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## Management's Discussion and Analysis for Business Operations For the year ended December 31, 2011

### 1. Executive Summary

For the year end of 2011, the Consolidated Financial Statements recorded a net profit of Baht 5,610 million (EPS = 4.24 Baht per share) which can be summarized in the table below

(Unit: Million Baht)	End of 2011	End of 2010	Q4 2011	% Change YoY	% Change QoQ
Sale Revenues	158,610	136,369	40,172	+16.31%	+1.01%
Net Profit <sup>1/</sup>	5,610	2,796	561	+100.64%	-7.12%
EPS (Baht)	4.24	2.16	2.33	+96.30%	-4.55%

Note 1/ Excluding the profit attributed to Non-Controlling interests.

For the year end of 2011, Net Profit increased by 100.64% from last year because of higher GRM and inventory gain. In addition, company also received the compensation from PQI contractor and claim received from insurance company according to the Hydro Cracking Unit's pipe leakage incident in January, 2011.

Company's projects progress status are shown as follow:

Project	Details	Progress
<b>1. Product Quality Improvement Project</b>		
1.1 Gasoline EURO IV Project	To improve gasoline quality to meet with the EURO IV standard following the new regulation of the Ministry of Energy which has been legally effective on January 1, 2012	The Commercial Operation Date (COD) was in November 2011.



<b>2. Marketing Business Expansion Project</b>		
2.1 Gasohol Promotion Project	To promote and expand the use of gasohol through the increasing service stations of E20 and E85, including the sales promotion through the Gasohol Club Card	As of end of 2011, the Company's average sales volume of E20 was 10 million litres per month and average sales volume of E85 was around 400,000 litres per month .There are 454 service stations selling E20 and 30 service stations selling E85.
<b>3. Renewable Energy Development Project</b>		
3.1 Solar-cell power generation plants– Solar Farm Phase 1 at Bang Pa-in District, Ayutthaya Province.	<p>The capacity of 38 MW consisting of :</p> <ul style="list-style-type: none"> <li>● 8 MW plant, electricity will be sold to the PEA</li> <li>● 30 MW plant, electricity will be sold to the EGAT</li> </ul>	<ul style="list-style-type: none"> <li>● The 8 MW plant had commercial operation since Aug 5, 2011, but ceased its operation on October 16, 2011 due to the flood. The plant has insurance coverage both property damage and Business Interruption. It is expected to resume operation in April 2012.</li> <li>● The 30 MW plant has been under construction and not yet hand-over. The insurance coverage was arranged by the contractor. It is expected that the Commercial</li> </ul>



		<p>Operation Date (COD) of 30 MW will be in July 2012.</p> <ul style="list-style-type: none"> <li>From the flood in 2011, the company had the impairment losses for solar project for Baht 98 million.</li> </ul>
<p>3.2 Solar-cell power generation plants – Solar Farm Phase 2 (Bangchak Solar Energy Co., Ltd./BSE)</p>	<p>The capacity of 32 MW comprises of 2 locations: A 16 MW plant is at Bamnet Narong District, Chaiyaphum Province and the other 16 MW is at Bangpahun District, Ayutthaya Province</p>	<ul style="list-style-type: none"> <li>The 16 MW plant at Bamnet Narong District, Chaiyaphum Province is expected to start construction in April 2012.</li> <li>The other 16 MW plant at Bangpahun District, Ayutthaya Province is under the study of flood protection system and expected to start the flood protection construction in Second Quarter of 2012</li> </ul>
<p>3.3 Ethanol Project (Ubon Bio Ethanol Co., Ltd./UBE)</p>	<p>Produce ethanol with the capacity of 400,000 litres per day. Its business includes the manufacturing of cassava starch and biogas. BCP holds 21.28% of UBE shares.</p>	<ul style="list-style-type: none"> <li>Under construction, expected to be completed and start COD in October 2012.</li> <li>In October 2011, UBE had signed a contract with OSIC to export ethanol 300,000litre/day to China</li> </ul>



For the investment in Thai Agro Energy Public Company limited (TAE), BCP had announced the investment cancellation as TAE could not achieve the condition precedent as stated in Share Sale and Purchase Agreement within the specified time frame.

## 2. Oil Price Situation

In 2011, an average crude price increased from previous year around 28 \$/bbl. At the beginning of the year, there were two prominent key factors that supported the increase in oil price. Firstly, the Japanese earthquake in March 2011 resulted in the shutdown of nuclear power plants and led to strong demand of fossil fuel especially crude oil. Secondly, the political unrest situations in Middle East and North Africa regions led to the price rising until International Energy Agency (IEA) decided to release 60 million barrels of its strategic reserves to heal the situation.

In the Second Half of the year, oil price decreased due to the resolved of political tension in Middle East, but the price still fluctuated until the end of the year. Negative impact to oil price resulted from the announcement of S&P lowering the U.S. long term credit rating from AAA to AA. Price also been pressured by the “Operation Twist”, the FED’s measurement to stimulate the U.S. economy. This resulted in U.S. dollar appreciation and an increase in oil price. Furthermore, the concern over the default of some of the countries in Euro zone such as Greece, Ireland, Portugal, Italy and Spain were also the critical factors.

At the end of the year, oil price was supported from tension between Iran and the West over Iran’s nuclear program.

### Oil prices and product spread comparisons

Unit: USD/bbl

Price	2011			2010	Changes
	MAX	MIN	AVG (A)	AVG (B)	(A)-(B)
DB	116.00	92.52	106.19	78.04	+28.15
UNL95/DB	18.06	3.86	13.50	10.31	+3.19
GO/DB	22.01	15.67	18.28	11.41	+6.87
IK/DB	23.21	16.44	19.39	12.04	+7.35
FO/DB	-0.11	-10.77	-5.18	-5.68	+0.50



### 3. Operating Result

#### 3.1 Summary of the Operating Results on consolidated basis

Unit: Million Baht

Statements of income	Year		Changes	4Q2011	
	2011	2010	+/(-)	2011	2010
Revenue from sale of goods and rendering of services	158,610	136,369	+22,241	40,172	36,225
Cost of sale of goods and rendering of services	(147,984)	(130,020)	+17,964	(38,364)	(33,783)
<b>Gross Profit</b>	<b>10,626</b>	<b>6,350</b>	<b>+4,276</b>	<b>1,808</b>	<b>2,442</b>
Gain (loss) from crude and product oil price hedging contract	(759)	28	-787	117	(189)
Gain (loss) from foreign exchange and foreign exchange forward contract	(531)	912	-1,443	(196)	187
Impairment cost (loss)	12	146	-134	(227)	20
Other income / expense	1,524	717	+807	73	493
Selling, General & Administrative Expense	(3,841)	(3,406)	+435	(1,305)	(1,153)
<b>Profit before financial costs and income tax expense</b>	<b>7,031</b>	<b>4,746</b>	<b>+2,285</b>	<b>269</b>	<b>1,840</b>
Financial costs	(783)	(879)	-95	(195)	(228)
Income tax expense	(615)	(995)	-380	472	(447)
<b>Net Profit / (Loss)</b>	<b>5,632</b>	<b>2,872</b>	<b>+2,760</b>	<b>546</b>	<b>1,125</b>
· Non-controlling interests	<b>22</b>	<b>76</b>	<b>-54</b>	<b>-15</b>	<b>39</b>
· Equity holders of the Company	<b>5,610</b>	<b>2,796</b>	<b>+2,814</b>	<b>561</b>	<b>1,086</b>



### Revenues

- For 2011, revenues from sale of goods and rendering of services of the Company and its subsidiaries were Baht 158,610 million, comprised of the Company's revenues of Baht 156,928 million, Bangchak Green Net Company Limited (BGN)'s revenues of Baht 21,774 million, Bangchak Bio Fuel Company Limited (BBF)'s revenues of Baht 2,500 million and Bangchak Solar Energy Company Limited (BSE)'s revenues of Baht 1.38 Million. However, there was connected transaction of Baht 22,593 million which mostly associated with the sale transactions from the Company to BGN and BBF.

### Cost of sale of goods and rendering of services

- For 2011, cost of sale of goods and rendering of services of Consolidated Income Statement was Baht 147,984 million, comprising of the Company's costs of Baht 147,033 million, Bangchak Green Net Company Limited (BGN)'s costs of Baht 21,083 million and Bangchak Bio Fuel Company Limited (BBF)'s costs of Baht 2,363 million adjusted by connected transaction of Baht 22,495 million, which mostly was cost of sales of oil finished products among the Company to BGN and B-100 produced by BBF sold to BCP.

### Net Profit

- For 2011, the Consolidated Financial Statements recorded a net profit of Baht 5,632 million, which was the Company's net profit of Baht 5,643 million, Bangchak Green Net Company Limited (BGN)'s net profit of Baht 14 million, Bangchak Bio Fuel Company Limited (BBF)'s net profit of Baht 74 million and Bangchak Solar Energy Company limited (BSE)'s net profit of Baht 0.33 million. Taking out the profit attributed to Non-Controlling interests of Baht 22 million, the remaining net profit to equity holders of the Company was Baht 5,610 million (EPS 4.24 Baht.)



### 3.2 Analysis of the Company's Operating Results

Unit: Million Baht

Statements of income	Year		Changes	4Q2011	
	2011	2010	+ / (-)	2011	2010
Revenue from sale of goods and rendering of services	156,928	134,638	+22,290	39,792	35,661
Cost of sale of goods and rendering of services	(147,033)	(129,115)	+17,918	(38,082)	(33,493)
<b>Gross Profit</b>	<b>9,896</b>	<b>5,523</b>	<b>+4,373</b>	<b>1,710</b>	<b>2,168</b>
Gain (loss) from crude and product oil price hedging contract	(759)	28	-786	117	(189)
Gain (loss) from foreign exchange and foreign exchange forward contract	(531)	912	-1,443	(196)	187
Impairment cost (loss)	12	146	-135	(227)	20
Other income / expense	1,629	705	+924	73	462
Selling, General & Administrative Expense	(3,249)	(2,853)	+396	(1,144)	(1,004)
<b>Profit before financial costs and income tax expense</b>	<b>6,998</b>	<b>4,461</b>	<b>+2,536</b>	<b>333</b>	<b>1,644</b>
Financial costs	(784)	(842)	-94	(187)	(219)
Income tax expense	(607)	(985)	-378	468	(437)
<b>Net Profit / (Loss)</b>	<b>5,643</b>	<b>2,634</b>	<b>+3,009</b>	<b>614</b>	<b>987</b>

- For 2011, The Company's net profit was Baht 5,643 million increased from the last year by Baht 3,009 million. The Company's base performance EBITDA was Baht 6,597 million. Combining inventory gain of Baht 2,597 million and loss from GRM Hedging of Baht 171 million, total accounting EBITDA was Baht 9,022



million in which the refinery business, marketing business and Solar Power plant were accounted for Baht 7,716 million, Baht 1,292 million and Baht 14 million respectively. The Total Gross Integrated Margin-GIM (Gross Refining Margin-GRM and Marketing Margin-MKM) was 11.77 \$/bbl. and the average crude run was at 85.7 KBD.

- The revenue from sales was Baht 156,928 million, Baht 22,290 million increasing from 2010, due to rising in average oil price compared to the last year. Average retail price was Baht 26.09 per liter compared to Baht 22.45 per liter in 2010 while sales volume slightly increased by 0.35%.
- Gross profit of Baht 9,896 million which was Baht 4,373 million increasing (79.11%) from 2010 resulted from an improvement in refinery margin and a substantial inventory gain of Baht 2,597 million.
- Baht 759 million loss from crude and product oil price hedging contract.
- Loss from foreign exchange and foreign exchange forward contract amounted of Baht 531 million resulted from Thai Baht depreciation. It had effected a FX loss from Mark to Market and the USD 200 million Cross Currency Swap transactions in which the company had swapped the Thai Baht Loan to USD loan (Cross Currency Swap) according to the company's Natural Hedge Policy to protect exchange rate fluctuation impact.
- Other income was Baht 1,629 million comprising of a compensation from PQI contractor of Baht 918 million, claim received from insurance according to the incident in January, 2011 of Baht 260 million, and other income of Baht 451 million.
- Selling, General & Administrative expense increased by Baht 396 million resulted from an increase in transportation expenses and employees benefits.
- A decrease in financial cost of Baht 94 million from the conversion of convertible debenture in the beginning of 2011 and the Long-Term Loan restructure.





- Corporate Income Tax decreased by baht 378 million because of the BOI Tax Privilege from the Baht 1,349 million investment in Environmental Improvement Project.

### The breakdown EBITDA by businesses

Unit: Million Baht

	For Year		Δ	
	2011	2010	+/(-)	%
■ Base Performance EBITDA	6,597	5,365	+1,232	+23.0
- Refinery business	5,291	4,004	+1,287	+32.1
- Marketing business	1,292	1,361	-69	-5.1
- Solar Power Plant	14	-	+14	N/A
■ Gain (loss) from GRM hedging	(171)	28	-199	N/A
■ Gain (loss) from inventory (Including Inventory Hedging)	2,597	434	+2,163	+498.4
■ Total Accounting EBITDA	9,022	5,827	+3,195	+54.8
- Refinery business	7,716	4,466	+3,250	+72.8
- Marketing business	1,292	1,361	-69	-5.1
- Solar Power Plant	14	-	+14	N/A

#### ● Refinery Business

- For 2011, the Refinery Business's Base Performance EBITDA was Baht 5,291 million, an increase of Baht 1,287 million from EBITDA last year. As there were Baht 2,597 million inventory gain (included inventory hedging) and Baht 171 million loss from GRM hedging, total accounting EBITDA of Refinery business was Baht 7,716 million, an increase of Baht 3,250 million from 2010. The Refinery Business has a Total GRM of 9.24 \$/bbl, compared to 6.09 \$/bbl in 2010. An average crude run was 85.7 KBD decreasing from



86.0 KBD in 2010 due to a Turnaround Annual Maintenance in the First Quarter and equipments fixing in the Third Quarter.

GRM Analysis is available as follows:

Unit: USD/bbl

GRM	For Year		Changes +/-
	2011	2010	
Base GRM	6.71	5.63	+1.08
GRM Hedging	-0.18	0.03	-0.21
Inventory Gain (include inventory hedging)	2.71	0.43	+2.28
Total	9.24	6.09	+3.15

**Base GRM** The Base GRM was at 6.71 \$/bbl which was 1.08 \$/bbl increase from 5.63 \$/bbl in 2010 due to an improvement in spreads of all finished products to crude, and a better production yield. The spreads of the oil finished products and the benchmark crude are described as follows:

Unit: USD/bbl

spreads	For Year		Changes +/-
	2011	2010	
UNL95/DB	13.50	10.31	+3.19
IK/DB	19.39	12.10	+7.29
GO/DB	18.28	11.41	+6.87
FO/DB	-5.18	-5.68	+0.50

**GRM Hedging** loss of 0.18 \$/bbl since the spread between finished products to crude oil were higher than the prices the company had hedged.

**Inventory Effect** Net inventory gain equaled to 2.71 \$/bbl due to rising in oil price from the previous year.



● **Marketing Business**

- For 2011, EBITDA from the Marketing Business was Baht 1,292 million, Baht 69 million decreased from EBITDA of the last year which was at Baht 1,361 million. The Company's Marketing Margin (excluding lube) was at Baht 0.55 per litre (equivalent to USD 2.85 per barrel at the average exchange rate of 30.63 Baht/USD) which was lower when compared to last year's marketing margin of Baht 0.56 per litre (equivalent to USD 2.75 per barrel at the average exchange rate of 31.86 Baht/USD). It was the effect from the government policy of diesel price cap and a postpone of oil fuel fund since September 2011.
- The sales volume through the Marketing Business increased approximately by 7% from the last year, resulted from increases in industrial sales, service station sales and JET sales to Thai Airways International PLC., by 29.3%, 2.8% and 3.7% respectively.

Monthly sales volume by marketing business

Unit: Million litre	2011	2010	Δ	
			+/-	%
Service station	194.3	189.0	+53	+2.8%
Jobber	10.2	12.1	-1.9	-15.6%
Industrial sales	77.1	59.6	+17.5	+29.3%
JET	65.9	63.6	+2.3	+3.7%
Lube and others	2.5	2.2	+0.2	+14.7%
<b>Total</b>	<b>350.0</b>	<b>326.5</b>	<b>23.5</b>	<b>7.2%</b>

● **Solar Power Plant Business**

- In 2011, the 8 MW Solar Power Plant generated revenue of Baht 28 million and EBITDA of Baht 14 million. The Commercial Operation Date was on August 5, 2011 but later ceased operation on October 16, 2011 due to flood.



4. Analysis of the Financial Position as of December 31, 2011 compared with December 31, 2010

Unit: Million Baht

<b><u>Balance Sheet</u></b>	<b>31 December 2011</b>		<b>31 December 2010</b>	
	<b>Consolidated</b>	<b>Company</b>	<b>Consolidated</b>	<b>Company</b>
<b>Assets</b>				
Current assets	31,294	30,760	32,084	31,451
Investments in associates and other long-term investments	745	1,111	-	198
Property, plant and equipment	26,959	26,062	23,566	22,736
Other non-current assets	2,605	2,568	2,763	2,754
<b>Total assets</b>	<b>61,603</b>	<b>60,501</b>	<b>58,413</b>	<b>57,139</b>
<b>Liabilities</b>				
Current liabilities	13,990	13,786	14,918	14,577
Long-term borrowings & debentures (including current portion)	16,581	16,022	19,577	19,028
Other non-current liabilities	1,152	1,121	1,137	1,109
<b>Total liabilities</b>	<b>31,724</b>	<b>30,929</b>	<b>35,632</b>	<b>34,713</b>
<b>Equity</b>				
Total equity attributable to owners of company	29,729	29,572	22,616	22,426
Non-controlling interests	150	-	164	-
<b>Total equity</b>	<b>29,879</b>	<b>29,572</b>	<b>22,780</b>	<b>22,426</b>
<b>Total liabilities and equity</b>	<b>61,603</b>	<b>60,501</b>	<b>58,412</b>	<b>57,139</b>

Remark: The figures shown in the table for 2011 and 2010 were adjusted to the new accounting standard which has been applied since 1 January 2011.



#### 4.1 Assets

- At the end of December 2011, Total Assets of the Company and its subsidiaries were Baht 61,603 million, which comprised of the Company's total assets of Baht 60,501 million, Bangchak Green Net Company Limited (BGN)'s total assets of Baht 874 million, Bangchak Bio Fuel Company Limited (BBF)'s total assets of Baht 1,282 million and Bangchak Solar Energy (BSE)'s total assets of Baht 151 million adjusted by connected transactions of Baht 1,205 million which was mainly Trade Account Receivable-BGN and BBF of Baht 699 million and Baht 99 million accordingly. Subsidiaries investment of Baht 348 million and realized Baht 18 million lose from associate investment (Ubon-Bio-ethanol)
- The Company's Total Assets at the end of 2011 compared to the end of 2010 increased by Baht 3,362 million or increased by 6%. The changes of assets were mainly from
  - Cash decreased by Baht 5,092 million resulted from cash used for operating activities, in investment activities and long-term loan repayment. (Detail is mentioned under Cash Flow Analysis Section).
  - Net Accounts Receivable increased by Baht 2,354 million from the increasing sales through Supply sales, industrial sales and export.
  - The inventories increased by Baht 1,087 million from an increase in product prices while decreased in quantity. Inventory as of end of 2011 was 4.5 M.bbl which comprised of 2.9 M.bbl in crude oil and 1.6 M.bbl in finished products
  - Prepayment of Corporate Income Tax increased by Baht 327 million because the Corporate Income Tax paid for the First-half of 2011 was higher than the actual Corporate Income Tax, as the Company has received benefits from BOI tax privilege in Environmental Improvement Project amounted of Baht 1,349 million.



- At the end of 2011, Oil Fuel Fund Subsidy Receivable increased by Baht 406 million mostly from refunds of Diesel (EURO IV), GSH E20 and GSH9.
- Other Current Assets comprised of a Baht 568 million increase in Value Added Tax Receivable since there was an increase in crude purchasing, whereas Insurance Compensation Receivable decreased by Baht 416 million since the company already received the compensation payment.
- Property, plant and equipment increased by Baht 3,326 million. In 2011 the Company had an investment of Baht 5,145 million which were investment in Solar Power Plant 38 MW, Euro IV investment and normal capital expenditure. In addition, there was Baht 98 million in impairment assets caused by 2011 flood in Solar Power Plant, Baht 241 million reversing entries of impairment assets and Baht 1,850 million depreciation.

## 4.2 Liabilities

- At the end of December 2011, Total Liabilities of the Company and its subsidiaries were Baht 31,724 million, which comprised of the Company's total liabilities of Baht 30,929 million, Bangchak Green Net Company Limited (BGN)'s total liabilities of Baht 839 million, Bangchak Bio Fuel Company Limited (BBF)'s total liabilities of Baht 782 million and Bangchk Solar Energy (BSE)'s total liabilities of Baht 0.33 million adjusted by connected transactions of Baht 826 million which mostly associates with the sale transactions between the Company and subsidiaries (BGN and BBF).
- The Company's Total Liabilities at the end of 2011 compared to the end of 2010 decreased by Baht 3,784 million. The changes of liabilities were mainly from;
  - The short-term loans increased by Baht 2,000 million for working capital.



- Current portion of long-term loans from financial institutions decreased by Baht 1,069 million. There was a long-term loans drawdown of Baht 3,452 million for the 38 MW Solar Power Plants while there was a long-term loan prepayment of Baht 4,521 million. In addition, convertible debentures (CD-DR) were completely converted to common share worth of Baht 1,937 million.
- Accounts Payable decreased by Baht 1,477 million which was resulted from a 1.19 Mbbl. decrease in crude purchasing at the end of the Fourth Quarter.
- Excise tax and oil fuel fund payable decreased resulted from the government policy to reduce excise tax rate and remittance to oil fuel fund.
- Other Non-Current Liabilities decreased by Baht 794 million which mainly resulted from decrease in Other Account Payable from the final payment to PQI Contractor, Unpaid expenses and retention.

### **4.3 Equity**

- At the end of 2011, the Consolidated Total Equity was Baht 29,879 million, which comprised of the Company's total equity of Baht 29,572 million, Bangchak Green Net Company Limited (BGN)'s total equity of Baht 35 million, Bangchak Bio Fuel Company Limited (BBF)'s total equity of Baht 499 million and Bangchak Solar Energy (BSE)'s total equity of Baht 151 million adjusted by connected transactions of Baht 377 million.
- The Company's Total Equity at the end of 2011 was Baht 29,572 million increased by Baht 7,146 million from the end of 2010. The changes in the Company's Equity were as follow;
  - The Company's net profit for year 2011 was Baht 5,643 million.
  - The holders of the CD-DR had exercised conversion into common shares worth Baht 1,352 million at conversion price of Baht 14.30 per common share.



- PTT had exercised conversion CD-PTT worth Baht 585 million to common shares at conversion price of Baht 14 per common share.
- The holders of BCP-W1 had exercised their right to purchase common shares at exercise price of Baht 18 per common share, totaling 63 million shares.
- The above mentioned CD conversion and warrant exercising led to an increase of the common shares by 200 million shares at par of Baht 1 per share (an increase of Baht 200 million in paid up capital and an increase of Baht 2,885 million in share premium)
- The dividend paid to the Company's shareholders was in a total of Baht 1,582 million which comprised of Baht 687 million for the second half of 2010 at Baht 0.55 per share and Baht 895 Million for the 2011 interim dividend at Baht 0.65 per share.

Therefore, as of December 31, 2011, the Company's equities were Baht 29,572 million, with a book value of Baht 21.48 per share.

## 5. Analysis of the Cash Flows Statement

Unit: Million Baht

	Consolidated	Company
Cash flows from operating activities	9,965	9,787
Cash used for operating assets and liabilities	(8,845)	(8,814)
Net cash used in operating activities	1,120	973
Net cash used in investing activities	(6,003)	(5,961)
Net cash paid from financing activities	(205)	(104)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(5,088)</b>	<b>(5,092)</b>
Cash and cash equivalents at 1 January 2011	9,109	8,504
<b>Cash and cash equivalents at 31 December 2011</b>	<b>4,020</b>	<b>3,412</b>





- In 2011, the Company and Subsidiaries had Cash and cash equivalents at 1 January 2011 of 9,109 million. Net decrease in cash and cash equivalents was Baht 5,088 million which was resulted from Baht 1,120 net cash received from operating activities, Baht 6,003 million net cash used in investing activities and Baht 205 net cash paid for financial activities. As a consequence, total cash and cash equivalents at 31 December 2011 accounted for Baht 4,020 million.
- In 2011, the Company had a net profit of Baht 5,643 million and added by Baht 2,789 million from non-cash expenses, thus the cash earnings before interest and Corporate Income Tax were Baht 8,432 million and the Company's cash beginning balance was at Baht 8,504 million. Detail of cash used are as follows:
  - The company used Baht 8,814 million of cash for operating assets and liabilities;
    - The Company paid cash of Baht 4,545 million for the operating assets and liabilities, mostly for the increase in Trade Account Receivable by Baht 2,343 million, the increase in Inventory by Baht 1,177 million, and the increase in Other Assets by Baht 1,025 million.
    - Cash paid of Baht 2,859 million from Liabilities. There were Baht 1,870 million decreased in Accounts Payable, and Baht 989 million decreased in Debt and Other Accrued Expenses.
    - Corporate Income Tax paid of Baht 1,410 million
  - The company used Baht 5,961 million of cash for investing activities;
    - Investment in Property, Plant and Equipments of Baht 5,059 million,
    - Share payment of Baht 913 million in Subsidiaries and Affiliated Companies.
  - The company used Baht 104 million of cash for financing activities ;
    - Receiving of Baht 2,000 million from short-term loan and Baht 3,452 million from long-term loan.



- Receiving Baht 1,148 million of cash from BCP-W1 exercising.
- Baht 601 million paid for interest expense.
- Baht 4,521 million paid for long-term loan prepayment
- Baht 1,582 million for annual and interim dividend payments to the shareholders.

Therefore, as of the end of 2011, the Company's cash and cash equivalents decreased by Baht 5,092 million from the end of 2010 when the Company's cash was at Baht 8,504 million, leading to the ending cash of Baht 3,412 million.

## 6. Financial Ratio

	2011		2010	
	Consolidated	Company	Consolidated	Company
□ Net Profit Margin, %	3.54	3.60	2.05	1.96
□ Earnings Per Share, Baht/Share <sup>1/</sup>	4.24	4.26	2.39	2.25
□ Return on Equity-ROE, %	21.44	21.70	11.54	10.92
□ ROE (excluding inventory effect), %	14.47	14.71	10.26	9.66
□ Current Ratio , Times	2.15	2.16	1.83	1.84
□ Debt to Equity, Times <sup>2/</sup>	0.62	0.61	0.86	0.85
□ Book Value, Baht/Share <sup>3/</sup>	21.59	21.48	19.22	19.06

1/ As of 1,374 million shares in 2011 and 1,170 million shares in 2010.

2/ Calculated from Interest bearing debt

3/ As of 1,377 million shares at September, 30 2011 and 1,177 million shares at December, 31 2010.

## 7. Environmental Cost Accounting

Having the environmental concerns and social responsibilities, since 2005, the Company has prepared the Environmental Management Accounting Report (production line) and also published in the Annual Sustainability Report. The Environmental Cost Accounting helps the



Company to keep track of related information, which is useful for enhancing the environmental management effectiveness, and resource utilization. The report for 2011 compared to last year is summarized hereunder.

(Unit : Million Baht)	2011	2010	Change +/-
<b>Material Costs of Product Outputs</b> : Consist of crude oil, ethanol, bio-diesel, chemical, energy and utilities in production	110,779.62	84,091.34	+26,688.28
<b>Material Costs of Non-Product Outputs</b> : Consist of slop and sludge oil, waste water, chemical surplus	132.49	132.48	+0.01
<b>Waste and Emission Control Costs</b> : Consist of maintenance cost of environmental control equipments and depreciation and other fees	154.40	222.66	(68.26)
<b>Prevention and Other Environmental Management Costs</b> : Consist of monitoring and measurement cost, environmental management system expenses	7.32	7.99	(0.67)
<b>Benefit from by-product and waste recycling</b> : The revenue realization from liquid sulfur, glycerin, waste paper	(25.20)	(12.39)	+12.81

From the above table, the environmental expense in 2011 as a whole, increased from 2010 around Baht 26,688.28 million, or increased by 32%. Most of which, more than 99%, were the Material Costs of Product Outputs because the average crude oil price had increased by Baht 4.98 per litre, or increased by 31.8% compared to Baht 15.68 per litre in 2011.

The Material Costs of Non-Product Outputs was almost the same as 2010 due to 21% decrease of the slop oil which was in accordance with the decrease of the frequency of distillation unit maintenance.

The Waste and Emission Control Costs decreased by Baht 68.26 million or 30.66% from 2010 as the depreciation reduced from equipment replacements.

In addition, the benefit from by-product and waste recycling increased of Baht 12.81 million from liquid sulfur generated by refining 8 times amount of crude oil which had approximately twice sulfur contents compared to 2010.