

2. Management Discussion and Analysis of Operating Results for the Second Quarter of 2012

2.1 PTTEP Performance

The global economy in the second quarter of 2012 has continued to experience volatility. The major factor is the continuing problems of the European economy, which has slowed down the global economy recovery. China's economic growth is less than expected due to the slowdown of production and exports. This is because of public debt in Europe and the Chinese government's policy to slowdown the real estate growth. In addition, U.S. has also decreased growth targets because of the risk of economic problems like Europe and the uncertainty of the economy in the U.S. itself.

As for the Thai economy, 2012 is expected to be better than 2011. The Office of the National Economic and Social Development Board (NESDB) forecasts that Thai economic growth will be approximately 5.5 to 6.5 percent in 2012 and 3.1 to 4.1 percent by the second quarter of 2012, improving from first quarter which only expanded 0.3 percent. This reflects Thailand's recovery from the flood crisis. The main driving factors include acceleration of manufacturing production and recovery of domestic consumption and investment. Additionally, private segments continually spend more. The private segments still get support from flood crisis recovery activities and Thai government measures. This has increased demand for natural gas consumption in the first two months in the second quarter of 2012. Average natural gas consumption per month is 3.1% higher than the first quarter and may continue to increase depending on economic growth.

The world economy, the Thai economy, and oil price in global market are very fragile and highly uncertain. PTTEP continues to closely monitor the economics and accordingly revise its action plan and investment to be consistent with its strategic objectives. PTTEP also strives to increase its efficiency and develop its capabilities for sustainable growth. The results can be summarized as follows.

Exploration and Appraisal: PTTEP continues exploration activities in both domestic and international areas in order to assess the potential of fields and the amount of petroleum reserves added. In the second quarter of 2012, the company drilled exploration wells in several projects.

PTTEP Australasia project: The project finished 3-D seismic and drilled the appraisal well, Maple-2, to assess the potential of the reserves and resources.

Myanmar M3 and M11 Project: Currently, the company is in the process of acquiring rigs and preparing for drilling appraisal wells and an exploration well.

Indonesia Semai II Project: The project is conducting a geological study to assess the petroleum potential and define the second exploration well which is located in a shallow water area.

Algeria Hassi Bir Rekaiz Project: In the second quarter, the project drilled additional four exploration wells. The second exploration well was finished in May. The third exploration well is in process of flowline test. For the fourth and fifth exploration well, the project started drill in June and is currently planned to finish in August.

Canada Oil Sands KKD Project: The project is in process of interpreting the result of Winter Evaluation Program of year 2011-2012 and preparing the Winter Evaluation Program of year 2012-2013 to identify the position of the appraisal wells and seismic with the purpose of further development in Leismer, Corner and Thornbury.

Development: PTTEP has continued the development of various projects both in Thailand and internationally and aims to start up production as planned.

PTTEP Australasia Project, Montara field: Development of Montara Field is progressing. The drilling of the production wells is in process, and is expected to begin production by the end of the fourth quarter of 2012.

For the compensation claim, PTTEP has received total compensation claim of USD 151 million as of the end of the second quarter of 2012. The remaining claims are in progress.

Regarding the claim that was submitted by the Government of Indonesia for compensation due to oil leaks from the Montara incident, PTTEP is continuously collaborating with the Indonesian government. The company is still based on the evidence and the impact (if any) using scientific principles

Myanmar Zawtika Project: The project is in process of construction of Zawtika processing & quarter living platform and bridges and construction of wellhead platforms and infield sea lines. More than 30 percent of construction works have been completed.

Algeria 433a & 416b Project: The project finished drilling two wells out of the four planned wells and continues to drill the third well (BRS-13), which is expected to finish in September 2012.

Production: PTTEP is continually striving to maintain and increase the production level from new projects.

Bongkot Project: On June 16th, 2012, Greater Bongkot South, Bongkot Project has officially reached a stable gas production (72 Consecutive hours test run) at daily contractual quantity (DCQ) rate of 320 MMSCFD as required by the Gas Sales Agreement and condensate at 9,000 BPD. This is considered an important step towards PTTEP's producing gas to supply energy for the increasing domestic demand.

Canada Oil Sands KKD Project: Leismer production, average bitumen production in the second quarter was approximately 17,000 Barrel per Day (BPD) with maximum daily production reaching 21,200 BPD in May. The company completed Front End Engineering Design ("FEED") for Pad 5, field work is currently planned to start in September 2012 and drilling operation is currently scheduled in October 2012.

Corner Project, Tender Evaluation for Front End Engineering Design ("FEED"). FEED is currently expected to start in the third quarter of 2012.

The Vietnam 16-1 project: The second wellhead platform of Vietnam 16-1 project has been successfully installed. As a result, the project is expected to increase its production from 41,000 bpd to about 55,000 bpd by the fourth quarter this year.

Portfolio Management: PTTEP has operated continuously in the areas of Portfolio Management. This aims for appropriate investment both in value added to the project and risk management. The company studies and analyze the factors and the impact of investment on a regular basis in order to keep pace with changing social, economic and political conditions for decision and review of the target for expansion (Focused Countries) by grouping according to the countries, appropriateness and consistent with the direction and goals. The analysis is based on many factors such as petroleum potential, geographic factors, the government share, risk of politics and business, and a competitive advantage. PTTEP has continued the development of various projects as follows.

New Exploration Blocks PSC-G and EP-2 in the Republic of the Union of Myanmar: PTTEP South Asia Limited (PTTEP SA), a subsidiary of PTTEP, together with Win Precious Resources Pte. Ltd. (WPR) have been selected as the successful bidders of blocks PSC-G and EP-2 in the Myanmar Onshore Blocks Bidding Round 2011. PTTEP SA (the Operator) and WPR hold participating interests of 90% and 10%, respectively.

Blocks PSC-G and EP-2 are located onshore in the Central Myanmar Basin, west of the new capital Nay Pyi Taw, with approximate acreages of 13,330 and 1,345 square kilometers, respectively. This investment is in line with PTTEP's key strategic objective in expanding investment in the Republic of the Union of Myanmar.

Cash Offer for Cove Energy Plc: On May 23, 2012 PTTEP announced the terms of a recommended cash offer for Cove at the price of 240 pence for each Cove Share. The Acquisition values the entire issued and to be issued share capital of Cove at approximately 1,221.4 million Pound Sterling (GBP). The Acquisition would mark PTTEP's entry into the East Africa Hydrocarbon province, which is consistent with PTTEP's strategy of sustainable growth.

On May 29, 2012 the Republic of Mozambique's Ministry of Mineral Resources consented in writing for PTTEP to the indirect change of control of Cove's interests in Mozambique, should PTTEP's offer be finalised, and on July 9, 2012 PTTEP announced that the Competition Authority of Kenya has approved in writing the acquisition of the entire issued and to be issued share capital of Cove. On June 1, 2012, the offer document was sent to Cove's shareholders.

On July 16, 2012, Shell announced that it would not revise its offer of 220 pence per Cove share and would not take part in the auction procedure, making PTTEP's recommended offer of 240 pence per Cove share the highest offer available to Cove

shareholders. PTTEP's Offer is open for acceptance until 1:00 p.m. (London time) on July 25, 2012.

2.2 Results of Operations

Since January 1, 2011, PTTEP has complied with Thai Financial Reporting Standards (TFRS). Moreover, the Company has adopted Thai Financial Reporting Standard No.21 (revised 2009) "The Effects of Changes in Foreign Exchange Rates", which has been published but will not become effective until 2013, and which also requires the Company to determine its functional currency. The Company has also completed early adoption of International Accounting Standard (IAS) No. 39 "Financial Instruments: Recognition and Measurement".

The Company has determined the USD to be its functional currency. However, in the 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)	1 st Quarter 2012	2 nd Quarter 2012	2 nd Quarter 2011
Total Revenues	1,627	1,667	1,487
Total Expenses	(797)	(982)	(770)
Operating Income	830	685	717
Gain (Loss) from investments in associates	2	1	1
Income before income taxes	832	686	718
Income Taxes	(243)	(436)	(348)
Net income	589	250	370
Diluted earnings per share	0.18	0.08	0.11
Income from normal operations	538	461	401
Gain (Loss) from non-recurring items	51	(211)	(31)
Net income	589	250	370

Earnings summary (Unit : Millions of Baht, excepting Baht per share amounts)	1 st Quarter 2012	2 nd Quarter 2012	2 nd Quarter 2011
Total Revenues	50,447	52,164	45,012
Total Expenses	(24,691)	(30,786)	(23,299)
Operating Income	25,756	21,378	21,713
Gain (Loss) from investments in associates	47	42	17
Income before income taxes	25,803	21,420	21,730
Income Taxes	(7,515)	(13,687)	(10,560)
Net income	18,288	7,733	11,170
Diluted earnings per share	5.51	2.33	3.36

Second Quarter of 2012 compared with Second Quarter of 2011

For the results of operations in the second quarter of 2012, PTTEP and subsidiaries' net profit amounted to USD 250 million (equivalent to 7,733 million baht), or USD 0.08 per share-diluted (equivalent to 2.33 baht per share-diluted), a decrease of USD 120 million or 32% against the second quarter of 2011, which was USD 370 million (equivalent to 11,170 million baht), or USD 0.11 per share-diluted (equivalent to 3.36 baht per share-diluted). The returns on shareholders' equity for the second quarter of 2012 were 14.73%.

However, PTTEP and subsidiaries' net profit amounted to USD 250 million for the second quarter of 2012, comprising the recurring net profit for this period, which amounted to USD 461 million, and the loss from non-recurring items, which amounted to USD 211 million.

For the results of recurring operations in the second quarter of 2012, PTTEP and subsidiaries' recurring net profit was USD 461 million, an increase of USD 60 million or 15% against the second quarter of 2011, which was USD 401 million. The returns from normal operations on shareholders' equity for the second quarter of 2012 were 27.10%.

For the second quarter of 2012, the total revenue was USD 1,667 million (equivalent to 52,164 million baht), an increase of USD 180 million or 12% against the same period last year, which was USD 1,487 million (equivalent to 45,012 million baht). The increase was due to an increase of USD 147 million, caused by the following:

(1) The higher average petroleum sales price for the second quarter of 2012, which rose to USD 64.17 per barrel of oil equivalent (BOE) against the same period last year which was USD 56.28 per BOE; however,

(2) There was a lower average sales volume in the second quarter of 2012, which declined to 263,441 barrels of oil equivalent per day (BOED) against the same period last year which was 273,310 BOED. This average sales volume decreased as a result of;

- Arthit North project: Sales volume of natural gas and condensate decreased due to the production stoppage in November 2011.
- Arthit project: Sales volume of natural gas and condensate decreased in line with the new daily contract quantity (DCQ)
- Bongkot project: Sales volume of natural gas and condensate decreased resulting from a 11-day production shutdown in the quarter; however,
- Vietnam 16-1 project: Crude oil sales volume increased because production started in the third quarter of 2011.
- S1 project: Crude oil sales volume increased because of higher production volume produced from new wells and higher beam pump activities.

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

In the second quarter of 2012, PTTEP and subsidiaries took in other revenues of USD 60 million, an increase of USD 32 million against the second quarter of 2011, when the figure was USD 28 million. The increase resulted from the recognition of a downward adjustment of USD 17 million to the purchase price of the Canada Oil Sands KKD project of PTTEP Canada Limited. Moreover, the additional other revenue came from higher insurance claims received from the Montara incident of the PTTEP Australasia project amounting to USD 14 million which is non-recurring item.

PTTEP and subsidiaries incurred expenses amounting to USD 982 million (equivalent to 30,786 million baht) in the second quarter of 2012, an increase of USD 212 million against USD 770 million (equivalent to 23,299 million baht) for the same period last year. This increase was driven by the net effect of the following:

- (1) Increased impairment loss on assets amounting to USD 109 million, from impairment of PTTEP Australasia project assets recognized as impairment loss from Montara due to the increase of project cost and the delay of the first oil production. However, the Company expects that the project will start its production by the end of the fourth quarter of 2012.
- (2) The change of gain/loss on foreign exchange rate increased amounting to USD 46 million. In the second quarter of 2012, PTTEP and subsidiaries recognized loss on foreign exchange of USD 43 million mainly derived from USD loans of PTTEP Canada Limited while they recognized gain of USD 3 million in the second quarter of 2011.
- (3) Depreciation, depletion and amortization expenses escalated, amounting to USD 40 million, mainly from an increase in the completed assets of the Bongkot and S1 projects and from the start of production of Vietnam 16-1 project in the third quarter of 2011. However, depreciation, depletion and amortization expenses decreased from the Arthit North project due to discontinuation of the production since November 2011, and lower production volume from the Arthit project instituted to be in line with new DCQ.
- (4) Increased petroleum royalties amounting to USD 14 million in line with higher sales revenue; however,
- (5) Decreased exploration expenses amounting to USD 18 million, primarily due to lower exploratory well write-off costs of USD 28 million. In the second quarter of 2012, the exploratory well write-off costs were USD 28 million derived from the Bahrain 2 and Algeria Hassi Bir Rekaiz projects, while, in the second quarter of 2011, exploratory well write-off costs were USD 56 million mostly from the Indonesia Semai II project.

However, there were higher exploration expenses mainly from the PTTEP Australasia project amounted to USD 10 million.

In the second quarter of 2012, PTTEP and subsidiaries incurred income tax expenses of USD 436 million (equivalent to 13,687 million baht), an increase of USD 88 million, against that of the same period last year of USD 348 million (equivalent to 10,560 million baht). The increase was mainly due to petroleum income tax, oversea income taxes, and deferred income taxes affected from foreign exchange rates, which are the non-recurring items.

For the second quarter of 2012, PTTEP and subsidiaries recognized a loss from non-recurring items of USD 211 million, an increase of USD 180 million, against a loss from non-recurring items of the same period last year of USD 31 million, primarily stemming from the following:

- (1) Impairment loss of assets of the PTTEP Australasia project amounting to USD 109 million due to the increase of project cost and the delay of the first oil production. However, the Company expects that the project will start its production by the end of the fourth quarter of 2012.
- (2) The change of gain/loss on the foreign exchange rate of the Company amounted to USD 46 million. In the second quarter of 2012, PTTEP and subsidiaries recognized loss on foreign exchange of USD 43 million mainly derived from USD loans of PTTEP Canada Limited while they recognized gain on foreign exchange of USD 3 million in the second quarter of 2011.
- (3) An increase of income tax expenses affected by the functional currency of USD 35 million. In the second quarter of 2012, income tax expenses affected by the functional currency amounting to USD 82 million occurred was mainly because of higher deferred income tax liabilities due to a decrease in net assets after they were translated into USD on June 30, 2012, compared with net assets after were translated into USD on March 31, 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 income tax expenses in the future, accordingly.

However, the income tax expenses affected by functional currency of the second quarter of 2011 resulted in increase of income tax expenses in the future of USD 47 million.

- (4) Other revenues, however, increased in the amount of USD 14 million mainly from Montara incident insurance claims. In the second quarter of 2012, PTTEP and subsidiaries recognized the

insurance claims of USD 31 million against the same period last year of USD 17 million.

Second Quarter of 2012 compared with First Quarter of 2012

For the results of operations in the second quarter of 2012, PTTEP and subsidiaries' net profit amounted to USD 250 million (equivalent to 7,733 million baht), or USD 0.08 per share-diluted (equivalent to 2.33 baht per share-diluted), a decrease of USD 339 million or 58% from the previous quarter's net profit of USD 589 million (equivalent to 18,288 million baht), or USD 0.18 per share-diluted (equivalent to 5.51 baht per share-diluted). Return on shareholder's equity for the second quarter of 2012 was 14.73%.

However, PTTEP and subsidiaries' net profit amounted to USD 250 million for the second quarter of 2012 comprising the recurring net profit for this period, which amounted to USD 461 million, and the loss from non-recurring items, which amounted to USD 211 million.

For the results of recurring operations in the second quarter of 2012, PTTEP and subsidiaries' recurring net profit was USD 461 million, a decrease of USD 77 million or 14% from the first quarter of 2012's net profit of USD 538 million. The returns from normal operations on shareholders' equity for the second quarter of 2012 were 27.10%.

For the second quarter of 2012, the total revenue of PTTEP and subsidiaries was USD 1,667 million (equivalent to 52,164 million baht), an increase of USD 40 million or 2% from the first quarter of 2012's total of USD 1,627 million (equivalent to 50,447 million baht), which was chiefly due to higher sales, totaling USD 42 million, resulting from the net effect of:

- (1) A higher average sales volume in the second quarter of 2012, which increased to 263,441 BOED against the first quarter of 2012, when the figure was 253,411 BOED. This average sales volume increased as a result of;
 - Contract 4: Sales volume of natural gas and condensate increased because of higher nominations from PTT.
 - Arthit: Sales volume of natural gas increased due to higher nominations from PTT.
 - S1 project: Crude oil sales volume increased because of a higher production volume produced from new wells and higher beam pump activities.
 - 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.

- (2) However, the average petroleum sales price this quarter went down to USD 64.17 per BOE compared with the first quarter of 2012's price of USD 64.79 per BOE.

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

In the second quarter of 2012, PTTEP and its subsidiaries gained other revenues of USD 60 million (equivalent to 1,884 million baht), an increase of USD 36 million against the first quarter of 2012, which was USD 24 million (equivalent to 739 million baht). The increase can be accredited to the higher insurances claims received in the second quarter of 2012 from the Montara incident amounting to USD 31.

PTTEP and subsidiaries incurred expenses of USD 982 million (equivalent to 30,786 million baht) in the second quarter of 2012, an increase of USD 185 million or 23% from the first quarter of 2012, which was USD 797 million (equivalent to 24,691 million baht). This increase stemmed from the following:

- (1) An increased impairment loss on assets amounting to USD 109 million, from impairment of assets of the PTTEP Australasia project due to the increase of project cost and the delay of the first oil production. However, the Company expects that the project will start its production by the end of the fourth quarter of 2012.
- (2) The change of gain/loss on foreign exchange rate increased amounting to USD 77 million. In the second quarter of 2012, PTTEP and subsidiaries recognized loss on foreign exchange of USD 43 million mainly derived from USD loans of PTTEP Canada Limited while they recognized gain on foreign exchange of USD 34 million in the first quarter of 2012.
- (3) Increased exploration expenses amounting to USD 16 million, primarily due to higher exploratory well write-off costs of USD 18 million. In the second quarter of 2012, the exploratory well write-off costs was from the Bahrain 2 and Algeria Hassi Bir Rekaiz projects, while, lower exploratory well write-off costs in the first quarter of 2012 were mainly from Cambodia B project.

In the second quarter of 2012, PTTEP and subsidiaries incurred income tax expenses of USD 436 million, an increase of USD 193 million or 79%, against that of the first quarter of 2012 of USD 243 million, mainly due to an increase of income tax expenses affected by the functional currency which are non-recurring items. Moreover, the increase was due to petroleum income tax and oversea income taxes.

For the second quarter of 2012, PTTEP and subsidiaries recognized a loss from non-recurring items of USD 211 million. An increased loss of USD 262 million, against that of a gain from non-recurring items of the first quarter of 2011 of USD 51 million, resulted from the net effect of;

- (1) Impairment loss of assets of the PTTEP Australasia project amounting to USD 109 million due to the increase of project cost and the delay of the first oil production. However, the Company expects that the project will start its production by the end of the fourth quarter of 2012.
- (2) The change of income tax expenses affected by the functional currency of USD 141 million. In the second quarter of 2012, income tax expenses affected by the functional currency amounting to USD 82 million was mainly due to higher deferred income tax liabilities because of a decrease in net assets after they were translated into USD on June 30, 2012, compared with net assets after were translated into USD on March 31, 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 income tax expenses in the future, accordingly.

However, income tax expenses affected by the functional currency of the first quarter of 2012 caused a decrease of income tax expenses in the future of USD 59 million.

- (3) The change of gain/loss on foreign exchange rate of the Company amounted to USD 77 million. In the second quarter of 2012, PTTEP and subsidiaries recognized loss on foreign exchange of USD 43 million, mainly as a result of USD loans of PTTEP Canada Limited while they recognized gain on foreign exchange of USD 34 million in the first quarter of 2012.
- (4) Decreased decommissioning costs for Jabiru and Challis fields of USD 43 million because there were no decommissioning costs recognized in the second quarter of 2012, whereas, there was recognition of USD 43 million of the first quarter of 2012
- (5) Increased the insurance claim of the Montara incident of USD 30 million. In the second quarter of 2012, PTTEP and subsidiaries recognized the additional insurance claims of USD 31 million against the first quarter of 2012 when the figure was USD 1 million.

2.2.2. Results of Operations – First half year of 2012 Comparison

Earnings summary	Millions of USD		Millions of Baht	
	2012	2011	2012	2011
Total Revenues	3,260	2,797	101,534	85,023
Total Expenses	(1,745)	(1,481)	(54,399)	(45,021)
Operating Income	1,515	1,316	47,135	40,002
Gain(Loss) from the investments in associates	3	1	89	37
Income before income taxes	1,518	1,317	47,224	40,039
Income Taxes	(679)	(588)	(21,203)	(17,890)
Net income	839	729	26,021	22,149
Diluted earnings per share	0.25	0.22	7.84	6.67

Income from normal operation	999	744
Gain(Loss) from non-recurring items	(160)	(15)
Net income	839	729

For the 6-month period of 2012 compared with the 6-month period of 2011

Regarding the results of operations for the first half of 2012, PTTEP and its subsidiaries' net profit amounted to USD 839 million (equivalent to 26,021 million baht) or USD 0.25 per share-diluted (equivalent to 7.84 baht per share-diluted), an increase of USD 110 million or 15% compared with the first half of 2011's net profit of USD 729 million (equivalent to 22,149 million baht) or USD 0.22 per share-diluted (equivalent to 6.67 baht per share-diluted). Return on shareholder's equity for the first half of 2012 was 25.23%.

However, PTTEP and subsidiaries' net profit amounted to USD 839 million for the first half of 2012, comprising the recurring net profit for this period, which amounted to USD 999 million, and the loss from non-recurring items, which amounted to USD 160 million.

For the results of recurring operations in the first half of 2012, PTTEP and subsidiaries' recurring net profit was USD 999 million, an increase of USD 255 million or 34% against the same period last year which was USD 744 million. The returns from normal operation on shareholders' equity for the first half of 2012 were 30.03%.

For the first half of 2012, the total revenue of PTTEP and subsidiaries was USD 3,260 million (equivalent to 101,534 million baht), an increase of USD 463 million or 17% from the same period of 2011's total of USD 2,797 million (equivalent to 85,023 million baht), which was chiefly due to higher sales, totaling USD 466 million or 18%. Reasons for these higher sales are detailed below:

- (1) Higher average petroleum sales price for the first half of 2012, which rose to USD 64.47 per barrel of oil equivalent (BOE) brought about by higher world market prices against the same period last year when the price was USD 52.85 per BOE; however,
- (2) A lower sales volume persisted in the first half of 2012, which declined to 258,426 barrels of oil equivalent per day (BOED) against the same

period last year which rested at 272,307 BOED. This sales volume decreased as a result of;

- Arthit North project: Sales volume of natural gas and condensate decreased due to the production stoppage in November 2011.
- Arthit project: Sales volume of natural gas and condensate decreased in line with the newly instituted daily contract quantity; however,
- Vietnam 16-1 project: Crude oil sales volume increased because production started in the third quarter of 2011.
- S1 project: Crude oil sales volume increased because of higher production volume produced from new wells and higher beam pump activities.

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

In the first half of 2012, other income increased by USD 42 million against the same period last year, principally because of the recognition of the transfer of interest in the Arthit North project, together with the recognition of a higher additional insurance claims regarding the Montara incident when compared with the same period of last year.

PTTEP and its subsidiaries incurred expenses for the first half of 2012 amounting to USD 1,745 million (equivalent to 54,399 million baht), an increase of USD 263 million or 18% compared with USD 1,481 million (equivalent to 45,021 million baht) for the first half of 2011. This increase was due to the following:

- (1) Increased impairment loss on assets amounting to USD 109 million, from impairment of asset of the PTTEP Australasia project due to the increase of project cost and the delay of the first oil production. However, the Company expects that the project will start its production by the end of the fourth quarter of 2012.
- (2) Depreciation, depletion and amortization expenses escalated, amounting to USD 66 million, mainly from the net effect of the following: Increases in the completed assets of the Bongkot S1 and Contract 4 projects and from the start up of production of Vietnam 16-1 project in the third quarter of 2011. The depreciation, depletion and amortization expenses, however, decreased from the Arthit North project due to discontinuation of the production since November 2011, and from the lower production volume of the Arthit project.
- (3) Operating expenses increased by USD 41 million, mainly from net effect of the higher production volume of the Canada Oil Sands KKD project and from the production startup of Vietnam 16-1 project in the third quarter of 2011. However, the operating expensed decrease from Arthit North project due to discontinuation of the production since November 2011.

- (4) Increased petroleum royalties and remuneration of USD 52 million resulting from increased sales revenues.
- (5) Additionally, however, there were decreased exploration expenses amounting to USD 39 million, primarily due to;
 - In the first half of 2012, lower exploratory well write-off costs of USD 53 million occurred. The exploratory well write-off costs of the period amounted to USD 38 million, and was driven by the Bahrain 2 and Algeria Hassi Bir Rekaiz projects, while, there were also USD 91 million exploratory well write-off costs in the first half of 2011 principally from the Indonesia Semai II, Myanmar M7 and Bongkot projects.
 - On the other hand, there were some higher exploration expenses, amounting to USD 14 million, which were mainly from the PTTEP Australasia project.

In the first half of 2012, PTTEP and subsidiaries incurred income tax expenses of USD 679 million (equivalent to 21,203 million baht), an increase of USD 91 million against that of the same period last year of USD 588 million (equivalent to 17,890 million baht). The increase was mainly due to an increase oversea income taxes.

For the first half of 2012, PTTEP and subsidiaries suffered a loss from non-recurring items USD 160 million, an increased loss from non-recurring items of USD 145 million, against the same period last year of USD 15 million, which stemmed from the following:

- (1) Impairment loss of assets of the PTTEP Australasia project amounting to USD 109 million due to the increase of project cost and the delay of the first oil production. However, the Company expects that the project will start its production by the end of the fourth quarter of 2012.
- (2) The change of gain/loss on foreign exchange rate of the Company amounted to USD 76 million. In the first half of 2012 PTTEP and subsidiaries recognized loss on foreign exchange in the amount of USD 10 million mainly derived from loans of PTTEP Canada Limited while they recognized gain on foreign exchange amounting to USD 66 million in the first half of 2011.
- (3) Decreases in change income tax expenses affected by the functional currency of USD 35 million. In the first half of 2012, income tax expenses affected by the functional currency amounting to USD 23 million was mainly due to higher deferred income tax liabilities because of a decrease in net assets after they were translated into USD on June 30, 2012, compared with net assets after were translated into USD on December 31, 2011, 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 income tax expenses in the future, accordingly.

However, the income tax expenses affected by the functional currency of the six months of 2011 caused an increase of income tax expenses in the future of USD 58 million.

2.2.3. Financial position

	Unit : Millions of USD		Unit : Millions of Baht	
	Jun 30, 2012	Dec 31, 2011	Jun 30, 2012	Dec 31, 2011
Total Assets	14,527	14,131	462,351	447,842
Current Assets	2,574	2,737	81,917	86,764
Non-current Assets	11,953	11,394	380,434	361,078
Total Liabilities	7,532	7,819	239,714	247,818
Current Liabilities	2,205	3,139	70,161	99,504
Non-current Liabilities	5,327	4,680	169,553	148,314
Shareholders' Equity	6,995	6,312	222,637	200,024
Total Liabilities and Shareholders' Equity	14,527	14,131	462,351	447,842

As of June 30, 2012, PTTEP and subsidiaries commanded total assets of USD 14,527 million (equivalent to 462,351 million baht), an increase of USD 396 million higher than the total on hand at the end of 2011 at which point total assets were USD 14,131 million (equivalent to 447,842 million baht). This increase was mainly due to (1) an increase of USD 564 million in exploration and production mainly from an increase complete assets of the PTTEP Australasia, Zawtika, and Arthit projects, however, (2) a decrease in current assets of USD 164 million, mostly from the decrease of cash and cash equivalents and cash deposits at financial institutions of USD 764 million due to the payment of loans.

Most current assets as of June 30, 2012 were in cash and cash equivalents, cash deposits at financial institutions, parent company accounts receivable, trade accounts receivable, 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, goodwill and intangible assets; and deferred income taxes. PTTEP and subsidiaries. Current Ratio as of June 30, 2012, was 1.17 times.

PTTEP and its subsidiaries had total liabilities of USD 7,532 million (equivalent to 239,714 million baht), a decrease of USD 287 million lower than the total at the end of 2011, when total liabilities were USD 7,819 million (equivalent to 247,818 million baht), principally due to a decrease of current liabilities of USD 935 million, primarily from a decrease of its current portion of long term loans of USD 530 million, and a decrease of tax payable of USD 319 million.

Capital Structure

On February 13, 2012, PTTEP signed a loan agreement with Krung Thai Bank Public Company Limited. The total loan amount is Baht 20,000 million and is repayable within ten years of the first draw down. On March 30, 2012, PTTEP drew down Baht 10,000 million. The proceeds from the loan agreement were utilized for general corporate purposes. At the Board of Directors' meetings in 2010 and 2011, it was approved for the Company to enter into loan agreements, whose this loan agreement was signed under the remaining approved amount of Baht 68,250 million. The total outstanding loan as of June 30, 2012 is Baht 9,000 million.

On March 29, 2012, PTTEP Canada International Finance Limited (PTTEP CIF) signed a loan agreement with three financial Institutions comprising the Bank of Tokyo-Mitsubishi UFJ (Canada), Mizuho Corporate Bank, Ltd. and Sumitomo Mitsui Banking Corporation of Canada. The total loan amount is CAD 300 million. The loan agreement is fully guaranteed by PTTEP with a five-year tenor. On May 11, 2012, PTTEP CIF drew down the entire amount of CAD 300 million. The proceeds from the loan agreement were utilized for debt refinancing, capital expenditure and general corporate purposes. At the Board of Directors' meeting in 2011, it was approved for the Company to enter into loan agreements, whose this loan agreement was signed under the remaining approved amount of Baht 48,250 million. The total outstanding loan as of June 30, 2012 is CAD 300 million.

On April 20, 2012, PTTEP Canada International Finance Limited (PTTEP CIF) signed a loan agreement with Citibank, N.A., Canadian Branch. The total loan amount is CAD 75 million. The loan agreement is fully guaranteed by PTTEP with a five-year tenor. On May 11, 2012, PTTEP CIF drew down the entire CAD 75 million. The proceeds from the loan agreement were utilized for debt refinancing, capital expenditure and general corporate purposes. At the Board of Directors' meeting in 2011, it was approved for the Company to enter into loan agreements, whose this loan agreement was signed under the remaining approved amount of Baht 38,950 million. The total outstanding loan as of June 30, 2012 is CAD 75 million.

On June 12, 2012, PTTEP Canada International Finance Limited (PTTEP CIF) issued an unsecured and unsubordinated debenture to foreign institutional investors for the total amount of US Dollar 500 million with a coupon rate of 6.35% per annum. The debenture is fully guaranteed by PTTEP with a tenor of 30 years and has been rated BBB+ by Standard and Poor's and Baa1 by Moody's. Citigroup, Deutsche Bank, HSBC and UBS were the Joint Managers and Joint Bookrunners for the issuance. The proceeds from the debenture were utilized for general corporate purposes. At the Board of Directors and the General Shareholders' meeting in 2010, it was approved for the Company to issue and offer debentures, whose these debentures were issued under the remaining approved amount of Baht 103,400 million.

On June 15, 2012, PTTEP issued subordinated, unsecured and unconvertible hybrid bonds in the total amount of Baht 5,000 million. These hybrid bonds have no final maturity date (perpetual) and have a pay step-up coupon starting from 5.85% to 7.85% per annum. PTTEP has the right to early redeem the hybrid bonds on the 10th anniversary (15 June 2022) and on every coupon payment date afterwards. PTTEP can defer the coupon payment of the hybrid bonds at its sole discretion. All deferred coupons are cumulative and carry no interest. However, while the coupon payment is being deferred, PTTEP shall not (a) declare or make any dividend payment; (b) make any payment of interest

or distribution of any sort on any instrument or security issued by PTTEP which ranks pari passu or junior to the hybrid bonds; and (c) redeem, reduce, cancel, buy-back or acquire for any consideration on any instrument or security issued by PTTEP which ranks pari passu or junior to the hybrid bonds. The hybrid bonds are rated "AA" by TRIS Rating Co., Ltd. and obtained 50% equity credit until the 10th anniversary from S&P and TRIS Rating Co., Ltd.

Krung Thai Bank, Kasikorn Bank and Siam Commercial Bank were Joint Managers for the issuance. The proceeds from the bond were utilized for general corporate purposes. At the Board of Directors and the General Shareholders' meetings in 2010, it was approved for the Company to issue and offer debentures, whose these debentures were issued under the remaining approved amount of Baht 88,400 million.

Cash Flows

For the period of 6 months ending on June 30, 2012, PTTEP and subsidiaries had net cash flows from operations of USD 1,446 million, chiefly due to the higher sales revenue resulting from the higher average petroleum sales price during this period.

PTTEP and subsidiaries had net cash flows used in investment activities of USD 2,049 million, mainly resulting from the higher investment in oil and gas properties for exploration and production from the PTTEP Australasia, Zawtika, and Arthit projects. Moreover, PTTEP and subsidiaries have a deposit at a financial institution amounting to USD 600 million, which is reserved under escrow relating to the potential offer for Cove Energy Plc shares. The reserved cash is shown as restricted deposits at a financial institution in the statement of financial position

PTTEP and subsidiaries had net cash flows used in financing activities of USD 161 million, resulting from loans payment and dividends payment that amounted to USD 783 million and USD 293 million respectively. However, PTTEP and subsidiaries gained cash flows from financing activities by issued bonds and loan from financial institutions amounted to USD 496 million and USD 369 million respectively.

As of June 30, 2012, PTTEP and subsidiaries held cash and cash equivalents of USD 587 million, decreased of USD 764 million from the end of 2011 at which point cash and cash equivalents were USD 1,351 million.

2.3 Impact on Operating Results

Even though there were several uncertainties during the second quarter of 2012 such as the slowdown of China's economy, the economic crisis in Europe, and the nuclear situation in Iran after sanctions from America and Europe, oil prices maintained a relatively steady level. The average Dubai oil price in the second quarter of 2012 was USD 106.5 per barrel, which was slightly lower than the previous quarter. However, oil prices in the third and fourth quarters tend to be settled at average USD 100 per barrel. Investors and analysts have speculated that the Chinese government and the European Union will have a stimulation or expansionary monetary policy to solve the global economic downturn and

stabilization of the global economic recovery which may, in turn, help to keep the oil price in the global market at a high level.

As the global economy and oil prices are still volatile, PTTEP has continuously monitored the changing economic situation and energy demand and moved in response to the challenging business environment as follows:

Responding to the increase in energy demand In the second quarter of 2012, PTTEP production has increased by 5.7 percent compared to the first quarter during which production level was at 306,255 barrels per day. 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 investment opportunities in order to increase its reserves, with the purpose of meeting the nation's demand.

Improving the efficiency and cost optimization PTTEP regards efficiency improvement and cost optimization as key components for long term value creation and sustainable growth. PTTEP continues develop its Operational Excellence program in order to improve in operations and to compete in the increasingly competitive environment by focusing on Safety, Security, Health and Environment (SSHE), the reliability of safety in workplace, the efficiency of continuity of safety operations, and production and the production and cost management to maximize efficiency.

Safety, Security, Health and Environment (SSHE) and Sustainable Development (SD)

PTTEP places SSHE as a core value by promoting the implementation and continuous follow-up so that the business runs securely and efficiently. Our goal is to become a Loss Time Injury free organization in 2013. PTTEP has therefore applied and monitored standard measurements from International Association of Oil and Gas Producers (OGP) such as Lost Time Injury Frequency (LTIF), Total Recordable Injury Rate (TRIR), Loss of Primary Containment Rate (LOPCR), and Chemical and Hydrocarbon Spill Rate. The comprehensive safety system can mitigate risks and reduce effect of incidents as shown in improved SSHE statistics in the second quarter.

Moreover, PTTEP recognizes the role in supporting global energy demand in parallel with its responsibility in sustainable development of petroleum resources and environment. In every operation, the environmental aspects and risks are typically identified so that they can be addressed to ensure the lowest effect to the environment as possible. PTTEP has started up various projects such as

1. **Certified an Environmental Management Standard or ISO 14001 for major domestic operations.** Currently PTTEP has developed a standard related to international environmental management (revised version of ISO 14001) and is certified ISO 14001: 2004 for major domestic projects where PTTEP operates.
2. **Conducting Environment Impact assessment (EIA) before process a project and company's activity** PTTEP has prepared a policy to prevent, reduce,

and track the environmental impacts that would occur in both domestic and international projects.

3. Produced Water Management With regards to the Department of Mineral Fuel's regulations on the prohibition of discharging produced water into the environment, PTTEP re-injects its produced water (or water that comes from the production well in association with crude oil and gas that is subsequently separated in the production station) into depleted reservoirs without discharging produced water into the environment. The volume of produced water that was re-injected in the second quarter of 2012 was approximately 11,932,156 cubic meters. As for PTTEP's water management practices, fresh water is used efficiently in our operations with designs in our engineering process to limit the use of fresh water in our operations. In addition, PTTEP also reuses and recycles water in our production processes.

4. PTTEP annually collects and tests produced water samples and sea water samples in the vicinity of the production platforms to determine the quality of the water and its surrounding environments such as total dissolved solids, benthos, and fish.

5. Reporting and reducing gas emission with a standard of ISO 14064-1 Gas emission in 2012 decreased compared with the same period in 2011, mainly due to the decrease in flare gas from S1 Project and the decrease in gas emission from Arthit Project.

6. Waste Management PTTEP has implemented Waste Management to minimize the environment impact such as waste contaminated with mercury or oil stained from production process.

7. Preparing of procedure and equipment for oil spilled situation

From various SSHE activities, in 2012, PTTEP was awarded the Environmentally Responsible Produced Water Management award from the BG Group Chairman's Award which recognizes the best company of 121 companies around the world in Safety, Security, Health, Environment, and Social responsibility. The purpose of BG Group Chairman's Award is to develop the innovation of Safety, Security, Health, Environment, and Social responsibility with the best practice that approved by BG group and partner. PTTEP has been recognized by the global organizations in the company's ability of the management to reduce the impact of the operations on the environment by the standard under the SSHE.

PTTEP also continually supported Natural Gas Community Farming and Environment Project through the Nong Toom Banana Processing Cooperatives Limited under S1 support. A pipeline was built to channel excessive gas from oil production process to community's product processing workshop instead of being flared as waste. This project has significantly promoted community economy and created knowledge base to support self-sufficiency of the community. From the strong operating performance confirmed that the community was able to create jobs and generate more income and support quality of life.

Managing Risks on oil price volatility PTTEP aims to continuously conduct oil price hedging programs for the petroleum products from the PTTEP group, using the Brent crude oil price as a reference, as well as closely monitor the changing economy and events that may have impacted the oil price especially in the first and second quarter of this year. Moreover,

PTTEP has considered a variety of scenarios with varying market oil prices and formulated plans in the event of each situation.

Capability Development PTTEP has speedily developed the organizational capability by focusing on the potential of people, technology and process to be prepared to get along with the direction of the business growth in different countries around the world. In second quarter, the company has develop Center of Excellence or COE to study, research, and collect data including in-depth knowledge and technology necessary for the global growth direction of the company for both short and long term plan. This consequently will provide technical capability development for PTTEP employee to support the company's direction.