

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

2.1 PTTEP Performance

During the first quarter of 2013, the United States (U.S.) economy began to show visible signs of recovery, exemplified by improved private sector employment and consumer confidence indices. Despite the positive signs, the U.S. economy is under pressure from the sequestration - budget cuts on federal spending - at a total of USD 85 billion, placed into effect in March. As a consequence, gross domestic product (GDP) is expected to be lowered from the initial forecast of 2 percent to 1.5 percent. Meanwhile, the European economy continues to slow down and lacks signs of recovery with an anticipated growth of 0.1 percent in 2013. This is mainly attributed to Italy, where the inconclusive government formation may adversely affect the stability of the new government and the confidence in public debt restructuring. Furthermore, the ongoing financial crisis in Cyprus may negatively impact the country's economy in the long run, as well as the bailout plan and the economic recovery of the Eurozone countries. In Japan, the Japanese Yen currency continuously depreciated as a result of the country's unlimited quantitative easing (QE) to purchase more assets, the result of which doubled government bond and foreign exchange fund holdings. In addition, a revision in monetary policy to double money supply in the market within the next two years in order to achieve inflation target of 2 percent. In China, the government announced new measures to increase fiscal expenditure with a fiscal deficit target at 2 percent of the country's GDP, an increase from 1.6 percent target in 2012. This is part of China's economic stimulus plan to achieve a growth of 7.5 percent.

As for the Thai economy, growth is expected to be in the range of 4.5 to 5.5 percent in 2013. In the first quarter, the Office of the National Economic and Social Development Board (NESDB) forecasts that Thai economic growth will be approximately 5 percent. The growth is mainly driven by increases in both private and public sectors consumption and investment and corporate tax rate reduction, as part of the infrastructural development and preparation activities for the economic unification of ASEAN Economics Community (AEC) by 2015. In the wake of such growth, several key issues were raised regarding the management of economic policies. First is managing foreign exchange rate risk, which is becoming under pressure from the increasing fund flow, to align the currency's liquidity with the economy's fundamental aspects and with those of other currencies within the region. Other issues include governance over raw material prices, continuous economic growth management, investment plan for water resources management project, promoting exports to key markets and measures to alleviate the burden, especially the effects of Thai Baht appreciation and increase in minimum wage, on small-to-medium enterprises (SMEs).

The highly volatile and uncertain circumstances surrounding the global economy and oil prices in 2013 can impact the Thai economy. For instance, the economic slowdown in China, one of the largest oil consumers, and the strengthening Thai Baht currency, a consequence of changes in monetary policies and fund flows in developing countries, will positively impact Thailand's energy imports. PTTEP continues to closely monitor the economics and accordingly revise its action plan and investments in line 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 first quarter of 2013, the company drilled exploration appraisal wells in several projects.

Myanmar M3 and M11 Project: In early 2013, PTTEP International Limited (PTTEPI) agreed to divest 20% participating interest of Myanmar M3 to a wholly-owned subsidiary of Mitsui Oil Exploration Co., Ltd (MOECO). Upon completion of the transaction, subject to an official approval from the government of Republic of the Union of Myanmar, PTTEPI will remain the operator holding 80% participating interest. The similar condition was applied to Myanmar M11, where the participations of Total E&P Myanmar (TEPM) at 40% interest and JX Nippon Oil & Gas Exploration (JX NOEX) at 15% interest were approved by the government of Republic of the Union of Myanmar in January 2013. Introduction of aforementioned partners is a part of PTTEP's strategy in portfolio management, aiming to both add value to the project and manage risk.

Currently, the Myanmar M3 project is progressing with the exploration period extension process to prove the commerciality of the project, as well as the drilling of the second of four appraisal wells planned for 2013. The M11 deep water block is also in the process of preparation for an exploration well, expected to be drilled in late 2013.

Myanmar PSC-G and EP-2 Project: Blocks PSC-G and EP-2 are located onshore, approximately 300-500 kilometers north of Yangon, with PTTEP South Asia Limited (PTTEPSA), a subsidiary of PTTEP, as an operator with 90% participating interest and Win Precious Resources as the other participant with 10% interest. Currently the project is conducting 2D seismic acquisitions of 1,870 kilometers for block PSC-G and 640 kilometers for block EP-2.

Algeria Hassi Bir Rekaiz Project: The project completed the drilling of nine exploration wells in the 1st Exploration Phase. Crude oil and natural gas were discovered in seven wells and the project is conducting flow rate test for the third exploration well (ROS-1), which was drilled earlier. As for the 2nd Exploration Phase, the project plans to conduct 3D seismic acquisition and drill appraisal and additional exploration wells.

Canada Oil Sands KKD Project: The project completed the Winter Evaluation Program (WEP) for 2012-2013, which covered the drilling of 73 appraisal wells to evaluate bitumen volume or production planning. The project also completed 3D and 4D seismic studies, which covered a total of 134 kilometers in Leismer, Corner and Thornbury. Program results are used to evaluate the production of Leismer and assess the potential of Corner and Thornbury.

PTTEP Australasia Project: The project is progressing with geological and engineering studies and the analysis of commerciality for the development of Cash-Maple field. The project plans to drill additional exploration and appraisal wells in late 2013 or early 2014.

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: Hook-up and commissioning process and preparation for production are progressing. The project is expected to commence production in the second quarter of 2013.

For the compensation claim, PTTEP has received total compensation claim of USD 212 million as of the end of the first quarter of 2013. 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 assessing the case with the government through scientific evidences to determine the impact (if any).

Myanmar Zawtika Project: The project is in the process of constructing the Zawtika project phase 1A as planned. Currently the project completed the installation of 3 wellhead platforms and the construction of intra-field pipelines and is progressing with the drilling of production wells for the commercial production in early 2014.

Algeria 433a & 416b Project: The project completed the drilling of the fourth production well, of 12 total based on the initial plan since February 2013. The approximated flow rate of crude oil is more than 1,500 BPD. The project continues to progress with the construction of processing and pipeline facilities (EPC1), as well as the construction of the living quarters and utility facilities (EPC2) in the development area. The project is expected to begin production in the second half of 2014.

Mozambique Rovuma Offshore Area 1 Project: The project is currently progressing with the offshore development activities as well as the planning of onshore liquefaction facilities construction in the industrial zone at Cape Afungi, in Cabo Delgado Province of northern Mozambique. In the first quarter of 2013, the project completed the drilling of three exploration wells (Barracuda-1, Tubarao-2 and Black Pearl) with no potential for commerciality. The result did not impact the discovered natural gas resources in Prosperidade and Golfinho/Atum and will serve as geological information for future assessment of petroleum potential.

Production: Despite having below-than-planned production level in the first quarter, PTTEP has readied the action plan in key projects, such as S1 and in the Gulf of Thailand, for the remaining three quarters of 2013 to meet the planned production level. In the first quarter, major updates to key projects under production are as follow:

Bongkot Project: The overall production level of natural gas of the project, which consists of Greater Bongkot North and Greater Bongkot South, stood at 900 MMSCFD, which represents about 20% of Thailand natural gas demand.

S1 Project: The project reached the highest production level of crude oil at 37,890 BPD on February 25, 2013 and also served the highest ever record of production level since the inception of the project. The accomplishment was a result of various initiatives, such as artificial lift and waterflooding. Average production level of crude oil for the first quarter of 2013 stood at approximately 33,616 BPD.

Canada Oil Sands KKD Project: Average bitumen production for the Leismer area in the first quarter was approximately 14,680 BPD. In February, the project began the drilling of well pairs, which comprises of steam assisted gravity drainages and production wells for the production of Well Pad 5. Steam injection and production start-up for the well pad is planned for December 2013 in order to reach the expected production level of 20,000 BPD.

The Corner Field is currently undergoing Front End Engineering Design (FEED) process for the production capacity at 40,000 BPD. Together with the operator, the project is conducting detailed evaluation of the development plan and overall budget and is expected to be completed by the second quarter of 2013. As for the plans to increase production capacity (Leismer Expansion) to 40,000 BPD, the project completed the design for production capacity expansion and is in the process of awarding FEED contract, the approval of which is expected in the second quarter of 2013.

MTJDA-B17 Project: Production of natural gas had partially stopped on December 24, 2012 and fully stopped on January 12, 2013 due to repair work on an 8-inch condensate pipeline damage caused by vessel anchoring of a non-affiliated company. Repair was completed and production partially resumed on January 28, 2013. Production fully resumed on February 3, 2013 at the rate of 363 MMSCFD. Average production for the first quarter of 2013 stood at 269 MMSCFD.

Portfolio Management: PTTEP has operated continuously in the areas of Portfolio Management, such as the aforementioned agree partnership to join the interest in Myanmar M3 and M11 projects in early 2013. This aims for appropriate investment both in value added projects and risk management. To keep pace with changing social, economic and political conditions, the company studies and analyzes the factors and the impact of investment on a regular basis to derive investment considerations and decisions. In addition, the company reviews the target for expansion (Focused Countries) by grouping the countries according to the opportunities, appropriateness and consistency with the company's 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.

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)	4 th Quarter 2012	1 st Quarter 2013	1 st Quarter 2012
Total Revenues	1,954	1,907	1,627
Total Expenses	(1,128)	(937)	(797)
Operating Income	826	970	830
Share of gain from associates	1	1	2
Income before income taxes	827	971	832
Income taxes expenses	(378)	(291)	(243)
Net income	449	680	589
Diluted earnings per share	0.13	0.17	0.18

Income from normal operation	494	585	538
Gain(Loss) from non-recurring items	(45)	95	51
Net income	449	680	589

Earnings summary (Unit : Millions of Baht, excepting Baht per share amounts)	4 th Quarter 2012	1 st Quarter 2013	1 st Quarter 2012
Total Revenues	59,949	56,824	50,448
Total Expenses	(34,586)	(27,913)	(24,692)
Operating Income	25,363	28,911	25,756
Share of gain from associates	15	47	47
Income before income taxes	25,378	28,958	25,803
Income taxes expenses	(11,610)	(8,700)	(7,515)
Net income	13,768	20,528	18,288
Diluted earnings per share	4.00	5.08	5.51

First Quarter of 2013 compared with First Quarter of 2012

For the results of operations (Reviewed) in the first quarter of 2013, PTTEP and subsidiaries' net profit amounted to USD 680 million (equivalent to 20,258 million baht), or USD 0.17 per share-diluted (equivalent to 5.08 baht per share-diluted), an increase of USD 91 million or 15% against the first quarter of 2012, which was USD 589 million (equivalent to 18,288 million baht), or USD 0.18 per share-diluted (equivalent to 5.51 baht per share-diluted). The returns on shareholders' equity for the first quarter of 2013 were 22.03%.

PTTEP and subsidiaries' net profit amounted to USD 680 million for the first quarter of 2013 comprised the recurring net profit for this period, which amounted to USD 585 million, and the gain from non-recurring items, which amounted to USD 95 million.

For the results of recurring operations in the first quarter of 2013, PTTEP and subsidiaries' recurring net profit was USD 585 million, an increase of USD 47 million or 9% against the first quarter of 2012, which was USD 538 million. The returns from normal operation on shareholders' equity for the first quarter of 2013 were 23.28%.

For the first quarter of 2013, the total revenue of PTTEP and its subsidiaries was USD 1,907 million (equivalent to 56,824 million baht), an increase of USD 280 million or 17% against the first quarter of 2012 which was USD 1,627 million (equivalent to 50,448 million baht). The increase was mainly due to an increase of sales revenue of USD 273 million, caused by the following:

(1) There was a higher average sales volume in the first quarter of 2013, which increased to 291,476 barrels of oil equivalent per day (BOED) against the first quarter of 2012 which was 253,411 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. Sales volume of natural gas and condensate of Greater Bongkot North also increased, resulting from higher nomination against the first quarter of 2012
- S1 project: Crude oil sales volume increased because of higher production volume produced from new wells and higher beam pump activities.
- Vietnam 16-1 project: Crude oil sales volume increased because of higher production volume produced from 8 new wells

However,

- MTJDA-B17 project: Sales volume of natural gas decreased resulting from a shutdown for pipeline maintenance in January 2013

(2) The higher average petroleum sales price for the first quarter of 2013, which rose to USD 67.03 per barrel of oil equivalent (BOE) against the first quarter of 2012 which was 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 first quarter of 2013, PTTEP and subsidiaries had other revenues of USD 16 million, primarily resulting from the first quarter of 2013's recognition of transfer of participating interest in block Myanmar M11 (Myanmar M3&M11 project). Other revenues in the first quarter of 2013 decreased USD 7 million against USD 23 million for the first quarter of 2012.

PTTEP and subsidiaries incurred expenses amounting to USD 937 million (equivalent to 27,913 million baht) in the first quarter of 2013, an increase of USD 140 million or 18% against USD 797 million (equivalent to 24,692 million baht) for the first quarter of 2012. This increase was caused by the net effect of the following:

- (1) Depreciation, depletion and amortization expenses escalated, amounting to USD 66 million, mainly from an increase in the number of completed assets and production volume of Bongkot, Vietnam 16-1 and S1 projects.
- (2) Petroleum royalties and remuneration increased, amounted to USD 31 million resulting from increased sales revenue.
- (3) Operating expenses increased amounting to USD 27 million, mainly from increased cost of diluent of the Canada Oil Sands KKD project, pipeline maintenance of the MTJDA-B17 project, and higher production expense of the contract 4 project.
- (4) Finance costs increased, amounting to USD 16 million, mainly due to an increase of interest expenses of PTTEP Canada International Finance Limited (PTTEP CIF) which issued a 30-year bond for a total amount of USD 500 million and a drawdown of CAD loans totaling of CAD 475 million from financial institutions during the second and third quarters of 2012 in order to fund investments and ongoing operations.

In the first quarter of 2013, PTTEP and subsidiaries incurred income tax expenses of USD 291 million (equivalent to 8,700 million baht), an increase of USD 48 million, against the first quarter of 2012, which was USD 243 million (equivalent to 7,515 million baht). The increase was mainly due to an increase in petroleum income tax.

For the first quarter of 2013, PTTEP and subsidiaries' recognized a gain from non-recurring items of USD 95 million, an increase of USD 44 million, against a gain from non-recurring items of the first quarter of 2012 of USD 51 million. The increase

primarily resulted from no additional decommissioning costs for Jabiru and Challis fields in the first quarter of 2013, while those decommissioning costs amount USD 43 million was recognized in the first quarter 2012.

First Quarter of 2013 compared with Fourth Quarter of 2012

For the results of operations (Reviewed) in the first quarter of 2013, PTTEP and subsidiaries' net profit amounted to USD 680 million (equivalent to 20,258 million baht), or USD 0.17 per share-diluted (equivalent to 5.08 baht per share-diluted), an increase of USD 231 million or 51% from the fourth quarter of 2012's net profit of USD 449 million (equivalent to 13,768 million baht), or USD 0.13 per share-diluted (equivalent to 4.00 baht per share-diluted). Return on shareholder's equity for the first quarter of 2013 was 22.03%.

However, PTTEP and subsidiaries' net profit amounted to USD 680 million for the first quarter of 2013 comprising the recurring net profit for this period, which amounted to USD 585 million, and the gain from non-recurring items which amounted to USD 95 million.

For the results of recurring operations in the first quarter of 2013, PTTEP and subsidiaries' recurring net profit was USD 585 million, an increase of USD 91 million or 18% from the fourth quarter of 2012's recurring net profit of USD 494 million. The returns from normal operation on shareholders' equity for the first quarter of 2013 were 23.28%.

For the first quarter of 2013, the total revenue of PTTEP and subsidiaries was USD 1,907 million (equivalent to 56,824 million baht), a decrease of USD 47 million or 2% from the fourth quarter of 2012's total revenue of USD 1,954 million (equivalent to 59,949 million baht), which was chiefly due to lower sales revenue, totaling USD 44 million, resulting from the net effect of;

(1) There was a lower average sales volume for the first quarter of 2013, which decreased to 291,476 barrels of oil equivalent per day (BOED) against the fourth quarter of 2012, which was 294,233 BOED. This average sales volume decreased from the net effect of the following :

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

However,

- Bongkot project: Sales volume of natural gas increased from Greater Bongkot North due to no plant shutdown in the first quarter of 2013, while there was a partial shutdown during the fourth quarter of 2012

- S1 project: Crude oil sales volume increased because of higher production volume produced from new wells and higher beam pump activities.

However,

(2) The higher average petroleum sales price for the first quarter of 2013, which went up to USD 67.03 per BOE compared with the fourth quarter of 2012's price of USD 66.38 per BOE.

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

In the first quarter of 2013, PTTEP and its subsidiaries had other revenues of USD 16 million, a decrease of USD 39 million against the fourth quarter of 2012, which was USD 55 million. The decrease was mainly due to the recognition of insurance claims amount of USD 31 million in the fourth quarter of 2012 from Montara incident.

PTTEP and subsidiaries incurred expenses of USD 937 million (equivalent to 27,913 million baht) in the first quarter of 2013, a decrease of USD 191 million from the fourth quarter of 2012, which was USD 1,128 million (equivalent to 34,586 million baht). This decrease stemmed from the net effect of the following:

(1) Impairment loss on assets, which is a non-recurring item, decreased amounting to USD 95 million due to no recognition of impairment loss of Montara asset in the first quarter of 2013, while there was recognition of this impairment loss amount of USD 95 million in the fourth quarter of 2012.

(2) Administrative expenses decreased, amounting to USD 46 million, mainly from a donation, professional consultation fees related to financial consulting services and to share acquisition of Cove Energy Plc. occurred in the fourth quarter of 2012

(3) Operating expenses decreased, amounting to USD 33 million mainly from decreased cost of diluent of the Canada Oil Sands KKD project, and lower repair and maintenance costs of the Contract 4 and Bongkot projects.

(4) Exploration expenses decreased amounting to USD 31 million, primarily due to:

- Exploration expenses decreased amounting to USD 21 million, mainly from lower seismic cost of the A4, 5 & 6/48 and L21 & 28/48 projects.
- Exploratory well write-off costs decreased amounting to USD 10 million. The exploratory well write-off costs of the first quarter of 2013 amounted to USD 18 million were driven by the Mozambique Rovuma Offshore Area 1, B8/32 & 9A, and G4/43 projects; while there were USD 28 million exploratory well write-off costs in the fourth quarter of 2012, principally from the Canada Oil Sands KKD, Oman 44 and Australia WA-423-P projects.

For the first quarter of 2013, PTTEP and subsidiaries incurred income tax expenses, totaling USD 291 million. The decrease of USD 87 million comparing to the fourth quarter of 2012 amounted to USD 378 million, mainly because petroleum income tax and overseas income taxes decreased.

For the first quarter of 2013, PTTEP and subsidiaries' recognized a gain from non-recurring items of USD 95 million. An increased gain of USD 140 million, against that of a loss from non-recurring items of the fourth quarter of 2012 of USD 45 million, stemmed from the net effect of the following:

(1) Impairment loss on assets decreased amounting to USD 95 million due to no recognition of impairment loss on assets in the first quarter of 2013, while there was recognition of impairment loss on Montara assets amount of USD 95 million in the fourth quarter of 2012

(2) Gain from effect of foreign exchange increased amounting to USD 89 million mainly from;

- Gain on foreign exchange increased amounting to USD 44 million. In the first quarter of 2013, recognition of gain on foreign exchange amount of USD 42 million was mainly from the receipts of accounts receivable in Thai Baht, given the Baht appreciation against the USD on the cash receipt date. While, in the fourth quarter of 2012, PTTEP and subsidiaries recognized loss on foreign exchange amounted to USD 2 million.
- For the first quarter of 2013, income tax expenses affected by the functional currency decreased, amounting to USD 48 million against the fourth quarter of 2012. The decrease was mainly due to lower deferred income tax liabilities, because of an increase in net assets after they were translated into USD on 31 March 2013, compared with net assets after they were translated into USD on 31 December 2012, given the Baht appreciation against the USD. The increase of net assets resulted in an increase of depreciation expenses in USD and a decrease of future income tax amounted of USD 52 million; whereas, income tax expenses affected by the functional currency for the fourth quarter of 2012 caused a decrease of income tax expenses in the future of USD 4 million.

However,

(3) Net impact from Montara incident decreased amount of USD 31 million. In the first quarter of 2013, there was no recognition of other revenue from the insurance claim from the Montara incident; while, there was recognition of the insurance claim amounting USD 31 million in the fourth quarter of 2012.

2.2.2. Financial position

	Unit : Millions of USD		Unit : Millions of Baht	
	Mar 31, 2013	Dec 31, 2012	Mar 31, 2013	Dec 31, 2012
Total Assets	20,889	19,637	612,239	601,513
Current Assets	4,588	4,031	134,478	123,483
Non-current Assets	16,301	15,606	477,761	478,030
Total Liabilities	9,921	8,926	290,762	273,409
Current Liabilities	3,035	2,375	88,956	72,749
Non-current Liabilities	6,886	6,551	201,806	200,660
Shareholders' Equity	10,968	10,711	321,477	328,104
Total Liabilities and Shareholders' Equity	20,889	19,637	612,239	601,513

As of March 31, 2013, PTTEP and subsidiaries commanded total assets of USD 20,889 million (equivalent to 612,239 million baht), an increase of USD 1,252 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 due to

(1) An increase of USD 557 million in current assets mainly from cash and cash equivalents. An increase of USD 828 million of cash and cash equivalents was mainly from cash inflow of operating activities offset with cash outflow in the exploration and production assets and payment of finance costs. However, account receivable-parent company and trade accounts receivable decreases amount of USD 190 million.

(2) An increase of USD 695 million in non-current assets mainly from:

- An increase of USD 632 million in exploration and production assets, mostly from production assets of the Zawtika Project, PTTEP Australasia Project, Arhit Project, Contract 4 Project and Bongkot Project.
- An increase of USD 37 million in intangible assets and goodwill was primarily from the additional investment in exploration projects such as in Myanmar M3 and M11 Project and Algeria Hassi Bir Rekaiz Project.

Most current assets of PTTEP and subsidiaries as of March 31, 2013, were cash and cash equivalents; account receivable-parent company; 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 tax assets. PTTEP and subsidiaries' Current Ratio as of March 31, 2013, was 1.51 times.

As of March 31, 2013, PTTEP and subsidiaries had total liabilities of USD 9,921 million (equivalent to 290,762 million baht), an increase of USD 995 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) An increase of USD 660 million in current liabilities mainly from dividend payable for the second half-year operations of 2012 amount of USD 407 million, and an increase in income tax payable amount of USD 329 million. However, current liabilities decreased from the decreasing of accrued expenses amount of USD 113 million. The decrease primarily from accrued expenses in the construction of production assets, accrued employees' bonus and accrued consultation fees for PTTEP's newly issued ordinary shares.

(2) An increase of USD 335 million in non-current liabilities mainly from the increase in provision for remuneration for the renewal of petroleum production of Bongkot Project amount of USD 391 million.

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 March 31, 2013, there is no outstanding B/Es.

Bonds

No bonds issuance in the 1st quarter of year 2013

Subordinated Capital Debentures

No subordinated capital debentures issuance in the 1st 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 March 31, 2013, there is no outstanding loan.

Long-term loans from financial institutions

In March 2013, PTTEP Offshore Investment Company Limited (PTTEPO) has signed an Amendment Deed relating to a US\$500,000,000 Facility Agreement dated November 24, 2010. The Amendment Deed is to extend the final maturity of the Facility Agreement from November 2015 to November 2017.

In March 2013, PTTEP Offshore Investment Company Limited (PTTEPO) has signed an Amendment Deed relating to a US\$75,000,000 Facility Agreement dated December 1, 2010. The Amendment Deed is to extend the final maturity of the Facility Agreement from December 2015 to December 2017.

Cash Flows

For the period 3 months ending on March 31, 2013, PTTEP and subsidiaries had a net cash flows from operations of USD 1,601 million, chiefly due to the cash receipt from sales revenue offset with cash payments of expenses and tax expenses.

PTTEP and subsidiaries had a net cash flow employed in its investing activities of USD 732 million, mainly resulting from additional investment in exploration and production assets as well as intangible assets, principally from the Zawtika, PTTEP Australasia, Arthit, Canada Oil Sands KKD and Contract 4 projects.

PTTEP and subsidiaries had a net cash flow used in financing activities of USD 41 million, mainly from interest paid for loans, cash payments for financial costs, and interest paid for subordinated capital debentures

As of March 31, 2013, PTTEP and subsidiaries held total cash and cash equivalents of USD 3,120 million, an increase of USD 828 million from that of December 31, 2012 at which point cash and cash equivalents totaled USD 2,292 million.

2.3 Impact on Operating Results

Oil prices continue to be highly volatile during the first quarter of 2012. Average crude oil price for the first quarter stood at USD 114 per barrel, an increase from previous quarter at USD 111 per barrel. Factors driving oil prices higher include geopolitical tension in the Middle East between Israel and Syria and the sanction on Iran by the International Atomic Energy Agency (IAEA) over the country's unfavorable response on its nuclear project and may suppress crude oil supply. Terrorist activities, which took place in eastern Algeria at a gas plant joint venture between BP and national oil companies from Algeria and Norway, resulted in casualties of foreign workers held captive and added weight to the suppressed energy market supply.

Crude oil prices are expected to face continuous pressure from the global economic conditions, particularly on the demand side. Important factors that affect crude oil prices are the sequestration in the U.S., concerns over the Eurozone's prolonged debt restructuring process and lack of economic recovery and the increase in U.S. crude oil supply as the technology to reduce production cost of shale oil or tight oil becomes more advanced. The OPEC nations have responded to the increase in non-OPEC crude oil supply by lowering its crude oil output, providing balance to the global crude oil demand and supply.

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 first quarter of 2013, PTTEP production level was at 331,855 barrels of oil equivalent per day (BOED), an increase of 6 percent compared to the average production in 2012 at 313,972 BOED. Domestic energy demand, as released by the Ministry of Energy (MOE) in February 2013, stood at 2 million BOED, an increase of 4.1 percent compared to the same period of previous year at 1.9 million BOED. The increase in energy demand is consistent with Thailand's economic growth. Furthermore, the MOE has outlined the energy policies and outlook for 2013-2014 with an emphasis on sustainability and development of renewable energy. Several policies brought forward are aimed for the MOE to become the Energy Bridge of Thailand, provide parity in petroleum prices across the country, determine strategic petroleum reserves, develop renewable energy enterprises by utilizing Napier grass resources, further develop agro-energy products, such as ethanol, bio plastics and biodiesel, promote energy conservation and efficiency programs, and provide energy cost transparency.

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 the efficiency and cost optimization PTTEP, together with its parent company, PTT Public Company Limited (PTT), and other companies under the PTT Group, embarked on the PTT Group Operational Excellence Transformation Project to initiate the PTT Group Operational Excellence Management System (OEMS) with the objective of becoming one of the leading enterprises in the energy industry. In the first quarter of 2013, PTTEP and partners in the PTT Group Operational Excellence Transformation Project engaged in the OEMS Maturity Assessment for four weeks, with PTTEP as one of the seven PTT Group companies evaluated. The result of the evaluation will be presented to the project stakeholders in April in order to determine future operational excellence and process improvement initiatives for PTTEP.

Moreover, as the company's investment increases both domestically and internationally, it manages its operating costs to incorporate the increase in investment. As a representative example, The Supply Chain Plus project, aimed to reduce operating costs by USD 12 million, launched several initiatives, such as resources management in low cost countries (LCC) and the vendor managed inventory (VMI) to optimize storage and procurement costs. The company also plans to manage its supply chain in the form of global contracts as a future initiative.

Managing Risks on oil price volatility PTTEP aims to continuously conduct oil price hedging programs for the petroleum products from the PTTEP group, using Brent Crude price as a reference. PTTEP also closely monitors the changing economy and events that may have impacted the oil price, especially in the first nine months of this year, during which oil prices were highly volatile. 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 acknowledges the importance of capability improvement by focusing on the potential of people, technology and processes to prepare for business growth and meet challenges in different countries around the world. In 2012, PTTEP continued this focus with establishment of its Center of Excellence, or COE. The COE aims to create a clear-cut plan to study, research, and collect data, including in-depth knowledge and technology in four dimensions: Exploration, Deep Water Exploration and Production, Unconventional Oil and Gas Development, and Mergers and Acquisitions. Additionally, the initiative of a Technology Center, which centralizes the latest technological developments and also serves as a knowledge warehouse to further develop the capacities of employees and the organization, has been brought forward.

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

PTTEP aims to become a Loss Time Injury free organization in 2013 through compulsory management of safety, security, health and environment in all parts of the organization as measured by a series of performance indicators. In 2012, PTTEP achieved its best safety performance ever with the record for Lost Time Injury Frequency (LTIF) and Total Recordable Injury Rate (TRIR) at the ratios of 0.19 and 1.87 respectively and placed the company in a good position to be ranked in the top quartile amongst the International Association of Oil and Gas Producers (OGP). In the first quarter of 2013, the incidence report continues to show remarkable safety performance as LTIF ratio hits zero and TRIR

hits 0.78. During the same period, five petrochemical and petroleum spill incidents occurred with a spill rate of 0.06 tons per 1 million tons of production.

Furthermore, PTTEP developed action plans for emergency cautions and operational procedures in high risk areas, such as natural disasters, pandemic diseases and geopolitical unrests that could directly or indirectly impact PTTEP's operations.

PTTEP has the strategy to deliver long-term sustainable development and meet its 900,000 BOED production target by 2020 through investment opportunities that yield sustainable growth as well as achieve economic, social and environmental sustainability. In 2011, PTTEP proudly established its Sustainable Development Committee, comprising representatives from operational and executive levels, to provide governance and support to different organizations in the company with aligned objectives. PTTEP targets listing on the Dow Jones World Sustainability Index (DJSI World) by 2014. Moreover, during the first quarter of 2013, the company launched the sustainable development policy, or G.R.O.W.T.H. Policy, and sustainable development guideline to signify its commitment to deliver sustainable development to the organization.

Corporate Social Responsibility (CSR) PTTEP recognizes the importance of natural preservation, along with sustainable development in communities surrounding the areas of operation. In 2013, PTTEP engaged in various sustainable development activities in communities surrounding the areas of operation. Examples of such activities include the Crab Bank project in Chumphon province, the water bank program to manage irrigation system in Phatthalung and Songkhla provinces and the Love Your Neighbor project to educate the community on sustainable economy. PTTEP also engaged in various environmental restoration and preservation initiatives as part of its sustainable development program. Examples of such initiatives include submerging of the Royal Thai Navy Battleship for Underwater Learning Center in Chumphon province and in Koh Tao, Surat Thani province, the Artificial Coral Reefs project, one of the CSR programs to restore aquatic resources and the ecosystem in the coastal area, and the mangrove plantation project jointly with Chulalongkorn University, both of which in Chumphon province. Also in Songkhla province are the mangrove conservation project with the local community and the youth camp in "Conserve Songkhla Lake with PTTEP" project.

Furthermore, PTTEP has put guidelines to corporate social responsibility into action plan by developing guidelines for corporate philanthropy & charitable donation, corporate social investment and corporate social responsibility reporting. At the same time, the company published and distributed the 2012 Sustainability Report, established a Memorandum of Understanding (MOU) for Irrawaddy Dolphins preservation in Songkhla Lake to sustain the endangered dolphin population along with other aquatic, coastal, wildlife and botanic resources, and explored a 200,000-rai land for PTTEP reforestation to remove greenhouse gas project.