

## 2. Management Discussion and Analysis of Operating Results for 2013

### 2.1 PTTEP Performance

**Global macroeconomic overview:** In 2013, the global economy slowed down. The International Monetary Fund (IMF) projects global economic growth for 2013 to be 2.9%, a decrease from the 3.2% growth reported in 2012. The economic growth of developed market (DM) economies led the slowdown, while growth from emerging market economies (EM) was stagnant with no clear indication of expansion.

**Regional macroeconomic overview:** The IMF is currently in the progress of revising up its 2013 growth estimates for the United States (US), from its previous October forecast of 1.6%. The US economy grew at 2% during the second quarter of 2013, and recorded a year-high growth rate of 3.6% during the third quarter. Additionally, the US Bureau of Economic Analysis (BEA) announced a review of third quarter US Real Gross Domestic Product (GDP) which increased 4.1% from the continued expansion of private inventory investment, private domestic consumption and expenditure, investment in the residential property sector, and the renewed increase of local government expenditure. The US economy is showing signs of gradual recovery while also facing pressure from fiscal measures to reduce the budget deficit. Moreover, the US Central Bank has announced that it will begin to gradually taper its quantitative easing (QE) program in 2014 as the economy improves, with the timing and magnitude of the tapering dependent upon the pace of economic recovery. The US dollar, as a result, will likely appreciate, benefitting from a reduction of fiscal risk and an improved economy.

Eurozone economies are still in the early phase of recovery, with forecasted growth estimates for 2013 at -0.4%, an increase over the 2012 growth rate of -0.6%. During the third quarter of 2013, the Eurozone economy grew at 0.1%, versus a second quarter figure of 0.3%, with the recovery still at risk due to underlying fiscal conditions such as high levels of public debt, and high levels of unemployment. Moreover, the Eurozone's inflation rate of 0.7% is lower than the targeted 2% rate set by the European Central Bank (ECB), and therefore risks facing a deflationary situation similar to Japan. Consequently, the ECB has lowered its policy rate from 0.50 basis points to a historical low of 0.25 basis points; resulting in the likelihood of the Eurozone currency depreciating relative to the US dollar.

The Japanese economy expanded at a decreasing rate, with 2013 economic growth projected at 1.7%, a decrease relative to the 2% growth in 2012. During the third quarter, the economy grew at 0.3% versus the second quarter growth of 0.9%. Public expenditure increased 6.5% as a result of expansionary fiscal policies from the government resulting in a considerable amount of supplementary budget. Private consumption expenditure rose 0.1%, marking a consecutive growth over four quarters. On the other hand, exports decreased 0.6% due to lower exports to Asian and US markets, marking the first quarterly decrease after three consecutive quarters of growth.

The Chinese economy grew at a relatively stable rate, with 2013 growth projected at 7.7%, equivalent to the previous year's growth rate of 7.7%. In the third quarter, the Chinese economy expanded at 2.2% where in the second quarter it grew at 1.7%. During November, the country announced an economic reform plan focused on a market-driven economy, which is a significant reform relative to those of the past three decades. Particular emphasis is geared towards the financial sector where foreign exchange rates and interest rates will be governed by market dynamics, as well as towards the mechanisms for guaranteeing deposits which will involve screening and purging financially weak banks from the system in order to strengthen the industry in the long run and enable a stable economic recovery.

In Thailand, the Office of National Economic and Social Development Board (NESDB) announced the 2013 projected economic growth figure at 3%, a considerable decrease versus the 6.4% figure recorded in 2012. Thai economic growth during the third quarter slowed down to 2.7% versus the 3% growth rate of the same quarter of the previous year, and versus the 2.8% growth rate of the previous quarter. Household expenditure of durable goods decreased from a relatively high figure recorded during the same period last year, while expenditure on other goods and services contracted correspondingly with income and as lending to households were carried out with greater precaution due to the high levels of household debt. Private investment expenditure in the machinery & equipment sector decreased from previously high levels, whereas private investment expenditure in the construction sector continued to increase. Exports contracted due to sluggish global demand, but factors exist to support expansion in the production sector, particularly for hotels, restaurants, financials and transportation.

Politics was a key factor for the Thai economy in the fourth quarter of 2013. In 2014 the Thai economy is expected to grow at a slower pace due to the escalation of political conflicts which will likely require a considerable amount of time to resolve, and will directly impact the government's investment budget, as well as affect private investment and put pressure on household expenditure which is the largest contributor to Thailand's economy (approximately 55% of GDP). However, the Monetary Policy Committee (MPC) meeting held in October resolved to reduce the policy rate at by 0.25% per annum, from 2.50% to 2.25% per annum to support economic recovery.

The year 2013 was characterized by uncertainties in various factors of the global economy and of oil prices which consequently impacted energy costs and the Thai domestic economy. Examples include the slowdown of large emerging market economies which consume enormous amounts of energy such as that of China, the recovery of the US economy which is the largest importer of energy in the world, and the volatility of the Thai currency as a result of inwards and outwards capital flows. These factors had an effect on overall imports and exports and particularly on the cost of energy imports for Thailand. PTTEP closely monitors the economic and oil price conditions and reviews its operating and investment plans accordingly, such that they are aligned with the strategic plan. PTTEP also continuously carries out improvements in the organization's quality and capabilities to achieve sustainable growth in exploration, development and production.

PTTEP has operations in Thailand and internationally, altogether summing up to 42 projects in 10 countries. The following are the highlights of activities from key projects.

**Project Activity Highlights in Thailand:** PTTEP has 18 projects in Thailand which are mainly projects in the production phase located in both the Gulf of Thailand and onshore. The following section highlights the key project activities during over the course of 2013.

**S1 Project:** The project is the largest onshore crude oil field in Thailand covering the Kampaeng Phet, Sukhothai and Phitsnulok provinces. On 25 February 2013 the project achieved a record high production rate of 37,890 barrels per day (BPD), the highest since it began operations 30 years ago. In 2013, the project produced crude oil at an average rate of 32,749 BPD, and is able to maintain production levels above the 30,000 BPD rate through the of drilling new production wells, Artificial Lifting and Waterflooding. The project has drilled new exploration and appraisal wells to expand its production acreage in order to maintain crude oil production levels in the future.

**Bongkot Project:** The project, located in the south of the Gulf of Thailand, is the largest natural gas field in the Gulf of Thailand, and consists of the Greater Bongkot North and the Greater Bongkot South fields. During 2013 the project produced natural gas at an average rate of 920 Million Standard Cubic Feet per Day (MMSCFD) and condensates at an average rate of 32,486 BPD. The natural gas production from this project represents 20% of Thailand's natural gas demand.

**Project Activity Highlights in South East Asia:** PTTEP has 15 projects in this region with the following as key activities during 2013:

**Myanmar Zawtika Project:** The project is located offshore in the Gulf of Moattama, in the Republic of the Union of Myanmar, and is in the commissioning phase for commercial production in the first quarter of 2014. In 2013 the project completed the installation of 3 wellhead platforms, the laying of intra-field sealines, the laying of the offshore export pipeline and the installation of the central processing platform. The construction of the onshore pipeline and facility as well as the drilling of production wells are currently in progress.

**Myanmar M3 Project:** The project is located offshore in the Gulf of Moattama, in the Republic of the Union of Myanmar. During 2013 the project completed drilling four appraisal wells (Aung Sinkha-3, Aung Sinkha-4, Aung Sinkha-5 and

Aung Sinkha-6) with discoveries of gas and condensates in all four wells. The project is currently in the progress of conducting further studies to assess the commerciality of the project, and plans to drill 8 additional appraisal wells, commencing in the third quarter of 2014 for potential development and production from the Aung Sinkha field.

**Myanmar M11 Project:** The project is located offshore in the Gulf of Moattama, in the Republic of the Union of Myanmar. During 2013 the project completed drilling the Manizawta-1 deep water exploration well (MNZ-1) at a water depth of approximately 1,000 meters. The project did not encounter commercially viable petroleum, and is in the progress assessing the potential of remaining areas in order to plan for further activities.

**Myanmar PSC and EP-2 Project:** The project is located onshore, north of the city of Yangon. In December 2013, the project completed 2D seismic acquisition of 1,966 kilometers for the PSC-G field and 518 kilometers for the EP-2 field. The project is currently studying the geological structures in order to plan for 4 exploration wells in 2014-2015.

**Vietnam 16-1 Project:** The project, located offshore, south-east of Vietnam, successfully completed the drilling of an appraisal well in Area H5 of the Te Glac Trang Field (TGT field), and prepared plans to install a well head platform to support production from this area, which is expected to start production in 2015. During 2013, the project produced crude oil at an average rate of 44,641 BPD and natural gas at an average rate of 30 MMSCFD.

Additionally, the project has successfully tested the Floating Production Storage and Offloading Unit (FPSO) for a production rate of 60,000 BPD of crude oil. This has enabled the project to maintain its production rate at approximately 43,000 BPD despite having to share the FPSO, since May 2013, with another nearby project in Vietnam.

**Project Activity Highlights in Australasia:** PTTEP has 1 project in this region. The following are key highlights for 2013 from PTTEP's projects in this region.

**PTTEP Australasia Project:**

**Montara Field:** The field is located in the Timor Sea in Australia. Production from this field began in early June 2013, and in August 2013 the project sold its first offload of approximately 500,000 barrels of crude oil. The project is currently producing crude oil at an average rate of 17,000 BPD, and in 2014 the project plans to gradually ramp up its production rate from additional production wells to reach crude oil productions levels of approximately 25,000-30,000 BPD in the first half of 2014.

Regarding the compensation claims from insurance companies, since the time of the incident until the end of 2013, PTTEP has received a total compensation claim of USD 234 million, of which USD 21 million were received during the fourth quarter of 2013. The remaining compensation claims are in progress and PTTEP expects to receive the remaining claims during 2014.

With respect to the claim submitted by the Government of Indonesia for compensation for oil leakage from the Montara incident, PTTEP continues to assess the case with the Indonesian government through the use of scientific evidence to determine the impact (if any).

**Cash Maple Field:** The project, located in the Timor Sea in Australia, is progressing with geological and geophysics engineering studies and the analysis of commercial feasibility for the development of the Cash-Maple field. The drilling of an additional exploration well is planned for early 2014.

**Project Activity Highlights in North America:** PTTEP has 1 project in this region and the following are key highlights for 2013:

**Canada KKD Oil Sands Project:** The project, located in Alberta, Canada, completed the 2012-2013 Winter Evaluation Program for the assessment of bitumen quantities and production planning for Leismer, Corner and Thornbury. The Leismer field produced bitumen at an average rate of 14,800 BPD during 2013.

**Project Activity Highlights in Africa and the Middle East:** PTTEP has 7 projects in this region, with the following as key highlights in 2013:

**Algeria 433A and 416B:** The project is an onshore oil field located in the east of Algeria. In 2013, the project completed drilling 7 out of 12 total development wells, and is carrying out the construction of processing and pipeline facilities (EPC1) as well as the construction of living quarters and utility facilities (EPC2). Production is scheduled to begin by the end of 2014.

**Algeria Hassi Bir Rekaiz Project:** The project is an onshore oil field located in the east of Algeria. In 2013, the project completed drilling its first program of 9 exploration wells, and discovered crude oil and natural gas in 8 of those wells. The project is currently in the second exploration phase (May 2013 to May 2015), and is undergoing preparations to conduct 2D and 3D seismic acquisition as well as to drill additional appraisal wells. The seismic program and appraisal drilling is expected to commence during the first quarter of 2014.

**Mozambique Rovuma Offshore Area 1 Project:** The project is located off the coast of Mozambique, and is currently progressing with the development of offshore natural gas fields, and is planning the development of onshore Liquefied Natural Gas or LNG facilities construction in the industrial zone at Cape Afungi, in Cabo Delgado province in northern Mozambique. During 2013 the project drilled a total of 10 exploration and appraisal wells, and discovered natural gas in 6 of the wells, namely: Orca-1, Espadarte-1, Atum-3, Golfinho-5, Golfinho-6 and Manta-1. The drilling results for the remaining wells without commercial petroleum discoveries are being used as geological information for future fields.

Moreover, in 2014, the project has plans to drill 8 additional exploration and appraisal wells for continual exploration and assessment, as well as carry out the LNG Engineering and Construction Development as planned. The project expects to commence LNG production and sales towards the end of 2018 or in 2019.

**Kenya L5, L7, L11A, L11B and L12 Project:** The project is located in offshore Kenya, and in 2013 drilled 2 exploration wells, namely the Kiboko-1 well in the L11B field, and the Kubwa-1 well in the L7 field. Both wells made no petroleum discoveries in commercial quantities; however, the drilling results provide valuable data for further geological study. An additional exploration well is planned for 2014.

**Portfolio Management:** In 2013, PTTEP continued carrying out portfolio management activities to ensure appropriate investments and risk management while adding value to projects. To keep pace with the changing social, economic and political landscape, PTTEP, on a regular basis, studies and analyzes pertinent investment factors as well as impacts of investments to incorporate into its investment considerations and decisions. Additionally, the company reviews its target countries for expansion of its investments (Focused Countries) by grouping the countries according to the opportunities available, appropriateness and consistency with the company's direction and goals. The analysis is based on factors such as petroleum potential, geography, government sharing of interests, business and political risks, and PTTEP's competitive advantages. The following are highlights of PTTEP's portfolio management activities in 2013.

**Acquisition of Natuna Sea A:** The Natuna Sea A project is an oil and gas production project located in the West Natuna Sea, in Indonesia. In December 2013, PTTEP and Pertamina, on a 50:50 basis, completed the acquisition for the entity holding a 23% interest in the Natuna Sea A project. The total consideration for the acquisition consisted of USD 526 million for the purchase of the equity in Hess Corporation's subsidiary, and the assumption of USD 124 million of the subsidiary's intercompany debt. As a result, PTTEP has 11.5% interest in the Natuna Sea A project. The project is currently producing natural gas at an average rate of 220 MMSCFD, and crude oil at an average rate of 2,350 BPD.

The acquisition of the Natuna Sea A project follows PTTEP's strategic growth plan of acquiring producing assets which provide immediate contribution to growth in profits, production rate, and reserves. The project also serves to strengthen PTTEP's production base in South East Asia.

**Seeking Joint Venture Partners for Projects in the Republic of the Union of Myanmar:** In January 2013, the government of the Republic of the Union of Myanmar gave approval for Total E&P Myanmar (TEPM) and JX Nippon Oil & Gas Exploration (JX NOEX) to become partners in **Myanmar M11 Project** with 40% and 15% participation interests, respectively. PTTEP remains the operator and holds 45% participation interest.

In September of the same year, the government of the Republic of the Union of Myanmar also gave approval for Mitsui Oil Exploration Co. Ltd., (MOECO) to become a partner in the **Myanmar M3 Project** with 20% participation interest, while PTTEP holds the remaining 80% participation interest and is also the operator.

The search and selection of joint venture partners to participate in these projects follows PTTEP's portfolio management objective of ensuring appropriate levels of investment and risk while adding value to projects.

**Securing new exploration permits:** In 2013, the government of the Republic of the Union of Myanmar granted exploration rights for the **Myanmar MD-7 and MD-8 Project** to PTTEP. Both exploration fields are located in the deep waters of the Gulf of Moattama, and are adjacent to exploration fields in the Andaman Sea, in Thailand, where PTTEP has existing exploration rights, and will enable coordinated work effort.

**Relinquishment of various exploration rights:** In 2013, PTTEP relinquished exploration rights in several projects such as Australia W-423-P and Cambodia B, as well as relinquished exploration rights in the ACP17 and ACP 40 fields of the PTTEP Australasia project. The relinquishments have been approved by the respective governments.

Moreover, with respect to the Indonesia Sadang, Indonesia Sakari and the New Zealand Great South projects, as well as fields 21/8 and 6/48 in Thailand, PTTEP has submitted relinquishment documents to the respective governments of each project and is awaiting official approval.

In summary, although economic conditions in Thailand remain uncertain due to the political situation, the global economy is expected to continue expanding from the recovering global economies. PTTEP is expected to grow continuously and sustainability from its investments in both domestic and international assets such as from the Myanmar M3, Algeria Hassi Bir Rekaiz, Mozambique Offshore Area 1 projects, as well as from the Cash Maple field in the PTTEP Australasia project. Furthermore, PTTEP continues to operate without business interruption from the political situation in Thailand as a

result of its preparation and implementation of an effective Business Continuity Management (BCM) plan.

## 2.2 Results of Operations

Since 1 January 2011, PTTEP has determined the USD to be its functional currency in accordance with Thai Accounting Standard No.21 (revised 2009) “The Effects of Changes in Foreign Exchange Rates”. However, in submission of its financial statements to the Stock Exchange of Thailand and the Department of Business Development, the Company is also required to convert the financial statements from USD to the presentation currency, which is Thai Baht.

Detailed discussion of financial results for the year and final quarter are as follows:

### 2.2.1. Results of Operations – Full Year Comparison

	Millions of USD (excepting USD per share amounts)		Millions of Baht (excepting Baht per share amounts)	
	2013	2012	2013	2012
Earnings summary				
Total Revenues	7,445	7,021	228,741	218,137
Total Expenses	(4,090)	(3,826)	(126,065)	(118,846)
<b>Operating Income</b>	<b>3,355</b>	<b>3,195</b>	<b>102,676</b>	<b>99,291</b>
Share of gain from associates	6	5	191	145
<b>Income before income taxes</b>	<b>3,361</b>	<b>3,200</b>	<b>102,867</b>	<b>99,436</b>
Income tax expenses	(1,515)	(1,354)	(46,712)	(42,120)
<b>Net income</b>	<b>1,846</b>	<b>1,846</b>	<b>56,155</b>	<b>57,316</b>
Diluted earnings per share	0.46	0.55	14.07	17.08

<b>Income from normal operations</b>	<b>2,114</b>	<b>1,999</b>
Gain (Loss) from non-recurring items	(268)	(153)
<b>Net income</b>	<b>1,846</b>	<b>1,846</b>

Regarding the results of operations (Unaudited) for the year 2013, PTTEP and its subsidiaries’ totaled a net profit of USD 1,846 million (equivalent to 56,155 million baht) or USD 0.46 per share-diluted (equivalent to 14.07 baht per share-diluted), compared with 2012’s net profit of USD 1,846 million (equivalent to 57,316 million baht) or USD 0.55 per share-diluted (equivalent to 17.08 baht per share-diluted). Return on equity for 2013 was 16.45%.

PTTEP and subsidiaries’ net profit of USD 1,846 million for 2013 comprised the recurring net profit for this year, which amounted to USD 2,114 million, and the loss from non-recurring items, which amounted to USD 268 million.



For the results of recurring operations in 2013, PTTEP and subsidiaries' recurring net profit was USD 2,114 million, an increase of USD 115 million or 6% against 2012 which was USD 1,999 million. PTTEP and subsidiaries' return on equity from normal operations for 2013 was 18.84%.

For 2013, total revenues for PTTEP and its subsidiaries amounted to USD 7,445 million (equivalent to 228,741 million baht), an increase of USD 424 million or 6% against 2012 which was USD 7,021 million (equivalent to 218,137 million baht). The increase was mainly due to an increase of sales revenue of USD 483 million, caused by the following:

- (1) There was a higher average sales volume for 2013, which increased to 292,629 barrels of oil equivalent per day (BOED) against 2012, which was 275,923 BOED. This average sales volume increased from the net effect of the following:
  - Bongkot project: Sales volume of natural gas and condensate increased because Greater Bongkot South started its production as required by the Gas Sales Agreement in June 2012.
  - S1 project: Crude oil sales volume increased because of higher production volume produced from new wells and Artificial lift technique.
  - Vietnam 16-1 project: Sales volume increased because the Gas Sales Agreement was completely signed in November 2013, therefore, December 2013 is the first period that the project is able to recognize revenue from sales volume occurred during the period August 2011 to May 2013.
  - PTTEP Australasia project: Crude oil sales volume increased because Montara began offloading crude oil for sales in August 2013.
  - Natuna Sea A project: Sales volume of natural gas and condensate increased because of the acquisition of Natuna 2 B.V. which held interest in the Natuna Sea A Project in December 2013.

However, in

- Arthit project: Sales volume of natural gas and condensate decreased because of lower nomination from PTT.

The average sales volume for 2013, if excluded sales volume of Vietnam 16-1 project which the Gas Sales Agreement was completely signed in November 2013, would be 290,173 BOED

- (2) The higher average petroleum sales price for 2013, which rose to USD 65.58 per barrel of oil equivalent (BOE) against 2012, which was USD 64.86 per BOE. The increase was mainly due to an increase of average gas sales prices for 2013 comparing to those of 2012 based on price formula in the Gas Sales Agreements.

The average sales price for 2013, if excluded sales of Vietnam 16-1 project, would be 66.09 per BOE

PTTEP and subsidiaries' revenue from pipeline transportation from proportionate revenue in Moattama Gas Transportation Company (MGTC) and Taninthayi Pipeline Company LLC (TPC) remained stable comparing to those of 2012.

This year, PTTEP and subsidiaries' other revenues decreased by USD 76 million, principally because of the recognition of other income from the insurance claim from the Montara incident amounting USD 92 million in 2012; whereas, this insurance claim was recognized, amounting USD 21 million in 2013.

PTTEP and its subsidiaries incurred expenses for 2013 amounting to USD 4,090 million (equivalent to 126,065 million baht), an increase of USD 264 million or 7%, compared with USD 3,826 million (equivalent to 118,846 million baht) for 2012. This increase is attributed to the following:

- (1) Depreciation, depletion and amortization expenses escalated, amounting to USD 263 million, mainly from increases in the completed assets and production volume of the Bongkot and S1 projects, and from increase in completed assets of the Contract 4 and MTJDA-B17 project. In addition, they also increased from PTTEP Australasia project began offloading crude oil for sales in August 2013. However, depreciation, depletion and amortization expenses of the Vietnam 16-1 project decreased due to higher proved reserves and proved developed reserves revision in 2013.
- (2) Operating expenses increased amounting to USD 121 million, mainly from maintenance expenses of a planned shutdown of Greater Bongkot North, increased operating expenses of Greater Bongkot South since it started production as required by the Gas Sales Agreement in June 2012, and higher operating expenses of PTTEP Australasia project began offloading crude oil for sales in August 2013. In addition, they also increased from cost of diluent of the Canada Oil Sands KKD project.
- (3) Loss on foreign exchange increased amounting to USD 67 million. In 2012, PTTEP and subsidiaries recognized a loss on foreign exchange in the amount of USD 24 million mainly derived from the GBP loans to acquire Cover Energy Plc.; whereas, loss on foreign exchange was recognized, amounting USD 91 million in 2013 caused by the following:

- Loss on foreign exchange from USD transactions in PTTEP Canada Limited amounting to USD 52 million, mainly derived from USD loan given the CAD depreciation against the USD
- Loss on foreign exchange amounting to USD 39 million mainly due to an increase in realized and unrealized loss on foreign exchange from Thai Baht transactions given the Baht depreciation against the USD

However;

- (4) Impairment loss on assets decreased amounting to USD 204 million due to no recognition of impairment loss from Montara assets of PTTEP Australasia project in 2013; while, there was recognition of this impairment loss amount of USD 204 million in 2012 due to the increase of project cost, the delay of the first oil production and change in production profile.
- (5) Exploration expenses decreased amounting to USD 41 million due to:
  - Exploration expenses decreased amounting to USD 37 million, mainly from lower seismic cost of the PTTEP Australasia, A4/48 & A5/58 and Myanmar M11 projects; whereas, partial exploration expenses increased from seismic cost of Myanmar PSC G & EP2

While,

- Exploratory well write-off costs decreased amounting to USD 4 million. The exploratory well write-off costs of 2013 amount USD 68 million were driven by the Kenya L5, L7, L11A, L11B & L12 (USD 19 million), Mozambique Rovuma Offshore Area 1 (USD 19 million), Myanmar M11 (USD 11 million) and S1 projects (USD 10 million); while, there were USD 72 million exploratory well write-off costs in 2012, principally from the Bahrain 2, Canada Oil Sands KKD Oman 44 and Algeria Hassi Bir Rekaiz projects.

In 2013, PTTEP and subsidiaries incurred income tax expenses of USD 1,515 million, an increase of USD 161 million or 12%, against those of 2012 of USD 1,354 million. The increase was mainly due to increases in petroleum income tax and corporate income tax mainly from deferred income tax affected by functional currency given the Baht depreciation against the USD.

In 2013, PTTEP and subsidiaries recognized a loss from non-recurring items of USD 268 million, an increase loss of USD 115 million or 75%, against that of 2012 of USD 153 million, mainly resulted from the net effect of:

- (1) Higher loss from effect of foreign exchange amounted to USD 313 million caused by the following:
  - In 2013, income tax expenses affected by functional currency increased, amounting to USD 179 million against that of 2012. The increase was mainly due to higher deferred income tax liabilities,

because of a decrease in net assets after they were translated into USD on 31 December 2013, compared with net assets after they were translated into USD on 31 December 2012, given the Baht depreciation against the USD. The decrease of net assets resulted in a decrease of depreciation expenses in USD and an increase of future income tax amounted to USD 144 million, accordingly. However, in 2012, income tax expenses affected by the functional currency increased resulted in a decrease of future income tax amounted to USD 35 million given the Baht appreciation against the USD.

- Loss on foreign exchange increased amounting to USD 67 million. In 2012, PTTEP and subsidiaries recognized a loss on foreign exchange in the amount of USD 24 million mainly derived from the GBP loans to acquire Cover Energy Plc.; whereas, loss on foreign exchange was recognized, amounting USD 91 million in 2013 caused by the following:

- Loss on foreign exchange from USD transactions in PTTEP Canada Limited amounting to USD 52 million, mainly derived from USD loan given the CAD depreciation against the USD
- Loss on foreign exchange amounting to USD 39 million mainly due to an increase in realized and unrealized loss on foreign exchange from Thai Baht transactions given the Baht depreciation against the USD

(2) Other income from net impact from Montara incident decreased amounting to USD 65 million, principally because of the recognition of the insurance claim from the Montara incident amounting USD 21 million in 2013; whereas, this insurance claim was recognized, amounting USD 92 million in 2012.

However,

(3) Impairment loss on assets decreased amounting to USD 204 million due to no recognition of impairment loss from Montara assets of PTTEP Australasia project in 2013; while, there was recognition of this impairment loss amount of USD 204 million in 2012 due to the increase of project cost, the delay of the first oil production and change in production profile.

(4) Decommissioning costs decreased amounting to USD 52 million due to no recognition of decommissioning costs for Jabiru and Challis fields (abandonment field); while, there was additional recognition of this decommissioning costs amounting to USD 52 million in 2012.

## 2.2.2. Results of Operations - Quarterly Comparison

Earnings summary (Unit : Millions of USD, excepting USD per share amounts)	3 <sup>rd</sup> Quarter 2013	4 <sup>th</sup> Quarter 2013	4 <sup>th</sup> Quarter 2012
Total Revenues	1,841	1,904	1,954
Total Expenses	(996)	(1,227)	(1,128)
<b>Operating Income</b>	<b>845</b>	<b>677</b>	<b>826</b>
Share of gain from associates	2	1	1
<b>Income before income taxes</b>	<b>847</b>	<b>678</b>	<b>827</b>
Income taxes expenses	(281)	(440)	(378)
<b>Net income</b>	<b>566</b>	<b>238</b>	<b>449</b>
Diluted earnings per share	0.14	0.06	0.13
<b>Income from normal operation</b>	<b>600</b>	<b>393</b>	<b>494</b>
Gain(Loss) from non-recurring items	(34)	(155)	(45)
<b>Net income</b>	<b>566</b>	<b>238</b>	<b>449</b>

Earnings summary (Unit : Millions of Baht, excepting Baht per share amounts)	3 <sup>rd</sup> Quarter 2013	4 <sup>th</sup> Quarter 2013	4 <sup>th</sup> Quarter 2012
Total Revenues	57,937	60,402	59,949
Total Expenses	(31,374)	(38,982)	(34,586)
<b>Operating Income</b>	<b>26,563</b>	<b>21,420</b>	<b>25,363</b>
Share of gain from associates	70	31	15
<b>Income before income taxes</b>	<b>26,633</b>	<b>21,451</b>	<b>25,378</b>
Income taxes expenses	(8,828)	(14,024)	(11,610)
<b>Net income</b>	<b>17,805</b>	<b>7,427</b>	<b>13,768</b>
Diluted earnings per share	4.47	1.85	4.00

### Fourth Quarter of 2013 compared with Fourth Quarter of 2012

For the results of operations (Unaudited) in the fourth quarter of 2013, PTTEP and subsidiaries' net profit amounted to USD 238 million (equivalent to 7,427 million baht), or USD 0.06 per share-diluted (equivalent to 1.85 baht per share-diluted), a decrease of USD 211 million or 47% against the fourth quarter of 2012, which was USD 449 million (equivalent to 13,768 million baht), or USD 0.13 per share-diluted (equivalent to 4.00 baht per share-diluted). The return on equity for the fourth quarter of 2013 was 16.45%.

PTTEP and subsidiaries' net profit amounting to USD 238 million for the fourth quarter of 2013 comprised the recurring net profit for this period, which amounted to USD 393 million, and the loss from non-recurring items, which amounted to USD 155 million.

For the results of recurring operations in the fourth quarter of 2013, PTTEP and subsidiaries' recurring net profit was USD 393 million, a decrease of USD 101 million or 20% against the fourth quarter of 2012, which was USD 494 million. PTTEP and subsidiaries' return on equity from normal operations for the fourth quarter of 2013 was 18.84%.

For the fourth quarter of 2013, the total revenue was USD 1,904 million (equivalent to 60,402 million baht), a decrease of USD 50 million or 3% against the fourth quarter of 2012 which was USD 1,954 million (equivalent to 59,949 million baht). The decrease was mainly due to a decrease of sales revenue of USD 26 million, caused by the following:

- (1) The lower average petroleum sales price for the fourth quarter of 2013, which decreased to USD 64.48 per barrel of oil equivalent (BOE) against the fourth quarter of 2012, which was USD 66.38 per BOE.

The average sales price for 2013, if excluded sales of Vietnam 16-1 project, would be 66.46 per BOE.

However,

- (2) There was a higher average sales volume for the fourth quarter of 2013, which increased to 299,716 barrels of oil equivalent per day (BOED) against the fourth quarter of 2012, which was 294,233 BOED. This average sales volume increased from the net effect of the following:

- Vietnam 16-1 project: Sales volume increased because the Gas Sales Agreement was completely signed in November 2013, therefore, December 2013 is the first period that the project is able to recognize revenue from sales volume occurred during the period August 2011 to May 2013.
- PTTEP Australasia project: Crude oil sales volume increased because Montara began offloading crude oil for sales in August 2013.
- Natuna Sea A project: Sales volume of natural gas and condensate increased because of the acquisition of Natuna 2 B.V. which held interest in the Natuna Sea A Project in December 2013.

However, in

- Arthit project: Sales volume of natural gas and condensate decreased due to lower nomination from PTT.
- Yadana project: Sales volume of natural gas decreased because of 2 days partial production shutdown in the fourth quarter of 2013 and lower natural gas demand in the winter.

- Contract 4 project: In the fourth quarter of 2013, sales volume of natural gas decreased because of the lower nomination from PTT

The average sales volume for the fourth quarter of 2013, if excluded sales volume of Vietnam 16-1 project which the Gas Sales Agreement was completely signed in November 2013, would be 289,975 BOED.

PTTEP and subsidiaries' revenue from pipeline transportation from proportionate revenue in Moattama Gas Transportation Company (MGTC) and Taninthayi Pipeline Company (TPC) remained stable comparing to those of the fourth quarter of 2012.

PTTEP and subsidiaries incurred expenses amounting to USD 1,227 million (equivalent to 38,982 million baht) in the fourth quarter of 2013, an increase of USD 99 million or 9% against USD 1,128 million (equivalent to 34,586 million baht) for the fourth quarter of 2012. This increase was mainly caused by the following:

- (1) Depreciation, depletion and amortization expenses escalated, amounting to USD 101 million, mainly from increases in the value of completed assets of the Bongkot and S1 projects. In addition, they also increased from higher production volume of the PTTEP Australasia because Montara began offloading crude oil for sales in August 2013. However, Vietnam 16-1 project's depreciation, depletion and amortization expenses decreased due to higher proved reserve and proved developed reserves revision in 2013.
- (2) Loss on foreign exchange increased amounting to USD 63 million. In the fourth quarter of 2012, PTTEP and subsidiaries recognized a loss on foreign exchange in the amount of USD 2 million; whereas, in the fourth quarter of 2013 loss on foreign exchange was recognized, amounting USD 65 million caused by the following:
  - Loss on foreign exchange amounting to USD 47 million mainly due to an increase in realized and unrealized loss on foreign exchange from Thai Baht transactions given the Baht depreciation against the USD
  - Loss on foreign exchange from USD transactions in PTTEP Canada Limited amounting to USD 18 million, mainly derived from USD loan given the CAD depreciation against the USD
- (3) Administrative expenses increased, amounting to USD 33 million, mainly due to MTJDA-B17 project resulting from increased administrative expense paid to Malaysia-Thailand Joint Authority to in line with higher amount of condensate sales according to obligation in Production Sharing Contract. In addition, head office's administrative expenses also increased from geological data purchase and professional consultation fees.

- (4) Operating expenses increased amounting to USD 8 million, mainly from higher operating expenses of the PTTEP Australasia project began offloading crude oil for sales in August 2013, and higher maintenance expenses of the Bongkot project,

However, partial operating expenses decreased from cost of diluent of the Canada Oil Sands KKD project, in line with higher Diluted Bitumen sales volume, and from lower maintenance expenses of the MTJDA-B17 project.

While,

- (5) Impairment loss on assets decreased amounting to USD 95 million due to no recognition of impairment loss from Montara assets of PTTEP Australasia project in the fourth quarter of 2013; while, there was recognition of this impairment loss amount of USD 95 million in the fourth quarter of 2012 due to the increase of project cost and change in production profile.
- (6) Exploration expenses decreased amounting to USD 11 million due to:
  - Exploratory well write-off costs decreased amounting to USD 8 million. In the fourth quarter of 2013, the exploratory well write-off costs of USD 20 million were driven by the Myanmar M11 and S1 projects; whereas, in the fourth quarter of 2012 exploratory well write-off costs amounted to USD 28 million which was mainly from the Canada Oil Sands KKD and Oman 44 projects.
  - Exploration expenses decreased amounting to USD 3 million, mainly from lower seismic cost of the A4/48 & A5/58 projects; whereas, partial exploration expenses increased from seismic cost of Myanmar PSC G & EP2

In the fourth quarter of 2013, PTTEP and subsidiaries incurred income tax expenses of USD 440 million (equivalent to 14,024 million baht), an increase of USD 62 million or 16%, against the fourth quarter of 2012, which was USD 378 million (equivalent to 11,610 million baht). The increase was mainly due to an increase in corporate income taxes and petroleum income tax. However, overseas income tax decreased.

For the fourth quarter of 2013, PTTEP and subsidiaries' recognized loss from non-recurring items of USD 155 million, an increased loss of USD 110 million, against that of the fourth quarter of 2012 of USD 45 million, stemming from the following:

- (1) Higher loss from effect of foreign exchange amounted to USD 178 million caused by the following:
  - In the fourth quarter of 2013, income tax expenses affected by the functional currency increased, amounting to USD 78 million against that of the fourth quarter of 2012. The increase was mainly due to higher deferred income tax liabilities, because of a decrease in net



assets after they were translated into USD on 31 December 2013, compared with net assets after they were translated into USD on 30 September 2013, given the Baht depreciation against the USD. The decrease of net assets resulted in a decrease of depreciation expenses in USD and an increase of future income tax amounted to USD 74 million, accordingly. However, in the fourth quarter of 2012, income tax expenses affected by the functional currency increased resulted in a decrease of future income tax amounted to USD 4 million given the Baht appreciation against the USD.

▪ Loss on foreign exchange increased amounting to USD 63 million. In fourth quarter of 2012, PTTEP and subsidiaries recognized a loss on foreign exchange in the amount of USD 2 million; whereas, loss on foreign exchange was recognized, amounting USD 65 million in the fourth quarter of 2013 caused by the following:

- Loss on foreign exchange amounting to USD 47 million mainly due to realized and unrealized loss from Thai Baht transactions given the Baht depreciation against the USD
- Loss on foreign exchange from USD transactions in PTTEP Canada Limited amounting to USD 18 million, mainly derived from USD loan given the CAD depreciation against the USD

However,

- (2) Impairment loss on assets decreased amounting to USD 95 million due to no recognition of impairment loss from Montara assets of PTTEP Australasia project in the fourth quarter of 2013; while, there was recognition of this impairment loss amount of USD 95 million in the fourth quarter of 2012 due to the increase of project cost and change in production profile.
- (3) Loss on financial derivatives increased amounting to USD 23 million. In the fourth quarter of 2013, PTTEP and subsidiaries recognized a loss on financial derivatives in the amount of USD 9 million mainly derived from Mark to market of oil price hedge; whereas, gain on financial derivatives was recognized, amounting USD 14 million in the fourth quarter of 2013 mainly caused by gain from oil price hedge.

### **Fourth Quarter of 2013 compared with Third Quarter of 2013**

For the results of operations (Unaudited) in the fourth quarter of 2013, PTTEP and subsidiaries' net profit amounted to USD 238 million (equivalent to 7,427 million baht), or USD 0.06 per share-diluted (equivalent to 1.85 baht per share-diluted), a decrease of USD 328 million or 58% from the third quarter of 2013 of USD 566 million (equivalent to 17,805 million baht), or USD 0.14 per share-diluted (equivalent to 4.47 baht per share-diluted). Return on equity for the fourth quarter of 2013 was 16.45%.

PTTEP and subsidiaries' net profit of USD 238 million for the fourth quarter of 2013 comprised the recurring net profit for this period, which amounted to USD 393 million, and the loss from non-recurring items which amounted to USD 155 million.

For the results of recurring operations in the fourth quarter of 2013, PTTEP and subsidiaries' recurring net profit was USD 393 million, a decrease of USD 207 million or 35% against the third quarter of 2013 of USD 600 million. PTTEP and subsidiaries' Return on equity from normal operations for the fourth quarter of 2013 was 18.84%.

For the fourth quarter of 2013, the total revenue of PTTEP and subsidiaries was USD 1,904 million (equivalent to 60,402 million baht), an increase of USD 63 million or 3% from the third quarter of 2013's total of USD 1,841 million (equivalent to 57,937 million baht). The increase was mainly due to an increase of sales revenue of USD 40 million, caused by the following:

- (1) There was a higher average sales volume for the fourth quarter of 2013, which increased to 299,716 barrels of oil equivalent per day (BOED) against the third quarter of 2013, which was 286,578 BOED. This average sales volume increased from the net effect of the following:
  - Vietnam 16-1 project: Sales volume increased because the Gas Sales Agreement was completely signed in November 2013, therefore, December 2013 is the first period that the project is able to recognize revenue from sales volume occurred during the period August 2011 to May 2013.
  - B 8/32 and 9 A project: Sales volume of crude oil and natural gas decreased, resulting from a shutdown for Mercury Removal Unit maintenance in the third quarter of 2013; whereas, there was no this shutdown in the fourth quarter of 2013.
  - Bongkot project: Sales volume of natural gas and condensate increased due to no production shutdown in the fourth quarter of 2013, while, in the third quarter of 2013, there was shutdown, according to the annual maintenance plan.
  - Natuna Sea A project: Sales volume of natural gas and condensate increased because of the acquisition of Natuna 2 B.V. which held interest in the Natuna Sea A Project in December 2013.

However, in

- S1 project: Crude oil sales volume decreased in the fourth quarter of 2013 because of the normal planned maintenances.
- Oman 44 project: Sales volume of natural gas and condensate decreased mainly from lower condensate loadings.

The average sales volume for the fourth quarter of 2013, if excluded sales volume of Vietnam 16-1 project which the Gas Sales Agreement was completely signed in November 2013, would be 289,975 BOED

Whereas,

- (2) The average petroleum sales price for the fourth quarter of 2013, decreased to USD 64.48 per barrel of oil equivalent (BOE) against the third quarter of 2013, which was USD 65.71 per BOE.

The average sales price for 2013, if excluded sales of Vietnam 16-1 project, would be 66.46 per BOE

PTTEP and subsidiaries' revenue from pipeline transportation from proportionate revenue in Moattama Gas Transportation Company (MGTC) and Taninthayi Pipeline Company (TPC) remained stable comparing to those of the third quarter of 2013.

PTTEP and its subsidiaries had an increase in other income by USD 27 million. The increase mainly resulted from the recognition of insurance claims received from the Montara incident totaling USD 21 million during the fourth quarter of 2014; whereas, there was no recognition of such insurance claims in the third quarter of 2013.

PTTEP and subsidiaries incurred expenses of USD 1,227 million (equivalent to 38,982 million baht) in the fourth quarter of 2013, an increase of USD 232 million or 23% from the third quarter of 2013, which was USD 996 million (equivalent to 31,373 million baht). This decrease mainly stemmed from the following:

- (1) Administrative expenses increased, amounting to USD 73 million, mainly due to MTJDA-B17 project resulting from increased administrative expense paid to Malaysia-Thailand Joint Authority to in line with higher amount of condensate sales according to obligation in Production Sharing Contract. In addition, allocated administrative expenses increased from the Algeria 433 A & 416 B project and from the head office resulting from staff costs, geological data purchase and professional consultation fees.
- (2) Loss on foreign exchange increased amounting to USD 65 million. In the third quarter of 2013, PTTEP and subsidiaries recognized a gain on foreign exchange in the amount of USD 4 million presented under other income ; whereas, in the fourth quarter of 2013, loss on foreign exchange was recognized, amounting USD 65 million caused by the following:

- Loss on foreign exchange amounting to USD 47 million mainly due to an increase in realized and unrealized loss on foreign exchange from Thai Baht transactions given the Baht depreciation against the USD
  - Loss on foreign exchange from USD transactions in PTTEP Canada Limited amounting to USD 18 million, mainly derived from USD loan given the CAD depreciation against the USD
- (3) Depreciation, depletion and amortization expenses escalated, amounting to USD 50 million, mainly from higher production volume of the PTTEP Australasia because Montara began offloading crude oil for sales in August 2013, and from the Arthit project due to lower proved reserves and proved developed reserves revision. In addition, they also increased from an increases in the value of completed assets and production volume of the Contract 4, B8/32&9A and Bongkot projects.
- (4) Operating expenses increased amounting to USD 11 million, mainly from higher maintenance costs of the Bongkot project and higher operating expenses of the PTTEP Australasia project began offloading crude oil for sales in August 2013. However, partial operating expenses decreased from the Canada Oil Sands KKD project.
- (5) Exploration expenses increased amounting to USD 9 million due to:
- Exploration expenses increased amounting to USD 7 million, mainly from higher cost of geological studies of the Canada Oil Sands KKD project.
  - Exploratory well write-off costs increased amounting to USD 2 million. In the fourth quarter of 2013, the exploratory well write-off costs of USD 20 million were driven by the Myanmar M11 and S1 projects; whereas, in the third quarter of 2013 exploratory well write-off costs of USD 18 million was mainly from the Kenya L5, L7, L11A, L11B and L12 projects (USD 15 million)

In the fourth quarter of 2013, PTTEP and subsidiaries incurred income tax expenses of USD 440 million, an increase of USD 159 million or 57%, against the third quarter of 2013, which was USD 281 million. The increase was mainly due to an increase in petroleum income tax and corporate income taxes.

For the fourth quarter of 2013, PTTEP and subsidiaries' recognized loss from non-recurring items of USD 155 million, an increase loss of USD 121 million, against that of the third quarter of 2013 of USD 34 million, stemming from the following:

- (1) Higher loss from effect of foreign exchange amounted to USD 148 million caused by the following:

- In the fourth quarter of 2013, income tax expenses affected by the functional currency increased, amounting to USD 53 million against that of the third quarter of 2013. The increase was mainly due to higher deferred income tax liabilities, because of a decrease in net assets after they were translated into USD on 31 December 2013, compared with net assets after they were translated into USD on 30 September 2013, given the Baht depreciation against the USD. The decrease of net assets resulted in a decrease of depreciation expenses in USD and an increase of future income tax amounted to USD 74 million, accordingly. However, in the third quarter of 2013, income tax expenses affected by the functional currency resulted in an increase of future income tax amounted to USD 21 million.

- Loss on foreign exchange increased amounting to USD 65 million. In third quarter of 2013, PTTEP and subsidiaries recognized a gain on foreign exchange in the amount of USD 4 million; whereas, loss on foreign exchange was recognized, amounting USD 65 million in the fourth quarter of 2013 caused by the following:

- Loss on foreign exchange amounting to USD 47 million mainly due to realized and unrealized loss from Thai Baht transactions given the Baht depreciation against the USD
- Loss on foreign exchange from USD transactions in PTTEP Canada Limited amounting to USD 18 million, mainly derived from USD loan given the CAD depreciation against the USD

However,

- (2) Other income from net impact from Montara incident increased amounting to USD 27 million, principally because of the recognition of the insurance claim from the Montara incident amounting USD 21 million in the fourth quarter of 2013; whereas, there was no this insurance claim recognition in the third quarter of 2013.

### 2.2.3. Financial position

	Unit : Millions of USD		Unit : Millions of Baht	
	Dec 31, 2013	Dec 31, 2012	Dec 31, 2013	Dec 31, 2012
<b>Total Assets</b>	<b>21,572</b>	<b>19,637</b>	<b>707,867</b>	<b>601,513</b>
Current Assets	4,105	4,031	134,719	123,483
Non-current Assets	17,467	15,606	573,148	478,030
<b>Total Liabilities</b>	<b>9,844</b>	<b>8,926</b>	<b>323,012</b>	<b>273,409</b>
Current Liabilities	2,633	2,375	86,383	72,749
Non-current Liabilities	7,211	6,551	236,629	200,660
<b>Shareholders' Equity</b>	<b>11,728</b>	<b>10,711</b>	<b>384,855</b>	<b>328,104</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>21,572</b>	<b>19,637</b>	<b>707,867</b>	<b>601,513</b>

As of December 31, 2013, PTTEP and subsidiaries commanded total assets of USD 21,572 million (equivalent to 707,867 million baht), an increase of USD 1,935 million higher than the total on hand at the end of 2012 at which point total assets were USD 19,637 million (equivalent to 601,513 million baht). This increase was mainly due to

(1) An increase of USD 1,701 million in property, plant and equipment, mostly from petroleum exploration and production assets of the Zawtika Project, PTTEP Australasia Project, Bongkot Project, Arthit Project, and Natuna Sea A Project which is the result of the acquisition of Natuna B.V. in December 2013.

(2) An increase of USD 131 million in intangible assets and goodwill chiefly from the increase of goodwill amounting to USD 112 million from the acquisition of Natuna 2 B.V., the subsidiary of Hess Corporation, which holds interest in the Natuna Sea A project. As a result, the PTTEP has indirectly obtained 11.5% participating interest in the Natuna Sea A project. In addition, the increase in intangible assets and goodwill resulted from investing in exploration projects such as Mozambique Rovuma Offshore Area 1 and Algeria Hassi Bir Rekaiz projects.

(3) An increase of USD 74 million in current assets mainly from cash and cash equivalents. An increase of USD 65 million of cash and cash equivalents mainly from cash inflow of operating activities and bond issuance, offset with cash outflow in the exploration and production assets, and repayment of bond from financial institutions and from dividend payments for the second half of 2012 and the first half of 2013. Moreover, the current assets also increased from the increasing of inventory amount of USD 26 million and the parent company accounts receivable amount of USD 24 million.

Most current assets as of December 31, 2013 were cash and cash equivalents; parent company accounts receivable; and materials and supplies. A large proportion of the non-current assets as of December 31, 2013 were assets used in joint-venture exploration and production, presented under property, plant, and equipment; intangible assets; and goodwill. PTTEP and subsidiaries Current Ratio as of December 31, 2013, was 1.56 times.

PTTEP and subsidiaries had total liabilities of USD 9,844 million (equivalent to 323,012 million baht), an increase of USD 918 million higher than the total liabilities at the end of 2012, when total liabilities were USD 8,926 million (equivalent to 273,409 million baht), principally due to

- (1) An increase of USD 258 million in current liabilities mainly from:
  - A current portion of long-term debts increased of USD 193 million, primarily from the reclassification a portion of the Thai baht debentures of 11,700 million baht (equivalent to USD 373 million) from non-current liabilities to current liabilities. Moreover, during the second quarter of 2013, there was repayment of Thai baht debentures of 5,000 million baht (equivalent to USD 166 million)
  - Income tax payable increased of USD 51 million due to the increase of corporate income tax and petroleum income tax
  - Accrued expenses decreased of USD 73 million mostly derived from the PTTEP Australasia project's decreases of accrued expenses of the cost of production asset construction

However,

- (2) An increase of USD 660 million in non-current liabilities mainly from:
  - An increase in provision for decommissioning costs amounting to USD 363 million mainly from the Bongkot Project
  - An increase in debentures of USD 91 million mainly from the issuance of unsubordinated debentures of USD 500 million in September 2013 offset with the reclassification of a portion of Thai Baht debentures of 11,700 million baht (equivalent to USD 373 million) to current liabilities (current portion of long-term debts); together with a repurchase of a portion of 30 years USD unsecured and unsubordinated debentures amounting to USD 10 million of PTTEP CIF
- (3) An increase in deferred income tax liabilities amounting to USD 136 million, mainly from deferred income tax liabilities resulting from effect of foreign exchange in 2013 and from the acquisition of Natuna B.V. , the subsidiary of Hess Corporation, which holds interest in the Natuna Sea A project,.
- (4) An increase in provision for decommissioning costs amounting to USD 118 million mainly from the MTJDA B-17 and Zawtika Projects.

## **Capital Structure**

### **Bill of Exchange**

PTTEP maintains the Short-term Financing Program (“PF”) which involves the issuance of Bills of Exchange (B/Es) via Public Offerings to institutional and high net-worth investors in Thailand. B/Es are issued on a revolving basis with the total revolving credit of up to Baht 50,000 million. The B/Es facility was approved by the Resolution of the Board of Directors’ meeting in February 2009 and in November 2010.

As of 31 December 2013, there is no outstanding B/Es.

### **Bonds**

On 16 September 2013, PTTEP has issued 5 years unsecured and unsubordinated debentures to foreign institutional investors for the total amount of US Dollar 500 million with a coupon rate of 3.707% per annum.

The debentures has been rated BBB+ by Standard and Poor's and Baa1 by Moody's. The proceeds from the debentures issuance were used for general corporate purposes to support growth, including, but not limited to, funding petroleum exploration and production activities.

The Board of Directors and the general shareholders' meeting in year 2010 have approved the Company's issuing and offering of debentures, whose approved amount remaining was Baht 83,400 million.

On 24 September 2013 and 10 October 2013, PTTEP CIF repurchased USD 10 million of its 30 years USD 500 million with a coupon rate of 6.35% per annum unsecured and unsubordinated debentures which were issued in June 2012. It has cancelled out the repurchased debentures accordingly.

### **Subordinated Capital Debentures**

No subordinated capital debentures issuance in year 2013.

### **Short-term loans from financial institutions**

In February 2012, PTTEP entered into an unsecured, unsubordinated revolving credit facility agreement Baht 20,000 million. During the availability period of 5 years, the loan has a floating interest rate of THBFIX + 1.10%. The outstanding principal of the loan as of the end of the availability period may, subject to negotiation between the parties, be converted into a term loan to be repaid within 5 years after the end of the availability period. This revolving credit facility will be used for general corporate purposes.

The Board of Directors' meetings in year 2010 and 2011 approved the Company's entering into loan agreements, whose approved amount remaining was Baht 68,250 million.

As of 31 December 2013, there is no outstanding loan.



### **Long-Term Loans from financial institutions**

In March 2013, PTTEP Offshore Investment Company Limited (PTTEPO) has signed the Amendment Deed relating to the USD 500 million facility agreement dated November 24, 2010, and the Amendment Deed relating to the USD 75 million facility agreement dated December 1, 2010. The Amendment Deeds extend the final maturities of the Facility Agreements from November 2015 and December 2015, to November 2017 and December 2017, respectively.

The total outstanding loan as of 31 December 2013 was USD 575 million.

### **Commitment and Guarantee**

#### **Loans Agreement**

PTTEP has a subordinated loan agreement with Energy Complex Company Limited (EnCo) with the loan limit of Baht 1,250 million. The agreement was effective from April 2, 2009 and shall continue for 13 years and 6 months.

As of 31 December 2013, the outstanding loan to EnCo was Baht 580 million.

#### **Loan Guarantee**

PTTEP has guaranteed the unsecured and unsubordinated loan agreements of PTTEP Offshore Investment Company Limited (PTTEPO) with the total amount of USD 575 million.

PTTEP has guaranteed the unsecured and unsubordinated loan agreements of PTTEP Canada International Finance Limited (PTTEP CIF) with the total amount of CAD 475 million.

#### **Bond Guarantee**

PTTEP has guaranteed the unsecured and unsubordinated debentures of PTTEP Australia International Finance Pty Ltd (PTTEP AIF) with total amount of USD 700 million.

PTTEP has guaranteed the unsecured and unsubordinated debentures of PTTEP Canada International Finance Limited (PTTEP CIF) with total amount of USD 1,190 million.

### **Short Term Investment in Vayupak Fund 1**

PTTEP and its subsidiaries have invested in Vayupak Fund 1 for short term liquidity management with the policy to invest no longer than 1 year at a time, and with total investment not exceeding Baht 5 million.

The initial investment amount as at 12 December 2013 is as follow;

	Baht
PTT Exploration and Production Public Company Limited	4,800,000
PTTEP International Limited	100,000
PTTEP Siam Limited	100,000

### **Cash Flows**

For the year ended 31 December 2013, PTTEP and subsidiaries had a net cash flow from operating activities of USD 3,675 million, chiefly due to the cash received from sales revenue offset with cash payments of expenses and tax expenses.

PTTEP and subsidiaries experienced a net cash flow employed in its investing activities of USD 2,906 million, mainly resulting from:

(1) Additional investment in exploration and production assets as well as intangible assets, amounting to USD 2,666 million, principally from Zawtika, Bongkot, Arthit, and PTTEP Australasia projects.

(2) Payment of the acquisition of the share capital of Natuna 2 B.V., a subsidiary of Hess Corporation which hold interest in the Natuna Sea A Project, amounting to USD 266 million offset with cash on hand in Natuna 2 B.V. amounting USD 25 million, totaling a net payment of USD 241 million.

PTTEP and subsidiaries had a net cash flow used in financing activities of USD 704 million, resulting from the net effect of:

Cash payments of:

- Dividend payments amounting to USD 783 million.
- Bond payments amounting to USD 176 million.
- Interest payments for loans / subordinated capital debentures amounting to USD 174 million.
- Short-term loan payment amounting to USD 62 million.
- Financial costs payments amounting to USD 9 million

Cash receipts from:

- Bond issuance amounting to USD 500 million.

As of December 31, 2013, PTTEP and subsidiaries held total cash and cash equivalents of USD 2,357 million, an increase of USD 65 million from that of December 31, 2012 at which point cash and cash equivalents totaled USD 2,292 million.

### 2.3 Major Factors with Potential Impact on Operations

The oil price environment during the fourth quarter of 2013 is characterized by price volatility due to a number of factors. Dubai crude prices during the fourth quarter averaged 105.42 USD/bbl, a decrease versus the previous quarter's average of 105.95 USD/bbl, as well as a decrease relative to previous year's fourth quarter average of 107.49 USD/bbl. Dubai crude prices averaged 105.04 USD/bbl over the course of 2013, a decrease from the 2012 average price of 109.02 USD/bbl.

The reduced violence in Syria and Egypt towards the end of 2013 helped relieve supply concerns around crude oil exports to the rest of the world; crude oil prices, however, still remained volatile during the fourth quarter due to worries about the US debt ceiling, unrest in Libya, and unclear outcomes from the negotiations regarding solutions to the Iranian nuclear problem. Price volatility persisted with the subsequent successful talks with Iran regarding its nuclear program which resulted in expectations that Iranian crude oil production would contribute to future global supply.

In 2014, potential factors affecting oil price volatility include the anticipated increases of crude oil supply from Iraqi, Iranian and Libyan production, as well as from the US as a result of technological advances in shale oil production, causing a situation of excess crude oil in the global market. However, political uncertainty in the Middle East and violence in South Sudan may affect exports of crude oil. On the other hand, the recovery of the Eurozone, the increased prospects of global economic growth, as well as the local currency depreciation versus the US dollar of oil importing nations, are factors impacting the demand for crude oil.

PTTEP closely monitors global economic conditions and energy demands given the uncertainty and volatile conditions of the global economy and oil prices, and has developed the following guidelines for management of operations amidst the changing economic conditions.

**Responding to the increase in energy demand:** PTTEP's production rate between January and December 2013 averaged 329,471 barrels of oil equivalent per day (BOED), which is an increase over its average production rate over the same period in 2012 of approximately 313,972 BOED. During the fourth quarter of 2013, PTTEP produced at an average rate of 327,617 barrels of oil equivalent per day (BOED), a relatively flat figure compared to its previous quarter's average production rate of 327,127 BOED. Thailand's domestic energy demand, according the Ministry of Energy, in October 2013, was approximately 2 Million BOED, a year-on-year increase from 1.97 BOED or approximately 1.5%, driven by energy requirements for development of the economy. The Ministry Energy has established the direction of energy policies for 2013-2014 with emphasis on balancing the need for energy security and the development of renewable energy for the future, for example the production of ethanol, bio-plastics, and bio-diesel. The Ministry has also established policies geared towards energy conservation and efficient usage of energy as well as restructuring energy prices to accurately reflect the actual costs.

PTTEP has reviewed the supply plan and improved production in order to meet the rise in energy demand. PTTEP has been cooperating with the related government agencies to collectively outline an optimal supply plan, and forecast future energy demand from both domestic and neighboring countries, in both the short term and the long term. PTTEP has continuously been reviewing and adjusting its production plan as well as project development plans, including developing various technologies in exploration and production. Additionally, PTTEP is constantly seeking for investment opportunities in order to increase its reserves, with the purpose of meeting the nation's demand.

**Improving efficiency and cost optimization:** In 2013, PTTEP received an assessment recognizing its excellence within the PTT Group. PTTEP also received the Center of Excellence Awards for 2013 from PTT Group for Safety, Security, Health and Environment (SSHE) as well as for Performance Management.

During the fourth quarter of 2013, PTTEP, for the first time, officially appointed a PTTEP Operational Excellence Committee, with the Executive Vice President of the Domestic Asset Group as the chairman of the committee.

Moreover, PTTEP participated in the Operational Excellence and OpEx Transformation project with other PTT Group companies in order to jointly define the direction, objectives and strategies for the development of quality and for the management of operational costs, with emphasis placed on continuous development and aligned objectives with PTT Group's plan in order to ensure sustainable Operational Excellence.

PTTEP manages its operational costs efficiently and transparently by continuing to adhere to its established Supply Chain Management policies. In 2013, the company implemented the Supply Chain Plus project which reduced operating costs by 14.65 million US Dollars, exceeding its cost reduction target of 12 million US Dollars. The success was achieved through the implementation of procurement and logistics strategies such as:

- Procurement from Low Cost Country (LCC)
- Preparation of Price Agreements for high volume items
- Usage of procurement strategies appropriate to varying situations and to volatile market conditions in order to procure goods and services at the most reasonable price.
- Inventory Optimization to reduce storage costs and inventory
- Enhancement of logistics performance through management and control in order to avoid vessel delays, and also to ensure accuracy and adequacy of shipments

PTTEP's procurement process has also been reviewed and amended to comply with the National Anti-Corruption Commission (NACC)'s law. The company has further announced that it has adopted the guidelines for Green Procurement, which focuses on procurement of products and services that are environmentally friendly, covering a total of 72 product and service categories including stationeries, IT equipment, electrical appliances, construction materials, cleaning materials, spare parts, and other green-labeled products.

PTTEP has also improved its procurement process to respond to the dynamic operational requirements of the business.

**Managing Risks on oil price volatility:** PTTEP enters into derivative contracts, using Brent crude as its reference price, to hedge pricing risks of the petroleum products related to the company. PTTEP continues to closely monitor events and economic conditions which have potential impact on oil prices. Moreover, PTTEP simulates scenarios of various oils price levels to assess and prepare operating plans for each scenario.

**Capability Development:** PTTEP realizes the urgency required in developing the organization's capabilities to prepare for business expansion into overseas territories which are increasingly challenging. PTTEP, therefore, has been developing a Center of Excellence (COE), and has set out clear plans with emphasis on enhancing knowledge in seven key areas which are important and aligned with the company's strategy for rapid growth. The seven areas for knowledge development include, (1) Exploration; (2) Production; (3) Frontier; (4) Capital Project Management; (5) Unconventional; (6) Merger & Acquisitions; and (7) Health, Security and Environment. PTTEP is currently in the process of defining key milestones to achieve in each year and preparing the corresponding action plans. Together with the establishment of a Technology Center, which will be the center of research for new technologies, PTTEP aims to develop knowledge and capabilities for the organization and its people. The Conceptual Design study for this Technology Center will commence in 2014.

**Safety, Security, Health and Environment (SSHE):** PTTEP strives to be Lost Time Injury free organization by 2013 through effective management of SSHE. PTTEP, in 2012, ranked in the top quartile of Lost Time Injury Frequency (LTIF) amongst the members of the International Association of Oil and Gas Producers (OGP). At the end of the fourth quarter of 2013, PTTEP achieved an LTIF of 0.18 and a Total Recordable Incidence Rate (TRIR) of 1.12. If PTTEP maintains its current LTIF and TRIR at the current levels, it will continue to rank in the top quartile of OGP members in 2013, with official announcements to be made in 2014. The hydrocarbon spill rate of PTTEP is at 2.92 tonnes per million tonnes production, which is better than the average rate of 7.94 tonnes per million tonnes production of OGP members. Additionally, to further strengthen PTTEP's safety culture and encourage the participation of employees to take part in creating SSHE awareness, and also as a part of the "Life Saving Program," PTTEP launched an interactive animation game called "Safety Rush" via mobile applications available through Appstore, Facebook, and PTTEP's SSHE intranet. This interactive application revolves around the notion of driving safely and can be used by everyone to promote vehicle-safety awareness.

PTTEP realizes the importance of safety for its employees at all levels and has communicated news related to safety and security risks from natural disasters, epidemics and social unrest. During the fourth quarter, PTTEP issued SSHE Alerts to all employees across the organization regarding the Songkhla security situation and the public demonstrations in Bangkok.

**Sustainable Development (SD):** PTTEP manages its strategy, direction and long-term objectives for sustainable growth with attention to economic, social and environmental governance. In 2013, PTTEP's 2012 Sustainable Development Report was given a GRI Application Level rating of A+. The GRI, or Global Reporting Initiative, is a standard framework for reporting on sustainable development, and encourages companies to measure and report on performance results of economic, social and environmental governance. The GRI standard promotes transparency and confidence in the sustainable development report. This is the first time that PTTEP's SD report is recognized at the highest level of the GRI standard.

To further underscore PTTEP's commitment to sustainable development, PTTEP also recognizes the dangers of climate change and global warming, and is committed to reducing and offsetting greenhouse gas (GHG) emissions from its operations. PTTEP, in 2013, achieved a GHG emissions reduction of 3.51%, which surpasses its targeted 3% reduction. PTTEP has also commissioned an external third party auditor to verify its GHG emissions books in order to ensure correct disclosure in accordance with the ISO 14064-1 standard.

Moreover, in 2013, the Company participated for the first time in the assessment of the Dow Jones Sustainability Index (DJSI). The assessment from the DJSI World Universe, Oil & Gas Industry Group, ranked PTTEP 21<sup>st</sup> out of 123 participating companies, with a score in the top fifteenth percentile of companies participating in the Carbon Disclosure Project (CDP) and DJSI assessment.

During the fourth quarter, PTTEP was also one of the seven companies in Southeast Asia and Hong Kong to receive, in Hong Kong, the Second Best Year-on-Year Disclosure Score Change in the Region award from the CDP's Climate Change Disclosure Reporting for CDP Asia Ex Japan. The award was presented to PTTEP for excellence in improving its climate change disclosure and reporting.

Moreover, the S1 Project located at the Sao Thian-A oil field in Sukhothai, through its recovery of associated gas for use in power generation resulting in the reduction of carbon dioxide equivalent to 26,000 tonnes of carbon credit per annum, enabled PTTEP to be approved and registered by the Executive Board of the United Nations Framework on Conventional Climate Change (UNFCCC), and to participate in the Clean Development Mechanism (CDM) in order to have the rights to purchase and sell carbon credits in the global market; making it the first project in the Thai oil and gas business to be registered.

**Corporate Social Responsibility (CSR):** PTTEP continues to carry out CSR activities to meet the needs of society in a sustainable manner. In 2013, PTTEP initiated in a reforestation campaign to reduce global warming and engaged in reforesting and maintaining 50,000 rais of forest area across 30 provinces. Additionally, under the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn, PTTEP carried out, in conjunction with the Department of National Parks and Kasetsart University, a reforestation project for the study of ecological systems in the Si Nakhon Khuean Khan Park. Furthermore, PTTEP's "Thai Heritage & World Heritage" campaign sponsors the budget for maintenance and repair of the Khao Yai Visitor's Center. The campaign also features cooperation with the Huai Kha Khaeng Wildlife and Nature Education Center in launching a local curriculum for studying tigers. PTTEP's heritage campaigns, recognize the importance of nature and wildlife preservation, and also include the conservation of the Irrawaddy Dolphins in Songkhla Lake. Moreover, the company gives importance to encouraging employee participation in activities to instill a sense of social and environmental responsibility. The "PTTEP Green Up" was organized to promote awareness for the conservation of nature through reforestation activities. The activity was joined by 2,163 people, including management, employees and their families.

In the areas surrounding its operations, PTTEP provides opportunities for education to support the development of a future workforce. In 2013, PTTEP granted 761 scholarships to students in the following five provinces: Suphanburi, Chumporn, Ranong, Nakorn Si Thammarat and Songkhla. The company also sponsored the "PTTEP: We Love Sports" project for schools in PTTEP's network in the following three provinces: Chumporn, Suphanburi, and Songkhla. Amongst many other projects, PTTEP also sponsors the restoration of ecological systems as well as also promotes occupational development through various projects. For example, PTTEP engaged in Artificial Coral Reef Projects in Amphur Langsuan and Amphur Thung Tako as well as in Chumporn Bay; in a marine habitat revival project involving the submergence of old fishing boats to the bottom of the sea; and in several crab bank projects in the Chumporn province. In the Songkha province, PTTEP engaged in a project to breed and nurse crab species back to the ecosystem in Amphur Singhnakorn, and also partnered with the Songkhla Municipality and the Srivijai University of Technology in Songkhla to create a knowledge park called PTTEP Smart Center to encourage the young to read as a basis for future learning.