<td>26.19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>103.59</td>
</tr>
<tr>
<td>Total</td>
<td>1,510.49</td>
<td>142.42</td>
<td>15.29</td>
<td>187.37</td>
<td>0.15</td>
<td>1,855.72</td>
</tr>
</tbody>
</table>

Unit: Million US Dollar
Deferred tax liabilities:

<table>
<thead>
<tr>
<th>Description</th>
<th>As at Jan 1, 2019 (Restated)</th>
<th>Statement of income</th>
<th>Statement of comprehensive income</th>
<th>Business acquisition</th>
<th>Currency translation differences</th>
<th>As at Dec 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment and intangible assets</td>
<td>1,820.30 (-274.20)</td>
<td>-</td>
<td>677.80 (-)</td>
<td>-</td>
<td>-</td>
<td>2,223.90</td>
</tr>
<tr>
<td>Financial derivative</td>
<td>3.63 (7.70)</td>
<td>3.04</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14.37</td>
</tr>
<tr>
<td>Others</td>
<td>5.02 (-4.02)</td>
<td>(0.20)</td>
<td>12.44 (-)</td>
<td>-</td>
<td>-</td>
<td>13.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,828.95</strong> (-270.52)</td>
<td><strong>2.84</strong></td>
<td><strong>690.24</strong></td>
<td>-</td>
<td>-</td>
<td><strong>2,251.51</strong></td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td>0.88 (0.31)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,829.83</strong> (-270.21)</td>
<td><strong>2.84</strong></td>
<td><strong>690.24</strong></td>
<td>-</td>
<td>-</td>
<td><strong>2,252.70</strong></td>
</tr>
<tr>
<td><strong>Net</strong></td>
<td><strong>(319.34)</strong></td>
<td><strong>412.63</strong></td>
<td><strong>12.45</strong></td>
<td><strong>(502.87)</strong></td>
<td><strong>0.15</strong></td>
<td><strong>(396.98)</strong></td>
</tr>
</tbody>
</table>
### Deferred tax assets:

<table>
<thead>
<tr>
<th></th>
<th>As at Jan 1, 2019 (Restated)</th>
<th>Statement of income</th>
<th>Statement of comprehensive income</th>
<th>Business acquisition</th>
<th>Currency translation differences</th>
<th>As at Dec 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decommissioning costs</td>
<td>26,879.51</td>
<td>2,307.40</td>
<td>-</td>
<td>3,448.69</td>
<td>(1,992.84)</td>
<td>30,642.76</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>2,410.99</td>
<td>524.03</td>
<td>363.22</td>
<td>-</td>
<td>(182.50)</td>
<td>3,115.74</td>
</tr>
<tr>
<td>Property, plant and equipment and intangible assets</td>
<td>253.03</td>
<td>(0.79)</td>
<td>-</td>
<td>-</td>
<td>(17.83)</td>
<td>234.41</td>
</tr>
<tr>
<td>Loss carried forward</td>
<td>8,591.82</td>
<td>861.66</td>
<td>91.19</td>
<td>15.34</td>
<td>(581.05)</td>
<td>8,978.96</td>
</tr>
<tr>
<td>Financial derivative</td>
<td>0.76</td>
<td>16.21</td>
<td>-</td>
<td>-</td>
<td>(0.50)</td>
<td>16.47</td>
</tr>
<tr>
<td>Provision for impairment loss on assets</td>
<td>3,723.36</td>
<td>294.51</td>
<td>-</td>
<td>-</td>
<td>(235.57)</td>
<td>3,782.30</td>
</tr>
<tr>
<td>Others</td>
<td>4,639.98</td>
<td>(562.56)</td>
<td>10.06</td>
<td>2,290.63</td>
<td>(314.81)</td>
<td>6,063.30</td>
</tr>
<tr>
<td></td>
<td>46,499.45</td>
<td>3,440.46</td>
<td>464.47</td>
<td>5,754.66</td>
<td>(3,325.10)</td>
<td>52,833.94</td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td>2,511.42</td>
<td>839.33</td>
<td>-</td>
<td>-</td>
<td>(227.24)</td>
<td>3,123.51</td>
</tr>
<tr>
<td>Total</td>
<td>49,010.87</td>
<td>4,279.79</td>
<td>464.47</td>
<td>5,754.66</td>
<td>(3,552.34)</td>
<td>55,957.45</td>
</tr>
</tbody>
</table>
### Deferred tax liabilities:

<table>
<thead>
<tr>
<th>Description</th>
<th>As at Jan 1, 2019 (Restated)</th>
<th>Statement of income</th>
<th>Statement of comprehensive income</th>
<th>Business acquisition</th>
<th>Currency translation differences</th>
<th>As at Dec 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment and intangible assets</td>
<td>59,068.01</td>
<td>(8,651.19)</td>
<td>-</td>
<td>20,728.07</td>
<td>(4,085.47)</td>
<td>67,059.42</td>
</tr>
<tr>
<td>Financial derivative</td>
<td>117.89</td>
<td>233.40</td>
<td>94.24</td>
<td>-</td>
<td>(12.14)</td>
<td>433.39</td>
</tr>
<tr>
<td>Others</td>
<td>158.89</td>
<td>(126.89)</td>
<td>(6.14)</td>
<td>375.38</td>
<td>(1.95)</td>
<td>399.29</td>
</tr>
<tr>
<td></td>
<td>59,344.79</td>
<td>(8,544.68)</td>
<td>88.10</td>
<td>21,103.45</td>
<td>(4,099.56)</td>
<td>67,892.10</td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td>28.46</td>
<td>9.77</td>
<td>-</td>
<td>-</td>
<td>(2.34)</td>
<td>35.89</td>
</tr>
<tr>
<td>Total</td>
<td>59,373.25</td>
<td>(8,534.91)</td>
<td>88.10</td>
<td>21,103.45</td>
<td>(4,101.90)</td>
<td>67,927.99</td>
</tr>
<tr>
<td>Net</td>
<td>(10,362.38)</td>
<td>12,814.70</td>
<td>376.37</td>
<td>(15,348.79)</td>
<td>549.56</td>
<td>(11,970.54)</td>
</tr>
</tbody>
</table>
## The Company

<table>
<thead>
<tr>
<th></th>
<th>As at Jan 1, 2019</th>
<th>Statement of income</th>
<th>Statement of comprehensive income</th>
<th>As at Dec 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deferred tax assets:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decommissioning costs</td>
<td>642.63</td>
<td>39.30</td>
<td>-</td>
<td>681.93</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td>69.04</td>
<td>17.75</td>
<td>12.06</td>
<td>98.85</td>
</tr>
<tr>
<td>Loss carried forward</td>
<td>182.47</td>
<td>83.25</td>
<td>2.94</td>
<td>268.66</td>
</tr>
<tr>
<td>Others</td>
<td>93.77</td>
<td>(10.55)</td>
<td>-</td>
<td>83.22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>987.91</td>
<td>129.75</td>
<td>15.00</td>
<td>1,132.66</td>
</tr>
<tr>
<td><strong>Tax effect of currency translation on tax base</strong></td>
<td>63.32</td>
<td>(20.94)</td>
<td>-</td>
<td>42.38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,051.23</td>
<td>108.81</td>
<td>15.00</td>
<td>1,175.04</td>
</tr>
</tbody>
</table>

**Deferred tax liabilities:**

|                      |                    |                     |                                    |                   |
| Property, plant and equipment and intangible assets | 732.00           | (207.36)            | -                                  | 524.64            |
| Others               | 3.77              | 4.20                | 2.61                              | 10.58             |
| **Total**            | 735.77            | (203.16)            | 2.61                              | 535.22            |
| **Tax effect of currency translation on tax base** | -                | -                   | -                                 | -                 |
| **Total**            | 735.77            | (203.16)            | 2.61                              | 535.22            |
| **Net**              | 315.46            | 311.97              | 12.39                             | 639.82            |
### The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million Baht</th>
<th>As at Jan 1, 2019</th>
<th>Statement of income</th>
<th>Statement of comprehensive income</th>
<th>Currency translation differences</th>
<th>As at Dec 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred tax assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decommissioning costs</td>
<td></td>
<td>20,852.87</td>
<td>1,219.25</td>
<td>-</td>
<td>(1,509.45)</td>
<td>20,562.67</td>
</tr>
<tr>
<td>Provision for employee benefits</td>
<td></td>
<td>2,240.19</td>
<td>550.58</td>
<td>374.06</td>
<td>(184.36)</td>
<td>2,980.47</td>
</tr>
<tr>
<td>Loss carried forward</td>
<td></td>
<td>5,921.25</td>
<td>2,582.65</td>
<td>91.19</td>
<td>(493.71)</td>
<td>8,101.38</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>3,043.28</td>
<td>(327.16)</td>
<td>0.03</td>
<td>(206.16)</td>
<td>2,509.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32,057.59</td>
<td>4,025.32</td>
<td>465.28</td>
<td>(2,393.68)</td>
<td>34,154.51</td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td></td>
<td>2,054.83</td>
<td>(630.24)</td>
<td>-</td>
<td>(146.66)</td>
<td>1,277.93</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>34,112.42</td>
<td>3,395.08</td>
<td>465.28</td>
<td>(2,540.34)</td>
<td>35,432.44</td>
</tr>
<tr>
<td>Deferred tax liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment and intangible assets</td>
<td></td>
<td>23,753.52</td>
<td>(6,432.65)</td>
<td>-</td>
<td>(1,500.67)</td>
<td>15,820.20</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>122.15</td>
<td>130.61</td>
<td>80.99</td>
<td>(14.56)</td>
<td>319.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23,875.67</td>
<td>(6,302.04)</td>
<td>80.99</td>
<td>(1,515.23)</td>
<td>16,139.39</td>
</tr>
<tr>
<td>Tax effect of currency translation on tax base</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23,875.67</td>
<td>(6,302.04)</td>
<td>80.99</td>
<td>(1,515.23)</td>
<td>16,139.39</td>
</tr>
<tr>
<td>Net</td>
<td></td>
<td>10,236.75</td>
<td>9,697.12</td>
<td>384.29</td>
<td>(1,025.11)</td>
<td>19,293.05</td>
</tr>
</tbody>
</table>
26. Prepaid Expenses

Prepaid expenses comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Prepayments for the construction of a gas pipeline¹</td>
<td>11.68</td>
<td>13.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>352.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>423.28</td>
</tr>
<tr>
<td>Prepayments for rental fee</td>
<td>2.51</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>91.49</td>
</tr>
<tr>
<td>Others</td>
<td>3.68</td>
<td>4.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>111.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130.01</td>
</tr>
<tr>
<td>Total</td>
<td>17.87</td>
<td>19.87</td>
</tr>
<tr>
<td></td>
<td>538.89</td>
<td>644.78</td>
</tr>
</tbody>
</table>

¹ 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, 2019            | Dec 31, 2018       |
|                                | Dec 31, 2019            | Dec 31, 2018       |
| Financial derivative assets    |                         |                    |
| Financial derivative assets - Current | | |
| Oil price hedge                | 12.09                   | 38.92              |
|                                 | 364.53                  | 1,262.88           |
| Forward foreign exchange       | 0.25                    | 2.94               |
|                                 | 7.63                    | 95.36              |
| Cross currency and interest rate swap | -                    | 2.90               |
|                                 | -                       | -                  |
| Total financial derivative assets - Current | 12.34              | 44.76              |
|                                 | 372.16                  | 1,452.46           |
| Financial derivative assets - Non-current | | |
| Cross currency and interest rate swap | 83.68                 | 22.10              |
|                                 | 2,523.21                | 717.10             |
| Total financial derivative assets - Non-current | 83.68                 | 22.10              |
|                                 | 2,523.21                | 717.10             |
## Financial derivative liabilities

### Financial derivative liabilities - Current

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Oil price hedge</td>
<td>2.09</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>63.16</td>
<td>26.56</td>
</tr>
<tr>
<td>Forward foreign exchange</td>
<td>13.12</td>
<td>3.06</td>
</tr>
<tr>
<td></td>
<td>395.60</td>
<td>99.23</td>
</tr>
<tr>
<td>Cross currency and interest rate swap</td>
<td>-</td>
<td>6.81</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>220.95</td>
</tr>
<tr>
<td>Total financial derivative liabilities - Current</td>
<td>15.21</td>
<td>10.69</td>
</tr>
</tbody>
</table>

## Financial derivative assets

### Financial derivative assets - Current

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Forward foreign exchange</td>
<td>0.25</td>
<td>2.74</td>
</tr>
<tr>
<td></td>
<td>7.63</td>
<td>88.75</td>
</tr>
<tr>
<td>Cross currency and interest rate swap</td>
<td>-</td>
<td>2.90</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>94.22</td>
</tr>
<tr>
<td>Total financial derivative assets - Current</td>
<td>0.25</td>
<td>5.64</td>
</tr>
</tbody>
</table>

### Financial derivative assets - Non - current

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Cross currency and interest rate swap</td>
<td>64.10</td>
<td>22.10</td>
</tr>
<tr>
<td></td>
<td>1,932.75</td>
<td>717.10</td>
</tr>
<tr>
<td>Total financial derivative assets - Non - current</td>
<td>64.10</td>
<td>22.10</td>
</tr>
</tbody>
</table>

## Financial derivative liabilities

### Financial derivative liabilities - Current

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Forward foreign exchange</td>
<td>12.03</td>
<td>2.81</td>
</tr>
<tr>
<td></td>
<td>362.65</td>
<td>91.08</td>
</tr>
<tr>
<td>Cross currency and interest rate swap</td>
<td>-</td>
<td>6.81</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>220.95</td>
</tr>
<tr>
<td>Total financial derivative liabilities - Current</td>
<td>12.03</td>
<td>9.62</td>
</tr>
</tbody>
</table>
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 2019, 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 statement 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 loss during 2019 amount of US Dollar 0.01 million.

28. Other Non-current Assets

Other non-current assets comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Land usage fee</td>
<td>22.86</td>
<td>689.39</td>
</tr>
<tr>
<td>Advance payment and accrued interest</td>
<td>36.10</td>
<td>1,088.49</td>
</tr>
<tr>
<td>Pension scheme investments from joint operation</td>
<td>44.88</td>
<td>1,353.50</td>
</tr>
<tr>
<td>Prepaid assessed tax</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>38.30</td>
<td>1,154.78</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>4,286.16</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Unit: Million US Dollar</strong></td>
<td><strong>Unit: Million Baht</strong></td>
</tr>
<tr>
<td></td>
<td><strong>The Company</strong></td>
<td><strong>The Company</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Dec 31, 2019</strong></td>
<td><strong>Dec 31, 2018</strong></td>
</tr>
<tr>
<td>Deposits</td>
<td>4.86</td>
<td>146.63</td>
</tr>
<tr>
<td>Land usage fee</td>
<td>5.71</td>
<td>172.35</td>
</tr>
<tr>
<td>Others</td>
<td>1.10</td>
<td>33.05</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>352.03</strong></td>
</tr>
</tbody>
</table>

1 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”.

Notes to Financial Statements

(Official Translation)
29. **Loans and Debentures**

29.1 **Loans and debentures** are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated</strong></td>
<td><strong>Dec 31, 2019</strong></td>
<td><strong>Dec 31, 2018</strong></td>
</tr>
<tr>
<td><strong>Current portion of long-term financial liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current portion of debentures</td>
<td>-</td>
<td>406.75</td>
</tr>
<tr>
<td>Finance lease liabilities with maturity date</td>
<td>18.28</td>
<td>0.26</td>
</tr>
<tr>
<td>within 1 Year</td>
<td></td>
<td>551.26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18.28</td>
<td>407.01</td>
</tr>
<tr>
<td><strong>Long-term financial liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debentures</td>
<td>2,704.75</td>
<td>1,537.77</td>
</tr>
<tr>
<td><strong>Total debentures</strong></td>
<td>2,704.75</td>
<td>1,537.77</td>
</tr>
<tr>
<td><strong>Long-term loans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term loans from financial Institutions</td>
<td>593.26</td>
<td>-</td>
</tr>
<tr>
<td>Finance lease liabilities</td>
<td>125.41</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Total long-term loans</strong></td>
<td>718.67</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,423.42</td>
<td>1,538.76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Company</strong></td>
<td><strong>Dec 31, 2019</strong></td>
<td><strong>Dec 31, 2018</strong></td>
</tr>
<tr>
<td><strong>Current portion of long-term financial liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current portion of debentures</td>
<td>-</td>
<td>406.75</td>
</tr>
<tr>
<td>Finance lease liabilities with maturity date</td>
<td>0.30</td>
<td>0.26</td>
</tr>
<tr>
<td>within 1 Year</td>
<td></td>
<td>9.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.30</td>
<td>407.01</td>
</tr>
</tbody>
</table>
### Long-term financial liabilities

<table>
<thead>
<tr>
<th></th>
<th>The Company</th>
<th>The Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Debentures</td>
<td>377.76</td>
<td>351.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total debentures</td>
<td>377.76</td>
<td>351.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance lease liabilities</td>
<td>0.76</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total long-term loans</td>
<td>0.76</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>378.52</td>
<td>352.00</td>
</tr>
</tbody>
</table>

#### 29.2 Debentures

Movements in debentures for the year are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>1,944.52</td>
<td>63,099.15</td>
</tr>
<tr>
<td>Increase</td>
<td>1,130.05</td>
<td>35,070.94</td>
</tr>
<tr>
<td>Repayment of debentures</td>
<td>(418.20)</td>
<td>(12,978.80)</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>(7.23)</td>
<td>(209.92)</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>55.61</td>
<td>1,725.96</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(5,148.42)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>2,704.75</td>
<td>81,558.91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>757.76</td>
<td>24,588.98</td>
</tr>
<tr>
<td>Repayment of debentures</td>
<td>(418.20)</td>
<td>(12,978.80)</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>0.002</td>
<td>0.76</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>38.20</td>
<td>1,185.68</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(1,405.58)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>377.76</td>
<td>11,391.04</td>
</tr>
</tbody>
</table>
The carrying value of unsecured and unsubordinated debentures comprised:

<table>
<thead>
<tr>
<th>Interest rates (%) per annum</th>
<th>Effective interest rates (%) per annum</th>
<th>Maturity date</th>
<th>Consolidated</th>
<th>Unit: Million US Dollar</th>
<th>Consolidated</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity date within 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Debentures Baht 5,000 million ¹</td>
<td>4.80</td>
<td>4.873</td>
<td>May 29, 2019</td>
<td>-</td>
<td>154.08</td>
<td>-</td>
</tr>
<tr>
<td>- Debentures Baht 8,200 million ²</td>
<td>3.91</td>
<td>3.976</td>
<td>June 6, 2019</td>
<td>-</td>
<td>252.67</td>
<td>-</td>
</tr>
<tr>
<td>Maturity date over 1 year but not exceeding 3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Debentures US Dollar 700 million ³</td>
<td>5.692</td>
<td>5.815</td>
<td>April 5, 2021</td>
<td>699.73</td>
<td>699.52</td>
<td>21,099.71</td>
</tr>
<tr>
<td>- Debentures Baht 15,000 million ⁴</td>
<td>2.26</td>
<td>2.314</td>
<td>June 19, 2022</td>
<td>496.95</td>
<td>-</td>
<td>14,984.94</td>
</tr>
<tr>
<td>Maturity date over 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Debentures Baht 11,400 million ⁵</td>
<td>4.82</td>
<td>4.89</td>
<td>June 6, 2029</td>
<td>377.76</td>
<td>351.01</td>
<td>11,391.04</td>
</tr>
<tr>
<td>- Debentures US Dollar 490 million ³</td>
<td>6.35</td>
<td>6.507</td>
<td>June 12, 2042</td>
<td>487.36</td>
<td>487.24</td>
<td>14,695.76</td>
</tr>
<tr>
<td>- Debentures US Dollar 650 million ⁶</td>
<td>3.903</td>
<td>3.941</td>
<td>December 6, 2059</td>
<td>642.95</td>
<td>-</td>
<td>19,387.46</td>
</tr>
<tr>
<td>Total carrying value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,704.75</td>
<td>1,944.52</td>
</tr>
</tbody>
</table>

¹ [Unofficial Translation]
² [Unofficial Translation]
³ [Unofficial Translation]
⁴ [Unofficial Translation]
⁵ [Unofficial Translation]
⁶ [Unofficial Translation]
<table>
<thead>
<tr>
<th>Interest rates</th>
<th>Effective interest rates</th>
<th>Maturity date</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>(% per annum)</td>
<td>(% per annum)</td>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Maturity date within 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Debentures Baht 5,000 million | 4.80 | 4.873 | May 29, 2019 | - | 154.08 | - | 4,999.75 |
- Debentures Baht 8,200 million | 3.91 | 3.976 | June 6, 2019 | - | 252.67 | - | 8,199.13 |
Maturity date over 5 years
- Debentures Baht 11,400 million | 4.82 | 4.89 | June 6, 2029 | 377.76 | 351.01 | 11,391.04 | 11,390.10 |
Total carrying value | 377.76 | 757.76 | 11,391.04 | 24,588.98 |

1 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.

2 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.

3 The Group 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.

4 On June 19, 2019, the group has issued and offered the 3 years unsecured and unsubordinated debentures in the amount of Baht 15,000 million with a fixed interest rate of 2.26% per annum. The Group entered into a Cross Currency Swap transaction with a financial institution to swap Thai Baht debentures for US Dollar 480 million at the average exchange rate of Baht 31.25 per US Dollar. Under this agreement, the average interest rate was charged at the rate of 2.79% per annum.
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.

On December 6, 2019, the Group has issued and offered the 40 years unsecured and unsubordinated debentures in the amount of US Dollar 650 million with a fixed interest rate of 3.903% per annum.
29.3 Long-term loans from financial institutions

Movements in long-term loans from financial institutions for the year are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Increase</td>
<td>600.00</td>
<td>18,620.99</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>(6.74)</td>
<td>(203.20)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(528.59)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>593.26</td>
<td>17,889.20</td>
</tr>
</tbody>
</table>
Long-term loans from financial institutions comprised:

<table>
<thead>
<tr>
<th>Interest rates</th>
<th>Effective interest rates</th>
<th>Maturity date</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>(% per annum)</td>
<td>(% per annum)</td>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>6M LIBOR + 0.85</td>
<td>3.063</td>
<td>Oct 20, 2024</td>
<td>Dec 31, 2019</td>
<td>474.15</td>
</tr>
<tr>
<td>6M LIBOR + 0.95</td>
<td>3.056</td>
<td>Oct 20, 2024</td>
<td>Dec 31, 2018</td>
<td>119.11</td>
</tr>
</tbody>
</table>

Maturity date over 3 year but not exceeding 5 years
- Loan US Dollar 480 million\(^1\) 6M LIBOR + 0.85 3.063 Oct 20, 2024 474.15 - 14,297.44 -
- Loan US Dollar 120 million\(^1\) 6M LIBOR + 0.95 3.056 Oct 20, 2024 119.11 - 3,591.76 -

Total Carrying Value 593.26 - 17,889.20 -

\(^1\) The Group has entered into a long-term loan agreement with a financial institution. The credit facilities is at US Dollar 600 million with maturity of 5 years. The Group has drawdown facilites in full amount by the fourth quarter of 2019.
29.4 Finance lease liabilities

The Group has entered into finance lease contracts which mainly are leases for petroleum exploration and production assets. The contracts period is not later than 19 years. Movements in finance lease liabilities for the year are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>1.25</td>
<td>40.65</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>150.14</td>
<td>4,631.07</td>
</tr>
<tr>
<td>Repayment of finance lease liabilities</td>
<td>(12.93)</td>
<td>(401.48)</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>5.15</td>
<td>160.03</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>0.08</td>
<td>2.59</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(99.89)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>143.69</td>
<td>4,332.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>1.25</td>
<td>40.65</td>
</tr>
<tr>
<td>Repayment of finance lease liabilities</td>
<td>(0.31)</td>
<td>(9.63)</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>0.04</td>
<td>1.49</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>0.08</td>
<td>2.37</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(2.90)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>1.06</td>
<td>31.98</td>
</tr>
</tbody>
</table>

Finance lease liabilities comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance lease liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Within 1 year</td>
<td>27.64</td>
<td>833.69</td>
</tr>
<tr>
<td>- Over 1 year but not exceeding 5 years</td>
<td>81.46</td>
<td>2,456.37</td>
</tr>
<tr>
<td>- Over 5 years</td>
<td>78.66</td>
<td>2,371.86</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>(44.07)</td>
<td>(1,328.95)</td>
</tr>
<tr>
<td>Total present value of finance lease liabilities</td>
<td>143.69</td>
<td>4,332.97</td>
</tr>
</tbody>
</table>

Notes to Financial Statements
### Finance lease liabilities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Within 1 year</td>
<td>0.33</td>
<td>0.31</td>
<td>10.04</td>
<td>10.03</td>
</tr>
<tr>
<td>- Over 1 year but not exceeding 5 years</td>
<td>0.79</td>
<td>1.04</td>
<td>23.88</td>
<td>33.92</td>
</tr>
<tr>
<td>Deferred finance cost</td>
<td>(0.06)</td>
<td>(0.10)</td>
<td>(1.94)</td>
<td>(3.30)</td>
</tr>
<tr>
<td><strong>Total present value of finance lease liabilities</strong></td>
<td><strong>1.06</strong></td>
<td><strong>1.25</strong></td>
<td><strong>31.98</strong></td>
<td><strong>40.65</strong></td>
</tr>
</tbody>
</table>

### Short-term Provision

Short-term provision comprised:

#### Consolidated

|------------------------|--------------------|--------------------|--------------------|--------------------|
| Provision for
decommissioning costs  | 42.76              | 33.60              | 1,289.38           | 1,090.30           |
| Provision for
remuneration for the
renewal of petroleum production | 77.87              | 89.07              | 2,348.14           | 2,890.32           |
| Other provisions       | 10.87              | 11.00              | 327.74             | 357.09             |
| **Total**              | **131.50**         | **133.67**         | **3,965.26**       | **4,337.71**       |

#### The Company

|------------------------|--------------------|--------------------|--------------------|--------------------|
| Provision for
decommissioning costs  | 12.73              | 4.68               | 383.87             | 151.94             |
| Provision for
remuneration for the
renewal of petroleum production | 75.40              | 88.99              | 2,273.51           | 2,887.69           |
| Other provisions       | 9.76               | -                  | 294.41             | -                  |
| **Total**              | **97.89**          | **93.67**          | **2,951.79**       | **3,039.63**       |
31. **Provision for Employee Benefits**

Provision for employee benefits are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td><strong>Statements of financial position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retirement benefits</td>
<td>232.91</td>
<td>126.34</td>
</tr>
<tr>
<td>Other long-term benefits</td>
<td>12.34</td>
<td>8.92</td>
</tr>
<tr>
<td>Liabilities in the statements of financial position</td>
<td>245.25</td>
<td>135.26</td>
</tr>
<tr>
<td><strong>Statements of income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retirement benefits</td>
<td>32.31</td>
<td>12.25</td>
</tr>
<tr>
<td>Other long-term benefits</td>
<td>2.94</td>
<td>1.15</td>
</tr>
<tr>
<td>Total</td>
<td>35.25</td>
<td>13.40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td><strong>Statements of financial position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retirement benefits</td>
<td>167.05</td>
<td>112.59</td>
</tr>
<tr>
<td>Other long-term benefits</td>
<td>12.33</td>
<td>8.91</td>
</tr>
<tr>
<td>Liabilities in the statements of financial position</td>
<td>179.38</td>
<td>121.50</td>
</tr>
<tr>
<td><strong>Statements of income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retirement benefits</td>
<td>28.31</td>
<td>10.71</td>
</tr>
<tr>
<td>Other long-term benefits</td>
<td>2.94</td>
<td>1.15</td>
</tr>
<tr>
<td>Total</td>
<td>31.25</td>
<td>11.86</td>
</tr>
</tbody>
</table>
Movements of provision for retirement benefits during the year are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>126.34</td>
<td>4,099.80</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>44.89</td>
<td>1,354.08</td>
</tr>
<tr>
<td>Current service cost</td>
<td>9.36</td>
<td>290.71</td>
</tr>
<tr>
<td>Past service cost</td>
<td>18.71</td>
<td>593.83</td>
</tr>
<tr>
<td>Interest cost</td>
<td>4.24</td>
<td>131.76</td>
</tr>
<tr>
<td>Loss from actuarial assumptions</td>
<td>26.65</td>
<td>805.49</td>
</tr>
<tr>
<td>Benefits paid</td>
<td>(8.23)</td>
<td>(255.73)</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>10.95</td>
<td>340.13</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(337.11)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>232.91</td>
<td>7,022.96</td>
</tr>
</tbody>
</table>

The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>112.59</td>
<td>3,653.72</td>
</tr>
<tr>
<td>Current service cost</td>
<td>8.19</td>
<td>254.34</td>
</tr>
<tr>
<td>Past service cost</td>
<td>16.24</td>
<td>515.57</td>
</tr>
<tr>
<td>Interest cost</td>
<td>3.88</td>
<td>120.47</td>
</tr>
<tr>
<td>Loss from actuarial assumptions</td>
<td>24.12</td>
<td>728.86</td>
</tr>
<tr>
<td>Benefits paid</td>
<td>(7.71)</td>
<td>(239.47)</td>
</tr>
<tr>
<td>Foreign exchange differences</td>
<td>9.74</td>
<td>302.49</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(298.85)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>167.05</td>
<td>5,037.13</td>
</tr>
</tbody>
</table>

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

|                                    | Unit: Million US Dollar | Unit: Million Baht |
|                                    | Consolidated            | Consolidated       |
| Dec 31, 2019                       | Dec 31, 2018            | Dec 31, 2019       |
| Current service cost               | 9.36                    | 8.35               | 290.71          | 269.48 |
| Past service cost                  | 18.71                   | -                  | 593.83          | -     |
| Interest cost                      | 4.24                    | 3.90               | 131.76          | 125.99 |
| Total                              | 32.31                   | 12.25              | 1,016.30        | 395.47 |
| Other long-term benefits           | 2.94                    | 1.15               | 90.03           | 37.09 |
| Expenses recognized in the statements of income | 35.25 | 13.40 | 1,106.33 | 432.56 |
### Details of (gain) loss from actuarial assumptions of provision for employee benefits recognized in the statements of comprehensive income are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Change in demographic assumptions</td>
<td>26.65</td>
<td>3.70</td>
</tr>
<tr>
<td>Change in financial assumptions</td>
<td>805.49</td>
<td>121.11</td>
</tr>
<tr>
<td>Experience adjustments</td>
<td>(4.44)</td>
<td>(33.06)</td>
</tr>
<tr>
<td>Total</td>
<td>24.12</td>
<td>0.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Change in demographic assumptions</td>
<td>24.12</td>
<td>58.98</td>
</tr>
<tr>
<td>Change in financial assumptions</td>
<td>728.86</td>
<td>92.16</td>
</tr>
<tr>
<td>Experience adjustments</td>
<td>(4.44)</td>
<td>(145.12)</td>
</tr>
<tr>
<td>Total</td>
<td>24.12</td>
<td>6.02</td>
</tr>
</tbody>
</table>
Major Actuarial Assumptions for Retirement Benefits

<table>
<thead>
<tr>
<th></th>
<th>% per annum</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Discount rate</td>
<td>1.9 - 7.15</td>
<td>3.2</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>2.0 - 2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Credit interest rate on provident funds</td>
<td>3.4 - 4.3</td>
<td>3.4 - 4.3</td>
</tr>
<tr>
<td>Turnover rate</td>
<td>0.0 - 14.0</td>
<td>0.0 - 14.0</td>
</tr>
<tr>
<td>Mortality rate</td>
<td>Based on the announcement of each country</td>
<td>Based on the announcement of each country</td>
</tr>
</tbody>
</table>

Impact on Defined Retirement Benefit Obligation Plans

<table>
<thead>
<tr>
<th></th>
<th>Unit: US Million Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase (Decrease)</td>
<td>Increase (Decrease)</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Discount rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase 1%</td>
<td>(21.12)</td>
<td>(12.36)</td>
</tr>
<tr>
<td>Decrease 1%</td>
<td>25.51</td>
<td>14.67</td>
</tr>
</tbody>
</table>

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, 2019, the weighted average duration of the defined retirement benefit obligation is 20 years. (2018: 20 years)

Maturity analysis of undiscounted retirement benefits*:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31 December 2019</td>
<td>31 December 2019</td>
</tr>
<tr>
<td></td>
<td>Consolidated</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Consolidated</td>
<td>The Company</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>5.83</td>
<td>5.15</td>
</tr>
<tr>
<td>Over 1 to 5 years</td>
<td>37.67</td>
<td>34.98</td>
</tr>
<tr>
<td>Over 5 to 10 years</td>
<td>77.18</td>
<td>71.46</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>323.41</td>
<td>291.73</td>
</tr>
<tr>
<td>Total</td>
<td>444.09</td>
<td>403.32</td>
</tr>
</tbody>
</table>

* Not include retirement benefit paid of joint operations
On April 5, 2019, the Labour Protection Act (No.7) B.E. 2562 was published in the Royal Gazette and was effective in May 2019. The amendment 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. As a result, it changes the retirement benefit plan, in which the Group’s provision for retirement benefits increased by US Dollar 18.71 million (Baht 593.83 million) in the consolidated financial statement and US Dollar 16.24 million (Baht 515.57 million) in the Company’s financial statement. The Group recognized the effect from the amendment by recognizing past service cost as expense in the statements of income.

32. Provision for Decommissioning Costs

Provision for decommissioning costs are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Provision for...</td>
<td>3,010.27</td>
<td>2,277.25</td>
</tr>
<tr>
<td>Less Current portion</td>
<td>(42.76)</td>
<td>(33.60)</td>
</tr>
<tr>
<td>Non-current portion</td>
<td>2,967.51</td>
<td>2,243.65</td>
</tr>
<tr>
<td>of provision for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>decommissioning costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>90,771.73</td>
<td>73,896.52</td>
</tr>
<tr>
<td>Less Current portion</td>
<td>(1,289.38)</td>
<td>(1,090.30)</td>
</tr>
<tr>
<td>Non-current portion</td>
<td>89,482.35</td>
<td>72,806.22</td>
</tr>
<tr>
<td>of provision for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>decommissioning costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Provision for...</td>
<td>1,584.35</td>
<td>1,375.34</td>
</tr>
<tr>
<td>Less Current portion</td>
<td>(12.73)</td>
<td>(4.68)</td>
</tr>
<tr>
<td>Non-current portion</td>
<td>1,571.62</td>
<td>1,370.66</td>
</tr>
<tr>
<td>of provision for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>decommissioning costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47,774.55</td>
<td>44,629.50</td>
</tr>
<tr>
<td>Less Current portion</td>
<td>(383.87)</td>
<td>(151.94)</td>
</tr>
<tr>
<td>Non-current portion</td>
<td>47,390.68</td>
<td>44,477.56</td>
</tr>
</tbody>
</table>
Movements of provision for decommissioning costs during the year are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>2,277.25</td>
<td>73,896.52</td>
</tr>
<tr>
<td>Business acquisition</td>
<td>331.25</td>
<td>10,174.83</td>
</tr>
<tr>
<td>Additional provision</td>
<td>327.44</td>
<td>10,162.12</td>
</tr>
<tr>
<td>Abandonment cost incurred during the year</td>
<td>(14.63)</td>
<td>(454.27)</td>
</tr>
<tr>
<td>Accretion expenses</td>
<td>102.82</td>
<td>3,192.27</td>
</tr>
<tr>
<td>Reversal of provision</td>
<td>(13.86)</td>
<td>(430.25)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(5,769.49)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>3,010.27</strong></td>
<td><strong>90,771.73</strong></td>
</tr>
</tbody>
</table>

The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Balance as at January 1, 2019</td>
<td>1,375.34</td>
<td>44,629.50</td>
</tr>
<tr>
<td>Additional provision</td>
<td>152.43</td>
<td>4,730.74</td>
</tr>
<tr>
<td>Abandonment cost incurred during the year</td>
<td>(1.24)</td>
<td>(38.54)</td>
</tr>
<tr>
<td>Accretion expenses</td>
<td>57.82</td>
<td>1,795.23</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td>-</td>
<td>(3,342.38)</td>
</tr>
<tr>
<td><strong>Balance as at December 31, 2019</strong></td>
<td><strong>1,584.35</strong></td>
<td><strong>47,774.55</strong></td>
</tr>
</tbody>
</table>

33. Provision for Remuneration for the Renewal of Petroleum Production

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Provision for remuneration for the renewal of petroleum production</td>
<td>268.63</td>
<td>8,100.25</td>
</tr>
<tr>
<td>Less Current portion</td>
<td>(77.87)</td>
<td>(2,348.14)</td>
</tr>
<tr>
<td>Non-current portion of provision for remuneration for the renewal of petroleum production</td>
<td>190.76</td>
<td>5,752.11</td>
</tr>
</tbody>
</table>
The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Provision for remuneration for the renewal of petroleum production</td>
<td>250.32</td>
<td>7,548.12</td>
</tr>
<tr>
<td>Less Current portion</td>
<td>(75.40)</td>
<td>(2,273.51)</td>
</tr>
<tr>
<td>Non-current portion of provision for remuneration for the renewal of petroleum production</td>
<td>174.92</td>
<td>5,274.61</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>327.73</td>
<td>10,634.84</td>
</tr>
<tr>
<td>Increase</td>
<td>19.35</td>
<td>600.65</td>
</tr>
<tr>
<td>Abandonment cost incurred during the year</td>
<td>(90.75)</td>
<td>(2,816.69)</td>
</tr>
<tr>
<td>Accretion expenses</td>
<td>12.33</td>
<td>382.74</td>
</tr>
<tr>
<td>Reversal of provision</td>
<td>(0.03)</td>
<td>(0.98)</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td></td>
<td>(700.31)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>268.63</td>
<td>8,100.25</td>
</tr>
</tbody>
</table>

The Company

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>327.39</td>
<td>10,623.78</td>
</tr>
<tr>
<td>Abandonment cost incurred during the year</td>
<td>(88.99)</td>
<td>(2,761.78)</td>
</tr>
<tr>
<td>Accretion expenses</td>
<td>11.92</td>
<td>370.00</td>
</tr>
<tr>
<td>Currency translation differences</td>
<td></td>
<td>(683.88)</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>250.32</td>
<td>7,548.12</td>
</tr>
</tbody>
</table>
### 34. Other Non-current Liabilities

Other non-current liabilities comprised:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Contingent consideration from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>participating interest acquisition</td>
<td>51.86</td>
<td>1,563.84</td>
</tr>
<tr>
<td>in joint venture</td>
<td>27.90</td>
<td>841.23</td>
</tr>
<tr>
<td>Land usage fee</td>
<td>26.09</td>
<td>786.84</td>
</tr>
<tr>
<td>Retirement reserve from co-venturers</td>
<td>12.95</td>
<td>390.42</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118.80</td>
<td>3,582.33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
<td>Dec 31, 2019</td>
</tr>
<tr>
<td>Land usage fee</td>
<td>6.97</td>
<td>210.31</td>
</tr>
<tr>
<td>Retirement reserve from co-venturers</td>
<td>18.31</td>
<td>552.04</td>
</tr>
<tr>
<td>Total</td>
<td>25.28</td>
<td>762.35</td>
</tr>
</tbody>
</table>
35. Fair Value

35.1 Fair value estimation

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

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments in trading securities</td>
<td>213.70</td>
<td>6,444.00</td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>0.52</td>
<td>15.81</td>
</tr>
<tr>
<td>Financial derivatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Oil price hedge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>12.09</td>
</tr>
<tr>
<td>- Forward foreign exchange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>0.25</td>
</tr>
<tr>
<td>- Cross currency and interest rate swap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>83.68</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pension scheme investments from joint operation</td>
<td>44.88</td>
<td>1,353.50</td>
</tr>
<tr>
<td>Total assets</td>
<td>259.10</td>
<td>7,813.31</td>
</tr>
</tbody>
</table>

Notes to Financial Statements
## Financial liabilities

### Financial derivatives
- **Oil price hedge**: - 2.09 - 2.09 - 63.16 - 63.16
- **Forward foreign exchange**: - 13.12 - 13.12 - 395.60 - 395.60

### Other non-current liabilities
- **Deferred considerations acquired through business acquisition**: - - 7.10 7.10 - - 213.94 213.94
- **Contingent consideration from participating interest acquisition in joint venture**: - - 51.86 51.86 - - 1,563.84 1,563.84

### Total liabilities
- **Total**: - 15.21 58.96 74.17 - 458.76 1,777.78 2,236.54
### Financial assets

#### Short-term investments

- Debt securities (with embedded derivatives)  
  - 49.87
- Investments in trading securities  
  70.55
- Investments in available-for-sale securities  
  11.01

#### Financial derivatives

- Oil price hedge  
  38.92
- Forward foreign exchange  
  2.94
- Cross currency and interest rate swap  
  25.00

### Total assets

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.56</td>
<td>116.73</td>
<td>-</td>
<td>198.29</td>
</tr>
</tbody>
</table>

### Financial liabilities

#### Deferred considerations acquired through business

| acquisition | - | - | 465.97 | 465.97 | - | - | 15,120.70 | 15,120.70 |

#### Financial derivatives

- Oil price hedge  
  0.82
- Forward foreign exchange  
  3.06
- Cross currency and interest rate swap  
  6.81

### Total liabilities

| - | - | 10.69 | 465.97 | 476.66 | - | 346.74 | 15,120.70 | 15,467.44 |
## The Company

### Dec 31, 2019

<table>
<thead>
<tr>
<th></th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>0.21</td>
<td>-</td>
<td>-</td>
<td>0.21</td>
</tr>
<tr>
<td>Financial derivatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Forward foreign exchange</td>
<td>-</td>
<td>0.25</td>
<td>-</td>
<td>0.25</td>
</tr>
<tr>
<td>- Cross currency and interest rate swap</td>
<td>-</td>
<td>64.10</td>
<td>-</td>
<td>64.10</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>0.21</td>
<td>64.35</td>
<td>-</td>
<td>64.56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial derivative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Forward foreign exchange</td>
<td>-</td>
<td>12.03</td>
<td>-</td>
<td>12.03</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>-</td>
<td>12.03</td>
<td>-</td>
<td>12.03</td>
</tr>
<tr>
<td>Financial assets</td>
<td>Unit: Million US Dollar</td>
<td>The Company</td>
<td>Dec 31, 2018</td>
<td>Unit: Million Baht</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
<td>-------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
<td>Total</td>
</tr>
<tr>
<td><strong>Short-term investments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt securities (with embedded derivatives)</td>
<td>-</td>
<td>49.87</td>
<td>-</td>
<td>49.87</td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>70.54</td>
<td>-</td>
<td>-</td>
<td>70.54</td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>10.45</td>
<td>-</td>
<td>-</td>
<td>10.45</td>
</tr>
<tr>
<td><strong>Financial derivatives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward foreign exchange</td>
<td>-</td>
<td>2.74</td>
<td>-</td>
<td>2.74</td>
</tr>
<tr>
<td>Cross currency and interest rate swap</td>
<td>-</td>
<td>25.00</td>
<td>-</td>
<td>25.00</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>80.99</td>
<td>77.61</td>
<td>-</td>
<td>158.60</td>
</tr>
</tbody>
</table>

| Financial liabilities |          |          |          |       |          |          |          |       |
| Deferred considerations acquired through business acquisition | - | - | 465.97 | 465.97 | - | - | - | 15,120.70 |
| **Financial derivative** |          |          |          |       |          |          |          |       |
| 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 |
| **Total liabilities** | - | 9.62 | 465.97 | 475.59 | - | 312.03 | 15,120.70 | 15,432.73 |

**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).
35.2 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 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.

35.3 Valuation Techniques Used to Derive Level 3 Fair values

Valuation techniques and assumptions used to derive level 3 fair values are as follows:

- Deferred considerations acquired through business acquisition is disclosed in Note 6 - Business Acquisition in Murphy oil Corporation in Malaysia.

- Contingent consideration from participating interest acquisition in joint venture is disclosed in Note 19.6 - Significant transactions during the year.
35.4 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:

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated</td>
<td></td>
</tr>
<tr>
<td>December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Book Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Unsecured and unsubordinated debentures – Baht</td>
<td>874.71</td>
</tr>
<tr>
<td>Unsecured and unsubordinated debentures – US Dollar</td>
<td>1,830.04</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit: Million Baht</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated</td>
<td></td>
</tr>
<tr>
<td>December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Book Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Unsecured and unsubordinated debentures – Baht</td>
<td>26,375.98</td>
</tr>
<tr>
<td>Unsecured and unsubordinated debentures – US Dollar</td>
<td>55,182.93</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit: Million US Dollar</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Company</td>
<td></td>
</tr>
<tr>
<td>December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Book Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Unsecured and unsubordinated debentures – Baht</td>
<td>377.76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit: Million Baht</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Company</td>
<td></td>
</tr>
<tr>
<td>December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Book Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Unsecured and unsubordinated debentures – Baht</td>
<td>11,391.04</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>Consolidated</th>
<th>The Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Account receivable – parent company</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Trade and other accounts receivables</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Other current assets</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Long-term loans to related parties</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial liabilities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts payable and working capital to co-venturers</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Accrued expenses and interests payable</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Long-term loans</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial assets</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Account receivable – parent company</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Trade and other accounts receivables</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Short-term loans to related parties</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Other current assets</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Long-term loans</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
36. **Subordinated capital debentures**

In 2019, the Group redeemed the US Dollar subordinated capital debentures as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before redemption</td>
<td>(Redeemed/repurchased)</td>
</tr>
<tr>
<td><strong>PTTEP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuance and offering value</td>
<td>145.31</td>
<td>(145.31)</td>
</tr>
<tr>
<td>Net value from finance cost</td>
<td>144.66</td>
<td>(144.66)</td>
</tr>
<tr>
<td><strong>PTTEP TC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuance and offering value</td>
<td>354.69</td>
<td>(354.69)</td>
</tr>
<tr>
<td>Net value from finance cost</td>
<td>354.16</td>
<td>(354.16)</td>
</tr>
<tr>
<td><strong>PTTEP TC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuance and offering value</td>
<td>500.00</td>
<td>(469.15)</td>
</tr>
<tr>
<td>Net value from finance cost</td>
<td>499.29</td>
<td>(468.43)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuance and offering value</td>
<td>1,000.00</td>
<td>(969.15)</td>
</tr>
<tr>
<td>Net value from finance cost</td>
<td>998.11</td>
<td>(967.25)</td>
</tr>
</tbody>
</table>

1 The redemption of subordinated capital debentures is the first exercise of the redemption rights stipulated in the offering memorandum at the par value.

2 PTTEP TC repurchased the subordinated capital debentures in accordance with specified conditions and procedures.
### Financial Assets and Financial Liabilities

Financial assets and financial liabilities are classified as follows:

<table>
<thead>
<tr>
<th>Financial assets and financial liabilities</th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>2,822.90</td>
<td>3,180.10</td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>213.70</td>
<td>70.55</td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>0.52</td>
<td>11.01</td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>534.84</td>
<td>637.13</td>
</tr>
<tr>
<td>Trade and other accounts receivable</td>
<td>380.43</td>
<td>558.64</td>
</tr>
<tr>
<td>Other current assets</td>
<td>106.71</td>
<td>73.24</td>
</tr>
<tr>
<td>Long-term loans to related parties</td>
<td>86.06</td>
<td>95.50</td>
</tr>
<tr>
<td>Financial derivative assets</td>
<td>12.34</td>
<td>41.86</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>44.88</td>
<td>89.04</td>
</tr>
</tbody>
</table>

**Total financial assets**

|             | 270.92 | 83.68 | 4,002.43 | 0.52 | 200.00 | 112.41 | 25.00 | 4,633.65 | 11.01 | 820.53 |

Unit: Million US Dollar
<table>
<thead>
<tr>
<th>Financial liabilities</th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts payable and working capital to co-venturers</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current portion of long-term debts</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accrued expenses and interest payable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Financial derivative liabilities</td>
<td>15.21</td>
<td>3.88</td>
</tr>
<tr>
<td>Debentures and long-term loans</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total financial liabilities</td>
<td>15.21</td>
<td>3.88</td>
</tr>
</tbody>
</table>

Unit: Million US Dollar
### Consolidated Financial Report

#### Financial assets

<table>
<thead>
<tr>
<th></th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fair value through statement of income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans and accounts receivable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>-</td>
<td>15.81</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Fair value through statement of income</strong></td>
<td>-</td>
<td>103,193.56</td>
</tr>
<tr>
<td>Loans and accounts receivable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Available-for-sale financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Held-to-maturity financial assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td>8,169.66</td>
<td>150,360.49</td>
</tr>
</tbody>
</table>

#### Notes

- **Cash and cash equivalents**: N/A
- **Short-term investments**: N/A
- **Investments in trading securities**: N/A
- **Investments in available-for-sale securities**: N/A
- **Account receivable - parent company**: N/A
- **Trade and other accounts receivable**: N/A
- **Other current assets**: N/A
- **Long-term loans to related parties**: N/A
- **Financial derivative assets**: N/A
- **Other non-current assets**: N/A

**Unit: Million Baht**
### Consolidated Balance Sheet

#### Financial liabilities

<table>
<thead>
<tr>
<th>Description</th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts payable and working capital to co-venturers</td>
<td>3,603.54</td>
<td>3,901.58</td>
</tr>
<tr>
<td>Current portion of long-term debts</td>
<td>551.26</td>
<td></td>
</tr>
<tr>
<td>Accrued expenses and interest payable</td>
<td>23,201.11</td>
<td>19,892.09</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td></td>
<td>15,120.70</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>1,991.13</td>
<td>616.17</td>
</tr>
<tr>
<td>Financial derivative liabilities</td>
<td>458.76</td>
<td>125.79</td>
</tr>
<tr>
<td>Debentures and long-term loans</td>
<td>103,229.82</td>
<td>120,932.25</td>
</tr>
<tr>
<td>Other non-current liabilities</td>
<td>1,790.52</td>
<td>4.11</td>
</tr>
<tr>
<td><strong>Total financial liabilities</strong></td>
<td>458.76</td>
<td>102,674.45</td>
</tr>
</tbody>
</table>

Unit: Million Baht
### Financial assets

<table>
<thead>
<tr>
<th></th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>715.77</td>
<td>462.09</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>200.00</td>
<td>462.70</td>
</tr>
<tr>
<td>Investments in trading securities</td>
<td>70.54</td>
<td>-</td>
</tr>
<tr>
<td>Investments in available-for-sale securities</td>
<td>-</td>
<td>10.45</td>
</tr>
<tr>
<td>Account receivable - parent company</td>
<td>-</td>
<td>399.09</td>
</tr>
<tr>
<td>Trade and other accounts receivable</td>
<td>-</td>
<td>435.61</td>
</tr>
<tr>
<td>Short-term loans to related parties</td>
<td>-</td>
<td>1,175.45</td>
</tr>
<tr>
<td>Other current assets</td>
<td>325.53</td>
<td>71.29</td>
</tr>
<tr>
<td>Long-term loans to related parties</td>
<td>6,410.31</td>
<td>5,418.53</td>
</tr>
<tr>
<td>Financial derivative assets</td>
<td>64.10</td>
<td>25.00</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>4.98</td>
<td>4.62</td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td><strong>8,245.86</strong></td>
<td><strong>7,966.68</strong></td>
</tr>
</tbody>
</table>

**Unit: Million US Dollar**
### Financial liabilities

<table>
<thead>
<tr>
<th>Description</th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts payable and working capital to co-venturers</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current portion of long-term debts</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accrued expenses and interest payable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Financial derivative liabilities</td>
<td>12.03</td>
<td>-</td>
</tr>
<tr>
<td>Debentures and long-term loans</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total financial liabilities</td>
<td>12.03</td>
<td>695.42</td>
</tr>
</tbody>
</table>
## Financial Report 2019

### PTT Exploration and Production Public Company Limited

### Unit: Million Baht

<table>
<thead>
<tr>
<th>Financial asset</th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash and cash equivalents</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Short-term investments</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Investments in trading securities</strong></td>
<td>6.34</td>
<td>2,289.08</td>
</tr>
<tr>
<td><strong>Investments in available-for-sale securities</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Account receivable - parent company</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Trade and other accounts receivable</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Short-term loans to related parties</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Other current assets</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Long-term loans to related parties</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Financial derivative assets</strong></td>
<td>7.63</td>
<td>88.75</td>
</tr>
<tr>
<td><strong>Other non-current assets</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td>13.97</td>
<td>2,377.83</td>
</tr>
</tbody>
</table>

*Note: The above table represents the financial assets as of Dec 31, 2019 and Dec 31, 2018, including cash and cash equivalents, short-term investments, investments in trading securities, investments in available-for-sale securities, account receivable, trade and other accounts receivable, short-term loans to related parties, other current assets, long-term loans to related parties, financial derivative assets, and other non-current assets.*
## Notes to Financial Statements

**The Company**

<table>
<thead>
<tr>
<th></th>
<th>Dec 31, 2019</th>
<th>Dec 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value through</td>
<td></td>
<td></td>
</tr>
<tr>
<td>statement of income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hedging instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amortized cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade accounts payable and working capital to co-venturers</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current portion of long-term debts</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accrued expenses and interest payable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Financial derivative liabilities</td>
<td>362.65</td>
<td>-</td>
</tr>
<tr>
<td>Debentures and long-term loans</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total financial liabilities</td>
<td>362.65</td>
<td>-</td>
</tr>
</tbody>
</table>

Unit: Million Baht
38. **Share Capital**

As at December 31, 2019, 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:

<table>
<thead>
<tr>
<th>Ordinary shares issued and fully paid-up</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2019</td>
<td>3,969.98</td>
</tr>
<tr>
<td>New ordinary shares issued during the year</td>
<td>-</td>
</tr>
<tr>
<td>Balance as at December 31, 2019</td>
<td>3,969.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinary shares issued and fully paid-up</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at January 1, 2018</td>
<td>3,969.98</td>
</tr>
<tr>
<td>New ordinary shares issued during the year</td>
<td>-</td>
</tr>
<tr>
<td>Balance as at December 31, 2018</td>
<td>3,969.98</td>
</tr>
</tbody>
</table>

39. **Legal Reserve**

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Balance as at January 1</td>
<td>15.05</td>
<td>15.05</td>
</tr>
<tr>
<td>Appropriation during the year</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balance as at December 31</td>
<td>15.05</td>
<td>15.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Balance as at January 1</td>
<td>15.05</td>
<td>15.05</td>
</tr>
<tr>
<td>Appropriation during the year</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Balance as at December 31</td>
<td>15.05</td>
<td>15.05</td>
</tr>
</tbody>
</table>

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.
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:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Salary, wages and employees’ benefits</td>
<td>281.55</td>
<td>8,756.21</td>
</tr>
<tr>
<td></td>
<td>195.32</td>
<td>6,311.70</td>
</tr>
<tr>
<td>Repair and maintenance</td>
<td>152.24</td>
<td>4,724.80</td>
</tr>
<tr>
<td></td>
<td>143.90</td>
<td>4,960.36</td>
</tr>
<tr>
<td>Exploration well and projects write-off</td>
<td>76.76</td>
<td>2,368.68</td>
</tr>
<tr>
<td></td>
<td>0.67</td>
<td>21.47</td>
</tr>
<tr>
<td>Geological and geophysical expenses</td>
<td>50.57</td>
<td>1,569.38</td>
</tr>
<tr>
<td></td>
<td>29.28</td>
<td>945.52</td>
</tr>
<tr>
<td>Logistic</td>
<td>120.51</td>
<td>3,740.07</td>
</tr>
<tr>
<td></td>
<td>128.01</td>
<td>4,134.15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td>Salary, wages and employees’ benefits</td>
<td>271.30</td>
<td>8,425.81</td>
</tr>
<tr>
<td></td>
<td>146.76</td>
<td>4,742.62</td>
</tr>
<tr>
<td>Repair and maintenance</td>
<td>69.97</td>
<td>2,171.57</td>
</tr>
<tr>
<td></td>
<td>67.80</td>
<td>2,189.64</td>
</tr>
<tr>
<td>Geological and geophysical expenses</td>
<td>0.25</td>
<td>7.70</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Logistic</td>
<td>50.92</td>
<td>1,580.17</td>
</tr>
<tr>
<td></td>
<td>53.23</td>
<td>1,719.00</td>
</tr>
</tbody>
</table>

41. Earnings per Share

Basic earnings per share for the years are calculated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: US Dollar</th>
<th>Unit: Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td>Profit attributable to shareholders (Unit: Million)</td>
<td>1,569.06</td>
<td>48,802.54</td>
</tr>
<tr>
<td></td>
<td>1,119.61</td>
<td>36,206.29</td>
</tr>
<tr>
<td>Less: Interest expenses for subordinated capital debentures (Unit: Million)</td>
<td>(53.61)</td>
<td>(1,662.97)</td>
</tr>
<tr>
<td></td>
<td>(57.70)</td>
<td>(1,876.71)</td>
</tr>
<tr>
<td>Redemption of subordinated capital debentures (Unit: Million)</td>
<td>(23.59)</td>
<td>(716.29)</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures (Unit: Million)</td>
<td>3.07</td>
<td>94.44</td>
</tr>
<tr>
<td></td>
<td>4.75</td>
<td>154.78</td>
</tr>
<tr>
<td>Profit used to determine basic earnings per share (Unit: Million)</td>
<td>1,494.93</td>
<td>46,517.72</td>
</tr>
<tr>
<td></td>
<td>1,066.66</td>
<td>34,484.36</td>
</tr>
<tr>
<td>Weighted average number of ordinary shares outstanding during the year (million shares)</td>
<td>3,969.98</td>
<td>3,969.98</td>
</tr>
<tr>
<td></td>
<td>3,969.98</td>
<td>3,969.98</td>
</tr>
<tr>
<td>Basic earnings per share</td>
<td>0.38</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>11.72</td>
<td>8.69</td>
</tr>
</tbody>
</table>
### The Company

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit attributable to shareholders (Unit: Million)</td>
<td>1,135.72</td>
<td>811.52</td>
<td>35,275.10</td>
<td>26,275.64</td>
</tr>
<tr>
<td><strong>Less:</strong> Interest expenses for subordinated capital debentures (Unit: Million)</td>
<td>(13.63)</td>
<td>(17.40)</td>
<td>(422.13)</td>
<td>(564.10)</td>
</tr>
<tr>
<td>Redemption of subordinated capital debentures (Unit: Million)</td>
<td>(0.65)</td>
<td>-</td>
<td>(20.99)</td>
<td>-</td>
</tr>
<tr>
<td>Income tax for subordinated capital debentures (Unit: Million)</td>
<td>2.94</td>
<td>3.10</td>
<td>90.91</td>
<td>100.76</td>
</tr>
<tr>
<td><strong>Profit used to determine basic earnings per share (Unit: Million)</strong></td>
<td>1,124.38</td>
<td>797.22</td>
<td>34,922.89</td>
<td>25,812.30</td>
</tr>
<tr>
<td>Weighted average number of ordinary shares outstanding during the year (million shares)</td>
<td>3,969.98</td>
<td>3,969.98</td>
<td>3,969.98</td>
<td>3,969.98</td>
</tr>
<tr>
<td>Basic earnings per share</td>
<td>0.28</td>
<td>0.20</td>
<td>8.80</td>
<td>6.50</td>
</tr>
</tbody>
</table>

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

#### Consolidated financial statements for the year ended December 31, 2019

<table>
<thead>
<tr>
<th>Items</th>
<th>Exploration and production</th>
<th>Midstream</th>
<th>Pipeline</th>
<th>Others</th>
<th>Inter-company elimination</th>
<th>Group’s Total business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
<td>Africa</td>
<td>Others</td>
</tr>
<tr>
<td>Revenues - Third parties</td>
<td>276.73</td>
<td>721.58</td>
<td>-</td>
<td>0.41</td>
<td>-</td>
<td>52.95</td>
</tr>
<tr>
<td>- Related parties</td>
<td>4,280.74</td>
<td>636.66</td>
<td>-</td>
<td>-</td>
<td>66.79</td>
<td>-</td>
</tr>
<tr>
<td>Other revenues - Third parties</td>
<td>19.57</td>
<td>3.91</td>
<td>4.25</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest income</td>
<td>0.82</td>
<td>2.38</td>
<td>0.07</td>
<td>0.01</td>
<td>11.98</td>
<td>0.07</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>4,576.86</td>
<td>1,364.53</td>
<td>4.32</td>
<td>0.42</td>
<td>78.77</td>
<td>53.02</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>486.49</td>
<td>536.00</td>
<td>-</td>
<td>0.35</td>
<td>12.99</td>
<td>10.95</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td>-</td>
<td>74.99</td>
<td>-</td>
<td>1.47</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Write-off of exploration assets</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Geological and geophysical</td>
<td>1.61</td>
<td>29.20</td>
<td>2.80</td>
<td>3.70</td>
<td>0.07</td>
<td>14.26</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>43.09</td>
<td>39.68</td>
<td>12.75</td>
<td>4.74</td>
<td>23.79</td>
<td>7.29</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>527.57</td>
<td>18.76</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>1,511.06</td>
<td>423.09</td>
<td>0.09</td>
<td>0.12</td>
<td>29.94</td>
<td>13.47</td>
</tr>
<tr>
<td>(Gain) loss on foreign exchange</td>
<td>(39.64)</td>
<td>(31.26)</td>
<td>1.08</td>
<td>0.28</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Finance costs</td>
<td>104.71</td>
<td>37.27</td>
<td>-</td>
<td>-</td>
<td>0.72</td>
<td>1.21</td>
</tr>
<tr>
<td>Share of (gain) loss of associates and joint ventures</td>
<td>-</td>
<td>-</td>
<td>2.16</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>2,634.89</td>
<td>1,127.73</td>
<td>18.88</td>
<td>10.66</td>
<td>67.53</td>
<td>47.22</td>
</tr>
<tr>
<td>Segment profit (loss)</td>
<td>1,941.97</td>
<td>236.80</td>
<td>(14.56)</td>
<td>(10.24)</td>
<td>11.24</td>
<td>5.80</td>
</tr>
<tr>
<td>Depreciation - general</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrative expenses - general</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating profit</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other income, net</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest income</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gain on foreign exchange</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Loss on financial derivatives</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax - Project</td>
<td>(706.09)</td>
<td>(104.73)</td>
<td>-</td>
<td>0.09</td>
<td>2.97</td>
<td>(21.29)</td>
</tr>
<tr>
<td>- Group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Profit (Loss)</td>
<td>1,235.88</td>
<td>132.07</td>
<td>(14.56)</td>
<td>(10.15)</td>
<td>14.21</td>
<td>(15.49)</td>
</tr>
</tbody>
</table>
## Consolidated financial statements as at December 31, 2019

<table>
<thead>
<tr>
<th>Items</th>
<th>Exploration and production</th>
<th>Midstream</th>
<th>Pipeline</th>
<th>Inter-company elimination</th>
<th>Group's Total business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
<td>Africa</td>
</tr>
<tr>
<td>Assets</td>
<td>6,194.18</td>
<td>5,689.28</td>
<td>324.44</td>
<td>331.12</td>
<td>2,812.62</td>
</tr>
<tr>
<td>Investments under equity method</td>
<td>-</td>
<td>-</td>
<td>4.97</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unallocated assets</td>
<td>4,651.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>22,201.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Liabilities                  |                            |           |          |         |         |        |            |                |        |                          |                          |
| Segment liabilities          | 4,407.02                    | 1,315.80  | 3.71     | 5.23    | 74.19   | 425.91 | 9.90       | 136.49         | 35.62   | 6,413.87                 |                          |
| Unallocated liabilities      |                            |           |          |         |         |        |            |                |        | 3,946.46                 |                          |
| Total liabilities            | 10,360.33                   |           |          |         |         |        |            |                |        |                          | 10,360.33               |
| Capital Expenditures         | 930.29                      | 3,037.04  | 19.56    | 10.49   | 132.29  | 804.87 | 48.95      | 2.44           | 29.38   | 5,015.31                 |                          |

Unit: Million US Dollar
# Consolidated financial statements for the year ended December 31, 2019

<table>
<thead>
<tr>
<th>Items</th>
<th>Exploration and production</th>
<th>Midstream</th>
<th>Pipeline</th>
<th>Others</th>
<th>Inter-company elimination</th>
<th>Group’s Total business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
<td>Africa</td>
<td>Others</td>
</tr>
<tr>
<td>Revenues - Third parties</td>
<td>8,562.87</td>
<td>22,186.01</td>
<td>-</td>
<td>12.27</td>
<td>-</td>
<td>1,600.74</td>
</tr>
<tr>
<td>- Related parties</td>
<td>132,856.46</td>
<td>19,790.50</td>
<td>-</td>
<td>-</td>
<td>2,076.11</td>
<td>-</td>
</tr>
<tr>
<td>Other revenues - Third parties</td>
<td>605.13</td>
<td>120.86</td>
<td>130.10</td>
<td>-</td>
<td>-</td>
<td>0.09</td>
</tr>
<tr>
<td>Interest income</td>
<td>25.56</td>
<td>73.13</td>
<td>2.40</td>
<td>0.37</td>
<td>371.37</td>
<td>2.11</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>142,050.02</td>
<td>42,170.50</td>
<td>132.50</td>
<td>12.64</td>
<td>2,447.48</td>
<td>1,602.94</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>15,065.24</td>
<td>16,571.53</td>
<td>-</td>
<td>10.65</td>
<td>405.04</td>
<td>331.13</td>
</tr>
<tr>
<td>- Exploration expenses</td>
<td>49.60</td>
<td>900.23</td>
<td>85.74</td>
<td>114.34</td>
<td>2.27</td>
<td>438.81</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>1,336.57</td>
<td>1,226.96</td>
<td>396.85</td>
<td>147.89</td>
<td>728.52</td>
<td>222.04</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>16,374.66</td>
<td>570.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>46,901.78</td>
<td>13,066.00</td>
<td>2.99</td>
<td>3.62</td>
<td>930.91</td>
<td>407.13</td>
</tr>
<tr>
<td>(Gain) loss on foreign exchange</td>
<td>(1,216.95)</td>
<td>(955.13)</td>
<td>33.51</td>
<td>8.62</td>
<td>0.62</td>
<td>1.15</td>
</tr>
<tr>
<td>Finance costs</td>
<td>3,254.80</td>
<td>1,153.56</td>
<td>-</td>
<td>(0.01)</td>
<td>22.51</td>
<td>36.56</td>
</tr>
<tr>
<td>Share of (gain) loss of associates and joint ventures</td>
<td>-</td>
<td>-</td>
<td>66.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>81,765.68</td>
<td>34,847.05</td>
<td>585.14</td>
<td>331.05</td>
<td>2,089.87</td>
<td>1,436.81</td>
</tr>
<tr>
<td>Segment profit (loss)</td>
<td>60,284.34</td>
<td>7,323.45</td>
<td>(452.64)</td>
<td>(318.41)</td>
<td>357.61</td>
<td>166.13</td>
</tr>
<tr>
<td>Depreciation - general</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrative expenses - general</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating profit</td>
<td>72,665.35</td>
<td>441.27</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other income, net</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest income</td>
<td>2,210.10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs</td>
<td>(3,365.75)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gain on foreign exchange</td>
<td>1,218.06</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Loss on financial derivatives</td>
<td>(3,405.79)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td>69,754.24</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax - Project</td>
<td>(21,909.79)</td>
<td>(3,240.89)</td>
<td>-</td>
<td>2.67</td>
<td>92.46</td>
<td>(643.63)</td>
</tr>
<tr>
<td>- Group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Profit (Loss)</td>
<td>38,374.55</td>
<td>4,082.56</td>
<td>(452.64)</td>
<td>(315.74)</td>
<td>450.07</td>
<td>(477.50)</td>
</tr>
<tr>
<td>Items</td>
<td>Consolidated financial statements as at December 31, 2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exploration and production</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
<td>Africa</td>
<td>Others</td>
</tr>
<tr>
<td>Segment assets</td>
<td>186,779.22</td>
<td>171,554.53</td>
<td>9,783.19</td>
<td>9,984.71</td>
<td>84,811.69</td>
<td>29,669.96</td>
</tr>
<tr>
<td>Investments under equity method</td>
<td>-</td>
<td>-</td>
<td>149.90</td>
<td>-</td>
<td>-</td>
<td>2,408.86</td>
</tr>
<tr>
<td>Unallocated assets</td>
<td>140,247.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>669,464.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segment liabilities</td>
<td>132,889.12</td>
<td>39,676.75</td>
<td>112.01</td>
<td>157.60</td>
<td>2,237.25</td>
<td>12,842.77</td>
</tr>
<tr>
<td>Unallocated liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>28,871.66</td>
<td>93,748.08</td>
<td>606.98</td>
<td>321.12</td>
<td>4,105.72</td>
<td>24,324.07</td>
</tr>
</tbody>
</table>
## Consolidated financial statements for the year ended December 31, 2018

<table>
<thead>
<tr>
<th>Items</th>
<th>Exploration and production</th>
<th>Pipeline</th>
<th>Inter-company elimination</th>
<th>Group's Total business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
</tr>
<tr>
<td>Revenues - Third parties</td>
<td>303.65</td>
<td>357.68</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Related parties</td>
<td>3,745.36</td>
<td>596.39</td>
<td>143.80</td>
<td>-</td>
</tr>
<tr>
<td>Other revenues - Third parties</td>
<td>20.77</td>
<td>1.89</td>
<td>0.76</td>
<td>-</td>
</tr>
<tr>
<td>Interest income</td>
<td>0.69</td>
<td>0.37</td>
<td>0.23</td>
<td>-</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>4,070.47</td>
<td>956.33</td>
<td>144.79</td>
<td>-</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>435.98</td>
<td>392.63</td>
<td>70.17</td>
<td>-</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Write-off of exploration assets</td>
<td>0.60</td>
<td>(0.08)</td>
<td>0.15</td>
<td>-</td>
</tr>
<tr>
<td>- Geological and geophysical</td>
<td>1.60</td>
<td>9.01</td>
<td>1.34</td>
<td>21.20</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>34.99</td>
<td>38.32</td>
<td>22.00</td>
<td>4.27</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>469.66</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>1,371.23</td>
<td>339.72</td>
<td>62.82</td>
<td>0.01</td>
</tr>
<tr>
<td>(Gain) loss on foreign exchange</td>
<td>7.00</td>
<td>3.36</td>
<td>0.77</td>
<td>1.17</td>
</tr>
<tr>
<td>Other expenses</td>
<td>-</td>
<td>-</td>
<td>80.80</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs</td>
<td>103.60</td>
<td>37.63</td>
<td>3.34</td>
<td>-</td>
</tr>
<tr>
<td>Share of gain of associates and joint ventures</td>
<td>-</td>
<td>-</td>
<td>(0.10)</td>
<td>-</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>2,424.66</td>
<td>820.59</td>
<td>241.79</td>
<td>26.80</td>
</tr>
<tr>
<td>Segment profit (loss)</td>
<td>1,645.81</td>
<td>135.74</td>
<td>(96.35)</td>
<td>(26.80)</td>
</tr>
<tr>
<td>Depreciation - general</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative expenses - general</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating profit</td>
<td>1,879.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other income, net</td>
<td>12.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>81.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on foreign exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on financial derivatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income tax - Project</td>
<td>1,852.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Profit (Loss)</td>
<td>1,073.04</td>
<td>58.78</td>
<td>(151.25)</td>
<td>(26.80)</td>
</tr>
</tbody>
</table>
### Consolidated financial statement as at December 31, 2018

<table>
<thead>
<tr>
<th>Items</th>
<th>Exploration and production</th>
<th>Pipeline</th>
<th>Inter-company elimination</th>
<th>Group’s Total business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
</tr>
<tr>
<td>Segment assets</td>
<td>7,011.03</td>
<td>2,529.36</td>
<td>391.64</td>
<td>319.47</td>
</tr>
<tr>
<td>Investments under equity method</td>
<td>-</td>
<td>-</td>
<td>7.14</td>
<td>-</td>
</tr>
<tr>
<td>Unallocated assets</td>
<td>5,657.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>19,484.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segment liabilities</td>
<td>4,500.68</td>
<td>332.93</td>
<td>38.18</td>
<td>4.09</td>
</tr>
<tr>
<td>Unallocated liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>2,154.77</td>
<td>274.07</td>
<td>14.03</td>
<td>27.01</td>
</tr>
</tbody>
</table>
## Consolidated financial statements for the year ended December 31, 2018

<table>
<thead>
<tr>
<th>Items</th>
<th>Exploration and production</th>
<th>Pipeline</th>
<th>Others</th>
<th>Inter-company elimination</th>
<th>Group’s Total business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Third parties</td>
<td>9,814.29</td>
<td>11,552.96</td>
<td>-</td>
<td>-</td>
<td>3,481.65</td>
</tr>
<tr>
<td>- Related parties</td>
<td>121,250.42</td>
<td>19,286.71</td>
<td>4,619.92</td>
<td>-</td>
<td>1,803.20</td>
</tr>
<tr>
<td>Other revenues - Third parties</td>
<td>676.95</td>
<td>59.65</td>
<td>24.79</td>
<td>-</td>
<td>0.04</td>
</tr>
<tr>
<td>Interest income</td>
<td>22.29</td>
<td>11.98</td>
<td>7.41</td>
<td>0.10</td>
<td>-</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>131,763.95</td>
<td>30,911.30</td>
<td>4,652.12</td>
<td>0.10</td>
<td>1,803.24</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>14,107.19</td>
<td>12,690.18</td>
<td>2,259.15</td>
<td>-</td>
<td>443.94</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Write-off of exploration assets</td>
<td>19.16</td>
<td>(2.73)</td>
<td>-</td>
<td>5.04</td>
<td>-</td>
</tr>
<tr>
<td>- Geological and geophysical</td>
<td>50.14</td>
<td>292.07</td>
<td>43.45</td>
<td>702.49</td>
<td>371.44</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>1,130.02</td>
<td>1,236.73</td>
<td>714.38</td>
<td>138.54</td>
<td>228.37</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>15,204.94</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>44,409.76</td>
<td>10,971.34</td>
<td>2,015.59</td>
<td>0.35</td>
<td>837.13</td>
</tr>
<tr>
<td>(Gain) loss on foreign exchange</td>
<td>249.00</td>
<td>111.69</td>
<td>24.84</td>
<td>35.52</td>
<td>7 (78.88)</td>
</tr>
<tr>
<td>Other expenses</td>
<td>-</td>
<td>-</td>
<td>2,637.60</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs</td>
<td>3,360.58</td>
<td>1,216.83</td>
<td>107.21</td>
<td>-</td>
<td>17.58</td>
</tr>
<tr>
<td>Share of (gain) loss of associates and joint ventures</td>
<td>-</td>
<td>-</td>
<td>(3.24)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>78,530.79</td>
<td>26,516.11</td>
<td>7,798.98</td>
<td>881.94</td>
<td>1,890.58</td>
</tr>
<tr>
<td>Segment profit (loss)</td>
<td>53,233.16</td>
<td>4,395.19</td>
<td>(3,146.86)</td>
<td>(881.84)</td>
<td>(87.34)</td>
</tr>
<tr>
<td>Depreciation - general</td>
<td></td>
<td></td>
<td>(586.73)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative expenses - general</td>
<td></td>
<td></td>
<td>(5,970.02)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating profit</td>
<td></td>
<td></td>
<td>60,758.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other income, net</td>
<td></td>
<td></td>
<td>403.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td></td>
<td></td>
<td>2,645.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance costs</td>
<td></td>
<td></td>
<td>(4,150.66)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on foreign exchange</td>
<td></td>
<td></td>
<td>(225.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on financial derivatives</td>
<td></td>
<td></td>
<td>593.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit before income taxes</td>
<td></td>
<td></td>
<td>59,970.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income tax - Project</td>
<td>(18,532.58)</td>
<td>(2,483.43)</td>
<td>(1,792.70)</td>
<td>-</td>
<td>89.48</td>
</tr>
<tr>
<td>- Group</td>
<td></td>
<td></td>
<td>2,610.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Profit (Loss)</td>
<td>34,700.58</td>
<td>1,911.76</td>
<td>(4,939.56)</td>
<td>(881.84)</td>
<td>2.14</td>
</tr>
<tr>
<td>Items</td>
<td>Exploration and production</td>
<td>Pipeline</td>
<td>Others</td>
<td>Inter-company elimination</td>
<td>Group's Total business</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------</td>
<td>----------</td>
<td>---------</td>
<td>---------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td>Other Southeast Asia</td>
<td>Australia</td>
<td>America</td>
<td>Africa</td>
</tr>
<tr>
<td>Segment assets</td>
<td>227,506.86</td>
<td>82,077.26</td>
<td>12,708.72</td>
<td>10,366.86</td>
<td>84,278.68</td>
</tr>
<tr>
<td>Investments under equity method</td>
<td>-</td>
<td>-</td>
<td>231.54</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unallocated assets</td>
<td>183,579.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>632,256.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segment liabilities</td>
<td>146,046.31</td>
<td>10,803.65</td>
<td>1,238.76</td>
<td>132.70</td>
<td>1,373.98</td>
</tr>
<tr>
<td>Unallocated liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total liabilities</td>
<td>242,683.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>70,416.42</td>
<td>8,851.08</td>
<td>452.98</td>
<td>872.40</td>
<td>1,604.19</td>
</tr>
</tbody>
</table>
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, Africa and others.

- **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.

- **Midstream oil and gas**: The Group and partners jointly operate in gas processing business which processes natural gas into other petroleum products.

- 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 2019, average Dubai crude oil price decreased from prior year while the crude oil price has continued to increase from the beginning of the year and rised to its highest level in April at US Dollar 74 per barrel.
as a result of positive factors from the geopolitical tensions in the Middle East which cause the reduction of crude oil supply. However, according to the concern on global economic and the unresolved trade war between the United States of America and China, this resulted in a decrease and maintain of the oil price in the second half of 2019 at the level of approximately US Dollar 60 per barrel. Meanwhile, OPEC and other non-OPEC countries attempted to support oil price by continuously reduced crude oil production volume. According to the meeting in December 2019, major oil produces have a deal to cut down production by 0.5 million barrel per day from 1.2 million barrel per day, bringing the total curtailment of approximately 1.7 million barrel per day. The reduction will be extended to March 2020. The average Dubai crude oil price for the year is approximately US Dollar 63.5 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, 2019, the Group entered into oil price hedging derivatives for the year 2020 totaling 15.79 million barrels.

### Inflation 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, 2019, the Group has a proportion of float interest rate debt at 18% of total debt after entering into the interest rate swaps (in 2018, all debts were fixed interest rate debts after entering into the interest rate swaps). The weighted average interest rates of total debts was 4.41% per annum (in 2018, it was 5.32% per annum).

The changes in the Group’s interest rates on borrowing as at January 1, 2020, if the floating interest rate on debt increased by 1% per annum, the profit before income taxes would decrease by approximately US Dollars 6.10 million (in 2019, 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). 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, 2020. 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 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 as at December 31, 2019 and 2018, the other currencies had fluctuated 10% against the functional currency, the possible changes to the Group’s profit before income taxes are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consolidated Exposure of asset and liability position to the exchange rate</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>For the year ended December 31, 2019</td>
<td></td>
</tr>
<tr>
<td>Profit before income taxes decrease</td>
<td>(19)</td>
</tr>
<tr>
<td>(10% US Dollar appreciation)</td>
<td></td>
</tr>
<tr>
<td>Profit before income taxes increase</td>
<td>19</td>
</tr>
<tr>
<td>(10% US Dollar depreciation)</td>
<td></td>
</tr>
<tr>
<td>For the year ended December 31, 2018</td>
<td></td>
</tr>
<tr>
<td>Profit before income taxes increase</td>
<td>8</td>
</tr>
<tr>
<td>(10% US Dollar appreciation)</td>
<td></td>
</tr>
<tr>
<td>Profit before income taxes decrease</td>
<td>(8)</td>
</tr>
<tr>
<td>(10% US Dollar depreciation)</td>
<td></td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Within 1 year</th>
<th>Over 1 year but not exceeding 3 years</th>
<th>Over 3 years but not exceeding 5 years</th>
<th>Over 5 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts payable and working capital to co-venturers</td>
<td>119.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>119.50</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>749.65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>749.65</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>66.03</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>66.03</td>
</tr>
<tr>
<td>Deferred considerations acquired through business acquisition</td>
<td>-</td>
<td>5.79</td>
<td>1.31</td>
<td>-</td>
<td>7.10</td>
</tr>
<tr>
<td>Consideration paid for participating interest in joint venture</td>
<td>-</td>
<td>51.86</td>
<td>-</td>
<td>-</td>
<td>51.86</td>
</tr>
<tr>
<td>Loan from financial institutions with floating rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>-</td>
<td>-</td>
<td>600.00</td>
<td>-</td>
<td>600.00</td>
</tr>
<tr>
<td>Interest paid *</td>
<td>17.31</td>
<td>35.65</td>
<td>35.69</td>
<td>-</td>
<td>88.65</td>
</tr>
<tr>
<td>Debentures with fixed interest rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>-</td>
<td>1,197.45</td>
<td>-</td>
<td>1,518.06</td>
<td>2,715.51</td>
</tr>
<tr>
<td>Interest paid*</td>
<td>114.55</td>
<td>169.34</td>
<td>149.41</td>
<td>1,514.45</td>
<td>1,947.75</td>
</tr>
<tr>
<td>Cash outflow from foreign currency and interest rate swap **</td>
<td>31.30</td>
<td>535.70</td>
<td>35.36</td>
<td>428.53</td>
<td>1,030.89</td>
</tr>
<tr>
<td>Cash inflow from foreign currency and interest rate swap **</td>
<td>29.55</td>
<td>550.80</td>
<td>36.49</td>
<td>460.09</td>
<td>1,076.93</td>
</tr>
<tr>
<td>Cash outflow from forward foreign exchange **</td>
<td>1,494.63</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,494.63</td>
</tr>
<tr>
<td>Cash inflow from forward foreign exchange **</td>
<td>1,483.45</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,483.45</td>
</tr>
</tbody>
</table>

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 30, 2019 at Baht 30.154 per US Dollar.

* Interest paid represents the interest payment due within 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:

<table>
<thead>
<tr>
<th>Credit limit</th>
<th>Undrawn amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term committed bank credit facility</td>
<td>265.30</td>
</tr>
<tr>
<td>Short-term uncommitted bank credit facility</td>
<td>480.33</td>
</tr>
</tbody>
</table>

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 30, 2019 at Baht 30.154 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 2019 and 2018, the Company’s credit ratings as assigned by prominent credit rating agencies are as follows:

<table>
<thead>
<tr>
<th>Rating Agency</th>
<th>Foreign Currency</th>
<th>Domestic Currency</th>
<th>Foreign Currency</th>
<th>Domestic Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moody’s</td>
<td>Baa1</td>
<td>Baa1</td>
<td>Baa1</td>
<td>Baa1</td>
</tr>
<tr>
<td>Standard and Poor’s</td>
<td>BBB+</td>
<td>BBB+</td>
<td>BBB+</td>
<td>BBB+</td>
</tr>
<tr>
<td>Fitch Ratings</td>
<td>BBB+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TRIS Rating (National Rating)</td>
<td>-</td>
<td>AAA</td>
<td>-</td>
<td>AAA</td>
</tr>
</tbody>
</table>
44. Dividends

On March 29, 2019, the Annual General Meeting of the Shareholders approved payment of a dividend for the year 2018 of Baht 5.00 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 and for the second half-year operations of 2018 at the rate of Baht 3.25 per share on April 11, 2019.

The Company estimated the dividend to its shareholders for the year 2019 at Baht 6 per share. The Company made an interim dividend payment for the first half-year operations of 2019 at the rate of Baht 2.25 per share on August 23, 2019. The remaining dividend for the second half-year operations of 2019 at the rate of Baht 3.75 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:

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consolidated</td>
<td>Consolidated</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>72.44</td>
<td>20.22</td>
</tr>
<tr>
<td>Over 1 year but not exceeding 5 years</td>
<td>81.49</td>
<td>41.00</td>
</tr>
<tr>
<td>Over 5 years</td>
<td>7.86</td>
<td>18.08</td>
</tr>
<tr>
<td>Total</td>
<td>161.79</td>
<td>79.30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Unit: Million US Dollar</th>
<th>Unit: Million Baht</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Company</td>
<td>The Company</td>
</tr>
<tr>
<td></td>
<td>Dec 31, 2019</td>
<td>Dec 31, 2018</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>5.14</td>
<td>7.23</td>
</tr>
<tr>
<td>Over 1 year but not exceeding 5 years</td>
<td>5.28</td>
<td>1.71</td>
</tr>
<tr>
<td>Over 5 years</td>
<td>1.22</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>11.64</td>
<td>8.94</td>
</tr>
</tbody>
</table>
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, 2019 was US Dollar 19.24 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 capital debentures of Baht 15,000 million and US Dollar 650 million for PTTEP Treasury Center Company Limited (PTTEP TC)
- The Company has commitment for the guarantee of subordinated capital debentures of US Dollar 30.85 million for PTTEP TC.
- The Company has commitment for the guarantee of unsecured and unsubordinated loans of US Dollar 600 million for PTTEP TC.
- The Company has commitment from entering into guarantee of a Cross Currency Swap transaction for PTTEP TC to swap Baht debenture for US Dollar with guaranteed amount of US Dollar 360 million.

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, 2019, 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 7.24 million). Currently, the negotiation between the buyer (PTT) and the seller is in process.

Contingent liabilities

- 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 Montara oil spill incident in the Timor Sea in 2009. 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. Currently, the case is under the court determination.

The Company considers that the claim from the representative of West Timorese seaweed farmers related to Montara oil spill incident remains 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 was the Group’s proportion.

In February 2016, Natuna 2 B.V. made an advance payment for all assessed tax and penalty to prevent additional penalty that may arise during the appeal, together with a submission of the objection of ITO’s tax assessment. 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.

Subsequently, the tax court judged that Natuna 2 B.V. won the case which resulted in recovering the full amount of advance payment in the first quarter of 2019. However, the ITO has appealed against the tax court’s judgment to the Supreme Court of Indonesia while Natuna 2 B.V. has submitted the argument letter. Currently, the case is under the court determination and will be finalized when it is judged by the Supreme Court.

- As at December 31, 2019, the Company had contingent liabilities in the form of letters of guarantee amounting to US Dollar 275.21 million (Baht 8,298.75 million) for the Company’s financial statements and US Dollar 383.54 million (Baht 11,565.17 million) for the consolidated financial statements.

46. Events after the Reporting Date

- On January 10, 2020, PTTEP Treasury Center Company Limited (PTTEP TC) has repurchased the subordinated capital debentures in the all of outstanding debentures at the amount of US Dollar 30.85 million.

- On January 15, 2020, PTTEP Canada International Finance Limited (PTTEP CIF) has repurchased the unsecured and unsubordinated capital debentures in the amount of US Dollar 220 million from totalling amount of US Dollar 700 million. The remaining of debentures after redemption has the amount of US Dollar 480 million. PTTEP CIF will exercise its Optional Redemption rights for the remaining debentures in accordance with the terms and conditions of the debentures.

- On January 15, 2020, PTTEP Treasury Center Company Limited (PTTEP TC) has issued and offered the 10-year unsecured and unsubordinated debentures in the amount of US Dollar 350 million with a fixed interest rate of 2.993% per annum, guaranteed by the Company.
On February 12, 2020, PTTEP Energy Holding (Thailand) Company Limited (PTTEP EH), a subsidiary of the Group, increased its authorized share capital by Baht 726,795,600 by issuing of 7,267,956 newly issued ordinary shares, at the par value of Baht 100 each.

On February 13, 2020, PTTEP Business Center Company Limited (PTTEP BC), a subsidiary of the Group, increased its authorized share capital by Baht 726,795,600 by issuing of 72,679,560 newly issued ordinary shares, at the par value of Baht 10 each.

On February 18, 2020, PTTEP MENA Limited (PTTEP MENA), a subsidiary of the Group, increased its authorized share capital by US Dollar 24,000,000 by increasing its par value per share to US Dollar 82,000.

The Company’s Board of Directors authorized for the issue of this financial statements on February 18, 2020.
The total Proved Reserves of PTTEP and our subsidiaries as of December 31, 2019 are shown in the attached table. The Proved Reserves are reviewed annually by Company’s earth scientists and reservoir engineers to ensure rigorous professional standards. The Proved Reserves are reported on a gross basis, which includes the Company’s net working interest and related host country’s interest.

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

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

As of December 31, 2019, the total amount of Proved Reserves of PTTEP Group’s projects¹ was 310 million stock-tank barrels (MMSTB) of crude oil and condensate², and 5,097 billion standard cubic feet (BSCF) of natural gas or 830 million barrels of oil equivalent (MMBOE). The total amount of Proved Reserves in terms of oil equivalent in consolidation was therefore 1,140 MMBOE. Proved Reserves of crude and condensate are approximately 27% while, for gas, are 73% of the total Proved Reserves in terms of oil equivalent.

In 2019, the total production of PTTEP Group¹ was 151 MMBOE, consisting of 41 MMSTB of crude oil and condensate² and 690 BSCF or 110 MMBOE of natural gas. This was equivalent to the production rate of approximately 413,640 barrels of oil equivalent per day (BOED), which was approximately 54,255 BOED or 15.1% increase from the previous year. The increase was mainly due to the acquisition of Murphy Oil Corporation in Malaysia and Partex Holding B.V.

¹ Include APICO Joint Venture project
² Include the proved reserves and production of LPG
## Crude Oil and Condensate and Natural Gas Proved Reserves (1)

<table>
<thead>
<tr>
<th></th>
<th>Crude Oil and Condensate (MMSTB)</th>
<th>Natural Gas (BSCF)</th>
<th>Barrel of Oil Equivalent (MMBOE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Foreign</td>
<td>Total</td>
</tr>
<tr>
<td>As of December 31, 2017</td>
<td>99</td>
<td>57</td>
<td>156</td>
</tr>
<tr>
<td>1) Revision of previous estimates</td>
<td>19</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>2) Improved recovery</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>3) Extensions and discoveries</td>
<td>14</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>4) Purchases/Sales of Petroleum in place</td>
<td>6</td>
<td>(8)</td>
<td>(2)</td>
</tr>
<tr>
<td>5) Production</td>
<td>(27)</td>
<td>(7)</td>
<td>(34)</td>
</tr>
<tr>
<td>As of December 31, 2018</td>
<td>116</td>
<td>48</td>
<td>164</td>
</tr>
</tbody>
</table>

Company’s share of reserves of consolidated companies

<table>
<thead>
<tr>
<th></th>
<th>Crude Oil and Condensate (MMSTB)</th>
<th>Natural Gas (BSCF)</th>
<th>Barrel of Oil Equivalent (MMBOE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Foreign</td>
<td>Total</td>
</tr>
<tr>
<td>As of December 31, 2018</td>
<td>116</td>
<td>48</td>
<td>164</td>
</tr>
<tr>
<td>1) Revision of previous estimates</td>
<td>13</td>
<td>(1)</td>
<td>12</td>
</tr>
<tr>
<td>2) Improved recovery</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3) Extensions and discoveries</td>
<td>2</td>
<td>45</td>
<td>47</td>
</tr>
<tr>
<td>4) Purchases/Sales of Petroleum in place</td>
<td>21</td>
<td>106</td>
<td>127</td>
</tr>
<tr>
<td>5) Production</td>
<td>(30)</td>
<td>(11)</td>
<td>(41)</td>
</tr>
<tr>
<td>Company’s share of Reserves of equity companies (3)</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>As of December 31, 2019</td>
<td>123</td>
<td>187</td>
<td>310</td>
</tr>
</tbody>
</table>

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

(2) LPG Included

(3) Included Reserves from APICO Joint Venture project
(B) **Capitalized Costs Relating to Oil and Gas Producing Activities**

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

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

<table>
<thead>
<tr>
<th>(Unit: Million US Dollar)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proved properties</td>
<td>31,152</td>
<td>26,731</td>
</tr>
<tr>
<td>Unproved properties</td>
<td>4,366</td>
<td>4,715</td>
</tr>
<tr>
<td><strong>Gross capitalized costs</strong></td>
<td><strong>35,518</strong></td>
<td><strong>31,446</strong></td>
</tr>
<tr>
<td>Accumulated depreciation, depletion, amortization and allowance for impairment</td>
<td>(22,277)</td>
<td>(20,218)</td>
</tr>
<tr>
<td><strong>Net capitalized costs</strong></td>
<td><strong>13,241</strong></td>
<td><strong>11,228</strong></td>
</tr>
</tbody>
</table>

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

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

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

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

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

<table>
<thead>
<tr>
<th>(Unit: Million US Dollar)</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Foreign</td>
</tr>
<tr>
<td>Acquisition of properties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Proved</td>
<td>60</td>
<td>2,580</td>
</tr>
<tr>
<td>- Unproved</td>
<td>-</td>
<td>22</td>
</tr>
<tr>
<td>Exploration costs</td>
<td>5</td>
<td>210</td>
</tr>
<tr>
<td>Development costs</td>
<td>594</td>
<td>354</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>659</td>
<td>3,166</td>
</tr>
</tbody>
</table>
(D) Results of operations for producing activities

Results of operations from oil and gas producing activities for the year 2019 and 2018 are shown in the following table.

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

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

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

Depreciation, depletion and amortization expenses relates to capitalized costs incurred in acquisition, exploration and development activities, transportation pipeline, including amortized decommissioning costs.

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

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

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

(Unit: Million US Dollar) 2019 2018

<table>
<thead>
<tr>
<th>Gross revenues</th>
<th>Domestic</th>
<th>Foreign</th>
<th>Total</th>
<th>Domestic</th>
<th>Foreign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales – Related parties</td>
<td>4,281</td>
<td>1,024</td>
<td>5,305</td>
<td>3,745</td>
<td>1,085</td>
<td>4,830</td>
</tr>
<tr>
<td>Sales – Third parties</td>
<td>276</td>
<td>891</td>
<td>1,167</td>
<td>304</td>
<td>465</td>
<td>769</td>
</tr>
<tr>
<td>Total sales</td>
<td>4,557</td>
<td>1,915</td>
<td>6,472</td>
<td>4,049</td>
<td>1,550</td>
<td>5,599</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>486</td>
<td>582</td>
<td>1,068</td>
<td>436</td>
<td>497</td>
<td>933</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td>2</td>
<td>127</td>
<td>129</td>
<td>2</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>General administrative expenses</td>
<td>43</td>
<td>94</td>
<td>137</td>
<td>35</td>
<td>76</td>
<td>111</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>528</td>
<td>19</td>
<td>547</td>
<td>470</td>
<td>-</td>
<td>470</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>1,511</td>
<td>497</td>
<td>2,008</td>
<td>1,371</td>
<td>459</td>
<td>1,830</td>
</tr>
<tr>
<td>Other (income) / expenses</td>
<td>(59)</td>
<td>(37)</td>
<td>(96)</td>
<td>(14)</td>
<td>83</td>
<td>69</td>
</tr>
<tr>
<td>Total expenses</td>
<td>2,511</td>
<td>1,282</td>
<td>3,793</td>
<td>2,300</td>
<td>1,158</td>
<td>3,458</td>
</tr>
<tr>
<td>Results before income taxes</td>
<td>2,046</td>
<td>633</td>
<td>2,679</td>
<td>1,749</td>
<td>392</td>
<td>2,141</td>
</tr>
<tr>
<td>Income tax expenses</td>
<td>706</td>
<td>210</td>
<td>916</td>
<td>573</td>
<td>237</td>
<td>810</td>
</tr>
<tr>
<td>Net results of operations</td>
<td>1,340</td>
<td>423</td>
<td>1,763</td>
<td>1,176</td>
<td>155</td>
<td>1,331</td>
</tr>
</tbody>
</table>
Standardized Measure of Discounted Future Net Cash Flows (SMDCF) Relating to the Proved Oil and Gas Reserves

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

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

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

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

* Twelve-month average prices are calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month.
### Standardized Measure of Discounted Future Net Cash Flows Relating to Prove Oil and Gas Reserves

(Unit: Million US Dollar)

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>Foreign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Future cash inflows</td>
<td>17,902</td>
<td>16,164</td>
<td>20,025</td>
</tr>
<tr>
<td>Future production costs</td>
<td>(2,784)</td>
<td>(2,660)</td>
<td>(4,946)</td>
</tr>
<tr>
<td>Future development costs</td>
<td>(7,548)</td>
<td>(6,048)</td>
<td>(3,682)</td>
</tr>
<tr>
<td>Future income tax expenses</td>
<td>(2,174)</td>
<td>(2,288)</td>
<td>(3,186)</td>
</tr>
<tr>
<td>Future net cash flows</td>
<td>5,396</td>
<td>5,168</td>
<td>8,211</td>
</tr>
<tr>
<td>10% annual discount</td>
<td>(1,091)</td>
<td>(818)</td>
<td>(4,039)</td>
</tr>
<tr>
<td>Standardized measure of discounted future net cash flows (SMDCF) of consolidated companies</td>
<td>4,305</td>
<td>4,350</td>
<td>4,172</td>
</tr>
<tr>
<td>SMDCF of equity companies</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total SMDCF</td>
<td>4,342</td>
<td>4,350</td>
<td>4,172</td>
</tr>
</tbody>
</table>

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

(Unit: Million US Dollar)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value at beginning of year of consolidated companies</td>
<td>6,811</td>
<td>5,399</td>
</tr>
<tr>
<td>Sales and transfers of oil and gas produced, net of production costs during period</td>
<td>(4,652)</td>
<td>(3,767)</td>
</tr>
<tr>
<td>Development costs incurred during the period</td>
<td>960</td>
<td>1,145</td>
</tr>
<tr>
<td>Net changes in prices and production costs</td>
<td>2,197</td>
<td>3,216</td>
</tr>
<tr>
<td>Net changes in development costs</td>
<td>(112)</td>
<td>(564)</td>
</tr>
<tr>
<td>Extensions, discoveries and improved recovery</td>
<td>4,414</td>
<td>1,412</td>
</tr>
<tr>
<td>Revisions of previous quantity estimates</td>
<td>415</td>
<td>579</td>
</tr>
<tr>
<td>Purchases / sales of petroleum in place</td>
<td>3,714</td>
<td>1,225</td>
</tr>
<tr>
<td>Accretions of discount</td>
<td>(3,143)</td>
<td>(1,045)</td>
</tr>
<tr>
<td>Net changes in income taxes</td>
<td>(2,127)</td>
<td>(789)</td>
</tr>
<tr>
<td>Present value at the year end of consolidated companies</td>
<td>8,477</td>
<td>6,811</td>
</tr>
<tr>
<td>Present value at the year end of equity company³</td>
<td>37</td>
<td>-</td>
</tr>
<tr>
<td>Total Present value at the year end</td>
<td>8,514</td>
<td>6,811</td>
</tr>
</tbody>
</table>

³ included investment in APICO Joint Venture project
**Other Information**

**Productive Oil/Condensate and Gas Wells**

The numbers of productive wells at December 31, 2019 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Oil/Condensate</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gross</td>
<td>Gross</td>
</tr>
<tr>
<td>Thailand</td>
<td>865</td>
<td>1,205</td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>129</td>
<td>286</td>
</tr>
<tr>
<td>Others</td>
<td>9,315</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>10,309</td>
<td>1,491</td>
</tr>
</tbody>
</table>

**Drilling in Progress of Oil/Condensate and Gas Wells**

The numbers of wells in progress at December 31, 2019 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Number of Well</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploratory</strong></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
</tr>
<tr>
<td><strong>Development</strong></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>16</td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>
### Net Oil/Condensate and Gas Wells Drilled Annually in 2019

<table>
<thead>
<tr>
<th></th>
<th>Productive Well</th>
<th>Dry Well</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploratory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td><strong>Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>342</td>
<td>12</td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>385</td>
<td>13</td>
</tr>
</tbody>
</table>
Quarterly Information in 2019 and 2018 for the consolidated financial statement are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Year 2019</th>
<th>Unit: US Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4thQ</td>
<td>3rdQ</td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>1,754,900,631</td>
<td>1,494,389,633</td>
</tr>
<tr>
<td>Revenue from pipeline transportation</td>
<td>25,211,924</td>
<td>29,453,709</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on foreign exchange</td>
<td>29,442,854</td>
<td>19,975,173</td>
</tr>
<tr>
<td>Interest income</td>
<td>13,597,516</td>
<td>12,741,830</td>
</tr>
<tr>
<td>Gain on financial derivatives</td>
<td>-</td>
<td>21,347,992</td>
</tr>
<tr>
<td>Other income</td>
<td>16,929,538</td>
<td>15,382,313</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>1,840,082,463</td>
<td>1,593,290,650</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>280,742,698</td>
<td>181,382,444</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td>27,496,976</td>
<td>59,091,981</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>132,383,175</td>
<td>93,950,863</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>151,527,598</td>
<td>135,608,689</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>577,988,263</td>
<td>511,721,459</td>
</tr>
<tr>
<td>Other expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on financial derivatives</td>
<td>41,020,245</td>
<td>-</td>
</tr>
<tr>
<td>Finance costs</td>
<td>62,434,355</td>
<td>59,800,813</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>1,273,593,310</td>
<td>1,041,556,249</td>
</tr>
<tr>
<td>Share of profit of associates and joint ventures</td>
<td>6,303,945</td>
<td>802,183</td>
</tr>
<tr>
<td><strong>Profit before income taxes</strong></td>
<td>572,793,098</td>
<td>552,536,584</td>
</tr>
<tr>
<td>Income taxes</td>
<td>(189,146,369)</td>
<td>(193,931,190)</td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td>383,646,729</td>
<td>358,605,394</td>
</tr>
<tr>
<td><strong>Basic earnings per share</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing operations</td>
<td>0.09</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Year 2018</td>
<td>4thQ</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>1,411,017,765</td>
<td>1,337,321,462</td>
</tr>
<tr>
<td>Revenue from pipeline transportation</td>
<td>29,190,306</td>
<td>29,987,855</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain on foreign exchange</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest income</td>
<td>22,703,516</td>
<td>19,802,410</td>
</tr>
<tr>
<td>Gain on financial derivatives</td>
<td>71,955,087</td>
<td>-</td>
</tr>
<tr>
<td>Other income</td>
<td>21,530,874</td>
<td>10,632,882</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>1,556,397,548</td>
<td>1,397,744,609</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>168,808,730</td>
<td>166,176,601</td>
</tr>
<tr>
<td>Exploration expenses</td>
<td>9,022,944</td>
<td>18,637,627</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>104,706,341</td>
<td>69,634,574</td>
</tr>
<tr>
<td>Petroleum royalties</td>
<td>133,659,700</td>
<td>121,414,377</td>
</tr>
<tr>
<td>Depreciation, depletion and amortization</td>
<td>484,519,932</td>
<td>496,344,211</td>
</tr>
<tr>
<td>Other expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on foreign exchange</td>
<td>7,386,463</td>
<td>6,059,895</td>
</tr>
<tr>
<td>Loss on financial derivatives</td>
<td>-</td>
<td>6,808,271</td>
</tr>
<tr>
<td>Other expenses</td>
<td>20,745,077</td>
<td>37,022,924</td>
</tr>
<tr>
<td>Finance costs</td>
<td>66,885,106</td>
<td>57,421,070</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>995,734,293</td>
<td>979,519,550</td>
</tr>
<tr>
<td>Share of profit of associates and joint ventures</td>
<td>1,699,603</td>
<td>2,285,467</td>
</tr>
<tr>
<td><strong>Profit (loss) before income taxes</strong></td>
<td>562,362,656</td>
<td>420,510,526</td>
</tr>
<tr>
<td>Income taxes</td>
<td>(294,011,392)</td>
<td>(105,156,779)</td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td>268,351,466</td>
<td>315,353,747</td>
</tr>
</tbody>
</table>

**Basic earnings per share**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>4thQ</th>
<th>3rdQ</th>
<th>2ndQ</th>
<th>1stQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing operations</td>
<td>0.07</td>
<td>0.07</td>
<td>0.03</td>
<td>0.10</td>
<td></td>
</tr>
</tbody>
</table>

Petroleum Sales Volume and Average Unit Prices
<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales of petroleum (BOED)</td>
<td>350,651</td>
<td>305,522</td>
</tr>
<tr>
<td>Average petroleum unit prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average unit prices of crude oil and condensate (USD/BBL)</td>
<td>61.18</td>
<td>67.40</td>
</tr>
<tr>
<td>Average unit prices of natural gas (USD/MMBTU)</td>
<td>6.92</td>
<td>6.42</td>
</tr>
<tr>
<td>Average unit prices of petroleum (USD/BOE)</td>
<td>47.24</td>
<td>46.66</td>
</tr>
<tr>
<td>Lifting cost (USD/BOE)</td>
<td>4.31</td>
<td>4.33</td>
</tr>
</tbody>
</table>