



บริษัท บางจากปิโตรเลียม จำกัด (มหาชน)

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Management's Discussion and Analysis for Business Operations

For the year ended December 31, 2012

1. Executive Summary

For the year ended 2012, the Consolidated Financial Statements recorded a net profit of Baht 4,303 million The net profit attributed to equity owners of the Company amount Baht 4,273 million, EPS was 3.10 baht.

The Company's Performance can be summarized as follow:

(Unit: Million Baht)	For Year		Δ		Q 4	
	2012	2011	+/-	%	2012	2011
Sale Revenues	165,246	158,610	+6,636	+4.2	43,952	40,172
Net Profit ^{1/}	4,273	5,610	-1,338	-23.8	1,147	561
EPS (Baht)	3.10	4.24	-1.14	-26.9	0.83	0.37 ^{2/}

Note 1/ excluding the profit attributed to Non-Controlling interests

2/ adjusted by the weighted average number of ordinary shares outstanding.

Business unit performance could be summarized as follows;

Refinery business generated EBITDA amounted Baht 5,403 million, a decreased of Baht 2,102 million from 2011, resulted by a Baht 2,565 million decreased in gain from inventory. Also, because of the Annual Turnaround Maintenance (TAM) in the second quarter of the year 2012 and the incident of Crude Distillation Unit (CDU) no.3 in the third quarter of 2012, the average capacity was then dropped to the level of 73.71 KBD, compared to the year 2011 which was at 85.69 KBD.

The Company reported a Market GRM of 8.34 \$/bbl, inventory gain (incl. oil hedging and FX Hedging for inventory) of 0.02 \$/bbl, and GRM hedging gain (incl. FX hedging on GRM) of 0.84 \$/bbl. Thus, the total GRM was at 9.20 \$/bbl, a slightly increase from 2011 which was at 9.05 \$/bbl.

The marketing business generated an EBITDA amounted of Baht 1,744 million, an increase of Baht 452 million from 2011. Marketing margin (excluding lube) was at Baht 0.61 per litre, an increase of Baht 0.06 per litre compared to year 2011 which was at Baht 0.55 per



litre. Furthermore, sales volume through marketing channel increased by 6.02 KBD or 8.38% to the level of 77.89 KBD from the previous level of 71.87 KBD in 2011.

Sales volume through Company's service station increased from 40.18 KBD in 2011 to 43.43 KBD in 2012 (a growth of 3.25 KBD or 8.1% year-over-year) which is higher than the average sector growth of 5.31% year-over-year of petroleum traders in accordance with section 7 (Department of Energy Business, Ministry of Energy, 2012)

Solar Power Plant Business phase I (38 MW PPA) generated an EBITDA of Baht 423 million, an increase of Baht 404 million compared to year 2011, which an operation was ceased due to severe flooding situation in Thailand. The Solar Power Plant had resumed its operation on July 16, 2012.



The Company and its subsidiaries performance could be summarized as follows;

Unit: million baht

	For Year		Δ		4Q	
	2012	2011	Amount	%	2012	2011
Revenue	165,246	158,610	+6,636	4.2	43,952	40,172
EBITDA	7,770	8,902	-1,132	-12.7	2,050	1,169
Profit	4,273	5,610	-1,337	-23.8	1,147	561
Basic earnings per share (in Baht)	3.10	4.24	-1.14	-26.9	0.83	0.37
<u>Refinery Business</u>						
● Crude run (KBD)	73.71*	85.69	-11.98	-14.0	84.8*	94.57
● Utilization (%)	61.43%	71.41%	-	-	70.67%	78.81%
● Market GRM (\$/bbl)	8.34	6.71	+1.63	+24.3	10.64	5.65
<u>Marketing Business</u>						
● Sales volume through marketing channel (KBD)	77.89	71.87	+6.02	+8.38	81.15	73.58
● Marketing margin (excl. lube) (Baht per litre)	0.61	0.55	+0.06	+10.9	0.61	0.64
<u>Solar Power Plant Business</u>						
● Revenue	378	28	+350	+1,250	185	28
● EBITDA	423**	19	+404	+2,126	166	19
<u>Additional Data (Average)</u>						
● Dubai price	109.13	106.56	+2.57	+2.4	107.51	106.49
● FX	31.22	30.63	+0.59	+1.9	30.58	31.52

* Crude run had an impact from Annual Turnaround Maintenance and incident of Crude Distillation Unit no.3 in 2012. However, CDU no.3 has resumed to normal operation since October 2012.

** Included revenue from Indemnity of business interruption for Solar Power Plant Business Phase 1 amounted Baht 73 million.



Company's projects progress status are shown as follow:

Project	Details	Progress
1. Refinery Business Project		
1.1 Tail Gas Treating Unit Project	The project helps decreasing the emission level of Sulfur Dioxide from the Sulfur Recovery Unit. The total project value is approximately USD 37 million.	The foundation work was finished and structure work will be completed soon. Equipment installation process will be started in early 2013. Project progress is on schedule and expected to have project completion at the end of 2013 as planned.
2. Marketing Business Project		
2.1 Gasohol Promotion Project	The project aims to promote and expand the use of gasohol through increasing numbers of E20 and E85 service stations, including sales promotion through gasohol club card.	At the year ended 2012, the Company's had an average sales volume of E20 of 14.45 million litres per month and E85 of 2.14 million litres per month. In the fourth quarter of 2012 the average sales volume of E20 was at 18.31 million litres per month and E85 at 3.52 million litres per month. The Number of E20 service stations and E85 service stations are 581 and 51 stations, respectively.



Project	Details	Progress
2.2 Mini BigC in Bangchak Service Stations	It is a cooperative between the Company and BigC, through the investment of BigC in setting up and operating Mini BigC in Bangchak Service Stations. Bangchak will receive benefits in terms of revenue sharing. The Company also expects an increase of averaging 5 to 8% in oil sales through service stations.	At the year ended 2012, there were 7 branches of Mini BigC in Bangchak station: New Charoenkrung, Sukapibarn1 (2), Pattanakarn, Rama 3, Sukhumvit 99, Phaholyothin38 and Ekamai-Ramintra Highway
3. Renewable Energy Business Project		
3.1 Electricity Generation from Solar Energy – Solar Power Plant Phase 2 (Bangchak Solar Energy Co., Ltd. /BSE)	<p>There are 2 sites of solar energy power plant with a total power purchase agreement (PPA) of 32 MW supplied to Provincial Electricity Authority (PEA), namely</p> <ol style="list-style-type: none"> 1. A PPA of 16 MW at Bam Net Narong District, Chaiyaphum Province. 2. A PPA of 16 MW at Bang Pa Han District, Ayudhaya Province. 	<p>The project is under construction and expected to have Commercial Operation Date (COD) in 1Q 2013</p> <p>The project is under construction and expected to have COD in 1Q 2013</p>
3.2 Electricity Generation from Solar Energy – Solar Power Plant Phase 3	The electricity generation from solar energy with a total power purchase agreement (PPA) of 48 MW supplied to PEA	The project is during contractors selection process and will be located in the east and northeast of Thailand.



Project	Details	Progress
3.3 Bio Fuel (B100) production by Bangchak Bio Fuel Co., Ltd. /BBF	BBF's current capacity is 360,000 litres per day, with an expansion plan of 300,000 litres per day, totaling capacity will be 660,000 litres per day.	The expansion project is under planning stage.
3.4 Ethanol Production by Ubon Bio Ethanol/ UBE	<ol style="list-style-type: none"> 1. To produce Ethanol with a capacity of 400,000 litres per day. 2. Cassava flour production plant with a capacity of 300 Tons per day including biogas production plant. 	The project had an adjustment in production process for the feed from cassava, cassava chips or molasses and started the commissioning in December of 2012 and will be commercially operated (COD) in the first quarter of 2013
Financial related activities in year 2012		
1. Company Credit Rating	TRIS rating is the Company's credit rating agency since 2008	In year 2012, the Company was rated stable A- rating on 26 December 2012
2. Debenture Issuance	A debentures issuance of Baht 3,000 million for the purpose of investment, debt repayment, and/or for working capital. The bond has been rated stable A- by TRIS rating agency.	<p>The Company had issued unsubordinated and unsecured debentures to institutional investors and High Net Worth investors and having Bangkok Bank as sole lead arranger and registrars</p> <ul style="list-style-type: none"> - 7 years tenor tranche with an interest rate of 4.92 % per annum and the maturity was scheduled on 30 April 2019 - 10 years tenor tranche with an interest rate of 5.35% per annum and the maturity was scheduled on 30 April 2022



Project	Details	Progress
3. Dividend Policy	The company's dividend policy is to pay dividend of not less than 30 percent of net profit of consolidated financial statements after deduction of allocation of legal reserve (with additional conditions)	In 1Q2012, the Company announced dividend payment of 1 baht per share for the operation period from 1 July 2011 until 31 December 2011 In 3Q2012, the Company announced interim dividend payment of 0.35 baht per share for the operation period between 1 January 2012 until 30 June 2012

2. Oil Price Situation

Average Dubai crude price in 2012 increased 2.57\$ per barrel from the level of 106.56\$ per barrel in 2011 to 109.13\$ per barrel. For the first half of the year, the oil price was affected by several factors; the concerns on Economics and Financial crisis in Euro Zone, particularly in Greece and Spain. The crude price continuously went up after supply disruption concerns over Iran nuclear program. The EU announced a halt oil imports from Iran from July 1, while the US banned financial transactions with Iran to pressure Iran in order to cease Uranium Enrichment Program. Iran has threatened to retaliate by closing the Strait of Hormuz which is a major oil shipping route in the world. The Conflict between Sudan and South Sudan on oil exports, the unrest in Syria and sabotage in Yemen are also driven the crude prices. In addition, Saudi Arabia had pumping more crude above its quota to pressure crude prices.

For the second half of 2012, there were various factors supported crude price, for example, the Issuance of EFSF/ESM Agreement to directly fund commercial banks, economics and employment stimulus agreement including remaining low interest rate policy. Moreover, supply dropped because of many oil platforms near the Gulf of Mexico had stopped production which was caused by the Hurricane Isaac in September. And also, the turnaround period of crude production in the North Sea was suspended longer than expected. In addition, oil price had been driven by an increase of commodities prices after Fed announced another round of



Quantitative Easing both QE3 and QE4 totaling \$85 billion to encourage job employment and economics growth.

Nevertheless, crude price slightly decreased in the fourth quarter of 2012 compared to the third quarter of 2012, pressured by the U.S. demand fell after the Hurricane Sandy damaged the U.S. East Coast while crude oil production in the U.S. increased to more than 7 million barrels per day which was the highest figure since 1993 coupling with a continuously increase in Shale oil production. Lastly, we still have to keep an eye closely on the agreement of the U.S. government debt ceiling and U.S. fiscal cliff issue.

The table of oil prices and crack spreads comparison

Unit: USD/bbl

Price	FY 2012			FY 2011	Changes	4Q 2012	4Q 2011	Changes
	MAX	MIN	AVG (A)	AVG (B)	(A)-(B)	AVG(C)	AVG(D)	(C) – (D)
DB	124.2	89.10	109.13	106.56	+2.57	107.51	106.49	+1.02
UNL95/DB	23.39	6.52	14.42	13.53	+0.89	13.24	9.76	+3.48
IK/DB	23.24	12.12	17.72	19.41	-1.69	19.23	18.28	+0.95
GO/DB	22.41	12.58	17.08	18.31	-1.23	17.43	17.88	-0.45
FO/DB	5.47	-13.42	-3.32	-5.18	+1.86	-9.01	-0.39	-8.62



3. Operating Result

3.1 Summary of the Operating Results on consolidated basis

Unit: Million Baht

Statements of Income	For Year		Changes	4Q 2012	
	2012	2011	+/(-)	2012	2011
Revenue from sale of goods and rendering of services	165,246	158,610	+6,635	43,952	40,172
Cost of sale of goods and rendering of services	(158,083)	(147,984)	+10,099	(41,929)	(38,364)
Gross Profit	7,163	10,626	-3,463	2,023	1,808
Reversal of allowances for loss from inventory write-down	-	-	-	23	3
Gain (loss) from crude and product oil price hedging contract	869	(759)	+1,628	271	117
Gain (loss) from foreign currencies forward contract	746	(701)	+1,447	119	(111)
Gain on foreign exchange	346	170	+176	43	(86)
Net reversal of allowance for loss from impairment of assets	295	12	+283	239	(227)
Other income / expense	638	1,524	-886	368	70
Selling & Administrative Expenses	(4,100)	(3,841)	+259	(1,477)	(1,305)
Profit before financial costs and income tax expense	5,957	7,031	-1,074	1,610	269
Finance costs	(940)	(783)	+157	(274)	(195)
Income tax expense	(715)	(615)	+100	(190)	472
Profit / (Loss)	4,303	5,632	-1,330	1,146	546
· Non-controlling interests	30	22	+8	(1)	(15)
· Owners of the Company	4,273	5,610	-1,338	1,147	561

Revenues

- For the year ended 2012, the revenues from sale of goods and rendering of services of the Company and its subsidiaries were Baht 165,246 million, comprised of the Company's revenues of Baht 162,623 million, Bangchak Green Net Company Limited (BGN)'s revenues of Baht 26,153 million, Bangchak Bio Fuel Company Limited (BBF)'s revenues



of Baht 4,443 million and Bangchak Solar Energy Company Limited (BSE)'s revenues of Baht 3.94 Million. However, there was a connected transaction of Baht 27,977 million which mostly associated with the sales transactions from the Company to BGN and B-100 product produced by BBF sold to the Company.

- At the end of the fourth quarter of 2012, the revenues from sale of goods and rendering of services of the Company and its subsidiaries were Baht 43,952 million, comprised of the Company's revenues of Baht 43,337 million, Bangchak Green Net Company Limited (BGN)'s revenues of Baht 6,713 million, Bangchak Bio Fuel Company Limited (BBF)'s revenues of Baht 952 million and Bangchak Solar Energy Company Limited (BSE)'s revenues of Baht 1.35 Million. However, there was a connected transaction of Baht 7,051 million.

Cost of sale of goods and rendering of services

- For the year ended 2012, the cost of sale of goods and rendering of services of Consolidated Statement of Income was Baht 158,083 million, comprised of the Company's costs of Baht 156,319 million, Bangchak Green Net Company Limited (BGN)'s costs of Baht 25,339 million, Bangchak Bio Fuel Company Limited (BBF)'s costs of Baht 4,284 million and Bangchak Solar Energy Company Limited (BSE)'s costs of Baht 2.94 million, adjusted by a connected transaction of Baht 27,862 million, which mostly were the Company's cost of sales of finished oil products sold to BGN and B-100 product produced by BBF sold to the Company.
- At the end of the fourth quarter of 2012, the cost of sale of goods and rendering of services of Consolidated Statement of Income was Baht 41,929 million, comprised of the Company's costs of Baht 41,469 million, Bangchak Green Net Company Limited (BGN)'s costs of Baht 6,517 million, Bangchak Bio Fuel Company Limited (BBF)'s costs of Baht 962 million and Bangchak Solar Energy Company Limited (BSE)'s costs of Baht 1.45 million, adjusted by a connected transaction of Baht 7,020 million.

Net Profit

- For the year ended 2012, the Consolidated Statement of Income recorded a profit of Baht 4,303 million, which was the Company's profit of Baht 4,200 million, Bangchak Green Net Company Limited (BGN)'s profit of Baht 29 million, Bangchak Bio Fuel Company Limited (BBF)'s profit of Baht 100 million, Bangchak Solar Energy Company limited (BSE)'s net loss of Baht 1.49 million and Baht 23 million share of loss of associates. Taking out the



profit attributable to Non-Controlling interests of Baht 30 million, the remaining profit to owners of the Company was Baht 4,273 million (Earning per Share was 3.10 Baht.)

- At the end of the fourth quarter of 2012, the Consolidated Statement of Income recorded a profit of Baht 1,146 million, which was the Company's profit of Baht 1,180 million, Bangchak Green Net Company Limited (BGN)'s net loss of Baht 22 million, Bangchak Bio Fuel Company Limited (BBF)'s net loss of Baht 4 million, Bangchak Solar Energy Company limited (BSE)'s net loss of Baht 1.63 million and Baht 7 million share of loss of associates. Taking out the profit attributable to Non-Controlling interests of Baht 1 million, the remaining profit to owners of the Company was Baht 1,147 million (Earning Per Share was 0.83 Baht.)



3.2 Analysis of the Company's Operating Results

Unit: Million Baht

Statements of income	For Year		Changes	4Q	
	2012	2011	+/(-)	2012	2011
Revenue from sale of goods and rendering of services	162,623	156,928	+5,694	43,337	39,792
Cost of sale of goods and rendering of services	(156,319)	(147,033)	+9,286	(41,469)	(38,082)
Gross Profit	6,304	9,896	-3,592	1,868	1,710
Gain (loss) from crude and product oil price hedging contract	869	(759)	+1,628	271	117
Gain (loss) from foreign currencies forward contract	746	(701)	+1,447	119	(111)
Gain on foreign exchange	346	170	+176	43	(86)
Net reversal of allowance for loss from Impairment of assets	295	12	+283	239	(227)
Other income / expense	658	1,629	-971	374	73
Selling, General & Administrative Expense	(3,401)	(3,249)	+152	(1,270)	(1,144)
Profit before financial costs and income tax expense	5,816	6,998	-1,182	1,645	333
Finance costs	(910)	(748)	+162	(268)	(187)
Income tax expense	(706)	(607)	+98	(198)	468
Profit / (Loss)	4,200	5,643	-1,443	1,180	614

Company Operating Results for year ended 2012

- The Company's recorded revenues from sales of goods and rendering of services of Baht 162,623 million, comprised of revenues from sales of petroleum products (excluding lubricants) of Baht 160,366 million, sales of lubricants of Baht 1,879 million and revenues from solar business of Baht 378 million which constituted an increase in Company's revenues of Baht 5,694 million when compared to end of year 2011. The reason of the increase was from an increase in average Dubai crude price of 2.57 \$/bbl when compared to previous year and the realized of revenues from 38 MW solar business after the recovering from the massive flood.



- A Gross profit of Baht 6,304 million, a drop of Baht 3,592 million or 36.3% from previous year which was resulted from the lower level of average crude run of 73.71 KBD in 2012 (decreased from the average crude run in 2011 which was at 85.69 KBD). The main reasons were from the Annual Turnaround Maintenance in the second quarter and the incident at crude distillation unit (CDU) number 3 in the third quarter which was resumed operation in October 2012. Nevertheless, the average Market GRM of 2012 was higher than 2011 from 6.71 \$/bbl to 8.34 \$/bbl. For the details analysis regarding Gross Refinery Margin (GRM), Marketing Margin (MM), and performance result of solar energy business can be found in 3.2.1 to 3.2.3 in section below.
- The Company had a gain from crude and product oil price hedging contract of Baht 869 million and gain from foreign currencies forward contract of Baht 746 million from the decreased in GO/DB spread and the Baht appreciation, respectively.
- Other income of Baht 658 million was comprised of insurance compensation of Baht 383 million (Baht 73 million from Indemnity of business interruption and flood prevention plan for Solar Power Plant Phase 1 in 2Q 2012 and Baht 310 million received from insurance after the incident at CDU no. 3 on July 4, 2012)
- An increase in the finance costs was from issuance of Unsubordinated and Unsecured Debentures of Baht 3,000 million (7-year tenor tranche of Baht 2,000 million with an interest of 4.92% per annum and the 10-year tenor tranche which has an interest of 5.35% per annum)



The breakdown EBITDA by businesses

Unit: Million Baht

	For Year		Δ		4Q	
	2012	2011	2012/2011	%	2012	2011
▪ Base Performance EBITDA	6,848	6,567	+281	4.3	2,292	976
- Refinery Business	4,681	5,256	-575	-10.9	1,818	664
- Marketing Business	1,744	1,292	+452	+35.0	307	293
- Solar Power Plant	423	19	+404	+2,126.3	167	19
▪ Gains (loss) from GRM Hedging transactions	707	(331)	+1,038	N/A	297	32
- Oil	686	(171)	+857	N/A	288	67
- FX	21	(160)	+181	N/A	9	(36)
▪ Gains (loss) from Inventory	15	2,580	-2,565	-99.4	(533)	296
- Inventory Price effect	(893)	3,720	-4,613	-124.0	(626)	321
- Inventory Hedging	908	(1,139)	2,047	N/A	93	(25)
- Oil	183	(588)	771	N/A	-17	50
- FX	725	(551)	1,276	N/A	110	(75)
▪ Total Accounting EBITDA	7,570	8,816	-1,246	-14.1	2,056	1,240
- Refinery Business	5,403	7,505	-2,102	-28.0	1,582	928
- Marketing Business	1,744	1,292	+452	+35.0	307	293
- Solar Power Plant	423	19	+404	+2,126.3	167	19

3.2.1 Refinery Business

For year 2012, an average crude run capacity was at 73.71 KBD compared to 86.9 KBD in the same period of 2011 which was the result of the Annual Turnaround Maintenance and the incident of CDU no.3 on July 4 2012 (The CDU no.3 had resumed its operation in October 2012). Refinery's Base Performance EBITDA was Baht 4,681 million, decreased by Baht 575 million. There was a Baht 707 million gained from crude and petroleum product price hedging contract as well as gain from foreign currencies forward contract on GRM. Also, there was a Baht 15 million gain from inventory (including oil and FX hedging on inventory). The EBITDA from the refinery business was Baht 5,403 million, decreased from year 2011 by Baht 2,102 million.



	For Year		Changes (%)	4Q	
	2012	2011		2012	2011
Average Crude Run (KBD)	73.71	85.69	-14.0	84.8	94.57
Utilization Rate (%)	61.43%	71.41%		70.67%	78.81%
Average FX (THB/1 USD)	31.22	30.63	+1.9	30.80	31.17

GRM Analysis is shown as follows:

Unit: USD/bbl

GRM	For Year		Changes +/-	4Q	
	2012	2011		2012	2011
Market GRM	8.34	6.71	+1.6	10.64	5.65
GRM Hedging	0.84	(0.35)	+1.2	1.24	0.12
Gain (Loss) from Inventory	0.02	2.69	-2.7	(2.22)	1.09
Total	9.20	9.05*	+0.2	9.66	6.86

* Adjusted in 2012 due to new accounting regulation

Market GRM The market GRM was at 8.34 \$/bbl increased by 1.63 \$/bbl, compared to the same period of 2011 which was at 6.71 \$/bbl

3.2.2 Marketing Business

For the year ended 2012, the EBITDA from the Marketing Business was at Baht 1,744 million, increased 35% from EBITDA of year 2011 which was at Baht 1,292 million. The Company's Marketing Margin (excluding lube) was at Baht 0.61 per litre (equivalent to USD 3.10 per barrel), compared to last year's marketing margin of Baht 0.55 per litre (equivalent to USD 2.86 per barrel).

The sales volume through Marketing Business increased by 8.38% and the total sales volume was at 77.89 KBD



The table below shows the marketing margin

Unit: Baht / litre

	For Year		Changes (+/-)	4Q	
	2012	2011		2012	2011
Retail	0.85	0.75	+0.10	0.89	0.83
Industrial	0.26	0.29	-0.03	0.21	0.40
Lube	5.86	5.32	+0.54	6.29	3.82
Total	0.65*	0.58*	+0.07	0.66*	0.67*

* Weighted average method

Sales Volume by Marketing Business

Average sales volume in each market category of the Company

Unit: KBD

	For Year		Changes		4Q	
	2012	2011	+/-	%	2012	2011
Service Station	43.43	40.18	+3.25	+8.1	45.27	39.78
Jobber	2.52	2.11	+0.41	+19.3	2.92	1.42
Industrial sales	19.77	15.94	+3.83	+24.0	21.93	18.64
JET	12.17	13.64	-1.47	-10.8	11.03	13.74
Supply Sale / Others	3.45	3.51	-0.06	-1.8	5.05	4.36
Export	8.90	14.27	-5.37	-37.7	11.24	11.40
Wholesale to PTT	9.29	13.06	-3.77	-28.9	11.00	14.22
Total	99.51	102.70	-3.19	-3.1	108.44	103.57
Feedstock	0.02	0.21	-0.18	-88.8	0.01	0.23
Lube and Glycerine	0.61	0.53	+0.08	+15.7	0.62	0.55
Total	100.14	103.43	-3.29	-3.2	109.06	104.34

For the year 2012, the average sales volume excluding feedstock, lubricant and glycerine was at 99.51 KBD, a decreased of 3.1% compared to the same period last year which was at 102.70 KBD. As the result of the annual turnaround maintenance in the second quarter and the incident of CDU no. 3 which caused the Company to decrease its production, nevertheless, the sales volume through service station was increased from 40.18 KBD in 2011 to 43.43 KBD in



2012 (an increase of 3.25 KBD or 8.1%) which was higher than the average growth of the petroleum traders in accordance with section 7 which grew 5.31% (Department of Energy Business, Ministry of Energy, 2012)

The average sales through service stations in the fourth quarter of 2012 was at 45.27 KBD or increased 5.49 KBD or 13.8%, compared to the same period of 2011 which was higher than the average growth of the petroleum traders in accordance with section 7 which was at 8.24% (Department of Energy Business, Ministry of Energy, 2012)

The average sales to industrial customers increased 3.83 KBD or 24% from 15.94 KBD to 19.77 KBD, sales of lubricants and glyceriene increased 0.08 KBD or 15.7%, and sales through Jobber channel and export volume decreased by 37.7% and 28.9% respectively, compared to the same period of 2011. The incident of CDU no. 3 caused the Company to focus on the sales through service station and less prioritized the sales through export and jobber channel.

Overall sales volume through service station of petroleum traders in accordance with section 7(Department of Energy Business, Ministry of Energy, 2012)

Unit: Million litre

	For Year		Changes		4Q	
	2012	2011	+/-	%	2012	2011
PTT	7,043	6,764	+279	+4.12	1,836	1,801
ESSO	2,925	2,701	+224	+8.29	756	607
BCP	2,527	2,331	+196	+8.41	662	582
SHELL	2,303	2,162	+141	+6.52	609	565
CHEVRON	1,080	1,095	-15	-1.37	274	298
Others	2,388	2,292	+96	+4.19	637	558
Total	18,266	17,345	+921	+5.31	4,774	4,411



3.2.3 Solar Power Plant Business

For the year 2012, Solar Power Plant Phase I (38 MW) generated revenue of Baht 378 million and received the revenue from insurance, the Indemnity of business interruption and flood prevention plan in the second quarter, of Baht 73 million. After the massive flood in 2011, the solar power plant has resumed its production and started COD on July 16, 2012 and generated the EBITDA of Baht 423 million, increased Baht 404 million from 2011.



4. Analysis of the Financial Position as of December 31, 2012 compared to December 31, 2011

Unit: Million Baht

	Consolidated		Company	
	31 Dec 2012	31 Dec 2011	31 Dec 2012	31 Dec 2011
Assets				
Current assets	37,107	31,294	35,925	30,730
Investments in associates and other long-term investments	723	745	2,498	1,111
Property, plant and equipment	29,919	26,959	27,716	26,062
Other non-current assets	3,104	2,597	3,062	2,592
Total assets	70,853	61,597	69,202	60,494
Liabilities				
Current liabilities	18,218	13,990	17,504	13,787
Long-term borrowings (including current portion)	19,022	16,582	18,567	16,022
Other non-current liabilities	1,290	1,146	1,218	1,114
Total liabilities	38,530	31,717	37,289	30,922
Equity				
Total equity attributable to owners of the company	32,143	29,729	31,913	29,572
Non-controlling interests	180	150	-	-
Total equity	32,323	29,879	31,913	29,572
Total liabilities and equity	70,853	61,597	69,202	60,494

4.1 Assets

- As of December 31, 2012, Total Assets of the Company and its subsidiaries were Baht 70,853 million, comprised of the Company's total assets of Baht 69,202 million, Bangchak Green Net Company Limited (BGN)'s total assets of Baht 1,159 million, Bangchak Bio Fuel Company Limited (BBF)'s total assets of Baht 1,374



million and Bangchak Solar Energy (BSE)'s total assets of Baht 1,950 million, adjusted by connected transactions of Baht 2,832 million which were mainly from sales of gasoline between the Company, BGN, and BBF of Baht 1,013 million, Investment in Subsidiaries of Baht 1,735 million and realized loss from the investment in the associates, Ubon Bio Ethanol Company Limited, of Baht 40 million.

- The Company's Total Assets at the end of 2012, increased by Baht 8,708 million. compared to the end of 2011, The changes of assets were mainly from
 - Cash of Baht 6,641 million, increased by Baht 3,229 million. (Detail is stated under Cash Flow Analysis Section).
 - Net Trade Accounts Receivable decreased by Baht 101 million from the year 2011
 - Inventories totaling Baht 18,614 million, increased by Baht 2,469 million from last year. At the end of year 2012, the inventories level was approximately at 5.2 million barrel (increased by 0.7 million barrel from end of 2011), comprised of 3.4 Million Barrel of crude oil and 1.8 Million Barrel of petroleum products.)
 - Oil Fuel Fund subsidies receivable decreased Baht 104 million from last year, mostly for LPG, diesel, gasohol E85 and E20.
 - An additional investment in Subsidiaries of Baht 1,388 million, from an increased in the capital of Bangchak Solar Energy Co., Ltd – a wholly owned by the Company.
 - Property, plant and equipment increased by Baht 1,654 million. The Company had an investment of Baht 3,960 million and there was a depreciation of Baht 2,228 million and reversal of loss from impairment of Baht 104 million.



4.2 Liabilities

- For the year ended 2012, Total Liabilities of the Company and its subsidiaries were Baht 38,530 million, comprised of the Company's total liabilities of Baht 37,289 million, Bangchak Green Net Company Limited (BGN)'s total liabilities of Baht 1,095 million, Bangchak Bio Fuel Company Limited (BBF)'s total liabilities of Baht 775 million and Bangchak Solar Energy (BSE)'s total liabilities of Baht 414 million adjusted by connected transactions of Baht 1,043 million
- The Company's Total Liabilities as of December 31, 2012 compared to the end of 2011 increased by Baht 6,366 million. The changes of liabilities were mainly from;
 - Total Borrowing increased from debentures issuance of Baht 3,000 million, repayment of short-term debt of Baht 2,000 million, and long-term debt repayment of Baht 450 million.
 - Accounts Payable increased which was mainly from the crude oil transaction between the Company and PTT Plc.
 - Corporate Income Tax Payable amounted of Baht 533 million resulted from Corporate Income Tax in 2012 which is not yet due.

4.3 Equity

- At the end of year 2012, the Consolidated Total Equity was Baht 32,323 million comprised of the Company's total equity of Baht 31,913 million, Bangchak Green Net Company Limited (BGN)'s total equity of Baht 64 million, Bangchak Bio Fuel Company Limited (BBF)'s total equity of Baht 599 million and Bangchak Solar Energy (BSE)'s total equity of Baht 1,536 million, adjusted by connected transactions of Baht 1,790 million.



- The Company's Total Equity increased by Baht 2,341 million from the end of 2011. The Company had a 2012 profit of Baht 4,200 million and a dividend payment of Baht 1,859 million.
- Therefore, as of December 31, 2012, the Company's equity was Baht 31,913 million, with a book value of Baht 23.18 per share.

5. Analysis of the Cash Flows Statement

Unit: Million Baht

	For Year	
	31 Dec 2012	31 Dec 2011
Cash flows from operating activities	8,109	9,787
Cash received from operating assets and liabilities	2,678	(8,813)
Net cash provided by operating activities	10,786	973
Net cash used in investing activities	(5,326)	(5,961)
Net cash used in financing activities	(2,231)	(104)
Net increase in cash and cash equivalents	3,229	(5,092)
Cash and cash equivalents, Beginning Balance	3,412	8,504
Cash and cash equivalents, Ending Balance	6,641	3,412

For year ended December 31, 2012, the Company and Subsidiaries had Cash and cash equivalents, Beginning Balance of Baht 3,412 million. During the year, there was a net increase in cash and cash equivalents of Baht 3,229 million which comprised of Baht 10,786 net cash received from for operating activities, Baht 5,326 million net cash used for investing activities and Baht 2,231 net cash received from financial activities. As a result, the total cash and cash equivalents as of December 31, 2012 accounted for Baht 6,641 million. Cash used details are as follows:

1. The Company received Baht 2,678 million of cash from operating activities;
 - Cash of Baht 2,119 million used in the operating assets, which were mostly an increase in inventories of Baht 2,470 million. Increase in Trade



Accounts Receivable of Baht 754 million and a decrease in other assets of Baht 1,105 million.

- Cash of Baht 5,254 million received from operating liabilities. There were an increase in Accounts Payable of Baht 4,830 million and an increase in Other Liabilities and Other Accrued Expenses of Baht 424 million.
 - Cash paid for Corporate Income Tax of Baht 457 million
2. The Company used Baht 5,326 million of cash for investing activities;
- Investment in Property, Plants and Equipment of Baht 3,733 million,
 - Investment in Subsidiaries of Baht 1,388 million
 - Investment in Other Assets of Baht 272 million
 - Cash Received from Interest Earned of Baht 67 million
3. The Company used Baht 2,231 million of cash on financing activities ;
- Baht 2,995 million received from debenture issuance
 - Baht 2,500 million paid for short-term debt
 - Baht 1,859 million for dividend payment.
 - Baht 917 million paid for interest expense.
 - Baht 450 million paid for long-term debt.

Therefore, at the end of year 2012, the Company's net cash and cash equivalents increased by Baht 3,229 million from Beginning Balance of Baht 3,412 million. The Company's cash and cash equivalents, Ending Balance was at Baht 6,641 million.



6. Financial Ratio

	Consolidated		Company	
	FY 2012	FY 2011	FY 2012	FY 2011
☐ Revenues, Million baht	165,246	158,610	162,623	156,928
☐ Net Profit (Loss), Million baht ¹	4,273	5,610	4,200	5,643
☐ Earnings Per Share, Baht/Share ¹	3.10	4.24	3.05	4.26
☐ Net Profit Margin, %	2.59	3.54	2.58	3.60
☐ Return on Equity-ROE, %	13.81	21.44	13.66	21.70
☐ ROE (excluding inventory effect), %	13.69	14.25	13.62	14.76
☐ Return on Assets-ROA, %	6.45	9.35	6.48	9.59
☐ ROA (excluding inventory effect),%	6.40	6.22	6.46	6.52

¹ Calculated from the profit attributable to the owners of the Company, excluding non-controlling interest.

	Consolidated		Company	
	FY 2012	FY 2011	FY 2012	FY 2011
☐ Total Assets, Million baht	70,853	61,597	69,202	60,494
☐ Total Liabilities, Million baht	38,530	31,717	37,289	30,922
☐ Total Equity, Million baht	32,323	29,879	31,913	29,572
☐ Account Receivable Day, Day	16.20	18.49	24.08	20.04
☐ DSCR (Principle Interest), Times ³	5.04	6.50	5.55	7.21
☐ Current Ratio , Times	1.93	2.15	1.95	2.16
☐ Debt to Equity, Times ²	0.59	0.62	0.58	0.61
☐ Book Value, Baht/Share ³	23.34	21.59	23.18	21.48

¹ Solely from the total equity attributable to owners of the Company

² Debt = Interest Bearing Debt

³ Calculated from EBITDA excluding the inventory gain/loss at year ended 31 December 2011 (excluding pre-payment portion from the changes in long term loan terms)



7. Environment Cost Accounting

Having the environmental concerns and social responsibilities, the Company has prepared the environmental management accounting report since 2005. The environmental cost accounting helps the Company to keep track with the information which is useful for enhancing the environmental management effectiveness, and resource utilization. This is also in line with the Company's vision "Creating an energy business that is environmentally friendly for sustainable development"

(Unit : Million Baht)	For Year		+/-
	2012	2011	
Material Costs of Product Outputs : Consist of crude oil, ethanol, bio-diesel, chemical, energy and utilities in production	106,033.65	110,779.63	-4,745.98
Material Costs of Non-Product Outputs : Consist of slop and sludge oil, waste water, chemical surplus	269.2	132.49	+136.71
Waste and Emission Control Costs : Consist of maintenance cost of environmental control equipment and depreciation and other fees	201.37	154.41	+46.96
Prevention and Other Environmental Management Costs : Consist of monitoring and measurement cost, environmental management system expenses	6.18	7.32	-1.14
Benefit from by-product and waste recycling : The revenue realization from liquid sulfur, glycerin, waste paper	(24.01)	(25.2)	-1.19

Environmental cost in 2012, as a whole, dropped down to Baht 4,562.26 million, when compared to the same period of last year. Two major events during the year; The Annual Turn Around and the incident of CDU number 3, caused the material costs of product outputs of 2012 to drop Baht 4,745.98 million when compared to year 2011 despite the increasing in average Dubai crude price.

The material costs of non-product outputs, which means the waste from the production, has increased 23% from last year which was mainly from the rise in cost of rerunning slop oil, around 23%, and together with the effect of both major events during the year.

There was an increase in Waste and Emission Control Costs of Baht 46.96 million which was mainly from the maintenance of Waste and Emission Control equipment which was done



during the turnaround period. Also, the Company has changed its accounting policy; as such there was an increase in depreciation of Waste and Emission Control equipment of Baht 63.24 million and a decrease in maintenance cost of Baht 9.32 million. The new equipment benefits the Company by help reducing waste water and waste treatment costs.

The Company also sold its unused material to be used as a raw material for other industrial uses such as glycerin (from the Bio-diesel production), scrap and aluminum (an increase of Baht 0.15 million and an increase of Baht 1.73 million when compared to last year, respectively)