

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

### 2.1 PTTEP Performance

**Global macroeconomic overview:** For 2013, the International Monetary Fund (IMF) revised its global GDP growth estimate from 3.1% p.a. to 2.9% p.a. due to the likelihood of the Quantitative Easing (QE) program being tapered in the near future, and also due to slower than expected GDP growth from the world's largest economies, namely China, the United States (US), and the Eurozone. While Chinese government officials announced a GDP growth target on 7.5% for 2013, the IMF decreased its growth expectations for China, the United States and the Eurozone from 7.8%, 1.7%, and -0.4% to, 7.6%, 1.6% and -0.6% respectively.

**Regional macroeconomic overview:** The US economy during the second quarter grew quarter-on-quarter (qoq) at 2.5%, versus its qoq growth during the first quarter of 1.1%. The second quarter growth was driven by consumption expenditure, real-estate and residential investments, private sector inventory investments and exports of goods and services. Factors impacting the US economy in the short term include the shutdown of multiple US government agencies on 1 October to 17 October this year due to the deadlock of budget negotiations in Congress, as well as the temporary increase of the debt-ceiling until 7 February 2014 to avoid the US government's default on its debt obligations. These factors potentially lower private sector confidence in consumption and investment spending resulting in a decrease in fourth quarters GDP forecast figures by 0.2 - 0.3% from 2.5%. (However, the temporary shutdown of US agencies is not expected to affect Thailand's export sector since the majority of Thai exports to the US consists of durable goods such as electronic and electrical appliances, and it is unlikely that a temporary shutdown of a few government agencies will affect the consumption of such products.)

The uncertainty regarding the outcome of the US budget and public debt ceiling discussions increases the likelihood that the Federal Reserve Bank of the United States (FED) will postpone its decision to taper its QE program to early 2014. However, on 9 October 2013, the IMF cautioned the FED about potential damages to the global bond markets, the risks of escalated bond yields and the volatility of capital flows in Emerging Market Economies, resulting from tapering the QE program too early.

The Eurozone economies showed signs of improvement, with GDP growth during the second quarter growing at 0.3% qoq after contracting for 6 consecutive quarters. An increase in household spending of 0.2% was a key factor moving the economy forwards out of the recession. However, the overall recovery of the Eurozone region is still fragile since total production output for the region is still well below pre-crisis levels, public debt to GDP ratios are high, and unemployment rates are elevated. The European Central Bank (ECB) maintains its policy interest rate at 0.5% to carry on stimulating the economy, and continues to manage the

liquidity of Eurozone commercial banks as well as support small-sized companies by helping them secure access to loans.

The Japanese economy during the second quarter of 2013 grew 0.9% from first quarter of the year resulting in an overall annualized growth rate of 3.8% since the beginning of 2013; beating previous growth projections of 2.6%. The export sector benefited from the depreciation of the Japanese Yen which was a result of monetary easing policies of the Japanese Central Bank. Moreover, the economy also benefited from the fact that Tokyo was chosen to host the 2020 Summer Olympics and Summer Para-Olympics, resulting in expectations of increased government expenditure on infrastructure, including the renovation of existing stadiums as well as the construction of new ones for a total estimated sum of USD 8 billion. In addition, the Japanese government plans to increase the consumption tax rate from the current 5% to 8% in April 2014, and to 10% in October 2015, a key measure to reduce Japan's current public debt to GDP ratio of 230%.

The Chinese economy grew at annualized rates of 7.7%, and 7.5% during the first and second quarters of 2013, respectively; resulting in an annualized growth rate of 7.6% for the first half of 2013. Early during the third quarter of 2013, the Chinese economy showed signs of faster growth relative to the first 6 months of the year, driven by the manufacturing and international trade sectors, as well as the expansion of the consumption and investment sectors; all of which reflect increased market confidence and expectations that the Chinese economy will achieve its target annual growth rate of 7.5% this year.

In Thailand, the Office of the National Economic and Social Development Board (NESDB) announced second quarter GDP growth at 2.8% annualized, lower than the 5.4% annualized growth rate of the same quarter last year, or a 0.3% decrease from the previous quarter of this year, after already having decreased by 1.7% in the first quarter of 2013. Household expenditure and exports of goods and services drove the economy's contraction which followed the decline in automobile expenditure as the tax incentives for first-car buyers ended. Exports contracted by 1.5% during the second quarter of 2013 due to lower exports of agricultural products and a slowdown in US imports of rice. Moreover, exports of electronic and electrical appliances also declined due to lower consumption demand from a weak global economy. The Monetary Policy Committee (MPC) meeting held in October resolved to maintain the policy rate at 0.25% per annum, a continuation of monetary easing policies to stimulate the economy, after assessment that the Thai economy is just starting to stabilize and begin a slow recovery.

The remainder of 2013 continues to be characterized by uncertainties in various factors of the global economy and of oil prices which consequently have potential impacts on 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 have 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.

In terms of exploration, PTTEP has continued to carry out its activities in various domestic and international projects to assess for the potential of the fields and to increase petroleum reserves. On the development side, PTTEP has accelerated the development of several projects to ensure start-up as planned. During the third quarter of 2013, PTTEP achieved a slightly lower production rate than planned due in part to the shutdown of PTT Plc.'s Gas Separation Plant no. 5 (GSP 5) which suffered damages from the accident. The incident affected several projects in the Gulf of Thailand; PTTEP, however, has plans in place for continuous production according its production plan.

PTTEP has operations in Thailand and internationally, altogether summing up to 45 projects in 12 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 the third quarter of 2013.

**S1 Project:** The project continues to maintain its crude oil production rate from the previous quarter, with average rates during the third quarter of 2013 at 32,618 Barrel per day (BPD). This production level is a result of the of drilling new production wells, Artificial Lifting and Waterflooding, initiatives which were implemented at the beginning of the year and carried out continuously.

**Bongkot Project:** The project, consisting of the Greater Bongkot North and the Greater Bongkot South fields, produced natural gas at an average rate of 897.92 Million Standard Cubic Feet per Day (MMSCFD) and condensates at an average rate of 30,294 BPD during the third quarter of 2013. The natural gas production from this project represents 20% of Thailand's natural gas demand.

**Project Activity Highlights in South East Asia:** PTTEP has 17 projects in this region with the following as key highlights during this quarter:

**Myanmar Zawtika Project:** The project is located in the Gulf of Moattama, in the Republic of the Union of Myanmar and is in the process of constructing Phase 1A. The project has completed the installation of 3 wellhead platforms, the laying of intra-field gas pipelines and the construction of the main offshore gas export pipeline and distribution system. The construction of the onshore gas pipeline and distribution system as well as the drilling of production wells are in progress. The central processing platform is also under construction and is scheduled for offshore installation in October 2013. Commercial production is expected to commence by the first quarter of 2014.

**Myanmar M3 Project:** This project is in the phase of assessment for commercial development. During the third quarter of 2013, the project completed drilling all four appraisal wells planned for 2013, with gas discoveries in all of the wells, namely the Aung Sinkha-3, Aung Sinkha-4, Aung Sinkha-5 and Aung Sinkha-6 wells. The project plans to drill additional appraisal wells in 2014 for potential development and production from the Aung Sinkha field.

Additionally, during September 2013, the government of the Republic of the Union of Myanmar approved PTTEP International Limited (PTTEPI) to divest 20% participating interest to Mitsui Oil Exploration Co. Ltd (MOECO). PTTEPI continues to be the operator, and holds 80% participating interest in the project.

**Myanmar M11 Project:** The project began drilling a deep water exploration well called Manizawta-1 in September 2013, and expects to finish drilling towards year-end 2013 or early January 2014.

**Myanmar PSC and EP-2 Project:** The project is located onshore, north of Yangon, and is currently progressing with its 2D seismic acquisition of 1,870 kilometers for PSC-G and 640 kilometers for EP-2. The project expects to complete the program in October 2013.

**Vietnam 16-1 Project:** The project successfully completed drilling an appraisal well in Area H5 of the Te Glac Trang Field (TGT field), and has prepared for Well head platform installation which will be further developed to maintain the production rate.. During the third quarter of 2013, the project produced crude oil at an average rate of 40,000 BPD and natural gas at an average rate of 26 MMSCFD.

**Project Activity Highlights in Australasia:** PTTEP has 2 projects in this region. The following are key highlights from PTTEP's projects in this region.

**PTTEP Australasia Project:**

**Montara Field:** Production from this field began in early June 2013, with a current average production rate of 10,000 BPD. In August 2013, the FPSO began to offload approximately 500,000 barrels of crude oil for sales. The project expects to gradually ramp up production from this field through subsea wells and an additional development well scheduled for the fourth quarter of 2013.

Regarding the compensation claim, as of the third quarter of 2013, PTTEP has received a total compensation claim of USD 212 million. The remaining compensation claims are in progress and PTTEP expects to receive the remaining claims during the fourth quarter of 2013 and 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 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 additional exploration and appraisal wells is planned for early 2014.

**Project Activity Highlights in North America:** PTTEP has one project in this region with the following as key highlights:

**KKD Oil Sands Project:**

The Leismer field produced bitumen at an average rate of 15,960 BPD during the third quarter of 2013. The project is currently carrying out the Front End Engineering Design (FEED) process to increase the production rate from the Leismer field to 40,000 BPD.

The Corner Field is also currently carrying out the FEED process for a production capacity of 40,000.

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

**Algeria 433A and 416B:** The project completed drilling 6 of 12 total development wells. The project is progressing with 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 towards the end of the year 2014.

**Algeria Hassi Bir Rekaiz Project:** 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 exploration and appraisal wells. The seismic program and appraisal drilling is expected to commence during the first quarter of 2014.

**Projects under Cove principally consist of:**

**Mozambique Rovuma Offshore Area 1 Project:** The project 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.

The project continuously carries out exploration and appraisal drilling to assess the petroleum potential of the fields. During the third quarter of 2013, the project completed drilling a total of 4 wells, namely, 1 exploration well called Espadarte-1 and 3 appraisal wells called Atum-3, Golfinho-5 and Golfinho-6. The project is currently assessing the drilling results from these 4 wells.

**Kenya L5, L7, L11A, L11B and L12 Project:** The project is located in Kenya. An exploration well called Kiboko-1 was drilled in the L11B field with results indicating no potential for commercial development. However, the project is able to apply the findings in further geological studies.

**Portfolio Management:** PTTEP carries out portfolio management activities to ensure appropriate investments and risk management while adding value to projects. For example, in early 2013, PTTEP agreed for partners to farm-in to its Myanmar M3 and M11 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.

## 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 by quarter are as follows:

### 2.2.1. Results of Operations - Quarterly Comparison

Earnings summary (Unit : Millions of USD, excepting USD per share amounts)	2 <sup>nd</sup> Quarter 2013	3 <sup>rd</sup> Quarter 2013	3 <sup>rd</sup> Quarter 2012
Total Revenues	1,851	1,841	1,820
Total Expenses	(989)	(996)	(967)
<b>Operating Income</b>	<b>862</b>	<b>845</b>	<b>853</b>
Share of gain from associates	2	2	1
<b>Income before income taxes</b>	<b>864</b>	<b>847</b>	<b>854</b>
Income taxes expenses	(503)	(281)	(296)
<b>Net income</b>	<b>361</b>	<b>566</b>	<b>558</b>
Diluted earnings per share	0.09	0.14	0.17
<b>Income from normal operations</b>	<b>535</b>	<b>600</b>	<b>506</b>
Gain (Loss) from non-recurring items	(174)	(34)	52
<b>Net income</b>	<b>361</b>	<b>566</b>	<b>558</b>

  

Earnings summary (Unit : Millions of Baht, excepting Baht per share amounts)	2 <sup>st</sup> Quarter 2013	3 <sup>rd</sup> Quarter 2013	3 <sup>rd</sup> Quarter 2012
Total Revenues	55,326	57,937	57,083
Total Expenses	(29,544)	(31,374)	(30,290)
<b>Operating Income</b>	<b>25,782</b>	<b>26,563</b>	<b>26,793</b>
Share of gain from associates	42	70	40
<b>Income before income taxes</b>	<b>25,824</b>	<b>26,633</b>	<b>26,833</b>
Income taxes expenses	(15,160)	(8,828)	(9,307)
<b>Net income</b>	<b>10,664</b>	<b>17,805</b>	<b>17,526</b>
Diluted earnings per share	2.67	4.47	5.26

### **Third Quarter of 2013 compared with Third Quarter of 2012**

For the results of operations (Unreviewed) in the third quarter of 2013, PTTEP and subsidiaries' net profit amounted to 566 USD million (equivalent to 17,805 million baht), or USD 0.14 per share-diluted (equivalent to 4.47 baht per share-diluted), an increase of USD 8 million or 1% against the third quarter of 2012, which was USD 558 million (equivalent to 17,526 million baht), or USD 0.17 per share-diluted (equivalent to 5.26 baht per share-diluted). The returns on shareholders' equity for the third quarter of 2013 were 21.86%.

However, PTTEP and subsidiaries' net profit amounted to USD 566 million for the third quarter of 2013, comprising the recurring net profit for this period, which amounted to USD 600 million, and the loss from non-recurring items, which amounted to USD 34 million.

For the results of recurring operations in the third quarter of 2013, PTTEP and subsidiaries' recurring net profit was USD 600 million, an increase of USD 94 million or 19% against the third quarter of 2012, which was USD 506 million. The returns from normal operations on shareholders' equity for the third quarter of 2013 were 23.54%.

For the third quarter of 2013, the total revenue was USD 1,841 million (equivalent to 57,937 million baht), an increase of USD 21 million or 1% against the third quarter of 2012, which was USD 1,820 million (equivalent to 57,083 million baht). The increase was mainly due to an increase of sales revenue, caused by the following;

(1) There was a higher average petroleum sales price for the third quarter of 2013, which rose to USD 65.71 per barrel of oil equivalent (BOE) against the third quarter of 2012 which was USD 64.00 per BOE.

While,

(2) There was a lower average sales volume in the third quarter of 2013, which decreased to 286,578 barrels of oil equivalent per day (BOED) against the third quarter of 2012 which was 292,228 BOED. This average sales volume decreased mainly as a result of

- Bongkot project: Sales volume of natural gas and condensate of Greater Bongkot North decreased due to a planned shutdown in the third quarter of 2013, while there was no production shutdown in the third quarter of 2012.
- Vietnam 16-1 project: Sales volume of crude oil decreased because of FPSO Production sharing with a Joint Operating Company in Vietnam from May 2013 onwards resulting in a decrease in production volume from the fully utilized FPSO capacity; and from a shutdown for gas lift maintenance in the third quarter of 2013.



- B8/32 & 9A 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.

However,

- PTTEP Australasia project: Crude oil sales volume increased because Montara began offloading crude oil for sales in August 2013.
- S1 project: Sales volume of crude oil increased because of higher production volume produced from new wells and artificial lift techniques.

PTTEP and subsidiaries' revenue from pipeline transportation from proportionate revenue in Moattama Gas Transportation Company (MGTC) and Taninthayi Pipeline Company (TPC) decreased.

PTTEP and subsidiaries incurred expenses amounting to USD 996 million (equivalent to 31,374 million baht) in the third quarter of 2013, an increase of USD 29 million against USD 967 million (equivalent to 30,290 million baht) for the third quarter of 2012. This increase was mainly driven by the net effect of the following:

- (1) Depreciation, depletion and amortization expenses escalated, amounting to USD 38 million, mainly from depreciation, depletion and amortization expenses of PTTEP Australasia project which began offloading crude oil for sales in August 2013, from an increase in the completed assets of the Bongkot and Contract 4 projects, and from an increase in the completed assets and production volume of MTJDA-B17 project. However, depreciation, depletion and amortization expenses from the Vietnam 16-1 project decreased due to higher proved reserves and proved developed reserves revision in 2013 and lower production volume.
- (2) Operating expenses increased, amounting to USD 37 million mainly from an increased cost of diluent of the Canada Oil Sands KKD project, operating expenses of PTTEP Australasia project began offloading crude oil for sales in August 2013 and maintenance expenses from a planned shutdown of the Greater Bongkot North.
- (3) Exploration expenses increased, amounting to USD 3 million, primarily from the net effect of:
  - Exploratory well write-off costs increased amounting to USD 12 million. The exploratory well write-off costs of the third quarter of 2013 amounting to USD 18 million were driven by

the Kenya L5, L7, L11A, L11B and L12 projects; while, there were USD 6 million exploratory well write-off costs in the third quarter of 2012 from the Oman 44 project.

While,

- Exploration expenses decreased amounting to USD 9 million, mainly from lower seismic costs of the S1 project.

However,

- (4) Loss on foreign exchange decreased amounting to USD 12 million. In the third quarter of 2013, PTTEP and subsidiaries recognized a gain on foreign exchange of USD 4 million presented under other income, while in the third quarter of 2012, PTTEP and subsidiaries recognized a loss on foreign exchange of USD 12 million, mainly derived from GBP loan for acquisition of Cove Energy Plc.

Whereas, in the third quarter of 2013, gain on foreign exchange of USD 4 million stemmed from the net effect of gain on foreign exchange from the USD loans of PTTEP Canada Limited, given the CAD appreciation against the USD, offset with loss on foreign exchange from Thai Baht transactions.

- (5) Petroleum royalties and remuneration decreased, amounting to USD 9 million, mainly from the Bongkot and B8/32 & 9A projects, in line with lower sales revenue.
- (6) Administrative expenses decreased, amounting to USD 8 million, mainly due to stamp duties from share acquisition of Cove Energy Plc.

In the third quarter of 2013, PTTEP and subsidiaries incurred income tax expenses of USD 281 million, a decrease of USD 15 million, against that of the third quarter of 2012 of USD 296 million. The decrease was mainly due to lower overseas income taxes.

For the third quarter of 2013, PTTEP and subsidiaries' recognized a loss from non-recurring items of USD 34 million, an increase loss of USD 86 million, against a gain from non-recurring items of the third quarter of 2012, which was USD 52 million, primarily stemming from an increase in loss from effect of foreign exchange from income tax expenses. In the third quarter of 2013, income tax expenses affected by the functional currency increased, amounting to USD 71 million against the third 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 30 September 2013, compared with net assets after they were translated into USD on 30 June 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 amounting to USD 21 million.

Whereas, income tax expenses affected by the functional currency for the third quarter of 2012 caused a decrease of income tax expenses in the future of USD 50 million, given the Baht as of 30 September 2013 appreciation against as of 30 June 2013.

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

For the results of operations (Unreviewed) in the third quarter of 2013, PTTEP and subsidiaries' net profit amounted to USD 566 million (equivalent to 17,805 million baht), or USD 0.14 per share-diluted (equivalent to 4.47 baht per share-diluted), an increase of USD 205 million or 57% from the second quarter of 2013's net profit of USD 361 million (equivalent to 10,664 million baht), or USD 0.09 per share-diluted (equivalent to 2.67 baht per share-diluted). Return on shareholder's equity for the third quarter of 2013 was 21.86%.

However, PTTEP and subsidiaries' net profit amounted to USD 566 million for the third quarter of 2013 comprising the recurring net profit for this period, which amounted to USD 600 million, and the loss from non-recurring items, which amounted to USD 34 million.

For the results of recurring operations in the third quarter of 2013, PTTEP and subsidiaries' recurring net profit was USD 600 million, an increase of USD 65 million or 12% against the second quarter of 2013 which was USD 535 million. The returns from normal operations on shareholders' equity for the third quarter of 2013 were 23.54%.

For the third quarter of 2013, the total revenue of PTTEP and subsidiaries was USD 1,841 million (equivalent to 57,937 million baht), a decrease of USD 10 million or 1% from the second quarter of 2013's total of USD 1,851 million (equivalent to 55,326 million baht), which was chiefly due to gain on financial derivatives, which is a non-recurring item, amount of USD 11 Million in the second quarter of 2013, while there was a loss on financial derivatives of USD 9 Million in the third quarter of 2013 and lower sales totaling USD 5 million.

Total sales for the third quarter of 2013 decreased USD 5 million compared with that of the second quarter of 2013 resulting from the net effect of:

(1) There was a lower average sales volume in the third quarter of 2013, which decreased to 286,578 BOED against the second quarter of 2013, when the figure was 292,721 BOED. This average sales volume decreased mainly as a result of;

- Vietnam 16-1 project: Sales volume of crude oil decreased because of FPSO Production sharing with a Joint Operating Company in Vietnam from May 2013 onwards resulting in a decrease in production volume from the fully utilized FPSO capacity; and from a shutdown for gas lift maintenance in the third quarter of 2013
- Bongkot project: Sales volume of natural gas and condensate of Greater Bongkot North decreased, resulting from a planned shutdown in the third quarter of 2013

- B8/32 & 9A 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.

However,

- PTTEP Australasia project: Crude oil sales volume increased because Montara began offloading crude oil for sales in August 2013.

While,

(2) There was a higher average petroleum sales price for the third quarter of 2013, which rose to USD 65.71 per barrel of oil equivalent (BOE) against the second quarter of 2013 which was USD 65.16 per BOE.

PTTEP and subsidiaries' revenue from pipeline transportation from proportionate revenue in Moattama Gas Transportation Company (MGTC) and Taninthayi Pipeline Company (TPC) decreased.

PTTEP and subsidiaries incurred expenses of USD 996 million (equivalent to 31,374 million baht) in the third quarter of 2013, an increase of USD 7 million or 1% from the second quarter of 2013, which was USD 989 million (equivalent to 29,544 million baht). This increase stemmed from the net effect of:

- (1) Depreciation, depletion and amortization expenses increased, amounting to USD 33 million, mainly from depreciation, depletion and amortization expenses of PTTEP Australasia project which began offloading crude oil for sales in August 2013, from an increase in the completed assets and production volume from the Arthit project.

However, depreciation, depletion and amortization expenses decreased from the Oman 44 project due to higher proved reserves and proved developed reserves revision in the third quarter of 2013.

- (2) Exploration expenses increased, amounting to USD 18 million, primarily due to;
  - Exploratory well write-off costs increased amounting to USD 6 million. The exploratory well write-off costs of the third quarter of 2013 amounting to USD 18 million were driven by the Kenya L5, L7, L11A, L11B and L12 projects; while, there were USD 12 million exploratory well write-off costs in the second quarter of 2012, principally from the Kenya L5, L7, L11A, L11B and L12 and Mozambique Rovuma Offshore Area 1 projects.

- Exploration expenses increased amounting to USD 12 million, mainly from higher seismic costs of the Oman 44 and L53/43 & L54/43 projects.
- (3) Administrative expenses increased, amounting to USD 13 million, mainly due to consulting fee, expenses related to reforestation project as well as computer software repair and maintenance expenses.
- (4) Operating expenses increased, amounting to USD 14 million mainly from an increase in operating expenses of PTTEP Australasia project which began offloading crude oil for sales in August 2013.

However,

- (5) Loss on foreign exchange decreased amounting to USD 72 million. In the third quarter of 2013, PTTEP and subsidiaries recognized a gain on foreign exchange of USD 4 million presented under other income; while, in the second quarter of 2013, PTTEP and subsidiaries recognized a loss on foreign exchange of USD 72 million, mainly from:
- Loss on foreign exchange from Thai Baht transactions amounting to USD 40 million, given the Baht depreciation against the USD.
  - Loss on foreign exchange from USD items of PTTEP Canada Limited amounting to USD 32 million, primarily from the USD loans, given the CAD depreciation against the USD.

Whereas, in the third quarter of 2013, gain on foreign exchange of USD 4 million stemmed from the net effect of gain on foreign exchange from the USD loans of PTTEP Canada Limited, given the CAD appreciation against the USD, offset with loss on foreign exchange from Thai Baht transactions.

In the third quarter of 2013, PTTEP and subsidiaries incurred income tax expenses of USD 281 million, a decrease of USD 222 million or 44%, against that of the second quarter of 2013 of USD 503 million, mainly due to a decrease of petroleum income tax.

For the third quarter of 2013, PTTEP and subsidiaries recognized a loss from non-recurring items of USD 34 million, a decreased loss of USD 140 million, against that of the second quarter of 2013 of USD 174 million. The decreased loss resulted from a decrease in loss from effect of foreign exchange which is mainly from;

- In the third quarter of 2013, income tax expenses affected by the functional currency decreased, amounting to USD 80 million against the second quarter of 2013, mainly because an increase in deferred income tax liabilities in the third quarter of 2013 was less than an increase in deferred income tax liabilities in the second quarter of 2013. An increase in deferred income tax liabilities in the third quarter of 2013 resulting from a decrease in net assets after they were translated into USD on 30 September 2013, compared with net assets after they were translated into USD on 30 June 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 amounting to USD 21 million.

Whereas, income tax expenses affected by the functional currency for the second quarter of 2013 caused an increase of income tax expenses in the future of USD 101 million, given the Baht depreciation against the USD

- Loss on foreign exchange decreased amounting to USD 76 million. In the third quarter of 2013, gain on foreign exchange of USD 4 million was mainly from the USD loans of PTTEP Canada Limited, given the CAD appreciation against the USD, offset with a loss on foreign exchange from Thai Baht transactions.

In the second quarter of 2013, loss on foreign exchange of USD 72 million was mainly from Thai Baht transactions and from the USD loans of PTTEP Canada Limited, given the CAD depreciation against the USD.

### 2.2.2. Results of Operations – First Nine Months of 2013 Comparison

Earnings summary	Millions of USD		Millions of Baht	
	2013	2012	2013	2012
Total Revenues	5,544	5,081	168,448	158,617
Total Expenses	(2,867)	(2,712)	(87,192)	(84,688)
<b>Operating Income</b>	<b>2,677</b>	<b>2,369</b>	<b>81,256</b>	<b>73,929</b>
Share of gain from associates	5	4	159	129
<b>Income before income taxes</b>	<b>2,682</b>	<b>2,373</b>	<b>81,415</b>	<b>74,058</b>
Income taxes expenses	(1,075)	(976)	(32,688)	(30,510)
<b>Net income</b>	<b>1,607</b>	<b>1,397</b>	<b>48,727</b>	<b>43,548</b>
Diluted earnings per share	0.40	0.42	12.22	13.09

<b>Income from normal operations</b>	<b>1,720</b>	<b>1,505</b>
Gain (Loss) from non-recurring items	(113)	(108)
<b>Net income</b>	<b>1,607</b>	<b>1,397</b>

#### For the 9-month period of 2013 compared with the 9-month period of 2012

Regarding the results of operations (Unreviewed) for the nine months of 2013, PTTEP and its subsidiaries' totaled a net profit of USD 1,607 million (equivalent to 48,727 million baht) or USD 0.40 per share-diluted (equivalent to 12.22 baht per share-diluted), an increase of USD 210 million or 15% compared with the nine months of 2012's net profit of USD 1,397 million (equivalent to 43,548 million baht) or USD 0.42 per share-diluted (equivalent to 13.09 baht per share-diluted). Return on shareholder's equity for the nine months of 2013 was 21.86%.

However, PTTEP and subsidiaries' net profit amounted to USD 1,607 million for the nine months of 2013, comprising the recurring net profit for this period, which amounted to USD 1,720 million, and the loss from non-recurring items, which amounted to USD 113 million.

For the results of recurring operations in the nine months of 2013, PTTEP and subsidiaries' recurring net profit was USD 1,720 million, an increase of USD 215 million or 14% against that of the nine months of 2012 which was USD 1,505 million. The returns from normal operation on shareholders' equity for the nine months of 2013 were 23.54%.

For the nine months of 2013, the total revenue of PTTEP and subsidiaries was USD 5,544 million (equivalent to 168,448 million baht), an increase of USD 463 million or 9% from the nine months of 2012's total of USD 5,081 million (equivalent to 158,617 million baht), which was chiefly due to higher sales, totaling USD 509 million or 11%. Reasons for these higher sales are detailed below:

(1) A higher average sales volume in the nine months of 2013, which increased to 290,240 barrels of oil equivalent per day (BOED) against the nine month of 2012, when the figure was 269,776 BOED. This average sales volume increased as a result of;

- 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: Sales volume of crude oil increased because of higher production volume produced from new wells and artificial lift techniques.
- PTTEP Australasia project: Crude oil sales volume increased because Montara began offloading crude oil for sales in August 2013.

However,

- Arthit project: Sales volume of natural gas and condensate decreased because of lower nomination from PTT
- MTJDA-B17 project: Sales volume of natural gas decreased resulting from a shutdown for pipeline maintenance in January 2013

(2) Higher average petroleum sales price for the nine months of 2013, which rose to USD 65.96 per barrel of oil equivalent (BOE) against the nine months of 2012 when the price was USD 64.30 per BOE.

PTTEP and its subsidiaries had a decrease in other income by USD 64 million. The decrease mainly resulted from the recognition of insurance claims received from the Montara incident totaling USD 61 million, and a downward adjustment to the purchase price of the Canada Oil Sands KKD project amount of USD 17 million in the nine months of 2012; whereas, there was no recognition of such transactions in the nine months of 2013.

PTTEP and its subsidiaries incurred expenses for the nine months of 2013 amounting to USD 2,867 million (equivalent to 87,192 million baht), an increase of USD 155 million or 6% compared with USD 2,712 million (equivalent to 84,688 million baht) for the nine months of 2012. This increase was due to the net effect of:

- (1) Depreciation, depletion and amortization expenses escalated, amounting to USD 162 million, mainly from an increase in the number of completed assets and production volume of Bongkot, S1 and Contract 4 projects. However; depreciation, depletion and amortization expenses of Arthit project decreased due to a decrease in production volume.



- (2) Operating expenses increased amounting to USD 113 million, mainly from increased cost of diluent of the Canada Oil Sands KKD project, higher operating expenses of Greater Bongkot South due to production first starting in June 2012, higher operating expenses of Contract 4 project, and higher operating expenses of PTTEP Australasia project due to Montara starting first offload of crude oil for sales in August 2013.
- (3) Petroleum royalties and remuneration increased amounting to USD 40 million in line with higher sales revenue.

However,

- (4) Impairment loss on assets decreased amounting to USD 109 million due to no recognition of impairment loss from Montara assets of PTTEP Australasia project in the nine months of 2013; while, there was recognition of this impairment loss amount of USD 109 million in the nine months of 2012 due to the increase of project cost and the delay of the first oil production.
- (5) Exploration expenses decreased amounting to USD 29 million due to:
- Exploration expenses decreased amounting to USD 33 million, mainly from lower seismic cost of the PTTEP Australasia, S1, Myanmar M3 and Myanmar M11 projects.

While,

- Exploratory well write-off costs increased amounting to USD 4 million. The exploratory well write-off costs of the nine months of 2013 amounted to USD 48 million were driven by the Kenya L5, L7, L11A, L11B & L12 and Mozambique Rovuma Offshore Area 1 projects; while, there were USD 44 million exploratory well write-off costs in the nine months of 2012, principally from the Bahrain 2, Algeria Hassi Bir Rekaiz and Oman 44 projects.
- (6) Administrative expenses decreased, amounting to USD 13 million, mainly because there were stamp duties from share acquisition of Cove Energy Plc. in the nine months of 2012.

For the nine months of 2013, PTTEP and subsidiaries incurred income tax expenses, totaling USD 1,075 million. The increase of USD 99 million of 10% comparing to the nine months of 2012 amounted to USD 976 million, mainly from an increase in petroleum income tax.

For the nine months of 2013, PTTEP and subsidiaries' recognized a loss from non-recurring items of USD 113 million. An increased loss of USD 5 million, against that of the nine months of 2012 of USD 108 million, stemmed from the net effect of the following:

- (1) Loss from effect of foreign exchange increased amounting to USD 135 million mainly because for the nine months of 2013, income tax expenses affected by the functional currency increased, amounting to USD 101 million against the nine months 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 30 September 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 amounting to USD 70 million; whereas, income tax expenses affected by the functional currency for the nine months of 2012 caused a decrease of income tax expenses in the future of USD 31 million, given the Baht appreciation against the USD.

However,

- (2) Impairment loss on assets decreased amounting to USD 109 million due to no recognition of impairment loss from Montara assets of PTTEP Australasia project in the nine months of 2013; while, there was recognition of this impairment loss amount of USD 109 million in the nine months of 2012 due to the increase of project cost and the delay of the first oil production.

### 2.2.3. Financial position

	Unit : Millions of USD		Unit : Millions of Baht	
	Sep 30, 2013	Dec 31, 2012	Sep 30, 2013	Dec 31, 2012
<b>Total Assets</b>	<b>20,828</b>	<b>19,637</b>	<b>653,806</b>	<b>601,513</b>
Current Assets	4,036	4,031	126,691	123,483
Non-current Assets	16,792	15,606	527,115	478,030
<b>Total Liabilities</b>	<b>9,304</b>	<b>8,926</b>	<b>292,070</b>	<b>273,409</b>
Current Liabilities	2,245	2,375	70,474	72,749
Non-current Liabilities	7,059	6,551	221,596	200,660
<b>Shareholders' Equity</b>	<b>11,524</b>	<b>10,711</b>	<b>361,736</b>	<b>328,104</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>20,828</b>	<b>19,637</b>	<b>653,806</b>	<b>601,513</b>

As of September 30, 2013, PTTEP and subsidiaries commanded total assets of USD 20,828 million (equivalent to 653,806 million baht), an increase of USD 1,191 million higher than the total on hand as of December 31, 2012 at which point total assets were USD 19,637 million (equivalent to 601,513 million baht). This increase was mainly from an increase of USD 1,225 million in property, plant and equipment, net mainly from an increase in production assets of the Bongkot, Zawtika, and PTTEP Australasia projects.

Most current assets of PTTEP and subsidiaries as of September 30, 2013, were cash and cash equivalents; account receivable-parent company; and materials and supplies. A large proportion of the non-current assets were assets used in joint-venture exploration and production, presented under property, plant, and equipment, net; intangible assets; and goodwill. PTTEP and subsidiaries' Current Ratio as of September 30, 2013, was 1.80 times.

As of September 30, 2013, PTTEP and subsidiaries had total liabilities of USD 9,304 million (equivalent to 292,070 million baht), an increase of USD 378 million higher than the total on hand as of December 31, 2012, when total liabilities were USD 8,926 million (equivalent to 273,409 million baht), principally due to

- (1) A decrease of USD 130 million in current liabilities mainly from
  - A decrease in income tax payable of USD 217 million primarily due to payment of income tax for the year 2012 in May 2013
  - A decrease of accrued expenses of USD 173 million mainly from a decrease in accrued expenses in the construction of production assets of PTTEP Australasia, Zawtika and Bongkot projects.

However,

- Current portion of long-term debts increased by USD 209 million from the net effect of the reclassification of a portion of Thai Baht debentures of THB 11,700 million, equivalent to USD 373 million, with maturity within one year from non-current liabilities to current liabilities, offset with the redemption of Thai Baht debentures of THB 5,000 million, equivalent to USD 166 million in the second quarter of 2013.
- (2) An increase of USD 508 million in non-current liabilities mainly from
- An increase in provision for remuneration for the renewal of petroleum production of Bongkot Project of USD 372 million.
  - An increase in debentures of USD 109 million primarily 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 THB 11,700 million, equivalent to USD 373 million, with maturity within one year 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 3 million on September 24, 2013 of PTTEP CIF

## **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 30 September 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. Goldman Sachs, HSBC, Standard Chartered and UBS were the Joint Managers and Joint Bookrunners for the issuance.

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 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 a portion of its 30 years US Dollar 500 million with a coupon rate of 6.35% per annum unsecured and unsubordinated debentures which were issued in June 2012.

Losses on repurchased of US Dollar 3 million debentures on 24 September 2013 amount of US Dollar 0.14 million were recognized in administrative expenses in the consolidated statement of income for the nine month period ended 30 September 2013.

Losses on repurchased of US Dollar 7 million debentures on 10 October 2013 amount of US Dollar 0.51 million will be recognized in administrative expenses in the consolidated statement of income for the year ended 31 December 2013.

### **Subordinated Capital Debentures**

No subordinated capital debentures issuance in the 3rd quarter of 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 30 September 2013, there is no outstanding loan.

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

In March 2012, PTTEP Canada International Finance Limited (PTTEP CIF) entered into a CAD 300 million unsecured, unsubordinated loan agreement fully guaranteed by PTTEP. The loan has a floating interest rate of CDOR + 1.7% per annum and is repayable within 5 years of the first drawdown.

The entire loan amount was drawn down in May 2012. The proceeds from the loan were utilized for debt refinancing, capital expenditure and/or general corporate purposes.

The Board of Directors' meeting in the year 2011 approved the Company's entering into loan agreements, whose approved amount remaining was Baht 48,250 million.

The total outstanding loan as of 30 September 2013 was CAD 300 million.

In April 2012, PTTEP Canada International Finance Limited (PTTEP CIF) entered into a CAD 75 million unsecured, unsubordinated loan agreement fully guaranteed by PTTEP. The loan has a floating interest rate of CDOR + 1.9% per annum and is repayable within 5 years of the first drawdown.

The entire loan amount was drawn down in May 2012. The proceeds from the loan were utilized for debt refinancing, capital expenditure and/or general corporate purposes.

The Board of Directors' meeting in the year 2011 approved the Company's entering into loan agreements, whose approved amount remaining was Baht 38,950 million.

The total outstanding loan as of 30 September 2013 was CAD 75 million.

In August 2012, PTTEP Canada International Finance Limited (PTTEP CIF) entered into a CAD 100 million unsecured, unsubordinated loan agreement fully guaranteed by PTTEP. The loan has a floating interest rate of CDOR + 2.1% per annum and is repayable within 7 years of the first drawdown.

The entire loan amount was drawn down in September 2012. The proceeds from the loan agreement were utilized for general corporate purposes.

The Board of Directors' meeting in the year 2011 approved the Company's entering into loan agreements, whose approved amount remaining was Baht 36,625 million.

The total outstanding loan as of 30 September 2013 was CAD 100 million.

In March 2013, PTTEP Offshore Investment Company Limited (PTTEPO) has signed the Amendment Deed relating to the US Dollar 500 million facility agreement dated November 24, 2010. The Amendment Deed was to extend the final maturity of the Facility Agreement from November 2015 to November 2017.

The total outstanding loan as of 30 September 2013 was US Dollar 500 million.

In March 2013, PTTEP Offshore Investment Company Limited (PTTEPO) has signed the Amendment Deed relating to the US Dollar 75 million facility agreement dated December 1, 2010. The Amendment Deed was to extend the final maturity of the facility agreement from December 2015 to December 2017.

The total outstanding loan as of 30 September 2013 was US Dollar 75 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 30 September 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 US Dollar 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 US Dollar 700 million.

PTTEP has guaranteed the unsecured and unsubordinated debentures of PTTEP Canada International Finance Limited (PTTEP CIF) with total amount of US Dollar 1,197 million.

## **Cash Flows**

For the period of 9 months ending on September 30, 2013, PTTEP and subsidiaries had a net cash flows from operations of USD 3,024 million, chiefly due to the cash received from sales revenue offset with cash payments of expenses and tax expenses.

PTTEP and subsidiaries had a net cash flows used in its investing activities of USD 2,146 million, mainly resulting from additional investment in exploration and production

assets as well as intangible assets, principally from the Zawtika, PTTEP Australasia, and Arhit projects.

PTTEP and subsidiaries had a net cash flows used in financing activities of USD 580 million as below:

- Dividend payments amounting to USD 783 million
- Bond payments amounting to USD 169 million
- Interest payments for loans / subordinated capital debentures amounting to USD 120 million
- Financial costs payments amounting to USD 8 million

Offset with

- Cash received from issuance of unsubordinated debentures amounting to USD 500 million

As of September 30, 2013, PTTEP and subsidiaries held cash and cash equivalents of USD 2,590 million, an increase of USD 298 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 overall oil price environment during the third quarter of 2013 is characterized by oil price volatility due to a number of factors. Dubai crude prices averaged 105.95 USD/bbl, an increase versus the previous quarter's average of 100.68 USD/bbl, and flat relative the previous year's third quarter average of 106.16 USD/bbl. Violent confrontations in Syria whereby the Syrian government employed chemical weapons against the opposition resulted in psychological impacts to the supply of crude oil to the global market and caused oil price volatility during the past quarter. The psychological concerns later subsided after the Syrian government conceded to the terms of the US-Russian agreement for Syria's chemical weapons disarmament.

However, other factors affecting oil price volatility still remain, which include violent unrest in the Middle East affecting supply of crude oil for exports, including events in Egypt and negotiation issues between the International Atomic Energy Agency (IAEA) and the Iranian government concerning Iran's nuclear program, specifically related to uranium enrichment. The recovery of the Eurozone economy, the Japanese Nuclear energy crisis, and the psychological implications of the United States' debt-ceiling discussions, are among other factors affecting oil price volatility. Moreover, the demand for crude oil is also affected by the



depreciation of the domestic currencies of oil importing nations such as India, Turkey etc. versus the US dollar, as well as by changes in government oil subsidy policies in such nations.

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:** During the third quarter of 2013, PTTEP produced at an average rate of 326,763 barrels of oil equivalent per day (BOED), a relatively lower figure compared to the previous quarter's average production rate of 327,799 BOED. Thailand's domestic energy demand, according to the Ministry of Energy, in August 2013, was approximately 2.01 Million BOED, a year-on-year increase from 1.97 BOED or approximately 2.3%, driven by energy requirements for development of the economy. The Ministry of 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 the optimal supply plan and forecast future energy demand from both domestic and neighboring countries, in both short term and 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:** During the third quarter of 2013, PTTEP participated in the OpEx Workshop with PTT Plc. and seven other PTT group companies to jointly define the directions, objectives and strategies for the development of quality and 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 also benchmarks its operations with peers for learning and development purposes. In 2013, the S1 Project participated with the Juran Institute to benchmark its processing facilities. Results of the benchmarks reveal that the S1 Project is the leader in the following six areas: Maintenance, Availability, Reliability and Downtime, Environmental and Process Safety, Absenteeism, and Training.

PTTEP manages its operational costs efficiently and transparently by continuing to adhere to its established Supply Chain Management policies. The company implemented the Supply Chain Plus project aimed at reducing operating costs by twelve million US Dollars in 2013. As of the third quarter of 2013, year-to-date operating costs were reduced by USD 9.63 million, and are expected to be reduced according to the planned target by year-end. An enabling factor to achieving the cost reduction target is the procurement of materials from Low Cost Countries (LCC). PTTEP's procurement process has also been reviewed and amended to comply with the National Anti-Corruption Commission (NACC)'s law, which came into effect since 11 August 2013, regarding the announcement of reference prices for transparency of the procurement process.

**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 oil 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 for Excellence, 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. 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 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 third quarter of 2013, PTTEP achieved an LTIF of 0.20 and a Total Recordable Incidence Rate (TRIR) of 1.2. If PTTEP maintains its current LTIF and TRIR at the current levels, it will continue to rank in the top quartile of OGP members. The hydrocarbon spill rate of PTTEP is at 1.3 which is better than the average of 7.94 of OGP members. Moreover, as part of PTTEP's campaign to reduce accidents, during the third quarter of 2013, the Company created and issued a SSHE Handbook, and presented videos of Target Zero and Trigger Talk by executive management to demonstrate their leadership and commitment to enhancing awareness amongst employees and contractors about everyone's role

and responsibilities regarding SSHE, so that everyone may come to work and return home to their families, safely, every day.

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 third quarter, the Company promoted SSHE Alerts to all employees across the organization such as the security alert issued to employees travelling to Egypt.

**Sustainable Development (SD):** PTTEP manages its strategy, direction and long-term objectives for sustainable growth with attention to economic, social and environmental governance. In the second quarter of 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, particularly with respect to climate change and global warming, PTTEP has set a target to reduce greenhouse gas (GHG) emissions from its operations by 3% in the year 2013. During the third quarter of 2013, the Company has already achieved GHG emissions reduction of 2.3% and expects to achieve this year's target. 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 within the top fifteenth percentile of companies participating in the assessment. PTTEP also received an award for one of seven companies with best performance improvements in disclosing climate change data to the Carbon Disclosure Project's (CDP) Climate Change Disclosure Reporting for CDP Asia Ex Japan.

Additionally, as a result of successful initiatives of the S1 Project to divert excess gas from normal production process, which would otherwise be flared, to productive use in the Saotien-A petroleum field in the Sukhothai province, the Executive Board of the United Nations Framework Convention on Climate Change (UNFCCC) approved PTTEP's registration for the Clean Development Mechanism (CDM), and PTTEP will henceforth be able to trade carbon credits in the world market.

**Corporate Social Responsibility (CSR):** PTTEP focuses on the mutual development of the organization as well as of communities. During the third quarter of 2013, PTTEP awarded over 500 scholarships to students in communities situated in areas where it operates in Suphanburi, Songkhla, and Chumpon provinces, as well as establishing Tutor Camps in these areas.

Additionally, in cooperation with local government agencies and communities in the northern Songkhla Lake area, PTTEP initiated the “PTTEP Loves Songkhla Lake Irrawaddy Dolphins” project to create a hundred fisheries in order to provide feedstock and a home for the Irrawaddy Dolphins. The project also involves organizing workshops regarding the conservation network for Irrawaddy dolphins whereby a total of for 3 sessions will be held - two sessions of 51 people per session, and an additional session of 57 people for PTTEP’s “Irrawaddy Dolphin Conservation Efforts Youth Camp.”

On 9 September 2013, a ceremony was held for the signing of a Memorandum of Understanding (MOU) between PTTEP, the Department of National Parks and Kasetsart University, regarding the joint study and cooperation in restoration of ecological systems in Si Nakhon Khuean Khan Park, of Bang Kachao District, in Amphur Prapadaeng of Samut Prakarn Province, according to the philosophy of Her Royal Princess Maha Chakri Sirindhorn, who presided over the ceremony held at the Center for Management of Green Areas of the Si Nakhon Khuean Khan Park. The faculty of forestry of the Energy Ministry and the Chai Pattana Foundation were also witnesses in the signing ceremony. All guests toured the Green Areas of the Si Nakhon Khuean Khan Park.

PTTEP’s 50,000 rai reforestation project continues to be carried out according to the plans and objectives for 2013, and Company further organized eight “PTTEP Green Up” activities for employees to engage in reforestation activities, in which a total of 658 people, including management and employees, participated.