



# Annual Registration Statement

As of 31 December 2011

PTT Exploration and Production Public Company Limited

(English Translation)



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## Executive Summary

"This chapter has been cancelled by the Notification of Capital Market Supervisory  
Tor Jor 11/2009: Rules, Conditions and Procedure for Disclosure of Financial Position and Result  
of Operation of Issued Securities Companies."



## 1. General Information

### 1.1 PTTEP's Information

Company Name	PTT Exploration and Production Public Company Limited or PTTEP
Head Office	555/1 Energy Complex Building A, 6 <sup>th</sup> & 19 <sup>th</sup> – 36 <sup>th</sup> floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900, Thailand
Type of Business	Petroleum exploration and production, and investment in related business
Registration Number	0107535000206
Telephone	66 (0) 2537-4000
Facsimile	66 (0) 2537-4444
Website	<a href="http://www.pttep.com">www.pttep.com</a>
E-mail	To contact Independent Director: <a href="mailto:independentdirector@pttep.com">independentdirector@pttep.com</a> To contact Investor Relations: <a href="mailto:IR@pttep.com">IR@pttep.com</a> To contact Corporate Secretary: <a href="mailto:corporatesecretary@pttep.com">corporatesecretary@pttep.com</a>
Registered Capital	Baht 3,322,000,000, divided into 3,322,000,000 ordinary shares, Baht 1 each
Paid-up Capital	Baht 3,319,985,400, divided into 3,319,985,400 ordinary shares, Baht 1 each (as of 31 December 2011)



## 1.2 Subsidiary's Information

As of 31 January 2012, there are 52 subsidiaries. All of them have the same office, telephone and facsimile as PTTEP (see item 1.1). Details of the directors of each subsidiary appear in attachment 2.

No.	Company Name	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
E&P Business						
1.	PTTEP International Limited	PTTEPI	2,000,000,000	Baht 10	ordinary share	PTTEP 100%
2.	PTTEP Siam Limited	PTTEPS	1,000,000	Baht 100	ordinary share	PTTEP 51% PTTEPO 49%
3.	PTTEP Andaman Company Limited	PTTEPA	100,000	Baht 10	ordinary share	PTTEPS 100%
4.	PTTEP MEA Limited	PTTEP MEA	50,000	USD 1	ordinary share	PTTEP 100%
5.	PTTEP Offshore Investment Company Limited	PTTEPO	6,667	USD 1	ordinary share	PTTEP 75% PTTEPI 25%
6.	PTTEP Southwest Vietnam Company Limited	PTTEP SV	50,000	USD 1	ordinary share	PTTEPO 100%
7.	PTTEP Kim Long Vietnam Company Limited	PTTEP KV	50,000	USD 1	ordinary share	PTTEPO 100%
8.	PTTEP Hoang-Long Company Limited	PTTEP HL	50,000	USD 1	ordinary share	PTTEPO 100%
9.	PTTEP Hoan-Vu Company Limited	PTTEP HV	50,000	USD 1	ordinary share	PTTEPO 100%
10.	PTTEP Oman Company Limited	PTTEP OM	50,000	USD 1	ordinary share	PTTEPO 100%
11.	PTTEP Algeria Company Limited	PTTEP AG	50,000	USD 1	ordinary share	PTTEPO 100%
12.	PTTEP Iran Company Limited	PTTEP IR	50,000	USD 1	ordinary share	PTTEP OM 100%
13.	PTTEP Bahrain Company Limited	PTTEP BH	50,000	USD 1	ordinary share	PTTEP OM 100%



No.	Company Name	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
14.	PTTEP Holding Company Limited	PTTEPH	50,000	USD 1	ordinary share	PTTEPO 100%
15.	PTTEP Indonesia Company Limited	PTTEP ID	50,000	USD 1	ordinary share	PTTEPH 100%
16.	PTTEP Bengara I Company Limited	PTTEPB	50,000	USD 1	ordinary share	PTTEP ID 100%
17.	PTTEP Semai II Limited	PTTEP SM	50,000	USD 1	ordinary share	PTTEP ID 100%
18.	PTTEP Egypt Company Limited	PTTEP EG	50,000	USD 1	ordinary share	PTTEPH 100%
19.	PTTEP Rommana Company Limited	PTTEPR	50,000	USD 1	ordinary share	PTTEP EG 100%
20.	PTTEP Sidi Abd El Rahman Company Limited	PTTEP SAER	50,000	USD 1	ordinary share	PTTEP EG 100%
21.	PTTEP Bangladesh Limited	PTTEP BD	50,000	USD 1	ordinary share	PTTEPH 100%
22.	PTTEP South Asia Limited <sup>1</sup>	PTTEP SA	50,000	USD 1	ordinary share	PTTEPH 100%
23.	PTTEP New Zealand Limited	PTTEP NZ	50,000	USD 1	ordinary share	PTTEPH 100%
24.	PTTEP International Holding Company Limited	PTTEP IH	50,000	USD 1	ordinary share	PTTEPH 100%
25.	Orange Energy Limited	Orange	1,000,000	Baht 100	ordinary share	PTTEPO 53.9496% MOECO International B.V. 36.0504% KrisEnergy (Gulf of Thailand) 10%
26.	PTTEP Australia Pty Ltd	PTTEP AU	50,000	AUD 1	ordinary share	PTTEPH 100%
27.	PTTEP Australia Offshore Pty Ltd	PTTEP AO	50,000	AUD 1	ordinary share	PTTEP AU 100%
28.	PTTEP Australia Perth Pty Ltd	PTTEP AP	50,000	AUD 1	ordinary share	PTTEPH 100%
29.	PTTEP Australia Browse Basin Pty Ltd	PTTEP AB	50,000	AUD 1	ordinary share	PTTEP AP 100%

<sup>1</sup> Formerly, PTTEP Myanmar Limited



No.	Company Name	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
30.	PTTEP Australasia Pty Ltd	PTTEP AA	409,895,440	various price <sup>2</sup> (avg. AUD 0.4895)	ordinary share	PTTEP AB 100%
			40,000,000	AUD 0.4957	preference share	
			1,575,000	AUD 0.4895	Class B share <sup>3</sup>	
31.	PTTEP Australasia (Finance) Pty Ltd	PTTEP AAF	1	AUD 1	ordinary share	PTTEP AA 100%
32.	PTTEP Australasia (Petroleum) Pty Ltd	PTTEP AAP	10	AUD 1	ordinary share	PTTEP AA 100%
33.	Tullian Pty Ltd	PTTEP AAT	1	AUD 1	ordinary share	PTTEP AAF 100%
34.	PTTEP Australasia (Operations) Pty Ltd	PTTEP AAO	106,686,517	AUD 0.20	ordinary share	PTTEP AAF 100%
35.	PTTEP Australasia (Ashmore Cartier) Pty Ltd	PTTEP AAA	1,700,000	AUD 2	ordinary share	PTTEP AAO 100%
36.	PTTEP Australasia (Staff) Pty Ltd	PTTEP AAS	10	AUD 1	ordinary share	PTTEP AAO 100%
37.	PTTEP Australia Timor Sea Pty Ltd	PTTEP AT	50	no par value <sup>4</sup> (avg. AUD 827,048.78)	ordinary share	PTTEP AB 100%
38.	PTTEP FLNG Holding Company Limited	PTTEP FH	10,000	HKD 1	ordinary share	PTTEP IH 100%
39.	JV Shore Base Limited <sup>5</sup>	JV Shore Base	50,000	USD 1	ordinary share	PTTEP IH 100%
40.	PTTEP Netherland Holding Limited	PTTEP NL	50,000	USD 1	ordinary share	PTTEP IH 100%
41.	JV Marine Limited	JV Marine	50,000	USD 1	ordinary share	PTTEP IH 100%
42.	PTTEP South Mandar Limited	PTTEP SMD	50,000	USD 1	ordinary share	PTTEP ID 100%
43.	PTTEP South Sageri Limited	PTTEP SS	50,000	USD 1	ordinary share	PTTEP ID 100%

<sup>2</sup> Total amount equals AUD 200,631,256.48 (plus AUD 19,826,452.31 for the preference shares and AUD 770,914.25 for the Class B shares = total AUD 221,288,623.04).

<sup>3</sup> A type of share issued to employees under an Employee Share Option Plan, which was subsequently acquired by PTTEPAB.

<sup>4</sup> PTTEP AB acquired PTTEP AT's 50 shares, for a total amount of AUD 41,352,439.

<sup>5</sup> Formerly, PTTEP Brazil Holding Limited



No.	Company Name	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
44.	PTTEP Sadang Limited	PTTEP SD	50,000	USD 1	ordinary share	PTTEP ID 100%
45.	PTTEP Malunda Limited	PTTEP ML	50,000	USD 1	ordinary share	PTTEP ID 100%
46.	PTTEP Netherlands Coöperatie U.A.	PTTEP NC	- <sup>6</sup>	-	-	PTTEP IH 0.00005% PTTEP NL 99.99995%
47.	PTTEP Canada Limited	PTTEP CA	1,017,891,500	CAD 1	ordinary share	PTTEP NC 100%
<b>Service Business</b>						
48.	PTTEP Services Limited (Personnel Services Support)	PTTEP Services	100,000	Baht 10	ordinary share	PTTEP 25% PTTEPI 75%
49.	Andaman Transportation Limited (Investment in Gas Pipeline for Myanmar Project)	ATL	62,500	USD 1	ordinary share	PTTEPO 80% MOGE 20% <sup>7</sup>
50.	PTTEP Southwest Vietnam Pipeline Company Limited (Investment in Gas Pipeline for Vietnam Project)	PTTEP SVPC	50,000	USD 1	ordinary share	PTTEPH 100%
51.	PTTEP Australia International Finance Pty Ltd (Raise Fund for PTTEP Business)	PTTEP AIF	50,000	AUD 1	ordinary share	PTTEP AP 100%
52.	PTTEP Canada International Finance Limited (Raise Fund for PTTEP Business)	PTTEP CIF	50,000	CAD 1	ordinary share	PTTEP NC 100%

Remark PTTEP Merangin Company Limited has dissolved on 29 December 2011.

<sup>6</sup> PTTEP NC has total amount of Member Contribution of USD 1,000,050,000.

<sup>7</sup> Myanmar Oil and Gas Enterprise holds shares in ATL since 5 January 2012.



### 1.3 Associated Company's Information (including, the business entities those the company having investment for 10% and above)

As of 31 January 2012, PTTEP has 17 associated companies. Details of the directors of each associated company appear in attachment 2.

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
1.	Energy Complex Limited	Property Leasing	Energy Complex	180,000,000	Baht 10	ordinary share	PTTEP 50% PTT 50%
	Head Office: 555/1 Energy Complex Building A, Vibhavadi-Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900						
	Telephone: 66 (0) 2140-1000						
	Facsimile: 66 (0) 2 140-1122						
2.	PTT ICT Solutions Company Limited	Information Technology and Communication Services	PTTICT	15,000,000	Baht 10	ordinary share	PTTEP 20% PTT 20% PTTGC 40% Thaioil 20%
	Head Office: : 555/1 Energy Complex Building A, floor 4-5, Vibhavadi-Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900						
	Telephone: 66 (0) 2537- 3456						
	Facsimile: 66 (0) 2537- 2935						
3.	Carigali – PTTEPI Operating Company Sendirian Berhad	Petroleum Exploration and Production	CPOC	350,000	MYR 1	ordinary share	PTTEPI 50% PCJDA Limited 50%
	Head Office: Tower 1, Petronas Twin Towers, Kuala Lumpur City Center, 50088, Kuala Lumpur, Malaysia						
	Telephone: (603) 2782-2555						
	Facsimile: (603) 2713-9877						



No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
4.	Moattama Gas Transportation Company	Gas Pipeline in Union of Myanmar	MGTC	1,000,000	USD 0.03	ordinary share	PTTEPO 25.5% Unocal Myanmar Offshore 28.2625% Total E&P Myanmar 31.2375% MOGE 15%
	Head Office: No.5 Sacred Tooth Relic Lake Avenue, Punn Pin Gone Quarter No. 5, Mayangon Township, Yangon, Union of Myanmar						
	Telephone: (951) 650-977, 660-466						
	Facsimile: (951) 650-478, 650-479						
5.	Taninthayi Pipeline Company LLC	Gas Pipeline in Union of Myanmar	TPC	100,000	USD 1	ordinary share	PTTEPO 19.31784% Petronas Carigali Myanmar (Hong Kong) Ltd 40.91018% MOGE 20.45414% Nippon Oil Exploration (Myanmar) Ltd 19.31784%
	Head Office: 16 Shwe Taung Kyar Bahan, Yangon, Union of Myanmar						
	Telephone: (951) 526-411-4						
	Facsimile: (951) 525-698						
6.	B 8/32 Partners Limited	Petroleum Exploration and Production	B 8/32 Partners	110,000	Baht 100	ordinary share	PTTEPO 25.0009% MOECOI 16.7064% KrisEnergy 4.6346% Chevron 53.6581%
	Head Office: 19 Siam Commercial Bank Park Plaza, East 3rd Building, 5th floor, Ratchadapisek Road, Chatuchak, Bangkok, 10900						
	Telephone: 66 (0) 2545-5555						
	Facsimile: 66 (0) 2545-5554						



No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
7.	Hoang Long Joint Operating Company	Petroleum Exploration and Production	HL JOC	-*	-	-	PTEP HL 28.5% PVEP 41% SOCO 28.50% OPECO 2.0%
	Head Office: Suite 2001, Me Linh Point Tower, 2 Ngo Duc Ke Street, District 1, Ho Chi Mihn City, S.R. Vietnam						
	Telephone: (848) 3829-9359						
	Facsimile: (848)-3822-6106						
8.	Hoan-Vu Joint Operating Company	Petroleum Exploration and Production	HV JOC	-*	-	-	PTTEP HV 25% PVEP 50% SOCO 25%
	Head Office: Suite 2006, Me Linh Point Tower, 2 Ngo Duc Ke Street, District 1, Ho Chi Mihn City, S.R. Vietnam						
	Telephone: (848) 3823-9525						
	Facsimile: (848)-3823-9526						
9.	Shoreair Pty Limited	Operation of Air Base	-	600	AUD 1	ordinary share	PTTEP AAO 50% Arthur Hamilton 41.667% Alex Wood 8.333%
	Head Office: Level 1, 40 Cavenagh St, Darwin, Northern Territory, Australia						
	Telephone: (61) 8-8922-0930						
	Facsimile: (61) 8-8922-0910						
10.	Troughton Island Pty Ltd	ฐานปฏิบัติการทางเดินอากาศ สำรวจ	-	100	AUD 1	ordinary share	PTTEP AAO 50% Arthur Hamilton 44% Alex Wood 6%
	Head Office: Level 1, 40 Cavenagh St, Darwin, Northern Territory, Australia						
	Telephone: (61) 8-8922-0930						
	Facsimile: (61) 8-8922-0910						



No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
11.	Groupement Bir Seba	Petroleum Exploration and Production	GBRS	- <sup>8</sup>	-	-	PTTEP AG 35% PVEP 40% Sonatrach 25%
	Head Office: Lot No.1, Lotissement Belle Vue-Hydra, Algiers, Algeria						
	Telephone: (213) 2194-5325 / 26 / 27						
	Facsimile: (213) 2194-5320 / 22						
12.	PTT FLNG Limited	Manufacture/Production/Trading of Oil/Gas/Other Energy Supply	PTT FLNG	1,000	HKD 10	ordinary share	PTTEP FH 50% PTT International (Singapore) Company Pte. Ltd. 50%
	Head Office: 1401 Hutchison House, 10 Harcourt Road, Hong Kong						
	Telephone: (852) 2846 1888						
	Facsimile: (852) 2845 0476						
13.	Erawan 2 FSO Bahamas Ltd.	Lease of FSO	Erawan 2 FSO Bahamas	100	USD 1	ordinary share	Chevron Global Energy Inc. 65.91% JV marine Ltd. 13.11% MOECO 20.98%
	Head Office: Ocean Centre, Montagu Foreshore, East Bay Street, Nassau, New Providence, Bahamas P.O. Box SS-19084, Nassau, New Providence, Bahamas						
	Telephone: -						
	Facsimile: -						

<sup>8</sup> No share issued. Percentage of shareholding is subject to participation interest of the concession.



No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
14.	KKD Oil Sands Partnership <sup>9</sup>	Petroleum Exploration and Production	KKD Oil Sands	1,570,000	No par value	partnership unit	Statoil Canada Ltd. 60% PTTEP CA 40% (unit of partnership)
	Head Office: Suite 3600, 308 – 4 <sup>th</sup> Ave S.W., Calgary, Alberta T2P 0H7, Canada						
	Telephone: (403) 234-0123						
	Facsimile: (403) 234-0103						
15.	Leismer Aerodrome Limited	Operation of Air Base	LAL	200	No par value	ordinary share	Statoil Canada Ltd. 60% PTTEP CA 40%
	Head Office: Suite 3600, 308 – 4 <sup>th</sup> Ave S.W., Calgary, Alberta T2P 0H7, Canada						
	Telephone: (403) 234-0123						
	Facsimile: (403) 234-0103						
16.	NST Supply Base Co.,Ltd.	Petroleum Supply Base, Port and Warehouse	NST Supply Base	1,000,000 <sup>10</sup>	Baht 1,000	Ordinary share	Chevron Thailand Exploration and Production Ltd. 62.86% MOECO 20.58% JV Shore Base 15.67% KrisEnergy International (Thailand) Holdings Ltd., 0.56% Palang Sophon Limited 0.33%
	Head Office: 19 SCB Park Plaza, Tower East 5 <sup>th</sup> Floor, Ratchadapisek Rd., Chatuchak, Bangkok 10900						
	Telephone: 66 (0) 2545-5555						
	Facsimile: 66 (0) 2545-5454						

<sup>9</sup> Formerly, Statoil Canada Partnership

<sup>10</sup> Increase capital to Baht 1,000,000,000 on 3 February 2012



No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
17.	Asia Pacific Marine Services (EF) B.V.	Petroleum Exploration and Production	Asia Pacific Marine Services	18,000	Euro 1	Ordinary Share	Erawan 2 FSO Bahamas Ltd. 100%
	Head Office: Naritaweg 165 Telestone 8, Amsterdam						
	Telephone: -						
	Facsimile: -						



## 1.4 References

(1) Share Registrar

Name Thailand Securities Depository Company Limited  
Address 62 The Stock Exchange of Thailand Building,  
Rachadapisek Road, Klongtoey,  
Bangkok 10110  
Telephone 0-2229-2800  
TSD Call center 0-2229-2888  
Facsimile 0-2654-5427  
Email TSDCallCenter@set.or.th  
Website <http://www.tsd.co.th>

(2) Debenture Registrar

(2.1) for following Baht Debentures:

- Baht 2,500 Million Bonds – Issued March 2003
- Baht 6,500 Million Bonds – Issued June 2007
- Baht 40,000 Million Bonds – Issued May 2009

Name Thai Military Bank Public Company Limited  
Address 393 Silom Road, Bangrak, Bangkok, Thailand 10500  
Telephone 0-2230-6061 0-2230-6203 0-2230-5487  
Facsimile 0-2266-8150

(2.2) for USD 500 million bonds issued in July 2010

Name The Bank of New York Mellon  
Address One Temasek Avenue, #03-01 Millenia Tower,  
Singapore 039192  
Telephone +65-6432-0355  
Facsimile +65-6883-0338



(2.3) for USD 200 million bonds issued in August 2010

Name Bangkok Bank Public Company Limited  
Address 333 Silom Road, Bangrak, Bangkok, Thailand 10500  
Telephone 0-2230-2971  
Facsimile 0-2626-4545-6

(2.4) for USD 700 million bonds issued in April 2011

Name The Bank of New York Mellon  
Address One Temasek Avenue, #03-01 Millenia Tower,  
Singapore 039192  
Telephone +65-6432-0355  
Facsimile +65-6883-0338

(3) Bondholder's Representative

(3.1) for Baht 6,500 million bonds issued in June 2007

Name KASIKORNBANK Public Company Limited  
Address 11th Floor, 400/22 KASIKORNBANK Building,  
Phahonyothin Road Samsen-Nai, Phayathai,  
Bangkok, Thailand 10400  
Telephone 0-2470-1986  
Facsimile 0-2470-3684

(3.2) for Baht 40,000 million bonds issued in May 2009

Name Siam Commercial Bank Public Company Limited  
Address 3<sup>rd</sup> Floor, Building 2, Petchburi Road, Rajthevee, Makkasan,  
Bangkok, Thailand 10400  
Telephone 0-2256-2316  
Facsimile 0-2256-2401-4



(3.3) for USD 500 million bonds issued in July 2010

Name The Bank of New York Mellon  
Address One Temasek Avenue, #03-01 Millenia Tower,  
Singapore 039192  
Telephone +65-6432-0355  
Facsimile +65-6883-0338

(3.4) for USD 200 million bonds issued in August 2010

Name Bangkok Bank Public Company Limited  
Address 333 Silom Road, Bangrak, Bangkok, Thailand, 10500  
Telephone 0-2230-2971  
Facsimile 0-2626-4545-6

(3.5) for USD 700 million bonds issued in April 2011

Name The Bank of New York Mellon  
Address One Temasek Avenue, #03-01 Millenia Tower,  
Singapore 039192  
Telephone +65-6432-0355  
Facsimile +65-6883-0338

(4) Facility Agent (USD 500 million loan agreement dated in November 2010)

Name The Bank of Tokyo-Mitsubishi UFJ, Ltd.  
Address 10/F., AIA Central, 1 Connaught Road, Central, Hong Kong  
Telephone +852-2823-6666  
Facsimile +852-2823-6686



## (5) Cross Currency and Interest Rate Swap Counter Party

(5.1) Cross Currency Swap Counter Party (for Baht 10,000 million loan from KRUNG THAI BANK PUBLIC COMPANY LTD.)

Name KASIKORNBANK PUBLIC COMPANY LTD.

Division Capital Markets Business Division

Address 400/22 Phahon Yothin Avenue, Samsen-Nai,  
Phayathai, Bangkok, Thailand 10400

Telephone 0-2470-2020

Facsimile 0-2470-3065

Name KRUNG THAI BANK PUBLIC COMPANY LTD.

Division Corporate Sales, Treasury

Address Building 1 (Nana Nue), 5<sup>th</sup> Floor , 35 Sukhumvit Road,  
North Klongtoey, Bangkok, Thailand 10110

Telephone 0-2208-4815

Facsimile 0-2256-8398

(5.2) Cross Currency and Interest Rate Swap Counter Party (for Baht 2,500 million bonds issued in March 2003)

Name KASIKORNBANK PUBLIC COMPANY LTD.

Division Capital Markets Business Division

Address 400/22 Phahon Yothin Avenue, Samsen-Nai,  
Phayathai, Bangkok, Thailand, 10400

Telephone 0-2470-2020

Facsimile 0-2470-3065



(5.3) Cross Currency Swap Counter Party (for Baht 3,500 million bonds issued in June 2007)

Name CITIBANK, N.A. Bangkok Branch  
Division Corporate Sales and Structuring  
Address Interchange 21 Bldg., 399 Sukhumvit Rd.,  
Klongtoeynua, Wattana, Bangkok, Thailand, 10110  
Telephone 0-2788-2822  
Facsimile 0-2788-4825-8

(5.4) Cross Currency Swap Counter Party (for Baht 5,000 million bonds issued in May 2009)

Name DEUTSCHE BANK AG, Bangkok Branch  
Division Corporate Treasury Sales  
Address 63 Athenee Tower, 27-29 Floor, Wireless Road, Lumpini,  
Pathumwan, Bangkok, Thailand, 10330  
Telephone 0-2646-5139  
Facsimile 0-2651-5892

(5.5) Cross Currency Swap Counter Party (for Baht 11,700 million bonds issued in May 2009)

Name SIAM COMMERCIAL BANK PUBLIC COMPANY LTD.  
Division Corporate Banking Division 4, Wholesale Banking Group  
Address 8<sup>th</sup> Floor, Zone B, 9 Rutchadapisek Road,  
Chatuchak, Bangkok, Thailand, 10900  
Telephone 0-2544-2483  
Facsimile 0-2937-704

Name KASIKORNBANK PUBLIC COMPANY LTD.  
Division Capital Markets Business Division  
Address 400/22 Phahon Yothin Avenue, Samsen-Nai,  
Phayathai, Bangkok, Thailand, 10400  
Telephone 0-2470-2020  
Facsimile 0-2470-3065



Name DEUTSCHE BANK AG, Bangkok Branch  
Division Corporate Treasury Sales  
Address 63 Athenee Tower, 27-29 Floor, Wireless Road,  
Lumpini, Pathumwan, Bangkok, Thailand, 10330  
Telephone 0-2646-5139  
Facsimile 0-2651-5892

(5.6) Cross Currency Swap Counter Party (for Baht 5,000 million bonds issued in May 2009)

Name KASIKORNBANK PUBLIC COMPANY LTD.  
Division Capital Markets Business Division  
Address 400/22 Phahon Yothin Avenue, Samsen-Nai,  
Phayathai, Bangkok, Thailand, 10400  
Telephone 0-2470-2020  
Facsimile 0-2470-3065

Name CITIBANK, N.A. Bangkok Branch  
Division Corporate Sales and Structuring  
Address Interchange 21 Bldg., 399 Sukhumvit Road,  
Klongtoeynua, Wattana, Bangkok, Thailand, 10110  
Telephone 0-2788-2822  
Facsimile 0-2788-4825-8

Name DEUTSCHE BANK AG, Bangkok Branch  
Division Corporate Treasury Sales  
Address 63 Athenee Tower, 27-29 Floor, Wireless Road,  
Lumpini, Pathumwan, Bangkok, Thailand, 10330  
Telephone 0-2646-5139  
Facsimile 0-2651-5892



(5.7) Cross Currency Swap Counter Party (For Baht 18,300 million bonds issued in May 2009)

Name DEUTSCHE BANK AG, Bangkok Branch  
Division Corporate Treasury Sales  
Address 63 Athenee Tower, 27-29 Floor, Wireless Road,  
Lumpini, Pathumwan, Bangkok, Thailand, 10330  
Telephone 0-2646-5139  
Facsimile 0-2651-5892

Name KASIKORNBANK PUBLIC COMPANY LTD.  
Division Capital Markets Business Division  
Address 400/22 Phahon Yothin Avenue, Samsen-Nai,  
Phayathai, Bangkok, Thailand, 10400  
Telephone 0-2470-2020  
Facsimile 0-2470-3065

Name CITIBANK, N.A. Bangkok Branch  
Division Corporate Sales and Structuring  
Address Interchange 21 Bldg., 399 Sukhumvit Road, Klongtoeynua,  
Wattana, Bangkok, Thailand 10110  
Telephone 0-2788-2822  
Facsimile 0-2788-4825-8

(6) Auditor

Name Office of the Auditor-General of Thailand  
Address Soi Areesumpun, Rama VI Road, Phayathai, Bangkok,  
Thailand 10400  
Telephone 0-2271-8150  
Facsimile 0-2618-5783



## (7) Advisors to the Board of Directors

Name Mr. Tongchat Hongladarom  
Address 8/48 Prasanmit Condominium, Sukhumvit 23, Klongteoy-nua,  
Wattana, Bangkok, Thailand 10110  
Telephone 02-258-4363  
Facsimile -

Name Ms. Sukon Kanchanalai  
Address 188 Soi 16, Tesbanimit Tai Road, Prachanivej I, Chatuchak,  
Bangkok, Thailand 10900  
Telephone 66 (0) 2589-5566  
Facsimile -

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## 2. Risk Factors

The major risks associated with PTTEP's petroleum exploration and production result from internal and external factors.

### 2.1 Internal Risk Factors

#### 2.1.1 New Project Investment Risks

PTTEP's policy is to invest more, both domestically and internationally, with a focus on promising projects and those aligning with its strategic plan of increasing petroleum production and reserves. To achieve solid, long-term growth, it therefore focuses on investments made in territories with high petroleum potential. The Company revises its investment expansion strategy through its deliberation of deposit potential and investment opportunities in target countries, petroleum production technology, and investment expansion with strategic partners. In addition, it adjusts its strategic plans by growing aggressively in core areas through more exploration and mergers and acquisitions (M&As), with a focus on growth-platform investment base expansion or investment in countries where PTTEP holds advantages due to investment already made in these countries, which could leverage existing projects and command growth potential. Yet, new investments contain risks. Therefore, PTTEP has instituted risk mitigation measures designed for each investment as part of its screening process – taking into account petroleum potential, operating risks, operators' capability, attractiveness of fiscal regimes, contract adherence, political stability, economic and fiscal stability, international relations, geographical conditions, and project types and sizes. In addition, risk prevention measures must be identified ahead of time. These risk factors are taken into account and mitigated in profitability analyses.

In view of such risks, PTTEP has instituted a process to scrutinize investment for each new project by running it through the Early Opportunity Review Committee so that investment expansion may follow the corporate investment direction and policy. The committee analyzes assorted factors for both business investment and technological investment—both conventional and unconventional development. Each new investment, including farm-in and farm-out projects, must secure endorsement from the above-mentioned committee and the



Management Committee before securing another endorsement from the Risk Management Committee. Then, the Board provides the final approval.

### 2.1.2 Exploration Risks

Exploration for new petroleum sources is vital to this high-risk, high-return business. Exploration projects deal with petroleum reserves potentially lying kilometers beneath the surface of the earth. Given the current level of advanced technology, it is still difficult to visualize and understand petroleum geology at such depths. Absolute geological confidence is therefore rare and considerable geological uncertainty prevails. Still, the availability of sufficient data and detailed geological analyses could reduce this uncertainty and exploration risks to acceptable levels.

Here are the major risk factors and uncertainty often stressed in PTTEP's detailed investigation before exploration decisions are made:

- (1) Risk assessment or probability of success
- (2) Assessment of the sizes of resources or reserves in each target area
- (3) Finding costs.

To minimize the risks associated with these three factors, PTTEP values capability development of relevant personnel, such as that through knowledge management efforts and further E&P database development to store best practices and lessons learned from projects for everyone's reference and applications. In addition, an expert directory has been prepared for reference by everyone.

For efficient decision-making as required by industry practices, PTTEP set up a risk management mechanism for its technical consideration by using a peer review through the New Venture Project Quality Assurance Review Team (QART), which screens and assesses the quality of exploration projects that encompass key technical issues and geological uncertainty in keeping with PTTEP's standards as well as processes. PTTEP's exploration portfolio has undergone stringent reviews during the annual work program and budget formulation period. Such process ensures efficient fund allocation based on risk profiles.



### 2.1.3 Project Development Risks

Recognizing potential project development delays and cost overruns, PTTEP has drawn up the following risk mitigation measures to enable successful and timely project completion:

(1) Project management: To ensure timely project implementation, suitable production costs, and maximum benefit to all parties involved, PTTEP focuses on related policy formulation, sound project planning and engineering system designs, contract administration, monitoring, and construction supervision management.

(2) Personnel and procedures: This is achieved through a development focus on project management personnel, application of knowledge management procedures for data and experience-sharing among projects, while constantly improving procedures under the Project Realization Process (PREP) to enable project development to follow proper procedures that are suitable, transparent, and conducive to goal achievement in quality, budgetary, and time aspects, including improvement of its procurement processes for greater flexibility.

(3) Commercial contract: There exist risks arising from contractual matters, ranging from contract drafting, contract obligation, to contract administration, violation of which could lead to litigation. These risks are controllable, starting at the negotiation stage, which calls for knowledgeable and competent personnel attached to related units. For instance, in negotiating production platform construction agreements, knowledge and competence of civil engineering is required for technical detail scrutiny. In addition, procurement personnel need to examine contractors' qualifications and compare prices; finance and accounting personnel need to consider tax and insurance matters; law personnel need to ensure compliance with laws, duties and responsibility of the parties, etc. Prudent contract management lessens risks and damage potentially resulting from delays, which could not only affect plans and performance at large, but result in potential litigation and disputes. Therefore, departments charged with contract management must ensure that PTTEP personnel master contractual terms and conditions and that they consult the Legal Department.

### 2.1.4 Production Risks

Production disruption tends to result from aging production equipment and operation errors, which may make output targets unachievable.



To prevent such risks, PTTEP focuses on every detail, starting from production platform designs, production systems, to production control and preventive maintenance. Automatic detection and emergency shutdown systems are in place to prevent losses, as are work procedures and operation manuals, together with training programs to instill greater understanding and efficiency of operation. PTTEP has implemented ARIMs (Asset Reliability & Integrity Management System), which forms a part of the Operation Excellence Project. ARIMs cuts production losses due to worn-out equipment and regularly raises equipment efficiency, as well as raising the management efficiency of preventive maintenance and inspection. The ultimate goal is zero unplanned shutdowns.

To give its overall operation management even greater efficiency, PTTEP has set up an Operations Risk Committee to analyze and assess risks, impacts on project implementation plans, and provide recommendations on action plans to ward off and mitigate potential impacts while monitoring risks to ensure that they align with PTTEP's risk management policy.

#### 2.1.5 Commercial Risks

Since PTTEP's main product is natural gas, which relies heavily on the domestic market, its revenue could drop if domestic demand proved lower than projected. As a result, PTTEP has expanded its investments in foreign E&P projects, in particular those with crude oil potential, to increase its oil reserves. A case in point is its investment in the Canada Oil Sands KKD Project, where the first oil has flowed from the Leismer area since January this year. This is a way to diversify risks of excessive dependence on natural gas. In addition, PTTEP has been seeking opportunities to develop stranded gas fields by employing Floating Liquefied Natural Gas Production (FLNG), a process of liquefying gas for subsequent barge transport to the market. Such technology will make stranded gas field projects commercially feasible. A clean and abundant energy form in the world today, natural gas could enhance Thailand's national energy security and fits in well with PTT Plc's plan to import LNG.

Although PTT Plc is the sole customer of natural gas, PTTEP has concluded long-term gas sales agreements (GSAs) with PTT to guarantee income over 25-30 years, thereby mitigating the risks if PTT should refuse to take delivery of the gas. Under these GSAs, a take-



or-pay clause is included in case the buyer cannot take delivery of at least the net annual contract quantity (ACQ), which serves as a guarantee for PTTEP's revenue.

In response to the dynamics of energy demand, PTTEP closely monitors petroleum demand in coordination with PTT and related government agencies to collectively outline an optimal supply plan. PTTEP reviews and adjusts its production as well as project development plans to match energy requirements. This also included the development of a holistic development master plan to optimize reserves and resources of existing assets to match the country's energy demand.

### 2.1.6 Organization Capability Risks

Because personnel and business processes dictate an organization's success, PTTEP has taken the following actions to enhance its business process and organizational capability:

(1) Accelerate competency development in support of future growth strategies, consisting of M&As, exploration, drilling and production processing with the FLNG technology

(2) Develop personnel recruitment and development plans through the Competency Management System for many functions, especially core professionals; develop competency assessment to define development plans so that PTTEP personnel can attain the desired capability. A Technical Career Ladder (TCL) has been implemented to provide career growth opportunities to technical personnel, who are now able to acquire comparable job values as management by staying on the technical track. An Accelerated Development Program (ADP) has been also implemented to speed up staff competency development to be ready to perform on given assignments. PTTEP has also devised plans to recruit and develop personnel who should hold executive positions and equivalent to replace retiring executives or add to executive positions to accommodate the Company's growth. This includes a choice of technical partners—or business allies—that can educate its personnel further and thus add to its own strengths for specific expertise like FLNG.

### 2.1.7 Safety, Security, Health, and Environmental Risks

Since PTTEP and its subsidiaries conduct the E&P business, they are inherently faced with assorted risks, including safety, security, occupational health, and the environmental ones (all of which come from inside and outside) with various degrees of severity.



In view of SSHE risks, PTTEP has drawn up a clear SSHE policy and constantly improved its SSHE performance to add security and efficiency to its business. This year, the Step Change in SSHE Project was initiated, with a primary goal of becoming an LTI-free (lost-time- injury-free) organization by 2013 in addition to capability upgrading to become a national E&P entity filled with credibility, safety, and sustainable growth. Emphasis will be on continuous development of SSHE management systems to define and improve work procedures to be always timely while enriching the SSHE culture through the expressed desires of executives, participation of personnel, and assessment of operation for the sake of continuous improvement.

### 2.1.8 Financial Risks

Two risk factors are categorized as internal financial risk: credit and liquidity. PTTEP ensures that products are sold to customers with acceptable credit profiles, with the overwhelming majority of sales currently being made to PTT Plc, PTTEP's parent company. Bank deposits, accounts receivable trading and derivatives, and counterparty credit risks are carefully assessed and regularly reviewed.

Liquidity risk arises from a lack of viable sources of funding for PTTEP's business activities. PTTEP Group's liquidity is managed via the forecasting and continual updating of cash and currency requirements by operating units, including the launch of short-term loan projects to provide access to domestic capital. This is done by issuing short-term debt instruments (bonds) and entering into credit lines with obligations with commercial banks.

## 2.2 External Risk Factors

### 2.2.1 Political Risks in Other Countries

Under PTTEP's foreign investment policy to supply the expanding domestic energy market and sustain its own growth in the long term, it has focused on growing aggressively in core areas. Some of these bear substantial political risks, and therefore PTTEP appointed a geopolitical risk team to monitor all these factors and periodically analyze their development in the forms of risk alerts and scenarios for the consideration of management and relevant units for their decision-making on new investments and assess security risks in countries of existing investments where PTTEP staff are based. PTTEP bases its risk rating scores on such assessment before investing in new projects. In addition, PTTEP liaises closely with the Ministry of Foreign Affairs and Thai embassies in all these countries to promote cordial



relations and ensure that PTTEP's execution is well-supported by the public sector and aligns with the national policy.

### 2.2.2 Litigation Risks

These risks result from violation or non-conformance to relevant laws, requirements, or standards, leading to disputes or potential revocation of licenses. An instance is violation of laws or requirements dealing with safety and the environment, which directly causes losses of revenue and immeasurable losses, such as PTTEP's reputation.

To date, PTTEP has applied measures for risk prevention concerning compliance with regulations of the Australian government for the Montara Project, under which action plans were formulated to closely monitor project operation, while an ad hoc oversight panel was also set up. In addition, PTTEP is preparing to study rules and environmental & safety standards of the Australian and Canadian governments to accommodate and address changes in a timely way.

### 2.2.3 Price Risks

In 2011, the price of oil faced rather high volatility, with Brent crude in the USD 94.49-127.71 per barrel range. PTTEP's product prices vary with those of the world oil market, which are subjected to factors beyond its control, including market demand and supply, political and economic stability of various countries, OPEC's production policy, oil reserves in individual countries, and the global climate. Fluctuations in world oil prices affect revenue and investment planning.

When oil prices drop, so do the prices of PTTEP's oil and condensate. However, because of built-in gas pricing mechanisms of GSAs, which cushion gas prices from oil price volatility (natural hedge), the typical prices of natural gas, its main product, do not immediately drop. Most of PTTEP's contractual gas prices are adjusted every six or twelve months. A reference oil price is usually found in each gas price formula. Should this price rise or fall, the gas price will do the same to a certain degree.

PTTEP has realized the impact of prices on its revenue and profits. Therefore, the risk mitigation plan is routinely reviewed by the Risk Management Committee and endorsed by the Board for further action.



## 2.2.4 Exchange Rate Risks

Effective from January 1 this year, PTTEP has opted for the US dollar as its functional currency, since it is the main denomination referred to in petroleum product transactions involving its core products (oil and gas). PTTEP's cash flow is also subjected to risks concerning the baht currency in comparison with the dollar, since the bulk of its cash flow receivables are in baht based on the dollar. That is to say, the sales prices of its crude, a key product, are based on the world oil price, traditionally set in dollars. But because PTTEP's key customers are those registered domestically, they pay for such crude in baht equivalent of the dollar, which is in turn derived from sales formulas based on the world oil price. Conversely, PTTEP's operation payments—including key investment items—are in dollars. To make matters worse, periods for payments and receipts of payments for goods and services do not coincide, resulting in risks associated with cash flow and volatility of the baht in relation to the dollar. To solve this problem, PTTEP manages such risks by engaging itself in forward and option contracts for foreign currencies, by basing them on currency exchange rates for the receipt of payments for its goods in baht.

Such choice of functional currency also resulted in PTTEP's exposure to volatility in the baht currency in relation to the dollar due to the conversion of asset values, including cash in hand and loans, in baht to the dollar in every accounting period. To handle this, PTTEP exercise risk management by choosing proper ratios between its assets and baht-denominated liabilities. Besides, it is engaged in cross-currency swaps for baht-denominated loans or debt instruments to convert and decide interest rate payments and principals due in the dollar denomination so as to ease potential impacts of the changing baht-dollar exchange rate.

In addition, the performance of PTTEP and its subsidiaries are subjected to risks resulting from changes in the US dollar-Canadian dollar exchange rate. This is because PTTEP CA, its subsidiary partner in the Canada Oil Sands KKD Project, had opted for the Canadian dollar as its functional currency, while all loans are in US dollars. As a result, PTTEP CA's profits or losses are unrealized due to the conversion of liabilities and changes in the US dollar-Canadian dollar exchange rate. To solve this problem, PTTEP manages such risks by adjusting the ratio between liabilities and capital, together with changing the denomination of liabilities through its engagement in cross-currency swaps and securing of new loans, taking into account costs, market situations, and acceptable risks.



## 2.2.5 Interest Rate Risks

PTTEP and its subsidiaries are subjected to interest rate risks due to changes in the interest rates affecting future cash flow and fair values of financial instruments. The majority of PTTEP's debts are long-term under fixed interest rates, giving it constant cashflow expenses; yet, there are risks of paying higher interests than market interest rates during periods of declining interest rates. To cope with this, PTTEP's policy is to maintain a balance of its proportion of liabilities with fixed interest rates and those with floating interest rates suitable to PTTEP's business. It favors borrowing funds at fixed and floating interest rates and applies financial instruments to ward off interest-rate risks, including interest-rate swap agreements, to convert floating into fixed rates, and vice versa. In so doing, PTTEP takes into consideration costs, market conditions, and acceptable risks.



### 3. Nature of Business

#### 3.1 Significant Development in 2011

##### 3.1.1 Investment of PTTEP and its subsidiaries

(1) In March 2011, PTTEP Sidi Abd El Rahman Company Limited (PTTEP SAER) has withdrawn the entire 30% participation interest from Sidi Abd El Rahman Offshore Project in the Arab Republic of Egypt after fulfillment of the exploration work commitment.

(2) In March 2011, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) signed the Sale and Purchase Agreement for AC/RL7 for the purchase of 20% participation interest from an existing partner. As a result, PTTEP AAA now holds 100% participation interest.

(3) In April 2011, PTTEP International Limited (PTTEPI) has relinquished the entire area of Exploration Block M4 in the Union of Myanmar after fulfillment of the exploration work commitment.

(4) In June 2011, PTTEP Australasia Offshore Pty Limited (a subsidiary of PTTEP) withdrew the entire 22.21% participation interest from Australia AC/P36 Project in Australia after fulfillment of the exploration work commitment.

(5) In July 2011, PTTEP Australasia (Ashmore Cartier) Pty Limited (PTTEP AAA) was approved by the government of the Australia to obtain 100% rights in the exploratory area AC/P54 for six years effective from July 7, 2011.

(6) In August 2011, PTTEP South Mandar Limited (PTTEP SMD), PTTEP Sough Sageri Limited (PTTEP SS), and PTTEP Sadang Limited (PTTEP SD), subsidiaries of PTTEP, have signed a farm-out agreement of the three exploration blocks in Indonesia, South Mandar, South Sageri, and Sadang to TOTAL E&P Indonesia South Mandar Limited, TOTAL E&P South Sageri Limited, TOTAL E&P Sadang Limited (TOTAL Group). The three blocks are deep-water exploration blocks located off-shore in the Makassar Strait. The farm-out contract resulted in PTTEP share down from 67, 30, and 40 percent to 34, 20, and 30 percent respectively whereas Total Group's share up to 33, 45, and 30 percent respectively.

(7) In August 2011, PTTEP New Zealand Limited (PTTEP NZ), a subsidiary of PTTEP and its joint venture have signed a farm-out agreement of the two areas in the New



Zealand Great South Project which are PEP 50119 and PEP 50120 to Shell New Zealand Limited (Shell), who has extensive experience in the field of deepwater petroleum exploration and production. Both areas are located off the coast of the South Island of New Zealand, which is a frontier area. This farm-out contract resulted in PTTEP share down from 36 to 18 percent whereas Shell's share up to 50 percent.

(8) In August 2011, PTTEP New Zealand Limited (PTTEP NZ) ceased the exploration and relinquished the concession no. 50121 in New Zealand.

(9) In September 2011, PTTEP Australasia (Ashmore Cartier) Pty Limited (PTTEP AAA) withdrew the entire 20% participation interest from the concession WA378P of the PTTEP Australasia Project in Australia.

### 3.1.2 Establishment and Dissolution of Subsidiaries

(1) Incorporated PTTEP Canada International Finance Limited (PTTEP CIF) to carry out the fund raising business for PTTEP.

(2) Incorporated PTTEP MEA Limited (PTTEP MEA) to carry out E&P business in Algeria.

(3) Dissolved PTTEP Merangin Limited (PTTEPM) on 29 December 2011 for business management purpose since PTTEPM has no further business operation.

3.1.3 Reorganization (organization chart illustrated in item no.8) on 16 February 2011 and 1 October 2011 was to enhance the effectiveness of business management and to align with the strategic direction of the company which focus on sustainable investment, value creation of the existing projects and organization capability development.

### 3.1.4 Achievement

(1) Canada Oil Sands KKD Project has started up the first production from Leismer area in January 2011 with initial production capacity at 2,200 barrels per day. Since then, the production has increased to 15,000 barrels per day and will ramp up to the capacity of 20,000 barrels per day within approximately 24 months from the start-up. Canada Oil Sands KKD Project covers an area of 257,200 acres, comprising 5 core areas, namely, Leismer, Corner, Thornbury, Hangingstone, and South Leismer.



(2) Vietnam 16-1 Project has commenced its first production from Te Giac Trang (TGT) field from August 22, 2011 with the initial flow rate of approximately 15,000 barrels per day. The production has increased to approximately 30,000 barrels per day by the end of 2011.

(3) S1 Project has received the ISO 26000 Social Responsibility Statement of Performance at Role Model level and was the first E&P company in Thailand to be awarded the SA 8000 Social Accountability Certification.

### 3.1.5 Fund Raising

(1) In March 2011, PTTEP has signed the loan agreement with Krung Thai Bank for THB 20,000 million with a one-year tenor.

(2) In April 2011, PTTEP Canada International Finance Limited (PTTEP CIF) has completed the transaction of issuing unsecured and unsubordinated debentures to foreign institutional investors for the total amount of USD 700 million carrying a coupon of 5.692% p.a., fully guaranteed by PTTEP with the tenor of 10 Years. The debentures have been rated BBB+ by Standard and Poor's and Baa1 by Moody's.

### 3.1.6 Others

(1) From the first quarter 2011 onward, PTTEP has prepared Financial Statements using US Dollar as a functional currency in accordance with the newly adopted accounting standards and has also prepared the translated financial statements in Thai Baht as a presentation currency.

(2) In the beginning of February 2011, the Australian Government had revealed the Independent Review Report of the Action Plan developed by PTTEP Australasia Pty Ltd (PTTEP AA), a wholly owned subsidiary of PTTEP. The Australian Government decided to allow PTTEP AA to continue its operation in Australia. The Australian Government also recognized that the company's Action Plan effectively responds to the issues identified by the Montara Commission of Inquiry, including both technical and governance aspects, and reflects the company's commitment to deliver the highest standards of oilfield practices and safety in its operations. In addition, PTTEP AA has entered into a binding Deed of Agreement with the Australian Government under which independent experts will monitor the company's implementation of the Action Plan for 18 months.



(3) During October 2011, the massive flood occurred. The water has moved close to the Head Office, Energy Complex Building, since November 4, 2011. The impact of the flood to the company has resulted in temporary decline in production of certain projects. S1 Project, Sukhothai, Phitsanulok and Kamphaengpet provinces, has decreased the average production by approximately 10,000 barrels per day (from average production rate of approximately 25,000 barrels per day) since September 28, 2011 due to effect from the flood on rail transportation. However, S1 Project was able to resume the same production rate as before the flooding since the end of October.

PTTEP 1 Project, which locate in Suphan Buri and Nakhorn Pathom provinces and produces crude at the average rate of 380 barrels per day, has ceased the sales of crude from 18 October 2011 onward due to the inability to transport crude from the project. However, PTTEP 1 Project was able to resume production since 21 November 2011 at the average production rate of approximately 350 – 380 barrels per day.

As for the Head Office, Energy Complex Building, the company has relocated the head office operation to the secondary workplace in the location of PTT Group in Chonburi and Rayong provinces during 7 - 21 November 2011. The company is currently back in operation at the company headquarter, Energy Complex Building.

## 3.2 Business Operation

### 3.2.1 Business Overview

PTTEP's core business is petroleum exploration and production in Thailand and other countries. As of 31 January 2012, PTTEP and its subsidiaries and associated companies had 41 petroleum exploration and production projects in 13 countries. Nineteen projects are currently under the exploration phase, two under the development phase, and twenty under commercial production.

No.	Project Name	Phase	Location	Participation Interest	Operator
Thailand: 16 projects					
1.	Bongkot Project	Production	Gulf of Thailand	44.4445%	PTTEP
2.	S1 Project	Production	North	100%	PTTEP
3.	PTTEP 1 Project	Production	Central	100%	PTTEP



No.	Project Name	Phase	Location	Participation Interest	Operator
4.	B6/27 Project	Production	Gulf of Thailand	60%	PTTEP
5.	Arthit Project	Production	Gulf of Thailand	80%	PTTEP
6.	L22/43 Project	Exploration	North	100%	PTTEP
7.	L53/43 & L54/43 Project	Exploration	Central	100%	PTTEP
8.	L21, 28 & 29/48 Project	Exploration	North East	70%	PTTEP
9.	A4, 5 & 6/48 Project	Exploration	Andaman Sea	100%	PTTEP
10.	E5 Project	Production	North East	20%	ExxonMobil
11.	Contract 3 Project	Production	Gulf of Thailand	5%	Chevron
12.	Contract 4 Project	Production	Gulf of Thailand	45%	Chevron
13.	G4/43 Project	Production	Gulf of Thailand	21.375%	Chevron
14.	Sinphuhorm Project	Production	North East	20%	Hess (Thailand)
15.	B8/32 & 9A Project	Production	Gulf of Thailand	25%	Chevron
16.	G 4/48 Project	Production	Gulf of Thailand	5%	Chevron
Overlapping Area: 1 project					
17.	G9/43 Project	Exploration	Thailand- Cambodia	100%	PTTEP
Overseas: 24 projects					
Malaysia					
18.	MTJDA-B17 Project	Production	Thailand- Malaysia	50%	CPOC
Myanmar					
19.	Myanmar M3, M7 & M11 Project	Exploration	Gulf of Martaban	100%	PTTEP
20.	Myanmar Zawtika Project	Development	Gulf of Martaban	100%	PTTEP
21.	Yadana Project	Production	Gulf of Martaban	25.5%	TOTAL
22.	Yetagun Project	Production	Gulf of Martaban	19.31784%	Petronas



No.	Project Name	Phase	Location	Participation Interest	Operator
Vietnam					
23.	Vietnam 9-2 Project	Production	Offshore	25%	HV JOC
24.	Vietnam 16-1 Project	Production	Offshore	28.5%	HL JOC
25.	Vietnam B & 48/95 Project	Exploration	Offshore	8.5%	Chevron
26.	Vietnam 52/97 Project	Exploration	Offshore	7%	Chevron
Cambodia					
27.	Cambodia B Project	Exploration	Offshore	33.333334%	PTTEP
Indonesia					
28.	Indonesia Malunda Project	Exploration	Offshore	100%	PTTEP
29.	Indonesia South Mandar Project	Exploration	Offshore	34%	PTTEP
30.	Indonesia Semai II Project	Exploration	Offshore	28.33%	Murphy
31.	Indonesia Sadang Project	Exploration	Offshore	30%	Tarisman
32.	Indonesia South Sageri Project	Exploration	Offshore	20%	Tarisman
Oman					
33.	Oman 44 Project	Production	Onshore	100%	PTTEP
Bahrain					
34.	Bahrain 2 Project	Exploration	Offshore	100%	PTTEP
Algeria					
35.	Algeria Hassi Bir Rekaiz	Exploration	Onshore	24.5%	PTTEP
36.	Algeria 433a & 416 b Project	Development	Onshore	35%	GBRS
Egypt					
37.	Rommana Project	Exploration	Onshore	30%	Sipetrol
New Zealand					
38.	New Zealand Great South	Exploration	Offshore	18%	OMV New
Australia					
39.	PTTEP Australasia Project	Production	Offshore	100%	PTTEP



No.	Project Name	Phase	Location	Participation Interest	Operator
40.	Australia WA-423-P	Exploration	Offshore	30%	Murphy
Canada					
41.	Canada Oil Sands KKD	Production	Onshore	40%	Statoil

### 3.2.2 Structuring Policy for PTTEP Group

PTTEP established subsidiaries and/or associated companies mainly to conduct its core business. Its continuous expansion in domestic territory and overseas necessitates the establishment of subsidiaries and/or associated companies in the region where the company invests for flexible, efficient business operations and competitive advantages comparable with other international oil companies. To achieve this, PTTEP considered factors such as rules & regulations, financial structure, tax regimes, and risk management.

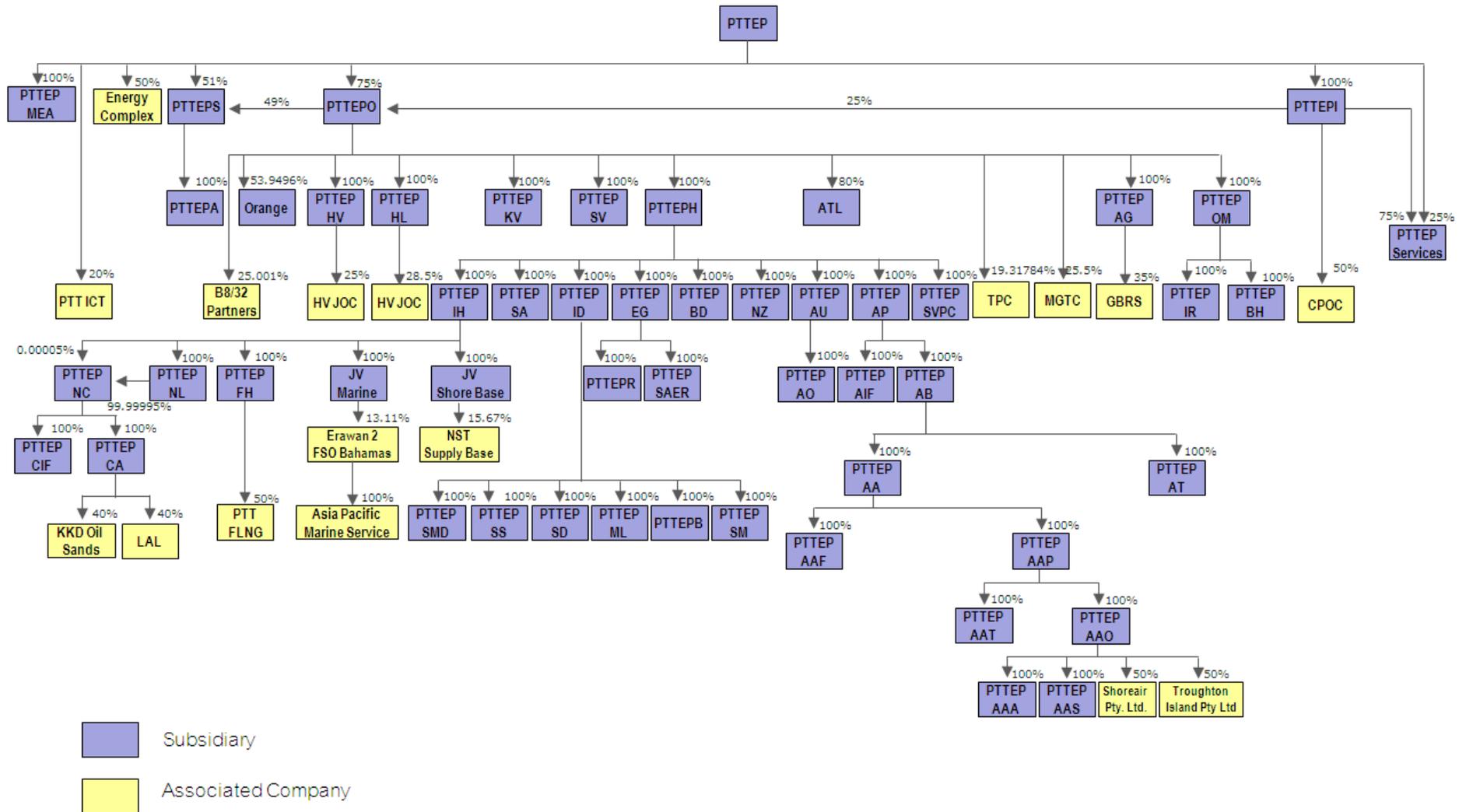
PTTEP's policy is to manage its subsidiaries as "One Company" with a clear direction that its subsidiaries follow PTTEP's business direction and strategy and being mainly managed as one team by PTTEP executives and employees. In addition, its management and internal control systems are also to be adopted and implemented in all PTTEP subsidiaries in the same way that they are standardized at PTTEP. To manage associated companies, PTTEP nominates a representative to serve as a shareholder and/or a member of each board of directors to participate in defining the overall business strategy and policy for these companies. To manage subsidiaries and associated companies, PTTEP adheres to its Good Corporate Governance principles and Business Ethics as its compelling philosophy to ensure effectiveness, transparency, fairness, and achievement of its business goals.

### 3.2.3 Shareholding Structure of PTTEP Group

As of January 31, 2012, PTTEP invested in 69 legal entities, comprising 52 subsidiaries and 17 associated companies. Details of each company appeared in item 1.1 and 1.3. The PTTEP Group shareholding structure is illustrated as follows:



### PTTEP Group Shareholding Structure





### 3.3 Revenue Structure

Commencing January 1, 2011, the Company's management has determined US Dollar as the functional currency and has presented its financial statements in US Dollars in accordance with Thai Accounting Standard No. 21 "The Effects of Changes in Foreign Exchange Rates".

PTTEP and its subsidiary's revenues have come mainly from sales of petroleum products prices for which are marked to the world fuel prices in US Dollars. Thus, PTTEP and its subsidiaries' revenue structures of 2009 – 2011 are presented here in US Dollars in order to reflect the company's revenue structures.

The petroleum exploration and production projects which generated revenues for PTTEP and its subsidiaries comprised 21 projects: the Bongkot, Pailin, S1, Yadana, Yetagun, Unocal III, B8/32 & 9A, PTTEP1, E5, B6/27, Sinphuhorm, G4/43, Oman 44, Arthit, Vietnam 9-2, Arthit North, PTTEP Australasia, G4/48, MTJDA-B17 Canada oil Sands KKD and Vietnam 16-1 projects. In addition, PTTEP and its subsidiaries recorded revenues proportionately from gas pipeline transportation which MGTC and TPC rendered to Myanmar Oil and Gas Enterprise (MOGE)



## Revenue structure of PTTEP and its subsidiaries during 2009-2011

Product	Operated by	Shareholding by	% of interest		2009*		2010		2011	
			2010	2011	Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Petroleum Exploration and Production Segment										
Crude	PTTEP	-	-	-	136.54	3.89	184.24	4.07	257.49	4.53
	PTTEPI	PTTEP	100.00	100.00	44.27	1.26	60.67	1.34	70.17	1.23
	PTTEPS	PTTEP	51.00	51.00	323.34	9.21	426.18	9.40	627.98	11.05
		PTTEPO	49.00	49.00	-	-	-	-	-	-
	PTTEPO <sup>1</sup>	PTTEP	75.00	75.00	244.32	6.96	283.91	6.26	314.11	5.52
		PTTEPI	25.00	25.00	-	-	-	-	-	-
	PTTEP HV	PTTEPO	100.00	100.00	68.16	1.94	55.33	1.22	60.36	1.06
	PTTEPT <sup>2</sup>	PTTEPI	100.00	100.00	0.17	0.01	1.68	0.04	-	-
	PTTEP AP	PTTEPH	100.00	100.00	59.74	1.70	60.40	1.33	-	-
	PTTEP HL	PTTEPO	100.00	100.00	-	-	-	-	149.95	2.64
Natural Gas	PTTEP	-	-	-	1,375.99	39.20	1,611.16	35.55	1,619.77	28.49
	PTTEPI	PTTEP	100.00	100.00	300.26	8.55	506.16	11.17	659.95	11.61
	PTTEPS	PTTEP	51.00	51.00	33.04	0.94	41.48	0.92	51.40	0.90
		PTTEPO	49.00	49.00	-	-	-	-	-	-
	PTTEPO <sup>1</sup>	PTTEP	75.00	75.00	73.31	2.09	77.53	1.71	80.22	1.41
		PTTEPI	25.00	25.00	-	-	-	-	-	-
	PTTEP HV	PTTEPO	100.00	100.00	3.46	0.10	2.26	0.05	1.59	0.03
	PTTEP OM	PTTEPO	100.00	100.00	16.56	0.47	16.66	0.37	16.30	0.29
	PTTEPT <sup>2</sup>	PTTEPI	100.00	100.00	0.04	0.01	0.26	0.01	-	-
LPG	PTTEP	-	-	-	5.35	0.15	5.60	0.12	6.58	0.11
	PTTEPS	PTTEP	51.00	51.00	16.06	0.46	16.80	0.37	19.75	0.35
		PTTEPO	49.00	49.00	-	-	-	-	-	-
Condensate	PTTEP	-	-	-	596.64	17.00	835.98	18.45	1,145.45	20.15
	PTTEPI	PTTEP	100.00	100.00	19.58	0.56	89.49	1.97	134.34	2.36
	PTTEPS	PTTEP	51.00	51.00	1.35	0.04	1.80	0.04	2.24	0.04
		PTTEPO	49.00	49.00	-	-	-	-	-	-



Product	Operated by	Shareholding by	% of interest		2009*		2010		2011	
			2010	2011	Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Condensate (cont'd)	PTTEP OM	PTTEPO	100.00	100.00	51.95	1.48	52.04	1.15	72.18	1.27
Diluted Bitumen	PTTEP CA	PTTEP NC	100.00	100.00	-	-	-	-	149.89	2.64
<b>Total</b>					<b>3,370.13</b>	<b>96.02</b>	<b>4,329.63</b>	<b>95.54</b>	<b>5,439.72</b>	<b>95.68</b>
<b>Overseas Pipeline Segment</b>										
Gas Pipeline Transportation	MGTC	PTTEPO	25.50	25.50	69.57	1.99	71.43	1.58	80.00	1.41
	TPC	PTTEPO	19.3178	19.3178	40.17	1.14	39.41	0.87	44.07	0.78
<b>Total</b>					<b>109.74</b>	<b>3.13</b>	<b>110.84</b>	<b>2.45</b>	<b>124.07</b>	<b>2.19</b>
<b>Other Segment</b>										
Other Revenues	PTTEP	-	-	-	10.51	0.30	32.33	0.71	18.59	0.33
	PTTEPI	PTTEP	100.00	100.00	10.17	0.29	5.76	0.13	30.14	0.53
	PTTEPO <sup>1</sup>	PTTEP	75.00	75.00	1.99	0.06	3.10	0.07	5.55	0.10
		PTTEPI	25.00	25.00	-	-	-	-	-	-
	PTTEP HV	PTTEPO	100.00	100.00	0.02	0.00	0.05	0.00	0.10	0.00
	PTTEP HL	PTTEPO	100.00	100.00	-	-	0.02	0.00	0.04	0.00
	MGTC	PTTEPO	25.50	25.50	0.10	0.00	0.10	0.00	0.58	0.01
	TPC	PTTEPO	19.3178	19.3178	-	-	-	-	0.23	0.00
	PTTEP Services	PTTEP	25.00	25.00	(5.22)	(0.15)	0.38	0.01	0.86	0.01
		PTTEPI	75.00	75.00	-	-	-	-	-	-
	PTTEPT <sup>2</sup>	PTTEPI	100.00	100.00	-	-	-	-	0.08	0.00
	PTTEPS	PTTEP	51.00	51.00	3.08	0.09	2.44	0.05	5.21	0.09
		PTTEPO	49.00	49.00	-	-	-	-	-	-
	PTTEP AP	PTTEPH	100.00	100.00	9.33	0.26	45.29	1.00	41.42	0.73
	PTTEP NZ	PTTEPH	100.00	100.00	-	-	-	-	7.51	0.13
	PTTEP SM	PTTEP ID	100.00	100.00	-	-	1.83	0.04	-	-
	PTTEP SMD	PTTEP ID	100.00	100.00	-	-	-	-	3.13	0.05
	PTTEP SS	PTTEP ID	100.00	100.00	-	-	-	-	1.16	0.02
	PTTEP SD	PTTEP ID	100.00	100.00	-	-	-	-	0.90	0.02
	PTTEP NC	PTTEP IH	0.00005	0.00005	-	-	-	-	-	-
		PTTEP NL	99.99995	99.99995	-	-	-	-	1.74	0.03
	PTTEP CA	PTTEP NC	-	100.00	-	-	-	-	3.77	0.07
	PTTEP CIF	PTTEP NC	-	100.00	-	-	-	-	0.29	0.01
<b>Total</b>					<b>29.98</b>	<b>0.85</b>	<b>91.30</b>	<b>2.01</b>	<b>121.30</b>	<b>2.13</b>
<b>Grand Total</b>					<b>3,509.8</b>	<b>100.0</b>	<b>4,531.7</b>	<b>3,509.85</b>	<b>100.00</b>	<b>4,531.77</b>



\* Revenue in THB currency that was reported to the SEC on 17 February 2010 has been converted to be presented in USD currency by using the 2009 average exchange rate of 34.2858 THB per USD.

<sup>1</sup> PTTEPO holds Orange Energy Limited and B8/32 Partners Limited

<sup>2</sup> As at December 24, 2010, PTTEPT has registered for the dissolution with the Ministry of Commerce and is in the process of liquidation.

For 2011, total revenues for PTTEP and its subsidiaries amounted to USD 5,685 million (equivalent to 173,375 million baht), an increase of USD 1,153 million or 25% against last year which was USD 4,532 million (equivalent to 143,506 million baht). The increase was mainly due to higher sales of petroleum of USD 1,110 million, resulting from (1) the higher average petroleum sales price for 2011, which rose to USD 55.49 per BOE compared with 2010 when it was at USD 44.83 per BOE; however (2) the higher sales volume for this year rose to 265,047 BOED compared with for last year of 264,575 BOED. The increased sales volume largely came from natural gas and condensate sales volume from the MTJDA-B17 project and the higher Diluted Bitumen (Dilbit) sales volume from the Canada Oil Sands KKD project, which started its production in the first quarter of 2011, as well as the increased crude oil sales volume from the Vietnam 16-1 project, which started its production in the third quarter of 2011. On the other hand, natural gas and condensate sales volumes from the Arthit decreased resulting from a lower daily contract quantity, in addition to crude oil and natural gas sales volume from the B8/32 & 9A project decreased when compared with the volumes of last year.

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

This year, other income increased, principally because of the recognition of other income from the transfer of interest in Myanmar Zawtika, New Zealand Great South, Indonesia South Mandar, Indonesia South Sageri and Indonesia Sadang projects. However, other income from insurance claim from Montara incident decreased in 2011. There was a recognition of additional insurance claims amounting to USD 36 million in 2011; whereas, this insurance claim was recognized, amounting USD 44 million last year.



### 3.4 PTTEP Business Targets during 2011-2015

PTTEP continues to closely monitor the global and national economics, in order to analyze the energy situation of the country. In addition, PTTEP has been cooperating with PTT and the related government agencies to collectively outline the optimal supply plan and forecast future energy demand in both short term and long term. Furthermore, PTTEP has continuously reviewed and adjusted its production plan as well as project development plans, including developing various technologies in exploration and production. Additionally, PTTEP constantly seeking the investment opportunities in order to increase the reserve added, with the purpose of supplying to the demand of the nation. PTTEP corporate business targets during 2011-2015 and results of corporate strategy execution during 2011 are summarized as follows:

#### 3.4.1 Quantitative target

Quantitative targets for sales in 2011 and 2015 are 273,204 and 316,195 Barrels of Oil Equivalent per Day (BOED), respectively, where the cumulative average growth rate in 2011 is approximately 4 percent. In 2011, PTTEP average petroleum sales was 265,047 BOED. Even though 2011 has many incidents affecting the production level in some projects such as the lower production from Arthit asset due to the adjust of the daily contract quantity (DCQ), the delayed of Montara project from the comprehensive approval process from the Australian government to continue petroleum exploration and production operations in Australia, and the major flood in Thailand towards the end of 2011, which results in the reduction of the petroleum production of project S1 and PTTEP1. However, once the flooding impact has been relieved, the company has increased petroleum production of project Bongkot, S1, and MTJDA-B17 to compensate for the declined production during the flood. As a result the company's sales volume was only 3 percent below the target. Moreover, PTTEP has accelerated in developing various technologies in exploration and production, including constantly seeking the investment opportunities in order to increase the reserve added, with the purpose of supplying the nation's long term energy need.

#### 3.4.2 Qualitative target

##### (1) Asset Value Maximization

In 2011, PTTEP accelerated to increase the value of existing assets for the country's energy security and to respond to the global and local economics volatility. In 2011, the total revenue of PTTEP and its subsidiaries was 5,685 million USD (equivalent to 173,375



million baht), as revenue from sales of 5,564 million USD (equivalent to 169,646 million baht) and other income of 121 million USD (equivalent to 3,729 million baht) and net profit of 1,468 million USD (equivalent to 44,748 million baht). In 2011, the company has the project progress as followed.

- 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 year 2011, the company drilled exploration wells in several projects.

- Arthit project: The petroleum has been discovered in appraisal well Arthit-14-19 A&B, in which will be developed further.

- PTTEP Australasia project: The Cash-Maple field locating in Timor Sea, the company has drilled the appraisal well Cash-2. The natural gas has been discovered and the result of this appraisal well is important information for the Preliminary Front End Engineering Design (Pre-FEED) to estimate the potential of the development of the Floating Liquefied Natural Gas (FLNG) project in Timor Sea. FLNG is the project with the purpose to facilitate the development of the natural gas in the remote area. In addition, the company will continue drilling additional appraisal wells in 2012 to confirm the petroleum reserves and evaluate the commercial potential of the field.

- As for the exploration block WA-397-P, Browse Basin, where PTTEP is a joint venture with 20% share, the exploration well Omar-1 was drilled to the total depth of 5,229 meters and discovered petroleum but not enough in quantity for commercial purposes. In addition, the exploration well Kingtree-1 in project AC/P24 and the exploration well Ironstone-1 in project AC/P40 were drilled to the total depth and discovered petroleum but not enough in quantity for commercial purposes.

- Oman 44 Project: The drilling result of exploration well Munhamir-3 to discover more petroleum reserve in the Munhamir oil field yielded petroleum discovery but not enough quantity for commercial purpose. Nonetheless, in the year 2012, PTTEP expected to produce additional condensate from the production well Munhamir-2. The additional production from Munhamir field and the current gas and condensate production from Shams gas field, together will increase the petroleum production from Oman 44 project.



- Myanmar M3 Project: Gulf of Martaban, Republic of the Union of Myanmar. As a result of the natural gas discovery in the exploration well, Aung Sinkha-2 PTTEP plans to accelerate the 3-D seismic survey of 1,000 square kilometers from the first quarter of 2012 to the fourth quarter of 2011, in order to align with the appraisal drilling plan in the fourth quarter of 2012. Currently, PTTEP is preparing the area to be surveyed in conjunction with relevant government agencies. In addition, Myanma Oil and Gas Enterprise (MOGE) has approved in principle for the extension of exploration period of 1 year, for PTTEP to continue with the drilling of exploration wells and appraisal wells, in order to prove the commercial potential.

- Indonesia Semai II Project: PTTEP entered into joint venture companies, with share of 28.33% with Murphy Semai Oil Co. Ltd. as the operator. The petroleum has been discovered in the exploration well Lengkuas-1, which has a depth of 1,095 meters under sea level and has drilled to the depth of 6,500 meters, the petroleum has been found in the reservoir rock but not enough in quantity for commercial purposes. However, the data obtained from the well Lengkuas-1 is particularly useful for the evaluation of the petroleum potential of the area nearby and for the future exploration and investment plan of the company

- MTJDA-B17 Project: There was the drilling of an exploration well and an appraisal well. Petroleum was discovered in 5 wells, which confirms the potential of the area.

- Development: PTTEP has accelerated the development of various projects to start up production as planned.

- PTTEP Australasia Project, Montara field: Development of Montara Field is progressing as planned, with the installation of the new wellhead platform completed. The drilling of the production well has begun, and is expected to begin production in the second half of 2012

Regarding the implementation of the Action Plan of the Montara incident as proposed to the Australian Government, PTTEP has received approval from the Australian government to continue petroleum exploration and production operations in Australia. The company will continue to report the progress of the implementation to the Department of Resources and Energy of Australia. PTTEP is currently in the process of taking lessons from the Montara incident to analyze and improve the operations as the "Corporate Lessons Learned" including to extend the lesson learned to subsidiaries in other countries. PTTEP remains committed to prevent similar incidents in the future.



For the compensation claim, ending the year 2011, PTTEP has received total compensation claim of USD 119.5 million to date.

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

- Greater Bongkot South: Processing platform, Wellhead platform, and Living quarters platform constructions have been completed. The initial production of natural gas is expected by the first half of 2012.

- Myanmar Zawtika Project: The project is currently under process of the constructions of the processing platform & bridge, wellhead platform and intra-field sealines, offshore gas export pipeline, onshore gas export pipeline & facilities. PTTEP expects to start up natural gas production from Zawtika Project in 2013.

- Algeria 433a & 416b Project: The project is currently under process of the design of detailed engineering for processing and pipeline. As for the construction of living quarter and facilities, the technical and commercial evaluation of the contracts have been approved. In addition, the drilling of the development well has begun in late 2011 and expected the initial production within the year 2014.

- Production: PTTEP continuously put efforts to maintain the current production level and increase production from new projects.

- Canada Oil Sands KKD Project: Canada Oil Sands KKD Project has begun its production in 2011 and has continuously increased its production from the Leismer area. The total production in Leismer area was approximately 3 million barrels in November 2011; the average production rate for the fourth quarter 2011 was approximately 14,300 barrels per day, and the maximum production rate reaching approximately 18,190 barrels per day in December 2011. In addition, there is the evaluation of installing the fourth stream generator to increase the production rate to 22,000 barrels per day, prior to the Leismer Expansion plan, which aims to increase production to 40,000 barrels per day in 2015. For the Corner area, the study period has been extended, in order to evaluate in more details of the development plan and overall budget to maximize the value of the investment and construction



process. It is expected that there will be a Final Investment Decision (FID) in 2013 and start production by the year 2016.

- Vietnam 16-1 Project: has commenced its first production on August, 2011 with the initial flow rate of approximately 15,000 barrels per day. The current average production rate is approximately 32,000 barrels per day.

- Arthit Project: PTTEP and the joint venture partners (the sellers) reviewed the development and production plan of the project to recover the limited natural resources to support the Kingdom's energy demand and the dependency on the domestic reserves; as a result, the amendment of the Gas Sales Agreement was agreed and signed by the sellers and PTT Public Company Limited. The key contents of the amendment include the adjustment of the Daily Contract Quantity (DCQ) from 330 million cubic feet per day (MMSCFD) to 220 MMSCFD and the adjustment in gas price formula to reflect the same level of return.

- As for Arthit North Project: PTTEP has been the operator and the sole shareholder of the Arthit North Project since 2006 to produce the natural gas via FPSO (Floating Production Storage and Off-Loading). At present, Arthit North has stopped the production since 28 Nov 2011 due to the FPSO rental agreement ended. Nonetheless, PTTEP plans to deliver the natural gas to produce at Arthit Processing Platform in 2012, where PTTEP and Arthit joint venture partners, Chevron Thailand Exploration and Production, Ltd. (Chevron) and Mitsui Oil Exploration Co., Ltd. (MOECO), have entered into the Arthit North Participation agreement on 29 Dec 2011 with 80% 16% and 4% participation interests respectively. This agreement will be effective in January 2012 in order to deliver the natural gas to produce at Arthit Processing Platform.

- Impact from the flood in Thailand: During October 2011, there has been a major flood in Thailand, impacting the petroleum transportation of the company. As a result, the production levels have been decreased in some part of S1, PTTEP1, Bongkot, Yadana, and Yetagun projects. However, the mentioned projects were able to resume to normal operation and production rate early in the fourth quarter. In addition, the major flood has also impacted the natural gas demand in the fourth quarter, reducing the natural gas demanded from the mentioned projects slightly, resulting in the total gas sales volume to decrease 5% compared to the third quarter of 2011.

- Improving the efficiency and cost optimization: PTTEP regards efficiency improvement and cost optimization as a key component for long term value creation



and sustainable growth. PTTEP continues its focus on Operational Excellence (OE) and has initiated the Operational Benchmarking program in order to excel in operations and able to compete in the increasingly competitive environment

The trend of the cost of petroleum exploration and production industry has been in the increasing direction, as well as the fact that PTTEP has unconventional projects and increasing oil producing projects, in order to maintain the optimal operating cost and maintain the level of return, PTTEP has continuously operates in the area of cost optimization, for instance, the supply chain plus project and the Zero Unplanned Shutdown program.

In addition, PTTEP has its main focus on Safety, Security, Health and Environment (SSHE). One example is that the project Step Change in SSHE was kicked-off in 2011 with the target of being LTI (Loss Time Injury) free organization by 2013. Moreover, there were various initiatives on the environment as PTTEP announced Climate Change Policy in recognizing PTTEP role in supporting global energy demand in parallel with the responsibility in the sustainable development of petroleum resources. A living example of PTTEP environmental initiatives is the "Natural Gas for Community Farmers and Environment Project" where PTTEP constructed a food-processing plant, equipped with natural gas distribution pipeline, for the Banana Processing Cooperative Ltd. of Tambon Nong Tum. The system enabled the cooperative to use natural gas surplus from oil production process from S1 Project instead if the more costly LPG fuel.

## (2) Expansion for Sustainable Growth

- Expanding Abroad – PTTEP has continuously expand its investment according to the strategic investment by pursuing a suitable investment opportunities, includes seeking strategic partner for investment in various projects abroad, focusing on the strategically targeted countries to be the growth platform for future expansion such as the PTTEP Australasia Project and the Canada Oil Sands KKD Project.

- Managing Portfolio and Reviewing Investment - PTTEP has review its focused countries by prioritize the countries in order of opportunity and appropriateness in investment by analyzing various factors including petroleum potential, geological factors, government's fiscal regimes, political and business risk, and competitive advantages. In addition, PTETP has set up the portfolio management department in order to manage risks and



appropriately allocate the investment in each projects to align with the strategic direction of the company.

(3) Organization Capability Development

- Capability Development - PTTEP has been continually improving the capability of the organization, particularly the capabilities urgently required including the deepwater drilling as well as the long term capability development and leadership development program, in order to align with the global growth direction.

- System Development PTTEP constantly improves its process, for instance, the new "Enterprise Resource Planning (ERP)" project which will be an efficient and comprehensive set of integrated and cross-functional business processes for all PTTEP's domestic and overseas operations.

- Financial Standard Development - PTTEP has implemented International Financial Reporting Standards-IFRS for the first quarter of 2011 financial statement reports in order to comply with internationally accepted standards, enable comparison between PTTEP and its peers, and allow for easier access to the source of capital.

- Knowledge Development - PTTEP has been continually improving the capability of the organization, particularly the development of good management and personnel. The technical forum of 2011 was held during the third quarter of 2011 and was set to be the stage for presenting technical papers including technological updates, exchange of ideas, and solutions sharing from exploration and production experiences from each of the company projects across the world. The forum also engages relating government and educational institutions, as part of PTTEP efforts to build knowledge and to promote the development of employee consistently and continuously



## 4. Business Operation

### 4.1 Products Features

#### 4.1.1 Petroleum

Petroleum means crude oil, natural gas, condensate, related products and other hydrocarbon products which are free in nature.

Crude oil means crude mineral oil and bitumen of all kinds which is liquid in nature and is obtained from an oil well and may be obtained through gas separation equipment but has not yet been refined or purified. Bitumen is another form of crude oil, which is sticky, black, opaque, and highly viscous (low API).

Natural gas means hydrocarbon which is gas or vapor at the atmospheric temperature and pressure, and which normally has methane as its major constituent.

Condensate means hydrocarbon which condenses in natural gas, and which, when separated from natural gas, is transparent and has low specific gravity (high API).

LPG means petroleum product which is obtained from crude oil refinery or natural gas separation processes and which primarily consists of butane and propane.

Crude oil, condensate, LPG and bitumen are measured in barrel while the natural gas is measured in cubic foot at standard conditions (1 atm and 60 Degree Fahrenheit). All petroleum products could be converted into Barrel of Oil Equivalent (BOE) based on their heat contents. 1 cubic foot of natural gas has the heating value of approximately 1,000 BTU while 1 barrel of crude oil has the heating value of approximately 6,000,000 BTU.

#### 4.1.2 Gas Transportation Pipeline:

PTTEPO has other major investment in other companies as well such as a 80% of the investment in Andaman Transportation Limited (ATL), 25.5% in Moattama Gas Transportation Company (MGTC) and 19.31784% in Taninthayi Pipeline Company (TPC) to conduct the business of pipeline laying from Zawtika (under construction), Yadana and Yetagun projects from the Republic of the Union of Myanmar to Thai borders.



#### 4.1.3 Jetty, Workshop and Warehouse

Petroleum Development Support Base (PSB) of PTTEP is established as a hub to support the development of petroleum in the Gulf of Thailand and the Andaman Sea. The main service is to support logistics operation for the petroleum exploration and production platforms off the coast as well as being a coordination centre in case of emergency for the petroleum production platforms in the Gulf of Thailand and Andaman Sea by aircraft and marine vessels. Moreover, PSB's additional service is included the warehouse storage for petroleum exploration and production's equipments for PTT EP projects and thereby perform total service of logistics activities for other offshore concessions including the inspection service for the equipment and tools to a standard prior to the shipment to offshore petroleum exploration and production platforms.

The onshore facilities are construction on 30 Rai (48,000 sq.m.) with an additional of 28.12 Rai (44,992 sq.m.) on long lease, and consist of:

(1) Jetty: it has a total length of 380 metres and is divided into six berths, each approximately 65 metres. The deck of the jetty is +2.3 metres above Mean Sea Level (MSL). The approaches and the water depth of the Jetty are maintained at a minimum 8 metres below Chart Datum. The facilities on the Jetty include bulk silos for H<sub>2</sub>S, Scavenger, Barite, Base Oil and Cement. The Jetty is fully ISPS CODE compliant (International Code for the Security of Ships and of Port Facilities) and is approved as a port facility by the Marine Safety and Environment Bureau, Marine Department, Thailand.

(2) Workshops: three established workshops with an approximate total area of 9,800 sq.m. support all and project construction, equipment maintenance and inspection and well service work.

(3) Warehouse and Yard Area: there are two warehouses (1,200 and 900 sq.m.) and an open storage yard which is used for the safe storage of petroleum materials and equipment such as tubular, drilling and valves. Also free zone area has been provided for partners who import the materials and equipment from abroad.

All above parts have been managed working practices in accordance with company SSHE rules and regulations and received two external certification namely ISO14001:2004 and OHSAS18001:2007. The site wider security system; CCTV surveillance is



installed at strategic locations throughout the Base and is monitored 24 hours a day at the Operations Centre.

#### 4.1.4 Energy Complex Limited (Energy Complex)

PTT and PTTEP has jointly established energy complex to construct and manage Energy Complex Investment Project, the energy business center of the country, in which the ministry of energy, the company of PTT group and the energy private companies is situated.

#### 4.1.5 PTT ICT Solution Company Limited (PTT ICT)

PTT ICT Solution Co., Ltd, a PTTEP 20% own company, has been hired to providing all PTTEP information technology and communication services according to the resolution of PTTEP Board meeting no. 10/2549/254 on 29 September 2006. This includes infrastructure design and implementation services, consultancy services, procurement services, and outsourcing services to support PTTEP information technology and communication needs. The 5 year contract period started on 1 July 2006 according to PTT Group ICT Policy Strategy to create synergy drive in the group.

#### 4.1.6 PTTEP Services Limited (PTTEP Services)

The concept that became PTTEP Services originated from PTTEP Board meeting No. 12/2003/216. The stated objective that PTTEP Services was created to achieve is to supply manpower for both local and overseas subsidiary companies belonging to PTTEP and cater for the fact that PTTEP requires a large number of staff who are sufficiently capable and of a high caliber with the primary objective of supporting PTTEP's extensive and rapid growth.

In order to fulfill these requirements, PTTEP Services has recruited and hired staff for PTTEP since 1 July 2004 and has developed, improved, and implemented compensation and benefits policies and practices to ensure that standardized welfare benefits, including requisite training are provided.

To build and enhance staff proficiency to enable prompt and appropriate support of customer operations (PTTEP) effectively through structured training and a training roadmap. The training courses are as follows:

- (1) Compulsory courses for new staff
- (2) Standard English courses
- (3) Standard / Selected soft skills courses



## 4.2 Factors affecting the opportunity or restriction in business

PTTEP does its petroleum exploration and production in domestic and abroad. The investment in foreign countries shall comply with conditions and concession laws of those countries i.e. Production Sharing Agreement/Contract or Services Agreement while investment in Thailand, PTTEP shall comply with the Petroleum Act B.E. 2514 which sets out the details and procedures for applying for and awarding petroleum concessions, the period of production and also provides for various forms of benefits to the government as owner of its petroleum resources. These forms of benefits include royalty, petroleum income tax and other benefits. The important points in the petroleum business operation are as follows:

### 4.2.1 Issue of Concession Areas

The Department of Mineral Fuels, Ministry of Energy as the responsible agency delineates exploration blocks, and then invites oil companies to submit applications for concessions. The Petroleum Committee considers applications for concessions which are initially screened by the sub-committee. The Energy Minister with the approval by the Cabinet has the power to award and sign the concessions. The government considers the qualifications of each applicant and will take into account the proposed work program, adequacy of the investment funds to be brought in and used in the exploration, the transfer of technology, employment of Thai nationals, and also the utmost benefits offered to the Kingdom.

### 4.2.2 Role of the Operator

A petroleum concession may be awarded to one concessionaire or to a joint venture of two or more co-concessionaires. Since the petroleum exploration and production business is associated with relatively high risk, it is common for companies to join together in joint ventures in order to diversify the risks. In a joint venture, one company will be designated as "operator" to conduct the exploration and production operations on behalf of the other co-venturers under the supervision of a management committee composed of representatives of each company. Other companies which participate in the joint venture are called "non-operators". The operator sets the cash call on all co-venturers to finance the project. The non-operators through their representation in the management committee participate in technical and financial decisions. Generally, an oil company will become an operator of any project, depending on the investment conditions, its readiness and business strategies in that project.



### 4.2.3 Nature of Operations and Investment Decisions

Before any oil company decides to invest in petroleum exploration in the Kingdom and abroad, it has to carefully consider its chances of exploration success as well as other investment risk factors. A study of information available is made to determine whether the area has high petroleum potential and is commercial for production. The success ratio of drilling of exploration wells in neighboring areas as well as the risk factors of the investment countries are taken into account. In case it found the project commercial to produce, then it will apply for a petroleum concession or will "farm-in" to an existing petroleum concession.

After the oil company is awarded a concession area for exploration of petroleum, an exploration program will be conducted which is normally taking 2-3 years. If the petroleum reserves are found, the amount of investment funds required for the development stage and the value of sale of the petroleum in the quantity of reserves expected to be recovered will be evaluated. If such study indicates that the reserves are worth investing in, that petroleum field will be considered to have sufficient commercial viability to justify further investment in development. The operator shall apply for an approval of petroleum production and shall start its production at the same time. The operation is still able to explore the rest of the existing areas if it is within the time frame of exploration mentioned in the concession. At this stage, the operator must have a certain degree of confidence about the investment because the investment required for such development is very high. The operator will normally identify buyers of petroleum in advance, and a long-term sales agreement for petroleum to be produced will be signed. At present the PTT is the biggest petroleum buyer in Thailand. The principal elements of the sales agreement for petroleum are the method of determination of the sales price and quantity of petroleum to be delivered. In this regard, when the commencement period in the contracted is reached, the buyer must be responsible the petroleum produced immediately after the production commences. The sale of natural gas from any domestic areas is presently made at the well-head while the sale of natural gas from any foreign areas is made at the Thai borders, in which case PTT must install gas pipe-lines sufficient for the production amount specified in the gas sale agreement. The sale of the crude oil is made at the buyer's refinery while the sale of the condensate is made at the Floating Storage Unit (FSU) near the well-head.



#### 4.2.4 Description of law relating to the business

At present, the operation of petroleum business in Thailand is governed by two major enactments, namely, the Petroleum Act, B.E. 2514, and the Petroleum Income Tax Act B.E. 2514, and its amendment. Several major features of these laws are:

- (1) an applicant for a concession must be limited company or a juristic person which has the same status as a limited company established under the law of Thailand or foreign law;
- (2) the concessionaire, the co-concessionaire(s) and the co-venturer(s) must pay royalty which is normally paid by cash. However, the Minister may authorize a payment in kind of petroleum by a notice of at least not less than 6 months. The royalty may be used as credit against income tax (Thailand I) or be deducted as expenses (Thailand III);
- (3) the rate of petroleum income tax may be prescribed not less than 50% but not over than 60% of the net interest from the petroleum business;
- (4) interest paid cannot be deducted as expenses for income tax purposes;
- (5) a concessionaire has right to obtain concessions for exploration blocks without limitation of number of exploration blocks.

Thailand I for the petroleum concessions issued by the Ministry of Industry\* from B.E. 2514 to B.E. 2532 and the onshore petroleum concession issued before B.E. 2525

Thailand II\*\* for all onshore petroleum concessions issued by the Ministry of Industry\* from B.E. 2525 to B.E. 2532

Thailand III for the petroleum concessions issued by the Ministry of Industry\* from B.E. 2533

Thailand IV for the petroleum concessions issued by the Ministry of Energy\*\*\* from B.E. 2550

\*Now is the Ministry of Energy

\*\*According to the Article 36 of the Petroleum Act (Issue 4) B.E. 2532, all the holders of the petroleum in Thailand II have already moved to Thailand III.

\*\*\*the Petroleum Act (Issue 6) B.E. 2550 has come into force 18 October B.E. 2550



## Details of Thailand I, II, III and IV Terms

Term	Thailand I	Thailand II	Thailand III	Thailand IV
Royalty Rates	12.5% of income from sale or disposal of petroleum which may be treated as tax credit	12.5% of income from sale or disposal of petroleum which may be treated as tax credit	progressive rate at sliding scale 5-15%, deemed to be expenses which could be deducted in tax calculation	progressive rate at sliding scale 5-15%, deemed to be expenses which could be deducted in tax calculation
Petroleum Income Tax	50% of net profit from petroleum business operation	50% of net profit from petroleum business operation	50% of net profit from petroleum business operation	50% of net profit from petroleum business operation
Special Benefits	-	annual benefits, and annual production bonus	special remunerator benefit which may be taken as deduction	special remunerator benefit which may be taken as deduction
Exploration Period	8 years with 4 year extension	8 years with 4 year extension	6 years with 3 year extension	6 years with 3 year extension
Production Period	not exceeding 30 years from expiry date of exploration, with extension not exceeding 10 years	not exceeding 30 years from expiry date of exploration, with extension not exceeding 10 years	not exceeding 20 years from expiry date of exploration, with extension not exceeding 10 years	not exceeding 20 years from expiry date of exploration, with extension not exceeding 10 years



Concession areas	not exceeding 10,000 sq. km per exploration block, up to 5 exploration blocks	not exceeding 10,000 sq. km per exploration block, up to 5 exploration blocks	not exceeding 4,000 sq. km per exploration block, up to 5 exploration blocks	not exceeding 4,000 sq. km per exploration block without limitation of number of exploration blocks
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### 4.3 Marketing and Competition

PTTEP has invested in 41 E&P activities, with 17 domestic projects and 24 overseas projects (including those in the Malaysia-Thailand and the Cambodia-Thailand overlapping areas). Its policy is to supply products, namely natural gas, crude oil, condensate, and LPG (a by-product of gas and oil) from both domestic and external sources primarily to the domestic market. Its overseas expansion of E&P and sales activities represents an additional means of forging energy security and generating income for Thailand.

In 2011, sales by PTTEP and its subsidiaries averaged 265,047 BOED, a few rise from the previous year. Most of the incremental sales of this year came from the diluted bitumen (Dilbit) from Canada Oil Sands KKD Project, on stream since late 2010 and averaging 14,300 BPD this year. Supporting this rise were crude oil and gas outputs from Vietnam 16-1 Project, on stream since August 2011 initially at 15,000 BPD and 30 MMSCFD. Finally, contributing were additional gas and condensate outputs from Block B17 of the Malaysia-Thailand Joint Development Area.

For the year 2011, the total sales ratio was 71% natural gas to 29% crude oil and condensate by volume, or 45% to 55% by sales revenue, as shown in the following table.

Product	Volume	Value
Natural Gas	417,090.97 MMSCF	2,429.23 Million USD
Condensate	12.92 MMBBL	1,354.20 Million USD
Crude Oil	14.16 MMBBL	1,480.07 Million USD
LPG	86,292.37 Metric Tons	26.33 Million USD
Diluted Bitumen	1.42 MMBBL	149.89 Million USD

#### 4.3.1 Marketing Characteristics

PTTEP, by and large, sells its outputs from domestic and regional projects to the Thai market through PTT Plc, the major buyer and processor of all products which are then supplied to power plants, the petrochemical industry, the transportation sector, industries, and households. A portion of the indigenous crude oil whose composition does not match domestic refinery configuration is exported.



Including its Yadana and Yetagun field outputs, PTTEP ranked first among 18 domestic sellers of petroleum products.

Sales of petroleum products from international fields vary from country to country as detailed below:

(1) Yadana and Yetagun Projects in Myanmar: The gas produced from both projects is primarily sold to Thailand (through PTT Plc, the buyer), and some is sold to Myanmar for its domestic power generation. Yetagun condensate is sold and consumed in that country, with the excess volume sold in regional spot markets.

(2) MTJDA-B17 Project: All the gas output is currently sold to PTT Plc for consumption in Thailand. Starting in 2015, however, it is to be divided equally with Petronas for consumption in Malaysia. The condensate output will be sold by PTT Plc and Petco Trading Labuan Company Limited (Petronas's subsidiary), as marketing agents in spot markets.

(3) Oman 44 Project: The gas output is sold to the Sultanate of Oman, whereas the condensate is sold to PTT Plc for consumption in Thailand.

(4) Vietnam 9-2 and Vietnam 16-1 Projects: The oil output is sold in spot markets and by short-term contracts, whereas the gas is sold to Vietnam Oil and Gas Group, a state enterprise, for consumption in that country.

(5) Canada Oil Sands KKD Project: All the diluted bitumen (Dilbit) output was initially sold to Statoil Canada Limited for distribution in North America. PTTEP is entitled to sell its share of oil in a later date under the conditions of the joint venture agreement

Marketing of petroleum products varies with their characteristics, which in turn differentiate market structures and sales price structures, as captured below.

(1) Natural gas

Due to the capital-intensive investment in developing gas fields, gas sales agreements (GSAs) must become effective or signed before any major investment is made. GSAs are typically long-term, ranging from 15 to 30 years. Prices, volumes, and points of sale are stipulated for each contract. The designated transfer points for all domestically sold gas are at the wellhead, from which the buyer will invest in the transmission system. However, the delivery point of the gas sold from Myanmar to Thailand is at the border. The seller is



responsible for investment in the transmission pipelines from the wellhead to the border. Gas prices are usually tied to fuel oil and economic indices, so that the cost of production can reflect the investment and be competitive with competing fuels for the GSA period.

Sales volumes are based on the assessed reserves on the negotiation date. GSAs stipulate buyer and seller obligations for the committed amount according to each year's take-or-pay conditions. If the buyer does not take the volume of gas as committed to in the GSA, it must pay for the committed volume whether the gas is taken or not. As a consequence, the buyer is entitled to take delivery of "make-up gas" free of charge in subsequent years. On the other hand, should the seller fail to deliver as nominated (shortfall), the buyer is entitled to an agreed discount price of the undelivered volumes as stipulated in each agreement.

#### (2) Condensate and crude oil

As a rule, the Company bases the prices of its condensate and crude oil on regional benchmark prices, meaning those predominantly sold in the region, which is the industry's common practice. Contracts are either short-term or long-term, and some are sold in spot markets.

#### (3) LPG

LPG produced from S1 Project is sold to PTT Plc under a long-term contract at a price referenced to the ex-refinery prices announced by the government.

### 4.3.2 Competition

Competition in the E&P industry of Thailand—PTTEP's key market—is by and large non-threatening, since demand always exceeds supply. Contracts are predominantly long-term, with take-or-pay clauses for gas to guarantee its market.

The year 2011 saw steady growth in energy consumption. According to a report by the Office of the National Economic and Social Development Board, during the first half, 1,028 KBOED of primary commercial energy was produced (a 3.9% rise from that of the previous year), in line with consumption, which averaged 1,898 KBOED (a 5.8% rise from that of the previous year). Natural gas consumption took the lion's share (44%) of total consumption.



To meet this demand, energy imports were the answer. During the first half of the year, such imports rose by 2.8%. The year saw, however, 56% dependence on energy imports, a slight drop from 58% in the same period of the previous year, which showed that indigenous energy resources can displace some imports.

For the latter half of the year, energy demand (especially that in the fourth quarter) plummeted with the onset of severe floods in many regions of the country, particularly Bangkok and its perimeter—the domestic economic nucleus—while several industrial estates sustained production disruption. These factors sharply eroded energy demand during the period. Still, by the first quarter of 2012, energy demand is expected to pick up and return to pre-flood levels, with the restoration of transport routes and plant operation in the industrial estates.

As for the market situation in 2012, Thailand's economy will likely be propelled by spending and public investment programs, which will play a key role because of new construction investment acceleration, together with repairs to the inundated infrastructure. Meanwhile, public policy implementation focusing on growing public income through restoration of the agricultural sector, industrial sector, and service sector will keep domestic demand growing. Supporting this growth will be private investment in the purchasing of new machinery and repairs to flooded machinery. All these will buoy domestic energy demand growth.

Meanwhile, the price of oil is likely to remain high due to demand growth and speculation in the world market, which will inflate the price. So, to accommodate a steady rise in demand and reduce import dependency, PTTEP is committed to finding new energy resources (indigenous and otherwise) to expand its output base and foster energy security for Thailand over the long run.

#### 4.4 Production

##### 4.4.1 Exploration and Production Stages and Technology

Petroleum Exploration and production may generally be divided into 4 major stages as follows:

- (1) Exploration Stage
  - Primary geological and geophysical surveys



- Seismic acquisition, processing and interpretation
  - Exploration wells Drilling
- (2) Appraisal/Delineation Stage
- Detailed Study of petroleum geology and additional seismic survey
  - Reservoir Formation Evaluation and Conceptual Development Design
- (3) Development Stage
- Construct and optimize the Field Development Plan
  - Design, construct and install production facilities
  - Drill development wells
- (4) Production Stage
- Oil and natural gas productions are controlled by the wellhead pressure and flow through processing facilities, including the production measuring equipment.
  - Petroleum production rates, proportion of produced water, pressure decline rate and future reservoir performance are closely monitored.
  - Well work-over and facilities maintenance are regularly performed to improve the petroleum production performance.

PTTEP is ready in terms of manpower, technology and equipments to run the business efficiently according to the company's target.

#### 4.4.2 Petroleum Reserves

Petroleum Reserves can be divided into 2 categories according to the level of confidence, which are Proved Reserves and Unproved Reserves. Unproved Reserves can be further divided into 2 categories which are Probable Reserves and Possible Reserves.

(1) Proved Reserves are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially



recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations. Proved Reserves means the petroleum in reservoirs that can be commercially produced, relying on supporting data of production rate testing. In some cases, Proved Reserves obtain from well testing and/or analyzing of source rocks in that area or the neighboring area already produced or having tendency to be able to produce. Moreover, Proved Reserves will be able to produce by using the existing equipment or the equipment installed in the future.

(2) Unproved Reserves

- Probable Reserves are those quantities of petroleum obtained from an analysis of geological and engineering data as same as Proved Reserves but having less possibility to produce due to the technology, rules, or economic conditions.
- Possible reserves are those quantities of petroleum obtained from an analysis of geological and engineering data as same as Probable Reserves but having less possibility to produce due to the technology, rules, or economic conditions.

The Proved Reserves are reviewed annually by company's earth scientists and reservoir engineers to ensure rigorous professional standards. The Proved Reserves are reported on a gross basis, which includes the company's net working interest and related host country's interest. As of 31 December 2011, the total Proved Reserves of all PTTEP and subsidiary' projects are 275 Million Stock Tank Barrels (MMSTB) for crude oil and condensate<sup>1</sup>, and 4,529 Billion Standard Cubic Feet (BSCF) for gas. The total Proved Reserves (Consolidated Companies) in term of oil equivalent is 969 Million Barrels (MMBOE).

#### 4.4.3 PTTEP Petroleum Production

In 2011, the total production of PTTEP and its subsidiaries is 110.0 MMBOE or equivalent to the production rate of approximately 301,367 Barrels of Oil Equivalent per Day (BOED), approximately 2,656 BOED or 0.87% decrease from last year. The production decrease was attributed to the unexpected inundation in the Northern and Central region of Thailand in the fourth quarter of 2011, resulting in lower oil production from Thailand Onshore fields as well as lower gas nominations from gas projects in the Gulf of Thailand and the Gulf of

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<sup>1</sup> Included the Proved Reserves of LPG and Bitumen



Martaban due to lower demand. However, these production decreases were offset by 2 new overseas projects, namely Canada KKD Oil Sands and Vietnam 16-1 projects that were put on production in 2011.

#### 4.5 Environmental Impact

An effective environmental management system is developed and implemented for petroleum exploration and production operations to minimize the following potential environmental impacts.

(1) Impacts on land use and marine organisms during seismic surveys from sound vibrations.

(2) Water and soil contamination from discharges of drilling fluids, produced water, releases of sludge, contaminated solid wastes, accidental spills of hydrocarbons (oil and condensate) during drilling and production activities in to the environment, and accidental chemical spills..

(3) Air pollution from hydrocarbon releases and atmospheric emissions from gas flaring, venting and fuel combustion during drilling and production activities.

Currently, the mitigation and monitoring of the above environmental impacts are controlled and regulated by local government agencies. In Thailand there are two main agencies: the Department of Mineral Fuels, Ministry of Energy which plays a major role in regulating environmental impacts from exploration and production companies; and the Office of Natural Resources and Environmental Policy and Planning (ONEP), Ministry of Natural Resources and Environment which issues directives and approvals for organizations to conduct environmental impact assessments and prior to the commencement of exploration and production projects.

In effort to reduce environmental impacts, PTTEP introduced and implemented, with continuous improvement and monitoring, the following environmental initiatives below:

(1) Implementation of the ISO14001:2004 Environmental Management System (EMS) Standard by PTTEP's domestic operational projects: In accordance with the ISO14001 requirements, an environmental management system should be in compliance with company policy and standards, national legislations, and other national and international standards/requirements to prevent environmental pollution and degradation, promote energy



conservation, and ensure the improvement of company performance. As a result, PTTEP is the first petroleum exploration and production company in Thailand and in the Southeast Asian region to achieve the ISO14001 Certification.

(2) Study of environmental impact assessment prior to commencing new exploration and production projects, which is legally required to ensure that the environmental mitigation and monitoring programs are in place in order to minimize environmental impacts arising from operations for both domestic and international projects. A compliance audit for EIA monitoring and mitigation is also conducted for each project during each phase to ensure that the environmental programs issued in the environmental impact assessment are implemented and up to standards.

(3) Re-injection of produced water (wastewater that is 'produced' to the surface from hydrocarbon reservoir along with the oil and gas) into subsurface reservoirs to ensure no overboard discharging which might affect the environment.

(4) Monitoring of discharged wastewater quality from production process, seawater quality, sediment quality, benthos, and ground fish with habitats around the vicinity of the operation platform to ensure the limited exposure to environmental hazard.

(5) Recovery of flare gas to generate electricity and reprocess in the system.

(6) Oil Spill Response Plan: oil spill equipments and response plans are provided to ensure environmentally sound operations from any oil spill incident Tier 1 (<20 tonnes). PTTEP also registered as a member in the Oil Industrial Environmental Safety Group (IESG) for Tier 2 oil spill response incident (20-1000 tonnes). As for Tier 3 oil spill response (more than 1000 tonnes), PTTEP is also a registered member of the EARL /OSRL (East Asia Response Limited/ Oil Spill Response Limited). Concerning the spill case of the Montara Oil Field in Australia, PTTEP coordinated with EARL in Singapore in compliance to the oil spill response plan for Tier 3 to mitigate environmental impacts and implement remedial actions which has been authorized by the Australian Government.

(7) Provision of appropriate technologies for waste management system (disposal, storage, treatment, and transport) for hazardous and non-hazardous wastes (e.g. mercury contaminated waste, oil contaminated wastes, chemical wastes, and other wastes from production process) for environmental impact abatement. PTTEP also complies with the Basel



Convention for the transportation and disposal of mercury contaminated wastes, and mercury wastes as well as local legislations & requirements concerning waste management. PTTEP also complies with company standards and procedures on waste management control, monitoring and storage.

(8) PTTEP promotes and strengthen safety, security, health and environmental (SSHE) awareness and culture for all staff including top management via training, conference, SSHE monthly bulletins and SSHE games and activities within the organization. Throughout the past years, PTTEP has made every possible attempt to ensure that our operations do not result in harmful events to either people or the environment. This is the foundation of our SSHE Management System (SSHE MS), which was adapted from the OGP (International Association of Oil and Gas Producers) that stipulates that risk assessment of all activities must be carried out and adequate control systems be implemented to reduce the risks to the As Low As Reasonably Practicable (ALARP). This effort also complies with the relevant legislation, regulations, and the international industry guidelines for the development and application of our SSHE MS. PTTEP SSHE MS also contains our SSHE Standards, which outline the development of specific work procedures for all work activities. Implementation of the SSHE MS has resulted in a continual improvement of the Company SSHE performance during the past years.

The PTTEP SSHE MS consists of 7 key elements as shown below:

- 1) Leadership and commitment
- 2) Policy and strategic objectives
- 3) Organization, resources and documentation
- 4) Evaluation and risk management
- 5) Implementation and operational control
- 6) Monitoring and measurement
- 7) Audit and review

(9) Promotion of the program "Step Change in SSHE" In Q2-2011, an initiative called "Step Change in SSHE" was introduced in PTTEP. The prime objective of the initiative is to move



our SSHE performance towards SSHE Excellence by the enforcement of the SSHE MS and strengthening of our SSHE culture.

The objective is to become an LTI-Free organization by 2013 and an Incident-Free organization by 2015.

There are five acts in the "Step Change in SSHE"

**Act1: SSHE moment in all meetings**

All meetings must kick off with a dynamic thought-provoking message about any element of SSHE. This is made by members in rotation to share their story to increase SSHE awareness of all PTTEP personnel.

**Act2: Safe and happy workplace**

This act aims to improve the promotion of a safe and happy work surroundings which result in awareness and realization of SSHE in every move PTTEP personnel make.

**Act 3: SSHE cares, SSHE shares**

This act is intended to convey care to PTTEP personnel by improving SSHE communication through various media, including websites, exhibitions, supporting campaigns, and other relevant activities.

**Act 4: SSHE is a license to operate**

Since our organization is an oil and gas organization, we cannot tolerate any mistakes because it may jeopardize the future prosperity of the organization. Hence, strengthening the SSHE MS is necessary.

**Act 5: SSHE in mindset**

SSHE is actually a part of daily life. All PTTEP personnel should have SSHE in their sub conscious mind and act habitually both at work and home.

(10) Provision of appropriate support and coordination with other exploration and production companies, government agencies, the Petroleum Institute of Thailand and other related agencies/associations, in order to encourage knowledge sharing and experiences with the abatement of environmental impacts and problems, and to allow for further continuous improvement such as the "Oil and Gas Decommissioning Guideline".



(11) With regards to PTTEP's shift towards sustainable development and the impact of global warming, environmental conservation, social development, and economic growth; PTTEP established "PTTEP Sustainable Development Committee" comprised of numerous top executives from different fields of expertise. This committee ensures that all three areas of sustainable development which are social, economic and environmental aspect are addressed and incorporated into the business strategy and that PTTEP will continue to grow in a sustainable manner with limited impacts on environment, people, and society. The Committee also ensures that PTTEP and its stakeholders have a common understanding of PTTEP's view on sustainable development, its targets, goals, policies, standards, guidelines and that sustainable development programs are communicated and implemented within the company effectively.

During the past 3 years, PTTEP has strictly complied with both Thai and International legislations and other regulations and requirements concerning the area of safety, security, health and environment. In addition, PTTEP has been continuously improving its environmental practices in maintaining, developing and reducing environmental impacts by achieving the ISO 14001: 2004 certification for Environmental Management System Standard from AJA Registrars LTD. Under UKAS (United Kingdom Accreditation Service) accreditation for PTTEP's operational units with details as of below:

- (1) Bongkot Project - with the scope of "exploration and production of natural gas and condensate".
- (2) S1 Project - with the scope of "exploration and production of petroleum"
- (3) PTTEP 1 Project - with the scope of "exploration and production"
- (4) PTTEP's Petroleum Support Base, Songkhla - with the scope of "Provision of logistic services to offshore oil and gas operations".
- (5) PTTEP Core Research Center - with the scope of "building management and maintenance service, core research center and logistic support for storage of core and slab samples and archive of company document".
- (6) Arthit Project - with the scope of "exploration and production of petroleum"

Consequently, PTTEP is constantly improving and developing its Environmental Management System Standard to comply with international standards ISO 14001 revised edition



and ISO14001:2004 for all of PTTEP's operational units in Thailand. In 2011, PTTEP implemented the ISO 14001 one common system for all certified sites to improve the efficiency of the environmental management system. In addition, PTTEP plans to apply the environmental management system that complies with the ISO14001 standard for its operating units in international assets in the near future as well as have a common ISO 14001 standard for all of PTTEP's operating units both domestically and internationally.

Other than the ISO14001 certification, PTTEP also received the OHSAS 18001:2007 Occupational Health and Safety Standard which specifies requirements for an occupational health and safety management system, to enable an organization to control its occupational health and safety risks and improve its performance. PTTEP received this certification for two of PTTEP's operating sites which are the Petroleum Support Base on October 2011 and at PTTEP1 Project on September 2011.

With regards to spill incidents in years 2009, 2010, and 2011, spills were accounted for 1.19, 1.63 and 0.54 tonnes per million tonnes of production respectively, excluding the spill case of the Montara Field in which if it were to be included in the year 2009, the spill rate will account for 318.75 tonnes per million tonnes of production. Concerning the spill case in the Montara Field, PTTEP undertook immediate response and had already implemented mitigation and corrective measures as was approved by the Australian Government. Currently, PTTEP is conducting an investigation on the incident. From these figures, it indicates that the level of spillage in the year 2011 is within estimated target which is approximately 4.00 tonnes per million tonnes of production and is also lower than the average spill rate of the International Association of Oil and Gas (OGP) in years 2010 with spill rates of 20.03 tonnes per million tonnes of production respectively.

PTTEP is committed to its SSHE policy where it focuses on minimizing negative impacts on personnel, and properties (both of the company and contractors) with numerous indicators such as PTTEP's Lost Time Injury Frequency (LTIF) rate or the number of lost time injuries per one million (1,000,000) hours, where for the setting target of 2011 is at 0.63 and the tendency of LTIF rate was reduced from 0.81 in 2009, 0.63 in 2010 and 0.38 in 2011 respectively. Fortunately, in 2011, there were no fatal accidents reported in PTTEP.



Although the company's LTIF rate in the past 3 years presented our continuous improvement in our SSHE management system, PTTEP still took immediate response action and investigation into the root of the problem to create preventive action plans in the affected areas.

In response to PTTEP's rapid growth in terms of investment, operations and company size in recent years, in 2011 there were numerous SSHE aspects that PTTEP endorsed. PTTEP consistently cultivates a strong uniform SSHE culture across the organization by implementing the campaign "Step Change in SSHE" as mentioned earlier, to reinforce staff awareness by stressing the importance of behavior based safety (BBS) with the aims of improving the frequency and openness of SSHE communication at all organizational levels by influencing the behavior of personnel through observation, communication and feedback process; as well as setting the target for zero lost time incident by year 2013. The implementation and improvement of the SSHE Management System was reinforced in all areas and operational units of the company both domestic and international units alike, to encourage same standard practice throughout the company. Response plans and strategies were also endorsed to minimize, eliminate accidents and lost time injury for all aspects of the organization with an ultimate goal of zero injury.

As part of PTTEP's commitment to protect and conserve the environment, PTTEP has increased its domestic assets' spending on environmental improvement programs by 116.3 million Thai Baht to 188.3 million Thai Baht to 133.4 million Thai Baht for the years 2009, 2010 and 2011 respectively.

According to the Kyoto Protocol under the United Nations Framework Convention on Climate Change (UNFCCC), it is not mandatory for Thailand to reduce green house gases as much as Annex I countries (since Thailand does not belong to this group). However with PTTEP's commitment to sustainable development, PTTEP is voluntarily encouraging green house gas emissions reductions in its operations through Clean Development Mechanism (CDM) and other projects that have economical and environmental opportunities.

The development of "Flare Gas Recovery" Project which is located at the Saotien A in Sirikit Field situated in the Sukhothai province helped further facilitate the utilization of flare gas by using the Clean Development Mechanism (CDM) approach as a basis for operation in the S1 project area as it is estimated to be economically viable with an initial approximation of carbon dioxide reduction emission of up to at least 31,000 tonnes of carbon dioxide per year.



## Research and Development

"This chapter has been cancelled by the Notification of Capital Market Supervisory Tor Jor 11/2009: Rules, Conditions and Procedure for Disclosure of Financial Position and Result of Operation of Issued Securities Companies."



## 5. PTTEP and its Subsidiaries' Assets

### 5.1 Property, Plant and Equipment

#### 5.1.1 Oil and Gas Properties<sup>1</sup>

PTTEP and its subsidiaries' properties mainly are jointly controlled oil and gas properties in each project. Oil and Gas properties, which located at each project, comprise land, buildings and construction, machine and equipments including transportation pipeline, capitalized exploratory and production drilling costs, property acquisition costs of concession right which shall incur when PTTEP and its subsidiaries acquire the concession right and decommissioning costs which have been determined based on reviews and estimates by the Group's own engineers and managerial judgment.

As at December 31, 2011, PTTEP and its subsidiaries' oil and gas properties are represented as share of the joint ventures' individual assets for each project as follows:-

<u>PTTEP's joint ventures</u>	<u>Company's interest (%)</u>
1. Contract 3 <sup>3</sup>	5
2. E5	20
3. Sinphuhorm (E 5-North)	20
4. Algeria Hassi Bir Rekaiz	24.5
5. S1	25
6. Bongkot (Block B15, B16, B17)	44.4445
7. Contract 4 <sup>2</sup>	45
8. Arthit (Block B14A, B15A, B16A)	80
9. Arthit North	100
<u>PTTEPI's joint ventures</u>	<u>Company's interest (%)</u>
10. G4/48	5
11. Contract 3 <sup>3</sup> (Block G6/50)	5
12. Yetagun	19.3178
13. G4/43	21.375
14. Yadana	25.50
15. Cambodia B	33.333334
16. Bongkot (Block G12/48)	44.4445
17. Contract 4 <sup>2</sup> (Block G7/50)	45
18. MTJDA - B17 ( Block B-17 and B-17-01)	50
19. L 21,28 & 29/48	70
20. Arthit (Block G9/48)	80
21. Arthit (Block G8/50)	80



22.	PTTEP1	100
23.	G9/43	100
24.	L 22/43	100
25.	Myanmar M3, M7 & M11 <sup>4</sup>	100
26.	Myanmar Zawtika <sup>4</sup>	80
27.	L53/43 & L54/43	100
28.	A4,5 & 6/48	100
	<u>PTTEPO's joint venture</u>	<u>Company's interest (%)</u>
29.	B8/32 & 9A <sup>5</sup>	25.0010
	<u>PTTEP SV's joint venture</u>	<u>Company's interest (%)</u>
30.	Vietnam 52/97	7
	<u>PTTEP KV's joint venture</u>	<u>Company's interest (%)</u>
31.	Vietnam B & 48/95	8.5
	<u>PTTEP HL's joint venture</u>	<u>Company's interest (%)</u>
32.	Vietnam 16-1	28.5
	<u>PTTEP HV's joint venture</u>	<u>Company's interest (%)</u>
33.	Vietnam 9-2	25
	<u>PTTEP OM's joint venture</u>	<u>Company's interest (%)</u>
34.	Oman 44	100
	<u>PTTEP AG's joint venture</u>	<u>Company's interest (%)</u>
35.	Algeria 433a & 416b	35
	<u>PTTEPS's joint venture</u>	<u>Company's interest (%)</u>
36.	Sinphuhorm (EU-1)	20
37.	B6/27	60
38.	S1	75
	<u>PTTEP AO's joint venture</u>	<u>Company's interest (%)</u>
39.	Australia WA-423-P	30
	<u>PTTEP BH's joint venture</u>	<u>Company's interest (%)</u>
40.	Bahrain 2	100
	<u>PTTEPR's joint venture</u>	<u>Company's interest (%)</u>
41.	Rommana	30
	<u>PTTEP SEMI II Limited 's joint venture</u>	<u>Company's interest (%)</u>
42.	Indonesia Semai II	28.33
	<u>PTTEP SAER's joint venture</u>	<u>Company's interest (%)</u>
43.	Sidi AbdEl Rahman Offshore <sup>7</sup>	30
	<u>PTTEP NZ's joint venture</u>	<u>Company's interest (%)</u>
44.	New Zealand Great South	18



<u>PTTEP SMD's joint venture</u>	<u>Company's interest (%)</u>
45. Indonesia South Mandar	34
<u>PTTEP ML's joint venture</u>	<u>Company's interest (%)</u>
46. Indonesia Malunda	100
<u>PTTEP SD's joint venture</u>	<u>Company's interest (%)</u>
47. Indonesia Sadang	30
<u>PTTEP SS's joint venture</u>	<u>Company's interest (%)</u>
48. Indonesia South Sageri	20
<u>PTTEP CA's joint venture</u>	<u>Company's interest (%)</u>
49. Canada Oil Sands KKD	40
<u>PTTEP AP's joint venture</u>	<u>Company's interest (%)</u>
50. PTTEP Australasia	
• PTTEP Australasia (AC/L7, AC/L8, AC/P33, AC/P34 and AC/P40)	100
• PTTEP Australasia (AC/L1, AC/L2 and AC/L3)	89.6875
• PTTEP Australasia (AC/RL7)	100
• PTTEP Australasia (AC/RL4 (Tenacious))	100
• PTTEP Australasia (AC/P24)	90
• PTTEP Australasia (AC/RL6 (Audacious), AC/P4, AC/RL4 (exclude Tenacious), AC/RL5, AC/RL6 (exclude Audacious) , AC/P17)	50
• PTTEP Australasia (AC/P32)	35
• PTTEP Australasia (WA378P <sup>6</sup> , WA396P and	20
• PTTEP Australasia (AC/P 54)	100

<sup>1</sup> See more detail in Attachment 3 – Supplementary Information of Oil and Gas Producing Activities

<sup>2</sup> Change name from Pailin to Contract 4.

<sup>3</sup> Change name from Unocal III to Contract 3

<sup>4</sup> According to the project rearrangement, the Myanmar Zawtika project comprises concession block M9 and the northeast part of block M11, and the Myanmar blocks M3, M4, M7 and M11 excluding the northeast part of block M11.

<sup>5</sup> PTTEPO has shareholding in Orange Energy Limited and B 8/32 Partners Limited, which holds the project's concessions.

<sup>6</sup> On 29 September 2011 PTTEP Australasia PtyLtd had terminated its 20% investment in concession block WA-378-P which will become effective upon the official approval from the Australian government.

<sup>7</sup> In March 2011 PTTEP Sidi AbdEl Rahman Company Limited had terminated its 30% investment in Sidi AbdEl Rahman Offshore project which will become effective upon the official approval from the Egyptian government.



As at December 31, 2011, details of properties' net book value are as follows:-

Unit: Million USD

Property, Plant and Equipment - Net	Proved Properties and Related Producing Properties	Pipelines	Other	Consolidated* Total
Land	7.50	-	2.82	10.32
Building and Construction	12.68	-	49.69	62.37
Acquisition Cost	1,018.22	-	-	1,018.22
Geological and Geophysical Survey	116.16	-	-	116.16
Exploration / Delineation Well	690.49	-	-	690.49
Development Well	1,311.36	-	-	1,311.36
Production Facilities	5,296.24	262.55	8.03	5,566.82
Other Development Cost	141.71	-	-	141.71
Decommissioning Cost	353.36	-	-	353.36
Support Facilities and Other Assets	29.50	-	20.71	50.21
Allowance for Impairment	(20.11)	-	-	(20.11)
Total	8,957.11	262.55	81.25	9,300.91

Intangible Assets, Net	Exploration and Evaluation Assets	Goodwill	Other	Consolidated* Total
Acquisition Cost	924.15	-	-	924.15
Exploration/ Delineation Well and Others	183.34	329.70	32.55	545.59
Allowance for Impairment	(3.49)	-	-	(3.49)
Total	1,104.00	329.70	32.55	1,466.25

\* Inter-company transaction have already been eliminated



## 5.2 Investments

As at December 31, 2011, PTTEP has 53\* subsidiaries and 13\*\* associated companies. PTTEP and its subsidiaries' investment lists are presented as follows:

Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
<u>Subsidiaries company</u>						
PTTEPI	Petroleum E&P	516.38	100	516.38	1,496.57	PTTEP 100%
PTTEPO	Petroleum E&P	0.007	75	0.005	855.68	PTTEP 75%
			25	0.002	285.23	PTTEPI 25 %
PTTEP SV	Petroleum E&P	0.05	100	0.05	(10.65)	PTTEPO 100%
PTTEP KV	Petroleum E&P	0.05	100	0.05	(17.25)	PTTEPO 100%
PTTEP HL	Petroleum E&P	0.05	100	0.05	(166.23)	PTTEPO 100%
PTTEP HV	Petroleum E&P	0.05	100	0.05	(37.91)	PTTEPO 100%
PTTEP OM	Petroleum E&P	0.05	100	0.05	(85.08)	PTTEPO 100%
PTTEP AG	Petroleum E&P	0.05	100	0.05	(103.88)	PTTEPO 100%
PTTEPT <sup>1</sup>	Petroleum E&P	2.54	100	2.54	(2.96)	PTTEPI 100%
PTTEP Services	Services	0.03	25	0.01	0.005	PTTEP 25%
			75	0.04	3.06	PTTEPI 75%
PTTEPS	Petroleum E&P	4.00	51	99.79	162.98	PTTEP 51%
			49	95.17	130.88	PTTEPO 49%
PTTEP IR	Petroleum E&P	0.05	100	0.05	(74.98)	PTTEP OM 100%
PTTEP BH	Petroleum E&P	0.05	100	0.05	(16.10)	PTTEP OM 100%
PTTEPH	Petroleum E&P	0.05	100	0.05	(394.19)	PTTEPO 100%
PTTEP ID	Petroleum E&P	0.05	100	0.05	(97.65)	PTTEPH 100%
PTTEPB	Petroleum E&P	0.05	100	0.05	(10.75)	PTTEP ID 100%
PTTEPA	Petroleum E&P	0.007	100	0.007	(0.002)	PTTEPS 100%
PTTEP EG	Petroleum E&P	0.05	100	0.05	(43.12)	PTTEPH 100%
PTTEPR	Petroleum E&P	0.05	100	0.05	(10.48)	PTTEP EG 100%
PTTEP SAER	Petroleum E&P	0.05	100	0.05	(32.55)	PTTEP EG 100%
PTTEP AU <sup>***</sup>	Petroleum E&P	0.45	100	0.45	(58.06)	PTTEPH 100%
PTTEP BD	Petroleum E&P	0.05	100	0.05	(10.87)	PTTEPH 100%
PTTEP SA <sup>2,7</sup>	Petroleum E&P	0.05	100	0.05	0.03	PTTEPH 100%
PTTEP NZ	Petroleum E&P	0.05	100	0.05	(13.27)	PTTEPH 100%
PTTEP SM	Petroleum E&P	0.05	100	0.05	(69.93)	PTTEPID 100%
PTTEP AP <sup>***</sup>	Petroleum E&P	0.04	100	0.04	30.18	PTTEPH 100%
ATL	Gas pipeline transportation	0.05	100	0.05	(7.49)	PTTEPO 100%
PTTEP IH	Petroleum E&P	0.05	100	0.05	(200.96)	PTTEPH 100%



Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
PTTEP SVPC	Gas pipeline transportation	0.05	100	0.05	(0.04)	PTTEPH 100%
PTTEP FH	Petroleum E&P	0.001	100	0.001	(6.79)	PTTEPIH 100%
JV Shore Base <sup>3,7</sup>	Petroleum E&P	0.05	100	0.05	0.04	PTTEPIH 100%
PTTEP NL	Petroleum E&P	0.05	100	0.05	(192.10)	PTTEPIH 100%
JV Marine <sup>4</sup>	Petroleum E&P	0.05	100	0.05	(0.12)	PTTEPIH 100%
PTTEP SMD	Petroleum E&P	0.05	100	0.05	(1.76)	PTTEPID 100%
PTTEP SS	Petroleum E&P	0.05	100	0.05	(1.74)	PTTEPID 100%
PTTEP SD	Petroleum E&P	0.05	100	0.05	(2.82)	PTTEPID 100%
PTTEP ML	Petroleum E&P	0.05	100	0.05	(10.34)	PTTEPID 100%
PTTEP NC <sup>7</sup>	Petroleum E&P	1,000.05	0.00005	0.0005	(1.85)	PTTEPIH 0.000050%
			99.99995	1,000.05	816.42	PTTEPNL 99.99995%
PTTEP CA <sup>7</sup>	Petroleum E&P	1,000.05	100	1,000.05	817.17	PTTEPNC 100%
PTTEP CIF <sup>7</sup>	Petroleum E&P	0.05	100	0.05	(3.57)	PTTEPNC 100%
PTTEP MEA <sup>7</sup>	Petroleum E&P	0.05	100	0.05	0.05	PTTEP 100%
<u>Associated company</u>						
EnCo	Commerce	49.58	50	24.79	21.78	PTTEP 50% PTT 50%
PTT ICT	Services	3.94	20	0.79	2.18	PTTEP 20% PTT 20% ATC 20% PTTCH 20% TOP 20%
PTTEP AP's Associates <sup>5</sup>	Services	0.97	50	0.48	2.97	PTTEP AAO 50%
<u>Jointly controlled entities</u>						
CPOC	Petroleum E&P	0.01	50	0.05	0.06	PTTEPI 50 % CARIGALI 50%
MGTC	Natural gas pipelines - Overseas	0.03	25.5	0.008	61.34	PTTEPO 25.50% UNOCAL 28.2625% TOTAL 31.2375% MOGE 15.0%



Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
<u>Jointly controlled entities (con't)</u>						
TPC	Natural gas pipelines - Overseas	0.10	19.3178	8.01	44.14	PTTEPO 19.3178% PETRONAS 40.9102% NIPPON 19.3178% MOGE 20.4542%
Orange	Petroleum E&P	4.00	53.9496	329.77	195.39	PTTEPO 53.9496% MOECOI 36.0504% PSI 10%
Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
B8/32 Partners	Petroleum E&P	4.40	25.0009	109.95	52.68	PTTEPO 25.0009% MOECOI 16.7064% PSI 4.6346% Chevron 53.6583%
PTT FLNG	Petroleum E&P	0.0007	50	0.0006	(6.77)	PTTEPFH 50% PTTI 50%
Erawan2	Petroleum E&P	0.0001	13.11	11.67	11.74	JV Marine 13.11% Chevron 65.91% Mitsui Oil 20.98%
KOSP <sup>6</sup>	Petroleum E&P	3,966.47	40	2,067.58	2,099.95	PTTEP CA 40% Statoil Canada 60%
LAL	Services	21.17	40	7.40	7.52	PTTEP CA 40% Statoil Canada 60%
GBRS	Petroleum E&P	-	35	-	-	PTTEP AG 35% PVEP 40% Sonatrach 25%

\* Including Orange Energy Limited which accounted for using proportionate consolidation for jointly controlled entity

\*\* Associated companies including Enco, PTT ICT, ShoreAir Pty Ltd, Troughton Island Pty Ltd and jointly controlled entities including CPOC, MGTC, TPC, B8/32 Partners, PTT FLNG, Erawan2, KOSP, LAL and GBRS

\*\*\* Details of PTTEP AU's subsidiaries and PTTEP AP's subsidiaries are as follows:-



Company	Registered country	% of interest
PTTEP AU's subsidiaries:		
PTTEP Australia Offshore Pty Limited (PTTEP AO)	Australia	100%

Company	Registered country	% of interest
PTTEP AP's subsidiaries:		
PTTEP Australia Browse Basin Pty Limited (PTTEP AB)	Australia	100%
PTTEP Australasia International Finance Pty Limited (PTTEP AIF)	Australia	100%
PTTEP Australasia Pty Limited (PTTEP AA)	Australia	100%
PTTEP Australasia Timor Sea Pty Limited (PTTEP AT)	Australia	100%
PTTEP Australasia (Finance) Pty Ltd (PTTEP AAF)	Australia	100%
PTTEP Australasia (Petroleum) Pty Ltd (PTTEP AAP)	Australia	100%
Tullian Pty Ltd (PTTEP AAT)	Australia	100%
PTTEP Australasia (Operations) Pty Ltd (PTTEP AAO)	Australia	100%
PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA)	Australia	100%
PTTEP Australasia (Staff) Pty Ltd (PTTEP AAS)	Australia	100%

<sup>1</sup> As at December 24, 2010, PTTEPT has registered for the dissolution with the Ministry of Commerce and is in the process of liquidation.

<sup>2</sup> The name of PTTEP Myanmar Limited (PTTEP MYA) was changed to PTTEP South Asia Limited (PTTEP SA).

<sup>3</sup> The name of PTTEP Brazil Holding Limited (PTTEP BR) was changed to JV Shore Base Limited (JV Shore Base).

<sup>4</sup> As at January 17, 2011, JV Marine Limited entered into an agreement to purchase 13.11% interest in Erawan 2 FSO Bahamas Ltd.

<sup>5</sup> PTTEP AP's Associates are ShoreAir Pty Ltd and Troughton Island Pty Ltd.

<sup>6</sup> The name of Statoil Canada Partnership (SCP) was changed to KKD Oil Sands Partnership (KOSP).

<sup>7</sup> As at December 31, 2011 PTTEP SA, JV Shore Base, PTTEP NC, PTTEP NC, PTTEP CA, PTTEP CIF, and PTTEP MEA have share receivables.

### 5.3 Net Book Value

As at December 31, 2011, PTTEP's net book value amounted to USD 6,312 million (equivalent to Baht 200,024 million) or USD 1.90 per share (equivalent to Baht 60.26 per share).



## Future Projects

"This chapter has been cancelled by the Notification of Capital Market Supervisory Tor Jor 11/2009: Rules, Conditions and Procedure for Disclosure of Financial Position and Result of Operation of Issued Securities Companies."



6. Legal Dispute

-None -



## 7. Capital Structure

As of December 31, 2011, PTTEP's capital structure consisted of US Dollar 3,873 million interest-bearing liabilities and US Dollar 6,312 million shareholders' equities. The liability to shareholders' equities ratio was 0.61 times. Details of the capital structure are as follows:

### 7.1 Securities

#### 7.1.1 Capital Stock

PTTEP currently has a registered share of Baht 3,322 million consisting of 3,322 million ordinary shares at the par value of 1 Baht per share.

In 2011, the Company's registered paid-up capital was increased by Baht 2.54 million (2.54 million shares at the par value of 1 Baht per share), from the exercise of warrants to purchase the Company's common shares by the management and employees according to the 2002-2006 Employee Stock Ownership Plan or ESOP (please refer to details of warrants in section 7.1.3). Therefore, at December 31, 2011, the Company's registered paid-up capital was at Baht 3,320 million (3,320 million ordinary shares at the par value of 1 Baht per share).

#### 7.1.2 Bonds and Short-Term Commercial Papers

##### (1) Bonds

On April 5, 2011, PTTEP Canada International Finance Limited (PTTEP CIF) issued an unsecured and unsubordinated debenture to foreign institutional investors for the total amount of US Dollar 700 million with a coupon rate of 5.692%. The debenture is fully guaranteed by PTTEP with the tenor of 10 years and has been rated BBB+ by Standard and Poor's and Baa1 by Moody's. The net proceed from the debenture was used for general corporate purposes. The Board of Directors and the general Shareholders' meeting in the year 2007 and 2009 have approved the Company's issuing and offering of debentures, whose approved amount remaining was Baht 24,400 million in December 31, 2011.

##### (2) Short-Term Commercial Papers

The PTTEP Short-Term Financing Program ("PF") has been launched to offer short-term commercial papers to high net-worth individual and institutional investors. The total of Bill of Exchange (B/Es) in 2010 was Baht 6,000 million. Bill of Exchange (B/Es) are to be



issued with a total revolving credit of up to Baht 50,000 million which was approved by the Resolution of the Board of Directors' meeting in February 2009 and in November 2010. As of December 31, 2011, there is no outstanding B/Es.

Details of Baht Bonds and Short-Term Commercial Papers as of December 31, 2011 are as follows:

Debt Security	Issue Size	Rate per annum	Maturity
Unsecured unsubordinated Baht Bond issued in 2003	Baht 2,500 million (2.5 million Units at a face value of Baht 1,000 per unit) <sup>1</sup>	Fixed 4.625% per annum, semi-annually	15 years, due in 2018
Unsecured, unsubordinated Baht Bond issued June 2007 -Baht 12,500 million issued in total	Baht 3,500 million (3.5 million Units at a face value of Baht 1,000 per unit) <sup>2</sup>	Fixed 3.91% per annum, semi-annually	5 years, due in 2012
<i>* Baht 6,000 million (6 million units at a face value of Baht 1,000 per unit) was redeemed in 2010</i>	Baht 3,000 million (3 million units at a face value of Baht 1,000 per unit)	Fixed 5.13% per annum, semi-annually	15 years, due in 2022 Issuer has an option for early redemption in 2012

<sup>1</sup> Swapped into USD 60.82 million at an interest rate of 3.85% per annum in 2005, then unwinded swap to Baht 2,500 MM at 3.30% per annum in 2007. In 2011, PTTEP swapped the bond into USD 82.92 million at an interest rate of 3.30% per annum.

<sup>2</sup> Swapped into USD 115.78 million at an interest rate of 1.73% per annum in 2011.



Debt Security	Issue Size	Rate per annum	Maturity
Unsecured, unsubordinated Baht Bond issued May 2009 -Baht 40,000 million issued in total	Baht 18,300 million (18.3 million Units at a face value of Baht 1,000 per unit) <sup>3</sup>	Fixed 3.25% per annum, quarterly	3 years, due in 2012
	Baht 5,000 million (5 million units at a face value of Baht 1,000 per unit) <sup>4</sup>	Years 1-2: 3.00% per annum Years 3-4: Fixed 4.00% or THB FIX + 1.25% with Cap of 6.0% and Floor of 3.25%, semi-annually	4 years, due in 2013
	Baht 11,700 million (11.7 million units at a face value of Baht 1,000 per unit) <sup>5</sup>	Fixed 4.00% per annum, quarterly	5 years, due in 2014
	Baht 5,000 million (5 million units at a face value of Baht 1,000 per unit) <sup>6</sup>	Fixed 4.80% per annum, semi-annually	10 years, due in 2019
Bills of Exchange	Baht 500 million	2.080%	29 days, due in February 23, 2011
Bills of Exchange	Baht 500 million	2.085%	29 days, due in February 23, 2011
Bills of Exchange	Baht 1,000 million	2.210%	27 days, due in March 22, 2011
Bills of Exchange	Baht 1,000 million	2.410%	35 days, due in April 26, 2011
Bills of Exchange	Baht 1,000 million	2.620%	28 days, due in May 24, 2011
Bills of Exchange	Baht 1,000 million	2.725%	28 days, due in June 21, 2011
Bills of Exchange	Baht 1,000 million	2.929%	35 days, due in July 26, 2011

<sup>3</sup> Swapped into USD 603.36 million at an interest rate of 1.45% per annum in 2011.

<sup>4</sup> Swapped into USD 165.89 million at an interest rate of 2.01% per annum in 2011.

<sup>5</sup> Swapped into USD 389.50 million at an interest rate of 2.67% per annum in 2011.

<sup>6</sup> Swapped into USD 161.81 million at an interest rate of 4.93% per annum in 2011.



Details of US Dollar Bonds as of December 31, 2011 are as follows:

Debt Security	Issue Size	Rate per annum	Maturity
Unsecured, unsubordinated US Dollar Bond issued July 2010	US Dollar 500 million <sup>7</sup>	Fixed 4.152% per annum, semi-annually	5 years, due in 2015
Unsecured, unsubordinated US Dollar Bond issued August 2010	US Dollar 200 million <sup>8</sup>	Fixed 4.152% per annum, semi-annually	5 years, due in 2015
Unsecured, unsubordinated US Dollar Bond issued April 2011	US Dollar 700 million <sup>9</sup>	Fixed 5.692% per annum, semi-annually	10 years, due in 2021

### 7.1.3 Warrants

On April 30, 2002, the PTTEP's General Shareholders' Meeting consented to the 5-year (2002-2006) Employee Stock Ownership Plan to issue and to offer 10,000,000 units of warrants to purchase the Company's common shares. Details of the warrants to be allocated each year were to be approved by the Shareholders on a yearly basis.

On April 28, 2004, PTTEP's General Shareholders' Meeting consented to the reallocation of 2.4 million shares<sup>10</sup> which was previously registered and reserved for the exercise of right under the warrant issued to management and employee in 1998, but had expired (none

<sup>7</sup> PTTEP Australia International Finance Pty Ltd (PTTEP AIF) was the issuer, fully guaranteed by PTTEP

<sup>8</sup> PTTEP Australia International Finance Pty Ltd (PTTEP AIF) was the issuer, fully guaranteed by PTTEP

<sup>9</sup> PTTEP Canada International Finance Limited (PTTEP CIF) was the issuer, fully guaranteed by PTTEP

<sup>10</sup> On June 16, 1998, PTTEP's General Shareholders' Meeting approved the issuance and offering of 1.2 million units of warrants to purchase PTTEP's common shares to management and employees of the Company. The warrants had a 5 year life, and the exercise price of Baht 300. On August 30, 2000, PTTEP's Extraordinary General Shareholders' Meeting resolved to change the par value of the Company's common shares from Baht 10 to Baht 5, and as a result, the exercise price of the warrants became Baht 150 each. On June 15, 2003, the warrants issued in 1998 were expired.



of the warrants were exercised), to be reserved for the exercise of right under the newly issued warrants in 2004, 2005, and 2006.

On April 12, 2006 PTTEP amended its par value from 5 Baht to 1 Baht per share in accordance with the 2006 General Shareholders Meeting's resolution. The change of its par value affected the exercise ratio of the warrants from 1:1 to be 1:5 including the exercise price from Baht 111, Baht 117, Baht 183, Baht 278 and Baht 456 to be Baht 22.20, Baht 23.40, Baht 36.60, Baht 55.60, and Baht 91.20 respectively. The details of the allocation of each warrant which were approved by the General Shareholders' Meeting are as follows:

Year	No. of Warrants (Unit)	Year to Maturity (Year)	Exercise Price (Baht)	No. of Warrant to No. of Common Stock (Unit : Stock)
2002*	2,000,000	5	22.20	1 : 5
2003	2,000,000	5	23.40	1 : 5
2004	2,800,000	5	36.60	1 : 5
2005	2,800,000	5	55.60	1 : 5
2006	2,800,000	5	91.20	1 : 5
Total	12,400,000			

\*Note: In 2002, the PTTEP's General Shareholders' Meeting resolved to issue and offer the warrants to its directors, management and employee. In 2003 - 2006 the General Shareholders' Meeting resolved to issue and offer the warrants to its management and employee.

The Employee Stock Option Program (ESOP) was expired in 2011 and the last exercise date was July 31, 2011. Since 2002, the total of exercised Warrants was 12 million units and the total number of shares exercised was 59.99 million shares.

#### 7.1.4 Number of shares and shareholders voting rights will be affected by NVDR issuance

An NVDR or Non-Voting Depository Receipt is a trading instrument issued by the Thai NVDR Company Limited, a wholly owned subsidiary of the Stock Exchange of Thailand (SET). NVDRs are automatically regarded as listed securities in the SET. The objective of issuing NVDRs is not only to stimulate trading activities in the Thai stock market, but also to help eliminate foreign investment barriers, such as the foreign investment limits and the impediments faced by institutional investors who previously could not trade in the existing Thai Trust Fund. Investors will receive all financial benefits; i.e., dividends, right issues or warrants, just as if they



had invested in the Company's common shares. The only difference between investing in an NVDR and the Company's shares is the voting right. Additionally, although the NVDR is designed mainly to ease foreign investment barriers, the SET does not prohibit Thai investors from investing this instrument.

As at February 16, 2012, as publicized on the website of the Stock Exchange of Thailand, the Company's ordinary shares held by Thai NVDR were 63,209,035 shares, which represent 1.904% of the total issued and paid-up capital of the Company of 3,319,985,400 shares. The NVDR holders will not participate and vote in shareholder's meeting, except in the case where a listed company wishes to delist its shares from the SET.

## 7.2 Shareholders

### 7.2.1 Top 10 major shareholders

Top 10 major shareholders of the Company as of 16 February 2012 are as below.

Rank	Top 10 Major Shareholders	Number of Shares	% of total shares
1.	PTT PUBLIC COMPANY LIMITED	2,167,500,700	65.286
2.	BNP PARIBAS SECURITIES SERVICES LUXEMBOURG	74,665,545	2.249
3.	STATE STREET BANK AND TRUST COMPANY	68,310,851	2.058
4.	THAI NVDR CO.,LTD.	63,209,035	1.904
5.	HSBC (SINGAPORE) NOMINEES PTE LTD	62,454,564	1.881
6.	THE BANK OF NEW YORK (NOMINEES) LIMITED	52,493,608	1.581
7.	CHASE NOMINEES LIMITED 42	47,662,028	1.436
8.	STATE STREET BANK EUROPE LIMITED	44,163,935	1.330
9.	NORTRUST NOMITEES LIMITED-NT0 SEC LENDING THAILAND	43,744,252	1.318
10.	BNP PARIBAS SECURITIES SERVICES, LONDON BRANCH	38,952,100	1.173
	Total Shares of Top 10 Major Shareholders	2,663,156,618	80.216
	Issued and Paid-Up Shares as of 16 February 2012	3,319,985,400	100



### 7.2.2 NVDR holder who owned more than 0.50% of the paid-up shares of the Company\*

Rank	NVDR holder (as of 16 February 2012)	Number of NVDR Issues	% of Total Outstanding Shares in Underlying Stock
1.	STATE STREET BANK AND TRUST COMPANY	18,223,600	0.55
	Total NVDR	18,223,600	0.55

\* Since 18 January 2010, Thai NVDR Co., Ltd. has changed its rule on disclosure of name of NVDR holder to disclose the names of NVDR holders having over 0.50 percent of the paid-up capital of underlying security.

### 7.2.3 Major shareholder who has significant influence on determining company policy or the operation of business

PTT, a major shareholder, takes part in determining company's policy and its operations but under the Board approval. As of 1 January 2012, there are 6 out of 15 directors who are assuming the director and executive of PTT.

### 7.3 Dividend Policy

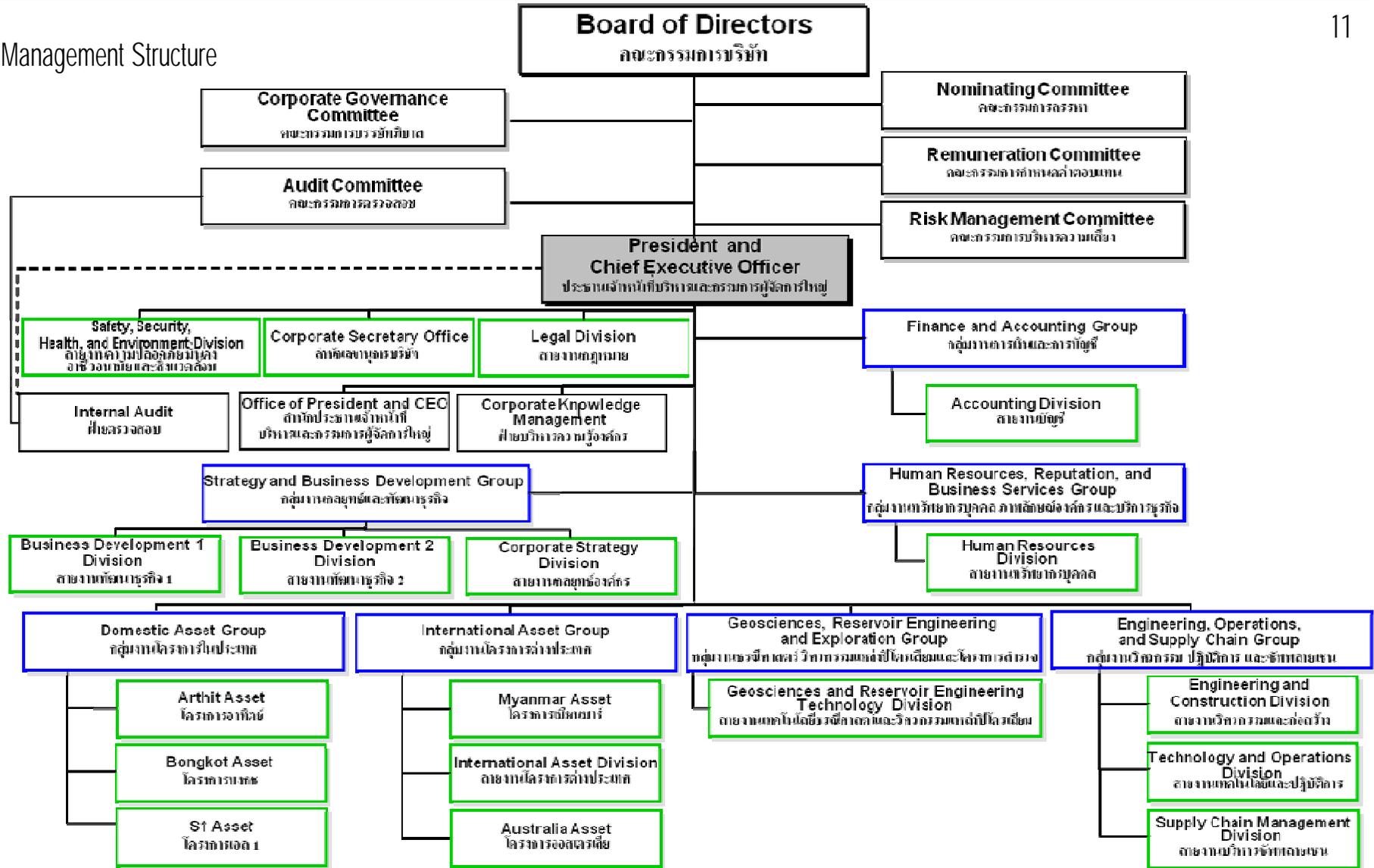
Normally, it is the policy of the Company's Board of Directors to recommend to the shareholders an annual dividend of not less than 30% of net income. Interim dividend may also be considered from time to time. The Company has no dividend policies for its subsidiaries.



# 8. Management

## 8.1 Management Structure

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PTTEP is governed by the Board of Directors (“The Board”), which has five standing sub-committees, namely the Corporate Governance Committee, the Audit Committee, the Nominating Committee, the Remuneration Committee, and the Risk Management Committee.

### 8.1.1 Duties and Responsibilities of the Board

The Board is authorized to manage the Company in accordance with the Company’s objectives, Articles of Association, and shareholder resolutions. The major duties and responsibilities are as follows:

(1) Duties under Articles of Association

- The Board is authorized to manage the Company in accordance with the Company’s objectives, Articles of Association, and shareholder resolutions.
- The Board shall elect one Chairman, one more director to be Vice Chairman if it deems appropriate, together with one Chief Executive Officer (CEO) and Secretary to the Board.

(2) Duties under Good Corporate Governance

- To determine the Company’s good corporate governance and code of business conduct and be a role model in adopting these principles for the management and employees.
- To ensure that the Company’s operations comply with laws, the Company’s objectives, affidavits, shareholders’ and Board resolutions, related policies including the internal control system as well as PTTEP good corporate governance principles and code of business conduct.
- To collaborate with the management in designating the vision, mission, and values that the Company expects to happen.
- To consider and approve strategic plans, direction, and policy for the Company as well as its budget, investment, loans, human resources, and operating goals submitted by the management, and supervise and closely monitor the Company’s operation so that its strategic plans and objectives can be achieved.
- To consider cases related to conflicts of interest in a careful and transparent manner and report to the Company any vested interests or stakes of related



persons, prevent misuse of the Company's properties for self-gains, as well as execution of transactions with people related to the Company in an inappropriate way.

- To specify and ensure that these following matters are in place within the Company: precise and appropriate regulations, standardized and reliable financial reporting, an efficient internal control system, as well as appropriate risk management.

- To ensure that the Company undergoes auditing both from the internal and external auditors and that they perform effectively and efficiently.

- To assure stakeholders of correct, complete, appropriate, and timely communication and information disclosure.

- To delegate authority to the President and CEO to execute business under the approved budget, and conduct a monitoring and assessment so that Company policies and plans can be accomplished.

- To conduct performance evaluation of the Board, Chairman of the Board and Standing Sub-committees, the findings of which are disclosed in the annual report, and conduct performance evaluation of the President and CEO and determine his or her remuneration based on performance. They shall also ensure that the Company has an effective evaluation process of the executive management's performance.

As of 1 January 2012, the Board consisted of 15 directors, with details of current ones and directors whose terms ended during the year shown in Attachment 1.



Changes in the number of shares held by Directors and Spouses, and Board Meeting attendances in 2011 are summarized as follows:

Director		Shares as of 31 December		Change	Number of Warrants	Number of Attendance/ Total Meetings
		2010	2011			
1. Mr. Norkun	Sitthiphong <sup>\$.@</sup>	N/A	-	N/A	-	13/13
2. Mr. Pichai	Chunhavajira <sup>\$</sup>	-	-	-	-	18/18
3. Mr. Viraphol	Jirapraditkul <sup>\$</sup>	-	-	-	-	18/18
4. Mr. Sommai	Khowkachaporn <sup>\$</sup>	-	-	-	-	18/18
5. Mr. Tevin	Vongvanich	180,500	75,500	(105,000)	-	17/18
6. Mr. Chakkrit	Parapuntakul <sup>\$</sup>	N/A	-	N/A	-	16/18
7. Mr. Chaikasem	Nitisiri <sup>\$</sup>	N/A	-	N/A	-	11/11
8. Mr. Ampon	Kittiampon <sup>\$.@@</sup>	N/A	-	N/A	-	13/13
9. General Lertrat	Ratanavanich <sup>\$.@@@</sup>	N/A	-	N/A	-	8/8
10. Mr. Krairit	Euchukanonchai <sup>\$.@@@</sup>	N/A	-	N/A	-	1/1
Spouse		N/A	10,000	N/A		
11. Mr. Pailin	Chuchottaworn <sup>\$.@@@</sup>	N/A	-	N/A	-	1/1
12. Mr. Manas	Jamveha <sup>1.°</sup>	N/A	-	N/A	-	-
13. General Pornchai	Kranlert <sup>1.°</sup>	N/A	-	N/A	-	-
14. Mrs. Varanuj	Hongsaprabhas <sup>1.°</sup>	N/A	-	N/A	-	-
15. Mr. Anon	Sirisaengtaksin <sup>##</sup>	92,000	106,000	14,000	-	18/18
<i>Ex-Directors in 2011</i>						
1. Mr. Prasert	Bunsumpun <sup>@</sup>	-	50,000	50,000	-	14/15
2. Mr. Chulasingh	Vasantasingh <sup>@@</sup>	-	-	-	-	4/5
3. Mr. Vudhibhandhu	Vichairatana <sup>@@@</sup>	-	-	-	-	5/5
4. Mr. Chitrapongse	Kwangasukstith <sup>@@@</sup>	222,000	222,000	-	-	5/5
Spouse		160,000	165,000	5,000		
5. M.R. Pongsvas	Svasti <sup>@@@@</sup>	-	-	-	-	10/10
6. Mr. Bhusana	Premanode <sup>*</sup>	-	-	-	-	13/15
7. Mr. Witoon	Simachokedee <sup>**</sup>	N/A	-	N/A	-	11/13
8. Mr. Wichai	Pornkeratiwat <sup>***</sup>	N/A	-	N/A	-	13/13
9. Mr. Naris	Chaiyasoot <sup>****</sup>	N/A	-	N/A	-	11/12

*Remarks:*

*\$#,@ Assumed directorship on 30 March 2011 and elected Chairman on 25 April 2011*  
*\$.@@ Assumed directorship on 30 March 2011*  
*\$.@@@ Assumed directorship on 16 June 2011*  
*\$ Independent Director*  
*\$.@@@ Assumed directorship on 25 November 2011*  
*\$.@@@ Assumed directorship on 1 December 2011*  
*1. Assumed directorship on 1 January 2012*  
*@ Resigned from directorship on 17 October 2011*  
*@@ Resigned from directorship on 19 April 2011 at 17.00 hrs.*  
*@@@ Term ended on 30 March 2011*  
*@@@ Resigned from directorship on 16 June 2011*  
*\* Resigned from directorship on 26 October 2011*  
*\*\* Resigned from directorship on 23 November 2011*  
*\*\*\* Resigned from directorship on 24 November 2011*  
*\*\*\*\* Resigned from directorship on 1 December 2011*

*# Chairman and Chairman of the Independent Director*  
*## CEO & President*  
*Audit Committee consisted of 7,8,9*  
*Remuneration Committee consisted of 9,11*  
*Nominating Committee consisted of 4,7,11*  
*Corporate Governance Committee consisted of 3,6,10*  
*Risk Management Committee consisted of 2, 3,4, 15*

8.1.2 Sub-committees: Appointed by the Board to screen specific significant matters, these sub-committees consist of experts in suitable specialized fields who present their views to the Board. PTTEP currently has five such sub-committees.

(a) The Corporate Governance Committee has the duties and responsibilities in accordance with its charter as follows:

(1) To establish the Company's corporate governance policy including its business ethics, which are proposed to the Board for approval and implemented at every level.

(2) To ensure that the Company's operation and the functioning of the Board, Sub-committees, the management, and all personnel comply with the Company's good corporate governance policy and business ethics.

(3) To review the Company's corporate governance policy, business ethics, along with the guidelines and good corporate governance practices, compare them with relevant laws, practices of international and leading companies, recommendations of leading institutions, and deliberate governance-related shareholders' proposals to table to the Board as well as to respond to the shareholders.

(4) To oversee the Company's assessment of compliance of the Company's good corporate governance policy and business ethics.



(5) To disclose information about the Company's good corporate governance to stakeholders in the annual report, with prior approval of the Board.

(6) To oversee and provide recommendations on corporate social responsibility (CSR) activities.

(7) To review this charter regularly for its constant appropriateness and timeliness.

(8) To disclose the Committee's performance in the Company's annual report.

(9) To perform other duties relevant to good corporate governance of PTTEP as may be assigned by the Board.

The Corporate Governance Committee consists of at least three independent directors. The following are current members of the committee with the term from 25 April 2011 to 24 April 2014:

- Mr. Viraphol Jirapraditkul      Chairman of the committee
- Mr. Chakkrit Parapuntakul      Member
- Mr. Krairit Euchukanonchai      Member

In 2011, the Committee held four meetings with perfect attendance each time, with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office and Corporate Secretary, acting as its secretary. The sub-committee has disclosed its annual performance in the Report of the Corporate Governance Committee.

(b) The Audit Committee has the duties and responsibilities in accordance with its charter as follows:

(1) To review PTTEP's financial reports with the external auditor at every quarterly meeting to ensure accuracy and adequacy.

(2) To review PTTEP's performance for compliance with the securities and exchange law, SET's regulations, and other laws related to PTTEP's business.

(3) To review connected transactions or transactions that may lead to conflicts of interest so as to ensure that they comply with the law and SET's regulations, and are reasonable as well as in the best interests of the Company.



(4) To ensure that PTTEP has an efficient and appropriate internal control system and internal audit system, and to review audit findings, approaches taken, and assess audit findings in various activities of PTTEP according to the procedures and acceptable standards in coordination with the external auditor.

(5) To consider, select, and propose the appointment of the external auditor, consider and decide the audit fees, and attend a non-executive meeting with the external auditor at least once a year.

(6) To scrutinize the independence of Internal Audit Department and endorse the appointment, transfer, and merit or punishment considerations for its head(s).

(7) To approve the audit plans of Internal Audit Department.

(8) To screen the budget and manpower requirements of Internal Audit Department.

(9) The Chairman of the Audit Committee or its members must attend shareholders' meetings to answer questions about its work or the appointment of the external auditor.

(10) To review and amend its charter annually.

(11) To perform other duties assigned by the Board.

(12) To disclose its performance in the Company's annual report.

The Audit Committee consists of at least three independent directors with knowledge, expertise, and experience in auditing financial statements. The following are current members with the term from 31 March 2010 to 30 March 2013:



Director	Position	Financial Statements Audit Experience	Remarks
Mr. Ampon Kittiampon	Chairman	<ul style="list-style-type: none"><li>- December 2005 - April 2007 : Member of the Audit Committee, Rayong Refinery Public Company Limited</li><li>- May - December 2007 : Chairman of the Audit Committee, Rayong Refinery Public Company Limited</li><li>- April 2010 - April 2011 : Chairman of the Audit Committee, PTT Public Company limited</li></ul>	Assumed the position on 25 April 2011
Mr. Chaikasem Nitisiri	Member	<ul style="list-style-type: none"><li>- 2008 – Present : Member of the Audit Committee, Thai Oil Public Company Limited</li><li>- April 2010 - April 2011 Member of the Audit Committee, PTT Public Company Limited</li><li>- 2007 - 2010 : Chairman of the Audit Committee, Thai Airways International Public Company Limited</li></ul>	Assumed the position on 19 May 2011
General Lertrat Ratanavanich	Member	<ul style="list-style-type: none"><li>- 2000 - 2004, 2006 : Member of the Audit Committee, PTTEP</li><li>- 2007 - 2008 : Chairman of the Audit Committee, PTTEP</li></ul>	Assumed the position on 16 June 2011

In 2011, the Audit Committee held 10 meetings, where 52 agenda items were considered with perfect attendance each time, with Mr. Verasak Manchuwong, Vice President of Internal Audit Department, acting as its secretary. The sub-committee has disclosed its annual performance in the Report of the Audit Committee.



(c) The Nominating Committee has the duties and responsibilities in accordance with its charter as follows:

(1) To shortlist candidates for Directors or President and CEO by taking into account the Board's composition, skill mix, experience, number of company in which he or she served, as well as potential conflicts of interest, and proposing their names to the Board or shareholders' meetings for election to fill the vacancies or to replace Directors that completed their terms.

(2) To prepare the names of shortlisted candidates for Directors or President and CEO in advance and/or when there is a vacancy.

(3) To acquire comments or suggestions from the Board and/or President and CEO of PTT (if any) to supplement the selection decision before submitting it for consideration of the Board's or shareholders' meetings.

(4) To develop performance agreements (PAs) each year for the Board and President and CEO and propose them to the Board for approval, and setting the annual evaluation forms of Chairman, Directors, sub-committees, and President and CEO.

(5) To nominate Directors to the sub-committees for appointment by the Board when there are vacancies or proposing to the Board a change in the sub-committees as deemed appropriate.

(6) To regularly review the appropriateness and timeliness of its own charter.

(7) To disclose its own performance in the Company's annual report.

(8) To perform any other assignment for the Board, relevant to the selection of Directors or President and CEO.

The Nominating Committee consists of at least three Directors, most of whom are independent directors, including the Chairman. The following are current members of the committee with the term from 23 June 2009 to 22 June 2012:



- Mr. Sommai Khowkachaporn Chairman and  
Independent Director
- Mr. Chaikasem Nitisiri Member and  
Independent Director
- Mr. Pailin Chuchottaworn Member

Mr. Chaikasem Nitisiri and Mr. Pailin Chuchottaworn were appointed as members on 19 May 2011 and 1 December 2011 respectively in place of Mr. Chulasingh Vasantasingh and Mr. Prasert Bunsumpun, who resigned from their membership on 19 April 2011 at 17.00 hrs. and 17 October 2011 respectively. In 2011, the Committee held seven meetings with perfect attendance each time, with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office and Corporate Secretary, acting as its secretary. The sub-committee has disclosed its annual performance in the Report of the Nominating Committee.

(d) The Remuneration Committee has the duties and responsibilities in accordance with its charter as follows:

(1) To consider remuneration packages for the Board and sub-committees against fair and reasonable criteria or principles in accordance with work performance, the Company's performance, the guidelines of the industry, as well as the scope of duties and responsibilities, and proposed them to shareholders' meetings for approval.

(2) To consider the remuneration package for the President and CEO and the salary structure of the executives against fair and reasonable criteria or principles, and propose them to the Board's meetings for approval. In case of the remuneration of the President and CEO, the duties and responsibilities together with the annual performance shall be taken into consideration as well.

(3) To evaluate its own performance, report it to the Board's meetings and disclose the findings to shareholders every year.

(4) To review its charter consistently to ensure appropriateness and timeliness.

(5) To undertake any other duties assigned by the Board of Directors.



The Remuneration Committee consists of at least three directors, most of whom are independent directors, including the Chairman. The following are current members of the committee with the term from 23 June 2009 to 22 June 2012:

- General Lertrat Ratanavanich      Chairman and  
Independent Director
- Mr. Pailin Chuchottaworn      Member.

An additional member is being selected from independent directors to fill the vacancy. During 2011, there were also other directors on the Remuneration Committee as follows:

Name	Term
Mr. Chitrapongse Kwangsukstith Member	23 June 2009 – 30 March 2011
Mr. Viraphol Jirapraditkul Member Chairman from 1 January 2011	23 June 2009 – 24 April 2011
Mr. Chulasingh Vasantasingh Member	1 January 2011 – 19 April 2011 at 17.00 hrs.
M.R. Pongsvas Svasti Member	25 April 2011 – 15 June 2011
Mr. Prasert Bunsumpun Member	25 April 2011 – 16 October 2011
Mr. Witoon Simachokedee Member	25 April 2011 – 22 November 2011

In 2011, the Committee had one meeting in December with perfect attendance with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office and Corporate Secretary, acting as its secretary. The sub-committee has disclosed its annual performance in the Report of the Remuneration Committee.

(e) The Risk Management Committee has the duties and responsibilities in accordance with its charter as follows:



(1) To define a risk management policy and a risk management framework, and provide advice to the Board and the management about enterprise-wide risk management.

(2) To oversee the implementation of the risk management system and provide relevant support in order to achieve success for the enterprise-wide risk management, with an emphasis on enhancing risk awareness and significance of each risk to support the decision for the development of appropriate procedures and commitment of resources.

(3) To review an enterprise-wide view of risks related to the corporate direction and the value chain in the exploration and production business, including risks related to exploration and development, production (covering issues on safety, security, health, and the environment), investment (covering the geopolitical risks of each country invested in), finance and commerce, corporate capability, and laws and regulations, together with preventive measures and the mitigation strategy to manage risks to acceptable levels. To monitor, evaluate, and improve action plans regularly to mitigate risks and suit operating conditions using Enterprise Risk Management Dashboard to identify the risk owners responsible for monitoring and updating related information, as well as defining mitigation strategies.

(4) To support each risk manager in his or her operations and assessment of major factors in continual risk management in line with the corporate plans and on a par with other leading companies.

(5) To regularly report to the Board risk management assessment supervision and mitigation measures taken, except for matters of significant impacts to the Company, for which the Board must be informed immediately.

The Risk Management Committee consists of at least three directors, with at least one being an Independent Director. The following are current members of the committee (Acting), three of whom are Independent Directors, with the term from 27 November 2008 to 26 November 2011:



- Mr. Pichai	Chunhavajira	Chairman and Independent Director
- Mr. Viraphol	Jirapraditkul	Member and Independent Director
- Mr. Sommai	Khowkachaporn	Member and Independent Director
- Mr. Anon	Sirisaengtaksin	Member.

New committee members are being selected by the Nominating Committee to replace those who retired. During the year, Mr. Chitrapongse Kwangsukstith and Mr. Vudhibhandhu Vichairatana retired at the AGM and ceased their duties on 30 March 2011; Mr. Wichai Pornkeratiwat and Mr. Viraphol Jirapraditkul were appointed members on 25 April 2011; afterward, Mr. Wichai Pornkeratiwat resigned from the Board and the committee, with effect from 24 November 2011.

In 2011, the Risk Management Committee held 12 meetings, with Mr. Chatchawal Eimsiri, Executive Vice President of Finance and Accounting Group, acting as its secretary for the January meeting, and Ms. PENCHUN Jarikasem taking the Executive Vice President of Finance and Accounting Group in February, acting as secretary and attended the meeting afterward. The sub-committee has disclosed its annual performance in the Report of the Risk Management Committee.



### Attendance of Sub-Committees in 2011

Sub-committee Member		Corporate Governance Committee	Audit Committee	Remuneration Committee*	Nominating Committee*	Risk Management Committee
		(Total 6 members)	(Total 6 members)	(Total 3 members)	(Total 6 members)	(Total 7 members)
		Total Meetings: 4 times	Total Meetings: 10 times	Total Meetings: 1 time	Total Meetings: 7 times	Total Meetings: 12 times
1. Mr. Ampon	Kittiampon <sup>®</sup>	-	8/8	-	-	-
2. Mr. Chaikasem	Nitisiri <sup>®®</sup>	-	7/7	-	3/3	-
3. General Lertrat	Ratanavanich <sup>®®®</sup>	-	6/6	1/1	-	-
4. Mr. Viraphol	Jirapraditkul <sup>®®®®</sup>	3/3	-	-	-	7/8
5. Mr. Chakkrit	Parapuntakul <sup>*</sup>	4/4	-	-	-	-
6. Mr. Pailin	Chuchottaworn <sup>**</sup>	-	-	1/1	1/1	-
7. Mr. Sommai	Khowkachaporn <sup>***</sup>	-	-	-	5/5	12/12
8. Mr. Pichai	Chunhavajira	-	-	-	-	12/12
9. Mr. Krairit	Euchukanonchai <sup>****</sup>	1/1	-	-	-	-
10. Mr. Anon	Sirisaengtaksin	-	-	-	-	11/12
<b>Ex-Sub-committee Members in 2011</b>						
1. Mr. Chulasingh	Vasantasingh <sup>#</sup>	-	2/2	-	4/4	-
2. Mr. Vudhibhandhu	Vichairatana <sup>##</sup>	1/1	1/1	-	-	3/3
3. Mr. Chitrapongse	Kwangstith <sup>###</sup>	-	-	-	3/3	2/2
4. M.R. Pongsvas	Svasti <sup>####</sup>	1/1	4/4	-	-	-
5. Mr. Prasert	Bunsumpun <sup>#####</sup>	-	-	-	1/1	-
6. Mr. Bhusana	Premanode <sup>#####</sup>	2/2	-	-	-	-
7. Mr. Witoon	Simachokedee <sup>#####</sup>	-	-	0/0 (Resigned before the meeting)	-	-
8. Mr. Wichai	Pornkeratiwat <sup>#####</sup>	-	-	-	-	4/5
9. Mr. Naris	Chaiyasoot <sup>#####</sup>	-	-	-	-	-

*Remark :*

<sup>®</sup>Became a member of Audit Committee and was appointed chairman of Audit Committee on 25 April 2011

<sup>®®</sup>Became a member of Audit Committee and Nominating Committee on 19 May 2011

<sup>®®®</sup>Became a member of Audit Committee and was appointed chairman of Remuneration Committee on 16 June 2011

<sup>®®®®</sup>Was chairman of Corporate Governance Committee and Risk Management Committee on 25 April 2011

<sup>\*</sup>Became a member of Corporate Governance Committee on 1 January 2011– 21 February 2011 and became a member of Corporate Governance Committee again on 25 April 2011

<sup>\*\*</sup>Became a member of Remuneration Committee and Nominating Committee on 1 December 2011

<sup>\*\*\*</sup>Was appointed chairman of Nominating Committee again on 24 March 2011

<sup>\*\*\*\*</sup>Became a member of Corporate Governance Committee on 25 November 2011

<sup>#</sup>Resigned from directorship, chairman of Audit Committee, Remuneration Committee, and Nominating Committee on 19 April 2011 at 17.00 hrs.

<sup>##</sup>Terms on Corporate Governance Committee, Audit Committee, and Risk Management Committee ended on 30 March 2011



*### Terms on Remuneration Committee, Nominating Committee, and Risk Management Committee ended on 30 March 2011*

*#### Resigned from directorship, Corporate Governance Committee, Audit Committee, and Remuneration Committee on 16 June 2011*

*##### Resigned from directorship, Remuneration Committee and Nominating Committee on 17 October 2011*

*##### Resigned from directorship and Corporate Governance Committee on 26 October 2011*

*##### Resigned from directorship on 23 November 2011*

*##### Resigned from directorship and Risk Management Committee on 24 November 2011*

*##### Resigned from directorship on 1 December 2011*

In addition, PTTEP has a panel of Independent Directors with the duties and responsibilities in accordance with its charter as follows:

(1) To propose significant issues beneficial to the Company, the major shareholders, and minor shareholders for the Board and/or President and CEO's consideration

(2) To provide views on the proper roles and duties of the Board and other appropriate views of Independent Directors for the best interests of the Company and the major and minor shareholders.

(3) To examine PTTEP's compliance with the law relating to Independent Directors and review the definition of Independent Directors to be lawfully complete and appropriate.

(4) To perform other duties assigned by the Board provided that such duties do not affect their independence.

(5) To review the Independent Director Charter for its appropriateness and timeliness.

At present, Independent Director consists of 12 members:

- |                                |                      |
|--------------------------------|----------------------|
| - Mr. Norkun Sittiphong        | Chairman             |
| - General Lertrat Ratanavanich | Vice Chairman        |
| - Mr. Viraphol Jirapraditkul   | Independent Director |
| - Mr. Sommai Khowkachaporn     | Independent Director |
| - Mr. Pichai Chunhavajira      | Independent Director |
| - Mr. Chakkrit Parapantakul    | Independent Director |
| - Mr. Ampon Kittiampon         | Independent Director |
| - Mr. Chaikasem Nitisiri       | Independent Director |
| - Mr. Krairit Euchukanonchai   | Independent Director |
| - Mrs. Varanuj Hongsaprabhas   | Independent Director |
| - General Pornchai Kranlert    | Independent Director |
| - Mr. Manas Jamveha.           | Independent Director |



During 2011, the following independent directors ended their terms, namely Mr. Vudhibhandhu Vichairatana, on 30 March 2011, and Mr. Chulasingh Vasantasingh, M.R. Pongsvas Svasti, Mr. Bhusana Premanode, Mr. Witoon Simachokedee, and Mr. Naris Chaiyasoot on 19 April 2011 at 17.00 hrs., 16 June 2011, 26 October 2011, 23 November 2011 and 1 December 2011, respectively. Moreover, starting from 1 January 2012, Mrs. Varanuj Hongsaprabhas, General Pornchai Kranlert, and Mr. Manas Jamveha were elected as PTTEP directors in the place of Mr. Wichai Pornkeratiwat, Mr. Witoon Simachokedee, and Mr. Naris Chaiyasoot, who resigned from their directorship. These also qualified as PTTEP Independent Directors.

In 2011, the Independent Directors held four meetings, with most of them in attendance, with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office, acting as its secretary. They performed their duties under the committee's charter carefully, prudently, competently, and independently for equitable treatment of shareholders and protection of minority shareholders. All meeting outcomes were reported to the Board for acknowledgment.

### 8.1.3 Qualifications of Independent Directors and Their Nomination

The Board must always be made up of at least one half in Independent Directors. The Company has made the qualifications of such Directors – under the good corporate governance of PTTEP – even more stringent than those defined by the Capital Market Supervisory Board, as seen below:

(1) Holds no more than 0.5% of the total voting stocks of PTTEP, its parent company<sup>1</sup>, its subsidiaries<sup>2</sup>, and its associated companies<sup>3</sup>, a related juristic entity<sup>4</sup>, including stocks held by connected persons, as well as nominees<sup>5</sup>.

(2) Is not or has never been an executive director, employee, staff, adviser who receives salary or a controlling person<sup>6</sup> of PTTEP, its parent company, its subsidiaries, its associated companies, its sister companies<sup>7</sup>, major shareholders or controlling persons of PTTEP unless the foregoing status has ended for more than two years. This shall not include an independent director who was a government official or an adviser of a government agency which is a major shareholders or controlling person of PTTEP

(3) Is not a person related by blood or legal registration, such as father, mother, spouse, sibling and child, including a spouse of the children, management, major



shareholders<sup>8</sup>, controlling persons, or persons to be nominated as management or controlling person of PTTEP or its subsidiaries.

(4) Has not or has not had a business relationship with PTTEP, its parent company, its subsidiaries, its associated companies, or a juristic person who may have conflicts of interest, in a manner that may interfere with his or her independent judgment, or is not or has never been a major shareholder, connected director, management, or controlling persons of any person with business relationship with PTTEP, its parent company, its subsidiaries, its associated companies, or a juristic person with potential conflicts of interest, unless such relationship has ended for more than two years.

The term 'business relationship' in paragraph one includes any normal business transaction, rental or lease of immovable property, transaction relating to assets or services or grant or receipt of financial assistance through receiving or extending loans, guarantee, providing assets as collateral, including other similar actions which result in the applicant or his counterparty being subjected to indebtedness payable to the other party for 3 percent or more of the net tangible assets of the applicant or 20 million Baht or more, whichever is lower. The amount of such indebtedness shall be calculated according to the calculation method for the value of connected transactions under the Notification of Capital Market Supervisory Board concerning Rules on Connected Transactions. The combination of such indebtedness shall include indebtedness taking place during the two years before the date on which the business relationship with the person begins.

(5) Is not or has never been an auditor of PTTEP, its parent company, its subsidiaries, its associated companies, or a juristic person with potential conflicts of interest and is not a major shareholder, connected director, management, controlling persons or partner of an audit firm which employs auditors of PTTEP, its parent company, its subsidiaries, its associated companies, or a juristic person with potential conflicts of interest unless such relationship has ended for more than two years.

(6) Is not or has never been a professional adviser, including legal or financial advisor who receives an annual service fee exceeding 2 million Baht from PTTEP, its parent company, its subsidiaries, its associated companies, or a juristic person with potential conflicts of interest, and is not a major shareholder, connected director, management, controlling persons



or partner of the professional adviser unless such relationship has ended for more than two years.

(7) Is not a director representing a PTTEP's or its major shareholder's board member or a shareholder who is related to PTTEP's major shareholder.

(8) Has no other characteristics which make him or her incapable of expressing independent opinions on PTTEP's business.

(9) Does not own/run any business similar to or competing with PTTEP or its subsidiaries and is not a material partner in any partnership, executive director, employee, staff, adviser who receives salary, and holds no more than 1% of total voting stocks of the company similar to or competing with PTTEP or its subsidiaries.

(10) Is authorized by the Board to make a collective decision to execute the business of PTTEP and its parent companies, its subsidiaries, its associated companies, sister companies, or a juristic person with potential conflicts of interest.

<sup>1</sup> Parent company means the company with more than 50% of total voting shares in PTTEP, directly or indirectly, which means PTT Plc ('PTT').

<sup>2</sup> Subsidiaries mean companies in which PTTEP directly or indirectly holds more than 50% of the total voting shares, or can influence financial and management policies, such as PTTEP International Ltd. and PTTEP Services Ltd.

<sup>3</sup> Associated companies mean companies in which PTTEP or its subsidiaries altogether hold from 20% to 50% of the total voting shares, or take part in decision-making on financial and management policies, such as Energy Complex, Co., Ltd., and Carigali – PTTEPI Operating Company Sendirian Berhad (CPOC)

<sup>4</sup> Juristic person with potential conflicts of interest means major shareholders or those that can exert control over PTTEP, which means PTT or a juristic entity in which PTT holds shares, controls, or has a significant interest, either directly or indirectly.

<sup>5</sup> Nominees mean shareholders for other people in a concealed manner.

<sup>6</sup> Controlling persons means any person who, as a matter of fact, has substantial control over PTTEP in its policy-setting, management, and operations.

<sup>7</sup> Sister companies mean any two or more subsidiaries of PTT, regardless of levels of subsidiaries, such as PTTEP and PTT Natural Gas Distribution Co., Ltd.

<sup>8</sup> Major shareholders mean shareholders with more than 10% of the voting shares, including those held by their connected persons.

Independent Directors at least once a year verify and certify their qualifications when submitting their biographies at the end of the year, which are disclosed in Form 56-1 and the annual report. On 1 January 2011, 12 Independent Directors did so under PTTEP's corporate governance.



The nominating procedure of Independent Director selection is similar to that of PTTEP Directors and the President and CEO, detailed under 8.2.1, that is, if he or she retires from the office, to fill the vacancy, PTTEP will give priority to qualified candidates with such qualifications and will keep the Board's composition with the right number of Independent Directors. However, if any other Director, from time to time, has qualified as an Independent Director, he or she will assume the position at once.

#### 8.1.4 Business relationship or professional services of the Independent Directors for the Company during the past fiscal year

None

#### 8.1.5 Authority of President and CEO

(1) Authority under the Articles of Association vested by shareholder resolutions

The President and CEO is the authorized signatory in dealing with external parties under clause 9, paragraph 6, of the Articles registered at the Ministry of Commerce.

(2) Authority vested by Board resolutions

The Board authorizes the President and CEO to act and conduct, on behalf of the Company, business operations under the stated objectives in its Memorandum of Association, petroleum concessions and other agreements, including other businesses in which the Company has interests; to take charge and conduct business under PTTEP Regulations – namely the Budgeting Charter B.E. 2539, Finance and Accounting Charter B.E. 2539, Regulation on Human Resources Management 2005, and Procurement Charter B.E. 2550, applying practices comparable with those of other private companies in the E&P business and in the best interests of PTTEP. Delegation of authority is permitted unless each attorney has a direct or indirect conflict of interest with PTTEP or its subsidiaries in exercising the authority.

8.1.6 Details of current management team members and the controlling persons as of 1 January 2012 appear in Attachment 1.

#### 8.1.7 Corporate Secretary

The Corporate Secretary plays a role in effectively coordinating internally between the Chairman and the President and CEO and externally between the Company, the



shareholders, and the regulators. PTTEP's good corporate governance prescribes the Board to designate the Corporate Secretary, who also resumes the position of Secretary to the Board of Directors (at present, Mr. Theerasak Tancharoenlarp), as responsible for overseeing and advising the Board and the Management about applicable laws, rules, regulations, including information about updates of good corporate governance matters; ensuring that the businesses of the Board and sub-committees are run correctly and smoothly, in compliance with related laws, regulations, and PTTEP's good corporate governance; organizing the Board's, sub-committees', and shareholders' meetings; preparing and safeguarding vital company documents, namely the agenda and minutes of the meetings of the Board, Standing Subcommittees and shareholders, Form 56-1, Director Roster, etc.; notifying regulators about related information; arranging orientation for new directors; and promoting and enhancing the understanding of good corporate governance among the Directors, the Management, and employees.

## 8.2 Nomination of the Board and Management

### 8.2.1 Nomination of the Board and the President and CEO

When there is a Director vacancy, the Nominating Committee is to choose suitable candidates to become a Director by considering the current list of state enterprise directors of State Enterprise Policy Office (SEPO), a collection of qualified persons for state enterprises, and recommended nominees from PTT, the major shareholder. Priority will be given to those with skill mixes, experience, and specific qualifications in areas still lacked by the Board or critical to the Company's business to fill the composition of the Board and for the ultimate benefit of PTTEP, including awareness of the possibilities of conflicts of interest of a given Director. The Nominating Committee is to consider qualified candidates for PTTEP Group as prescribed in No. 8.4.5 (1.2) Director Qualifications.

Election of Directors to replace retiring ones must obtain the approval of the AGM through a majority of eligible shareholders in attendance under the following criteria and procedures:

(1) Nomination to a shareholders' meeting is to be made by the Nominating Committee for each Director whose term has ended, with prior screening by the Board. Shareholders may nominate other persons and the Company has added another channel for this, that is, nominating a person or persons between 1 October and 31 December of each year.



This has been made known to investors through SET's notification channel and the Company's website, which also contains rules for nominating Directors, together with a Director nomination form, for minority shareholders' use.

(2) Should the number of Director candidates be less than the number to be elected, the shareholders' meeting is to elect those candidates as Directors by voting for individual candidates, under which they must receive majority votes.

(3) Should the number of Director candidates exceed the number to be elected, a ballot is to be held. Each shareholder may vote for as many candidates for Directors as the number of open positions, and voting is carried out for individual candidates. Those with the highest ballots are to be elected Directors, as many as the number of open positions accommodates.

When Director positions become vacant for other reasons, the Board may elect new Directors through at least a three-fourth majority vote and these elected Directors are to remain in their positions for only as long as the remaining terms of their predecessors.

With the approval of the Board, the President and CEO is nominated by The Nominating Committee, which considers a person who is skilled, experienced, and professional, and possesses specific expertise necessary and maximum benefit for PTTEP. Potential conflicts of interest of the President and CEO are also taken into account. Further information appears in Management Development and Succession Plan.

### 8.2.2 The Nomination of Executives

The CEO is authorized to select and appoint any person(s) with the knowledge, capabilities, and experience in PTTEP's business environment to the management rank. This authorization process complies with the PTTEP Personnel Administration Regulation and is reported at the Board's meeting, except for the appointment of Executive Vice Presidents, which requires the approval of the Board. If there is a need to select a person who is not a PTTEP employee, an interview of the candidate must be conducted by an interview committee. Additionally, any appointment of the head of internal audit management requires a prior approval of the Audit Committee.



## 8.3 Remuneration of the Board and the Management

## 8.3.1 Remuneration of Directors and Sub-committee Members

Directors		Remuneration							2011 Bonus paid in 2012 <sup>\$</sup>	Total
		Board		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Meeting Fee	Retainer Fee	Meeting Fee	Meeting Fee	Meeting Fee	Meeting Fee	Meeting Fee		
1. Mr. Norkun	Sitthiphong <sup>#*</sup>	400,000	450,000	0	0	0	0	0	2,432,517.40	3,282,517.40
2. Mr. Pichai	Chunhavajira	450,000	450,000	0	0	0	0	343,750	2,622,950.82	3,866,700.82
3. Mr. Viraphol	Jirapraditkul	450,000	450,000	0	93,750	0	0	150,000	2,622,950.82	3,766,700.82
4. Mr. Sommai	Khowkachaporn	450,000	450,000	0	0	0	156,250	275,000	2,622,950.82	3,954,200.82
5. Mr. Tevin	Vongvanich	425,000	450,000	0	0	0	0	0	2,622,950.82	3,497,950.82
6. Mr. Chakkrit	Parapuntakul	400,000	450,000	0	100,000	0	0	0	2,622,950.82	3,572,950.82
7. Mr. Chaikasem	Nitisiri	275,000	300,000	180,000	0	0	75,000	0	1,631,259.82	2,461,259.82
8. Mr. Ampon	Kittiampon <sup>#@</sup>	325,000	375,000	262,500	0	0	0	0	1,990,568.16	2,953,068.16
9. General Lertrat	Ratanavanich <sup>##@</sup>	200,000	262,500	150,000	0	46,875	0	0	1,430,047.16	2,089,422.16
10. Mr. Krairit	Euchukanonchai <sup>*@</sup>	25,000	75,000	0	25,000	0	0	0	265,888.17	390,888.17
11. Mr. Pailin	Chuchottaworn <sup>**@</sup>	25,000	37,500	0	0	25,000	25,000	0	222,771.17	335,271.17
12. Mr. Anon	Sirisaengtaksin	450,000	450,000	0	0	0	0	0	2,622,950.82	3,522,950.82



Directors		Remuneration							2011 Bonus paid in 2012 <sup>s</sup>	Total
		Board		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Meeting Fee	Retainer Fee	Meeting Fee	Meeting Fee	Meeting Fee	Meeting Fee	Meeting Fee		
Ex-Directors in 2011										
1. M.R. Pongsvas	Svasti <sup>#</sup>	250,000	225,000	110,000	25,000	0	0	0	1,192,903.66	1,802,903.66
2. Mr. Prasert	Bunsumpun <sup>##</sup>	381,250	403,125	0	0	0	25,000	0	2,236,694.36	3,046,069.36
3. Mr. Chulasingh	Vasantasingh <sup>###</sup>	100,000	112,500	62,500	0	0	100,000	0	783,292.16	1,158,292.16
4. Mr. Vudhibhandhu	Vichairatana <sup>@</sup>	125,000	112,500	0	50,000	0	0	0	639,568.83	927,068.83
5. Mr. Chitrapongse	Kwangasukstith <sup>@</sup>	125,000	112,500	75,000	0	0	75,000	50,000	639,568.83	1,077,068.83
6. Mr. Bhusana	Premanode <sup>@@</sup>	325,000	375,000	0	50,000	0	0	0	2,141,477.66	2,891,477.66
7. Mr. Witoon	Simachokedee <sup>@@@</sup>	275,000	337,500	0	0	0	0	0	2,191,780.82	2,804,280.82
8. Mr. Wichai	Pornkeratiwat <sup>*</sup>	325,000	337,500	100,000	0	0	0	0	2,198,966.99	2,961,466.99
9. Mr. Naris	Chaiyasoot <sup>**</sup>	275,000	337,500	0	0	0	0	0	1,983,381.99	2,595,881.99

*Remarks:*

<sup>#</sup> Assumed directorship on 30 March 2011 and chairmanship on 25 April 2011

<sup>##</sup> Assumed directorship on 30 March 2011, became a member of Audit Committee and the chairman of Audit Committee on 25 April 2011

<sup>###</sup> Assumed directorship and chairmanship of Remuneration Committee on 16 June 2011

<sup>\*</sup> Assumed directorship and membership of Corporate Governance Committee on 25 November 2011



*\*\*@Assumed directorship and membership of Remuneration Committee and Nominating Committee on 1 December 2011*

*#Resigned from directorship on 16 June 2011*

*##Resigned from directorship on 17 October 2011*

*###Resigned from directorship on 19 April 2011 at 17.00 hrs.*

*@Term ended on 30 March 2011*

*@@Resigned from directorship on 26 October 2011*

*@@@Resigned from directorship on 23 November 2011*

*\*Resigned from directorship on 24 November 2011*

*\*\*Resigned from directorship on 1 December 2011*

*§2011 bonuses to be paid in 2012 are in accordance with the AGM resolution on dividend payment*



## Remuneration to Independent Director Serving as an Independent Director in Parent Company

In year 2011, PTTEP Independent Directors had received remuneration from PTT Public Company Limited as Independent Director in PTT, a parent company of PTTEP as below

List	Board Remuneration		Meeting Fee of Sub-committees	Total
	Director Bonus	Meeting Fee and Retainer Fee		
1. Mr. Sommai Khowkachaporn	1,539,726.03	578,214.29	105,000	2,222,940.32
2. Mr. Ampon Kittiampon	482,191.78	261,532.25	86,250	829,974.03
3. Mr. Chaikasem Nitisiri	602,739.73	293,750	45,000	941,489.73
4. Mr. Krairit Euchukanonchai	449,315.07	170,322.58	60,000	679,637.65
5. Mr. Chulasingh Vasantasingh	1,402,739.73	621,000	206,250	2,229,989.73
6. Mr. Bhusana Premanode	1,671,232.88	610,000	75,000	2,356,232.88

### 8.3.2 Executive's Remuneration

The Remuneration Committee reviews and recommends for the Board's endorsement fair and reasonable criteria or procedures for defining the salary structures for executives while conforming to prevailing business practices. Executives' compensation packages and salary structures are determined by market comparison with other leading oil and gas companies' criteria, procedures, pay rates, salary surveys, and with consideration of executives' individual scopes of accountability.

The President and CEO decides individual executives' compensations. Annual merit increases of executives are tied to their individual performance, the Company's performance, and key performance indicator (KPI) achievement of each division or group.



To maintain its competitiveness in the oil and gas market, PTTEP participates in the annual compensation survey along with other leading oil and gas companies to obtain adequate information to report to the Board for possible adjustment in its competitive compensation strategy when there is a significant compensation change in the marketplace.

To comply with good corporate governance and transparency, PTTEP discloses the Management's compensation, including their PTTEP shares and ESOP warrants, in the annual report.

(1) Cash (compensation and provident fund)

	2010		2011	
	Number	Total Amount (Baht)	Number	Total Amount (Baht)
Salary	8 <sup>(4)</sup>	47,537,400	8 <sup>(5)</sup>	53,898,318
Bonus		23,957,719 <sup>(2)</sup>		29,756,163 <sup>(3)</sup>
Other compensation <sup>(1)</sup>		6,031,176		6,520,065
Total		77,526,295		90,174,546

<sup>(1)</sup> Provident Fund

<sup>(2)</sup> Includes bonuses for 2010, paid in 2011 (paid in January and February)

<sup>(3)</sup> Includes bonuses for 2011, paid in 2012 (paid in January and February)

<sup>(4)</sup> Executives, numbering 8, consist of the CEO and the Executive Vice Presidents

<sup>(5)</sup> Executives, numbering 8, consist of the CEO, the Executive Vice Presidents and seconded executives from PTT

(2) Allocation of ESOP Warrants

From 2006, with the approval of shareholders' meetings, PTTEP allocated ESOP warrants for common shares to all eligible Management and employees to give each a sense of belonging and reward those devoted to Company service, as summarized below:

Year	Number of Warrants (Unit)	Exercise Ratio (Unit of Warrant : Unit of Share)	Exercise Price (Baht) <sup>***</sup>	Exercise Period
2006*	2,800,000	1:5	91.20	31 July 2007 – 31 July 2011

\* In April 2006, PTTEP adjusted the par value from Baht 5 to Baht 1 per share, resulting in a change of exercise price and exercise ratio of the warrants for 2006.

\*\* Exercise Price Calculation



2006: Calculated by using the average closing prices of PTTEP shares during the 90 days lapse before the date of the Board's resolution to propose this agenda (calculated from November 1, 2005 to January 29, 2006) minus the 2005 dividend per share.

### Number of PTTEP Shares and Warrants Held by the Management and Spouses

Name		Shares as of 31 December		Change in Shares
		2010	2011	
1. Mr. Anon	Sirisaengtaksin	92,000	106,000	14,000
2. Mr. Somkiet	Janmaha	315,600	326,100	10,500
3. Mr. Asdakorn Spouse	Limpiti	55,000	45,000	(10,000)
		63,000	63,000	-
4. Mr. Chatchawal	Eimsiri	-	-	-
5. Ms. Penchun	Jarikasem <sup>1</sup>	N/A	-	N/A
6. Mr. Somporn Spouse	Vongvuthipornchai	142,000	142,000	-
		3,000	3,000	-
7. Mr. Prisdapunt	Pojanapreecha	319,000	319,000	-
8. Mr. Luechai	Wongsirasawad	80,800	109,800	29,000
9. Mr. Suraphong	Iamchula	99,400	88,400	(11,000)
10. Mr. Yongyos	Krongphanich <sup>2</sup>	N/A	67,500	N/A
11. Ms. Jaroonsri	Wankertphon	66,200	75,600	9,400
12. Ms. Chanamas		17,000	8,500	(8,500)

<sup>1</sup> Appointed as Executive Vice President, Finance & Accounting Group, on 1 February 2011

<sup>2</sup> Appointed as Senior Vice President, Accounting Division, on 16 February 2011

## 8.4 Good Corporate Governance

The Board of Directors of PTTEP values good corporate governance and code of business conduct and is convinced of steering business with strict adherence to these concepts. It is believed that this is the right path toward attaining the goal of 'growth, prosperity, stability, sustainability, and dignity' and to bolster confidence among shareholders and all stakeholders. The Board assigned the Corporate Governance Committee to ensure that PTTEP business conforms to the Company's Corporate Governance Policy and Code of Business Conduct and to always maintain the standards of Operational Excellence on a par with international practices. This has resulted in its national and international recognition through 2011 as shown in the topic Recognition. PTTEP has constantly complied with the Principles of Good Corporate Governance for Listed Companies 2006 of the Stock Exchange of Thailand (SET as follows:



## 8.4.1 Rights of Shareholders

Recognizing the rights of all shareholders, PTTEP has taken steps to demonstrate its respect for basic shareholders' rights, namely to buy, sell, or transfer shares; to obtain adequate information in a timely manner; to participate and vote or grant proxy to vote in the shareholders' meeting on significant issues that require approval from the shareholders' meeting such as the appointment of new directors in replacement of those who are due to retire by rotation, the consideration of the Board's remuneration, the appointment of the auditor and the consideration of the auditor's fee, etc., or other issues affecting PTTEP. Shareholders' rights concerning sharing in the profits of the company and receiving sufficient and timely information will be protected. PTTEP promotes the rights of shareholders as follows:

(1) 2011 Annual General Shareholders' Meeting

(1.1) PTTEP revealed the scheduled dates for 2011 shareholders' annual general meeting (AGM) approximately 2 months in advance since 27 January 2011, following the Board's resolution to hold the AGM on 31 March 2011. The Board also fixed the dates on which shareholders have the right to join the meeting and to receive their dividends (the so-called Record Date) on 14 February 2011 and to close the share registration book on 15 February 2011.

(1.2) The Company sends meeting invitations in both Thai and English to shareholders 21 days ahead of each meeting, containing agenda details, either for consideration or for acknowledgement, and related appendices in adequate details together with the opinions of the Board, proxy forms designed by the Ministry of Commerce, a list of all Independent Directors together with all possible conflicts of interest of each Independent Director. These invitations also contain details about the credentials each shareholder needs to bring to the meeting and meeting attendance procedure, together with Company regulations on the meeting and voting procedures, and a map showing the meeting venue. In addition, shareholders may view information about the agenda items of each meeting in both Thai and English on the Company's website 36 days ahead of the meeting date once the Board of Directors has decided on it, the same information that will be passed on to the shareholders.

(1.3) PTTEP always allows registration of shareholders at least two hours before each meeting, for which a barcode system detailing each shareholder is reproduced on the registration form or the proxy form and is used for facilitation and registration



time-saving, as well as the accuracy of shareholder details. Furthermore, PTTEP also provides duty stamps for all proxy forms.

(1.4) The Company distributes the rules and regulations of the AGM to all meeting participants so that they may have a clear understanding of the meeting procedures, voting method by shareholders and proxies whose votes cannot be divided except for proxy Form C, temporary closure of AGM registration for vote counting for each agenda item, as well as procedures for vote counting, making queries, and raising opinions at the meeting, and so on.

(1.5) Before each meeting, the Corporate Secretary is assigned by the Chairman to explain clearly how ballots are cast and counted under Company's regulations. The Company collects ballots of all shareholders or proxies, who have not yet voted on each agenda item, in cases they would object or abstain and uses barcode ballots to facilitate the process and make the ballot counting accurate. Balloting proceeds in line with Company regulations and the law, of which the voting result of each agenda item will be clearly displayed in the meeting room. The Company will ask shareholder volunteers together with an independent legal advisor to witness ballot counts for greater transparency. To protect the rights of shareholders, PTTEP conducts balloting for each matter separately, and in the election of directors, each nominated candidate will be voted individually.

(1.6) Allocating enough time for the meeting, the Chairman conducts each meeting suitably and transparently by the order of agenda items as listed on the meeting notice, allowing thorough expression of views and queries before each ballot round, and summarizes meeting resolution(s) on each agenda item. Shareholders are invited to send their meeting-related questions to the Board ahead of the meeting date.

(1.7) PTTEP gives shareholders who show up late a chance to vote on agenda items still under deliberation.

(1.8) All Directors attend each shareholders' meeting. Members of the standing sub-committees may address relevant questions and concerns posed by shareholders (if any).

(2) PTTEP regularly disseminates information to shareholders via the Stock Exchange of Thailand's (SET) channel, media, and publications, including its website. For



improved understanding of its business, PTTEP also organized its operation site visit altogether 2 trips in 2011 for shareholders to S1 Project, Phitsanulok Province, whereas 2 more trips of the plan have been postponed to be in February 2012 resulting from the flooding situation.

(3) The Company sets up information request channels for minor shareholders through the E-mail addresses of Independent Directors on matters of Directors' activities, good corporate governance (GCG) and audit matters. Apart from these channels, minor shareholders can directly contact the Corporate Secretary or the Investor Relations unit.

(4) PTTEP explicitly discloses shareholding structures in affiliated and subsidiary companies to ensure shareholders of transparent management structures that are open to scrutiny.

(5) The Company conducts its business efficiently for its sustainable growth and suitable returns to shareholders.

#### 8.4.2 Equitable Treatment of Shareholders

PTTEP values and treats all shareholders fairly through the following actions:

(1) 2011 Annual General Shareholders' Meeting

(1.1) Allowing each shareholder to propose agenda items for consideration at the annual general meeting of shareholders (AGM) or nominate qualified person for election as Directors ahead of the AGM date between 1 October and 30 December 2010, and announcing such acceptance and deliberation criteria via SET's news channels up to five months ahead. The announcement was also publicized on the Company's website to illustrate equitable treatment of shareholders. That is to say, each matter or nominee was to be considered against PTTEP's criteria, deemed as the screening of genuinely useful agenda items and an addition of qualified names through the Nominating Committee before submission to the Board's consideration. The Board would inform the meeting of its findings, together with its reasons, at the AGM. However, there was no proposal submitted to PTTEP.

(1.2) Conducting the meeting in sequence of agenda items as specified in the invitation and not adding agenda items without notifying shareholders in advance, so that they may have enough time for investigation before making their decisions.



(1.3) Providing shareholders with a list of all Independent Directors on proxy forms as another option for them to decide their own voting, clearly identifying which directors have vested interests in which matter. An instance is that in each director election to replace retiring ones due to completion of terms, an independent director that complete his or her terms and is nominated for re-election is regarded as having vested interests. PTTEP recommends that shareholders make use of proxy forms which can be indicated their voting directions and encourages them to do so.

(1.4) Encouraging shareholders to use ballots in every agenda item. 'Voting tickets', provided for each agenda item separately, are collected at the meeting for objected and abstained votes. All votes are then summed with the pre-cast votes as prescribed in the proxy forms before announcing the resolution to the meeting. For transparency and reference, PTTEP provides independent legal advisor and volunteers from the shareholders to serve as witnesses for ballot counting and files all voting tickets bearing signatures of volunteered witnesses for further review.

(1.5) Taking accurate minutes of the meeting with complete contents, namely the issues raised, queries, or opinions made in the meeting, clarifications made by Directors or executives related to each agenda item, meeting resolution with the numbers of votes for, votes against, and abstention, and arranging for deliveries of the minutes to all shareholders after submission to SET and SEC within 14 days after the meeting. The minutes, together with its video recording, will be also posted on the Company's website.

(2) The Use of Inside Information

Ensuring strict supervision of the use of inside information by defining in writing the explicit approach of inside information retention as well as the prevention of insider trading as part of GCG and the Business Ethics on the exploitation of inside information in accordance with securities laws; regular revisions are undertaken for fairness to all stakeholders. The following summarizes the major actions taken.

(2.1) Regularly warning Directors and all employees through various communication channels about the abuse of inside information to prevent such exploitation for themselves and others. The Company clearly stipulated punitive disciplinary measures. All supervisors, as CG leaders, must stress or advise their own subordinates.



(2.2) The Board of Directors' Meeting on 24 November 2011 approved the revision of the Company's business ethics on Use of Inside Information by elevating the level of cooperation request to prohibition of PTTEP stock trading in a silent period starting from the disclosure of 2011 financial statements. The Corporate Secretary informs Directors, executives from the senior vice president level upward, as well as Vice President, Corporate Accounting and Vice President, Finance of such restriction. These people, their spouses, and children under the legal age, are prohibited from buying or selling PTTEP shares through either direct or indirect methods (including through nominees or individual's mutual funds) one month before and 1 day after the release of the Company's material information that may affect PTTEP stock price, such as the quarterly or annual financial statements. This will provide enough time for the information to thoroughly reach the public. The Company also encourages these people to hold long-term shares, that is, for at least three months from each purchase. The restriction, however, does not include selling and buying PTTEP shares through warrants exercise.

(2.3) The company shall disclose the shareholding of directors, executives from the Executive Vice President upward, the Senior Vice President, Accounting Division, and Vice President, Corporate Accounting and Vice President, Finance in the annual report accurately as stipulated by the SET and SEC. Also, the Board has to follow up the ethical business performance on inside information control. Those said person shall submit the report every time when there is any change in shareholding to the company's secretary in order to inform the Board. Compliance unit will follow up and surveillance the ethical business performance on use of inside information according to the company's rule.

(3) Directors and executives from executive vice president upward are required to report vested interests with the Company, held by themselves and connected persons, without delay. The Corporate Secretary is responsible for reporting such stakes to the Chairman and Chairman of the Audit Committee for examination within seven days after receiving the report. The practice is in line with Securities and Exchange Act (No. 4) B.E. 2551 and the Capital Market Supervisory Board notification.

(4) In its GCG principles and its Code of Business Conduct, PTTEP devises practical guidelines for potential conflicts of interest for the Directors, the Management, and all employees to observe. It also defines criteria for the Directors and the Executive Management from the executive vice president level upward to report their vested interests, including such



interests of their related persons. Should such a matter arise, they must report it to PTTEP and the Corporate Secretary at once and refrain from deliberating and voting on that matter.

### 8.4.3 Roles of Stakeholders

The Board approved the PTTEP mission that values the rights of stakeholders. The mission states that PTTEP is committed to producing oil and natural gas with quality and safety and at competitive prices in parallel with the responsibility for society and environmental conservation. The Company observes GCG in its business administration and financial management. In practice, PTTEP values the rights of all internal and external stakeholders, which includes shareholders, customers, employees, government, partners, society, communities and environment, suppliers/contractors, lenders, competitors, local culture and tradition, and human rights, of which the practical guidelines are stated in its GCG booklet. In addition, an ethical business framework for balanced consideration of stakeholders appears in its Code of Business Conduct, also publicized on the Company's website. PTTEP takes into consideration stakeholders and their rights wherever it operates. In addition, in 2011, PTTEP became a participant in the United Nations (UN) Global Compact, an agency of the United Nations of which the objective is to call for the collaboration among organizations worldwide to advance their commitments to sustainability and corporate citizenship relating to 4 core areas: human rights, labour, the environment and anti-corruption.

#### (1) Treatment of major stakeholders

##### (1.1) Shareholders

PTTEP respects the rights of shareholders and treats all of them equally. The Company, in its business administration, observes GCG and the Code of Business Conduct to foster sustainable growth while creating maximum value for shareholders.

##### (1.2) Employees

(1.2.1) PTTEP adheres with the principles of the UN Global Compact by eliminating all forms of illegal labour in every location it has investment and defines guidelines in its GCG and code of business conduct as follows:

(i) PTTEP shall study for better understand of and strictly follow all applicable laws in every location.



(ii) PTTEP shall study and respect the cultural and local traditional differences and not act against culture or tradition of each locality.

(iii) PTTEP shall not discriminate against any individual by personal relationship or by dissimilarity of race, gender, age, complexion, religion, or any other condition that does not interfere with performance.

(1.2.2) PTTEP recruits, selects, and hires staff based on qualifications, experience, and competence for suitable positions, encourages their continuous development, promotes their career advancement, and provides opportunities for them to take part in external activities under the Company's policy.

(1.2.3) A fair compensation system is in place for PTTEP to attract and retain competent people in its service so that they may perform their work efficiently. Key factors taken into account include up-to-date pay scales and pay procedures of other domestic petroleum operators, job value discrepancies in the required expertise, job complexities, assigned responsibilities, and expressed competence through job performance.

(1.2.4) The Company provides and/or improves mutually fair welfare schemes. Key factors that have been considered include its own affordability, both short and long terms, with a focus on fostering the security of life for employees and their families; components not easily affordable by most employees, not adequate provided for by the government; and components provided by most other domestic petroleum operators to their employees.

In addition, PTTEP instituted a provident fund to ensure security for employees and their families. This will also be a guarantee for employees upon their resignation or retirement. The provident fund is made up of monthly contributions from both the employees and the Company. The Company contributes 15% of its employees' basic salary while employees contribute between 2% up to 15%. Conditions for employees to receive the contribution and its returns are made under Company's regulations.

(1.2.5) PTTEP values timely joint-resolution of problems between subordinates and supervisors, to maintain good relations among all. Should such a problem arise, employees can file petitions under the Company's procedure. Provided that they follow



the criteria and procedure in good faith, their employment status will not be affected, and PTTEP will refrain from taking action that would harm them or their witnesses.

(1.2.6) PTTEP gives priority in human development in order to enhance its capacity for business performance. We deem that human resources are key factors for the Company so they are provide with training and development both in short term and long term. Apart from academic and technical capacity's building, PTTEP also embeds the corporate values to all staff members so that they can work with a same standard leading the Company to attain its vision and mission as targeted.

(1.2.7) PTTEP has conducted the Employee Engagement Survey in 2011 as a mechanism to drive the company towards achieving its strategic goal and vision. Also, such survey assists in directing the company's development towards being a workplace of pride that employees can work effectively and happily.

### (1.3) Customers

PTTEP's mission is to produce and sell crude oil and natural gas at competitive prices through agreements of both long and short terms, as well as spot-market sales. For agreements governing new projects and spot-market sales, the Company treats all customers equally and in the best interests of all parties. For long-term product sales, including natural gas, PTTEP strictly honors agreements and regularly coordinates with its customers to deliver products of quality matching customers' needs in a timely manner.

### (1.4) Suppliers/contractors

PTTEP regards its suppliers/contractors as significant support of its business to grow and sustain. Therefore, the policy of fair treatment to suppliers/contractors as business partners is clearly defined in PTTEP Good Corporate Governance and Code of Business Conduct and announced to directors, management and employees for adherence.

In 2011, PTTEP revised its code of business conduct concerning suppliers/contractors to endorse its transaction with those who have ethics and responsibility for society and environment including to underline them to have a better standard in term of safe workplace and respect the social fundamental rights of their staffs likewise.

PTTEP treats all its suppliers/contractors fairly. Its procurement is based on fair and just competition while responsible for society and environment for the



maximum benefit of PTTEP. The Company does not discriminate others in business competition. The four channels of participation by suppliers and vendors are

(1.4.1) Through e-commerce in the PTTEP's website at <http://www.pttep.com/VendorRegistration/> and the suppliers/contractors are also able to check the payment transaction at <http://www.pttep.com/> and choose VendorPortal

(1.4.2) If the user at PTTEP already has suppliers'/contractors' information and wants to do business with them, the user then submits such information to the Procurement Department for further processing of new vendor prequalification before carrying on procurement. In term of prequalification, the company has investigated the suppliers/contractors if they have a policy and support ethical business practice and corporate social responsibility. In this regard, this could drive them to realize the corporate social responsibility and environment along with their business profit.

(1.4.3) The Company holds an SSHE Contractor Forum with suppliers/contractors every year to ensure the correct mutual understanding and stress the importance of safety, security, health, and the environment. Moreover, a PTTEP Golf Charity event is organized annually to foster their relationship with the Company.

(1.4.4) Suppliers/contractors can contact the Procurement Department directly throughout the working hour.

Furthermore, the Company provides additional channel for conveniences of suppliers/contractors to request information or notify of their addresses change by sending Email to [vendor@pttep.com](mailto:vendor@pttep.com).

#### (1.5) Partners

The joint venture between PTTEP and its partners either in Thailand or overseas will be carried on under the international mutual working agreement. This agreement will rule the rights and duties of the partners expressly. The partners have a mandate to become the joint venture committee for directing and managing the product and services supply including the annual work plan and budget with the clear scope and formal resolution. The partners have the right to monitor the financial information and annual financial statements. There are clear and suitable measures such as the penalty for non-compliance with the



agreement of partners. It is noted that the company also underlines transparency in information dissemination between the partners and external parties.

(1.6) Competitors

PTTEP treats its competitors professionally and fairly under transparent and fair rules and does not discredit competitors through false accusations.

(1.7) Lenders

PTTEP not only issues debentures and bills of exchange under relevant terms of reference, laws, and announcements of SEC, but also strictly follows policies, objectives, and resolutions made at shareholders' meetings. The Company values compliance with all obligations under the terms of reference on the rights and duties of a debenture issuer and the conditions of loan contracts. We also have a measurement to cope with the remedy for stakeholders affected from the company due to its non compliance with the rights and duties of the issuer and the condition of the loan agreements.

(1.8) Government

PTTEP executes its business transaction under close supervision of Government agencies concerned both in Thailand and abroad. The Company regards these government agencies as the key support to its smooth business and to proper business operations in line with respective countries' policies, rules, and regulations. Its clear policy, therefore, is to regularly coordinate and transparently and honestly share information with relevant government agencies, both domestic and abroad.

In addition, valuing the forging and maintaining of long-term relationship with these agencies, the Company has continually staged activities to promote cordial relationship.

(1.9) Communities/society

In addition to running an ethical business with principles nurtured into staff, PTTEP recognizes that its petroleum operations must be carried out in parallel with responsibilities for society. In 2011, PTTEP establishes the corporate social responsibility policy which is compatible to international standard as the framework for the Company's social



responsibility activities. The Company has consistently developed social responsibility projects under the concept of “From Natural Treasure to Intellectual Wisdom and Environmental Conservation”, with a focus on three aspects: development of the quality of life; conservation of natural resources, culture, and the environment; and participation from staff. This is used to drive society and communities toward sustainable development and to create an awareness of being a good citizen. PTTEP projects and activities in this area are as follows.

(1.9.1) Life quality development

(i) Education

- Scholarship
- Mobile library
- Learning park
- Educational Trip
- 7 Pat Tutor Camp
- Genius student camp with PTTEP
- Computer Donation and Computer Center
- Youth fishing

(ii) Health Promotion

- I Love Sports with PTTEP
- Youth training to become an umpire
- PTTEP Cares for Health
- Campaign for reduction of accident from agricultural vehicles
- Mini Farm

(iii) Skills Development

- Thai rice academy
- Life quality development at Doi Mae Salong



environment

- Natural gas for agricultural community and

- Crab bank

(1.9.2) Natural Resources, Cultural, and Environmental Conservation

- (i) Thai Heritage, World Heritage

- (ii) Tree Planting in the Human Heart

- (iii) Marine Heritage Conservation

- (iv) Learning source from the undersea royal vessel

- (v) Artificial coral placement

(vi) Folk Song Conservation and Following the Footsteps of Art Philosophers

(1.9.3) Staff participation

- (i) CSR Volunteer

- (ii) Neighborly Love Club

- (iii) Bongkot Asa Club

- (iv) Arthit Asa Club

- (v) PTTEP Ruam Jai Pattana

(1.10) Safety, Security, Health and Environment

The company's policy and practice on safety and health in work place and environment

PTTEP is committed to protecting the health and safety of everyone who plays a part in our operations and lives in the communities in which we operate, while maintaining the security of our people and assets. Wherever we operate, we will conduct our business with respect to local and global environment to achieve the objectives of sustainable development. Generally, oil and gas industry is a high risk business that may cause impact to health and safety of employees, community and environment. PTTEP believes that a



good safety management and effective planning can prevent and alleviate the impact to health, safety and environment. Furthermore, PTTEP keeps developing and improving its safety management, which is deemed worthwhile investment and easier compared to solving problems that may arise.

The vision of safety, security, health and environment of PTTEP is not only becoming the LTI free organization but also being a leader in safety, security, health and environment. This is consistent with the company's mission and policy as set systematically which is deemed as a key factor to achieve its goal of sustainable development in the future.

PTTEP has reviewed its vision, mission and safety policy periodically in order to ensure that they are up to date and in line with the company's expansion in the future.

To meet these commitments, PTTEP has in place, the SSHE Management System (SSHE MS) that outlines our main principles and accountabilities to drive for continuous improvements in our operations.

PTTEP's SSHE Policy includes the following:

- (i) Encourage a positive SSHE culture through visible leadership and commitment from management and employee involvement.
- (ii) Ensure that all employees and contractors are accountable for their own safety and the safety of those around them.
- (iii) Meet or exceed compliance with all applicable SSHE laws and regulations, and international standards in all of our operations worldwide.
- (iv) Ensure all employees and contractors are trained and competent to meet SSHE MS requirements.
- (v) Identify, eliminate or minimize, and manage SSHE risks to our employees, the environment and Assets.
- (vi) Develop and maintain active plan for emergency and crisis management.



(vii) Prevent any incident recurrences through an efficient incident management system.

(viii) Seek to achieve and maintain SSHE excellence by setting measurable SSHE objectives and targets and assessing performances through regular audits and reviews.

(ix) Communicate SSHE issues in an open and transparent manner both internally, either from top-down or bottom-up and externally.

### Conducting a Business with Environmental Standards

An effective environmental management system is developed and implemented for PTTEP's petroleum exploration and production operations to minimize potential environmental impacts that could arise. The implementation of the ISO14001:2004 Environmental Management System (EMS) Standard by PTTEP's domestic operational projects is in compliance with the company's policy and standards, national and local legislations, and other international standards/requirements to prevent environmental pollution and degradation, promote energy conservation, and ensure the improvement of company performance. As a result, PTTEP is the first petroleum exploration and production company in Thailand and in the Southeast Asian region to achieve the ISO14001 Certification for its domestic projects such as Bongkot Project, S1 Project, PTTEP1 Project, Petroleum Development Support Base and Arthit Project,. More information on the environmental management system and environmental performances, control and monitoring could be found in the answer to question no. 4.5 of the 56-1 SET questionnaire and also in the PTTEP annual Sustainability Report which has been published since 2007 on PTTEP's official website, (<http://www.pttep.com>)

### Promoting the Efficient Use of Natural Resources

PTTEP gives great importance in energy and natural resources efficiency in which many projects that uses the recovery of flare gas to generate electricity and reprocess in the system are present. Flare gas recovery and utilization at the Bongkot Project with a production rate of 600 MMSCFD of natural gas and 18,000 BBLD of condensate by installing a Flash Gas Recovery Unit system (FGRU) into their offshore operations in 2006. This decreased the amount of gas to be flared into the atmosphere by 6.5 MMSCF per day and also recovers condensate from operation by 400 BBL per day.



The recovery of flare gas at 10-20 MMSCF per day through the integration of gas pipelines/flowlines from different production stations in S1 Project is another way to reduce the GHG emissions into the atmosphere. This project is expected to be commenced by 2<sup>nd</sup> quarter of 2013. By connecting the pipelines from different production stations (from Nong Toom-A to Pradu Tao-A) and converging them into LKU's main production site, this can serve as a means to recover flare gas from the smaller production sites and converge it into one location for utilization and access. The utilization of flare gas includes electricity generation, cooking, etc. In 2010, the S1 Project also installed a "Cooling Pad" with the purpose of increasing the efficiency of the Chiller Cooling Pad by reducing the temperature of air before entering the system. The efficiency of the "Chiller Cooling Pad" has increased to 24% after the installation and is reduced the energy use by 21,600 KWh per month.

As for onshore petroleum production, PTTEP investigated the optimum use of petroleum resources. Associated gas, which needs to be flared, has found application as a fuel in the production of Nong Tum community products in Kong Krai Lat district, Sukhothai province. This not only exhibits a better use of natural gas but also reduces fuel costs for the community. The Company also has a project to produce liquefied natural gas (LNG) from associated gas at the Nong Tum-A oil deposit. Moreover, the Company has joined Ratchaburi Electricity Generating Holding Plc. in making use of associated gas to fuel a small power plant at Pratu Tao-A site to cut oil consumption by around 1.5 million liters per year for power generation of around 2 MW.

PTTEP, moreover, considers investment through the Clean Development Mechanism (CDM), devised under the Kyoto Protocol to help industrialized countries fulfill their obligations to reduce greenhouse gases through their investments in greenhouse gas reduction projects in developing countries. Also as a requirement, this kind of project must be designed to support sustainable development in developing countries. At present, PTTEP is carrying out a CDM project for less greenhouse gas emission at onshore production sites, especially at the Sao Thian-A deposit in S1, where a study is conducted to bring associated gas to fuel a small power plant. The project has already won approval as a CDM project from Thailand Greenhouse Gas Management Organization. The company is now going through the verification and documentation process before submission to the UN Clean Development Mechanism Executive Board for consideration and it is estimated to be



economically viable with an initial approximation of carbon dioxide reduction emission of up to at least 31,000 tonnes of carbon dioxide per year.

For more information on the environment efficiency and conservation projects, please refer to the answers in question 4.5 of the 56-1 SET questionnaire and also in the PTTEP Annual Sustainability Report which has been published since 2007 on PTTEP's official website, (<http://www.pttep.com>)

### Equipping Employees with Knowledge about the Environment

PTTEP provides SSHE and environment-related employees with trainings and knowledge sharing on environmental issues and key messages via different channels including in-house training, external training and seminars, knowledge sharing sessions, and via company email messages. Most of the environmental issues that are addressed are the Oil Spill Response IMO Level 1 training, ISO 14001 standard awareness and requirements training, environmental impact assessments and updates of local and international environment laws and regulations. We also send off environmental key messages and issues via SSHE Council meetings which is held quarterly, SSHE Monthly Meetings in each department, Sustainable Development Committee meetings, and tool box meetings for employees at the operating sites.

In addition, PTTEP has made every possible attempt to ensure that our operations do not result in harmful impacts on people and the environment. The SSHE Management System or the SSHE MS that was adapted from the OGP (International Association of Oil and Gas Producers) is the foundation of our SSHE Management System (SSHE MS), which stipulates that risk assessment of all activities must be carried out and adequate control systems be implemented to reduce the risks to the As Low As Reasonably Practicable (ALARP). This effort also complies with the relevant legislation, regulations, and the international industry guidelines for the development and application of our SSHE MS.

### "Step Change in SSHE"

Even though many SSHE measures and efforts have been put in place, PTTEP SSHE performance still needs to be significantly improved in order to support company growth in the future. In Q2-2011, an initiative called "Step Change in SSHE" was introduced in PTTEP.



The prime objective of the initiative is to move our SSHE performance towards SSHE Excellence by the enforcement of the SSHE MS and strengthening of our SSHE culture. The objective is to become an LTI-Free organization by 2013 and an Incident-Free organization by 2015.

There are five acts in the "Step Change in SSHE"

#### Act1: SSHE moment in all meetings

All meetings must kick off with a dynamic thought-provoking message about any element of SSHE. This is made by members in rotation to share their story to increase SSHE awareness of all PTTEP personnel.

#### Act2: Safe and happy workplace

This act aims to improve the promotion of a safe and happy work surroundings which result in awareness and realization of SSHE in every move PTTEP personnel make.

#### Act 3: SSHE cares, SSHE shares

This act is intended to convey care to PTTEP personnel by improving SSHE communication through various media, including websites, exhibitions, supporting campaigns, and other relevant activities.

#### Act 4: SSHE is a license to operate

Since our organization is an oil and gas organization, we cannot tolerate any mistakes because it may jeopardize the future prosperity of the organization. Hence, strengthening the SSHE MS is necessary.

#### Act 5: SSHE in mindset

SSHE is actually a part of daily life. All PTTEP personnel should have SSHE in their sub conscious mind and act habitually both at work and home.

#### (1.11) Law

PTTEP respects the law, culture and custom at everywhere we operate our business and defines it a business ethics for business operation legally and effectively. Director, executives, and employees are required to abide by strictly and not to abuse any copyrights especially in information and communication technology. PTTEP also



defines a business ethics on anti-corruption that the Company's personnel shall not corrupt nor receive a bribe and that they make clear to the related persons of the Company about the Company's standing point. It is required that any corruption encountered shall be raised to the Company. The Corporate Secretary Office is appointed a compliance unit to oversee the company's overall compliance with applicable laws.

(1.12) Local culture and tradition

When operating in different countries, PTTEP takes into account their local culture and practices and organizes training by experts, including representatives of the Ministry of Foreign Affairs or those from embassies on relevant subjects – including recommendations and information concerning local culture, what to do, and what to avoid for PTTEP employees assigned to work there.

(1.13) Human rights

The Company ensures that in all its operating areas, no illegal labor is used and that the human rights principles of the United Nations' Global Compact are observed.

(2) It is PTTEP's policy to promote stakeholders' participation in the Company's business by giving shareholders and other stakeholders opportunities to submit recommendations or useful information of assorted matters concerning either the Company's business or their individual rights by e-mailing directly to Independent Directors at [independentdirector@pttep.com](mailto:independentdirector@pttep.com). All such input will be screened for submission to the Board to ensure that their rights are catered to and that they are fairly treated.

(3) Measures concerning raising concerns and protection mechanism

It is PTTEP's ultimate business goal to generate long-term value and shareholders' satisfaction, as seen in its goals: "growth, prosperity, stability, sustainability and dignity". Convinced that GCG will lead to that goal, the Company instituted channels for employees and external parties to report or provide information concerning wrongdoing or violations of laws and rules, GCG, the Code of Business Conduct, policies, procedures, terms of reference, or regulations of PTTEP through the CG Hotline channels. And to foster confidence that such whistleblowers would not face persecution, PTTEP has instituted a policy for the acceptance of such complaints and protection of whistleblowers. This includes mitigation of



trouble for whistleblowers if their reporting were done in goodwill, without any malice to PTTEP or any other party. PTTEP will treat such information with strict confidentiality; the complaints will be involved by concerned and assigned persons only, and the investigation policy is to be strictly followed. The findings will be reported to the Corporate Governance and the Board of Directors quarterly. The following CG Hotline channels are available:

- (3.1) Facsimile number: 0-2537-4949
- (3.2) E-mail address: [cghotline@pttep.com](mailto:cghotline@pttep.com)
- (3.3) CG Hotline Box located at its Offices
- (3.4) Direct submission or by mail to the Corporate Secretary Office

In 2011, the Company received through CG Hotline three queries, all of which were replied, and one complaint, which was closed.

#### 8.4.4 Information Disclosure and Transparency

Disclosure of information represents a vital principle for GCG. PTTEP values the information that needs to be forwarded to SET and shareholders, particularly its accuracy, adequacy, timeliness, and equal access by all recipients. Such information preparation follows the Business Ethics. The Investor Relations, and the Corporate Communication and Reputation Management Department address inquiries from institutional investors, minor shareholders, analysts, and those interested in monitoring PTTEP data. The Company has a clear procedure for information disclosure to SET under ordinary and urgent circumstances.

PTTEP's material information includes both financial and non-financial information. In 2011, disclosure of financial information, especially the financial statements, was reviewed and audited by auditors in its essence according to generally accepted accounting principles (GAPP), and was endorsed and approved by the Audit Committee and the Board before its release to the shareholders. The Board of Directors also reports their financial responsibilities in the annual report. Moreover, PTTEP discloses unreviewed quarterly financial statements and unaudited annual financial statements, which exceed SET regulations, so that shareholders and investors can receive financial information more rapidly. Such information and the reviewed and audited statements do not contain any significant difference. PTTEP also follows SET and SEC regulations in releasing non-financial information, which include connected



transactions, management discussion and analysis, and risk management. The Good Corporate Governance report is also included in the annual report and the 56-1 Form.

Information disclosed to the public, shareholders and investors, is posted on the Company's website in both Thai and English. Such information involves all information disclosed through SET, which is immediately posted on the Company's website, annual reports, the 56-1 Form, invitations to shareholders' meetings, minutes of shareholders' meetings, information used for roadshows, quarterly results presented to analysts, audio and video information presented through webcast, news releases, and SSHE reports, which are incorporated into the annual sustainability report. PTTEP regularly updates its website to keep viewers informed and provide them with easy access to information for their highest benefit. In 2011, PTTEP disclosed 47 pieces of information through SET and organized activities to meet with analysts on various occasions, consisting of three analyst meetings, twelve roadshow sessions, two site visits and CSR activities by stock analysts, and regular company visits.

PTTEP also arranges for shareholders' visit to operating areas, such as Sirikit Oil Field in Kamphaeng Phet province, to build confidence and understanding of its operation and business. In the 2011 AGM, Investor Relations officers were stationed as part of PTTEP team to provide information and answer questions to shareholders, thus providing more access to information.

Directors, executives from executive vice president upward, Senior Vice President, Accounting Division, Vice President, Corporate Accounting and Vice President, Finance are required to report vested interests with the Company, held by themselves and connected persons, without delay. The Corporate Secretary is responsible for reporting such stakes to the Chairman and the Chairman of the Audit Committee for examination within seven days after receiving the report. The practice is in line with Securities and Exchange Act (No. 4) B.E. 2551 and a Capital Market Supervisory Board notification.

PTTEP also discloses the roles and responsibilities of the Board and all standing sub-committees, including the attendance of each Director under Topic 8, Management; reports of the Chairman of each sub-committee (item no. 8.5, Reports of Standing Sub-committees); and the policy of Directors and Executive Management remuneration under item no. 8.4.5, Responsibility of the Board, (3.8) Remuneration.



PTTEP constantly values the accuracy, completeness, timeliness, and transparency of information disclosure and is committed to keeping up this practice.

## Investor Relations (IR)

Investor Relations is responsible for communicating information that accurately shows PTTEP's real value to stock analysts, shareholders, and investors in general under the rules of SET, and for fostering confidence on the part of analysts and investors as well as a positive image and attitude in investors through coordination and consultation with PTTEP's management. Investors and interested parties can contact this unit for information on PTTEP, including financial statements, annual report, and notifications to SET, SEC, etc. To contact the IR unit, three means are possible:

- (1) Telephone number: 0-2537-4675, 0-2537-4611, and 0-2537-7555
- (2) E-mail address: [ir@pttep.com](mailto:ir@pttep.com)
- (3) Facsimile number: 0-2537-4467

## 8.4.5 Responsibilities of the Board of Directors

Each year, the Board of Directors plays a key role in developing the vision, mission, strategies, work plans, and budgets together with the Management. Directors must perform their duties cautiously and honestly in line with laws, Company regulations, Good Corporate Governance, and the Business Ethics. Directors also monitors that the reporting of operating results in all aspects, be it business results, financial results, and compliance with regulations and policies, be included in their monthly meetings to reinforce PTTEP's efficiency and business ethics.

### (1) Structure

#### (1.1) Components

The Board comprises 15 members, considered suitable size compared with this business. The Board members are categorized as non-executive director and executive director, or as independent directors with the number not less than half of the existing Board composition. There must also be at least three Directors from the private sector. As of 1 January 2012, there are altogether 15 directors comprising

- 14 Non-executive directors (93.34 percent of the Board)



- 1 executive director who is the President and Chief Executive Director

- 12 independent directors (90 percent of the Board)

- 3 directors from private sector

Only one major shareholder prevails at PTTEP, with minor shareholders so widely distributed that they cannot form a statistically significant group. Also, since the current non-Independent Directors and those who do not represent the major shareholder are diverse in professional qualifications or organizations, the current Board of Directors, accordingly, can safeguard the interests of all shareholders as a whole.

Name, bibliography, qualification, experience and shareholding of all directors are disclosed in the attachment 1: The detail of the executives and the controlling persons of the company and the company's website.

## (1.2) Qualifications of PTTEP Directors

(1) Qualifications complied with the Public Company Act, Security and Exchange Law, Rules of the Security and Exchange Commission, the Capital Market Supervisory Board, the Stock Exchange of Thailand and relevant Cabinet Resolution.

(2) Diverse skill mix, among them: industry knowledge, accounting & finance, business judgment, management skills, international markets, business strategy, crisis management, corporate governance, and legal.

(3) Directors can contribute fully for the company and shall not serve as director or executive at more than 5 listed companies. Any director who is absent from the Board of Directors' meeting more than 3 consecutive times without due reason is regarded as disqualify for directorship.

(4) Age not over 70 years

## (1.3) Terms of Directorship and Number of Companies Where Directors Can Serve

The Company has a set of criteria that one-third of the Directors, the total number of which must not exceed 15, must relinquish their directorship after the completion of the three-year term. Moreover, starting from 2006, each Director is not allowed to



serve for more than three consecutive terms. This gives the Company opportunities to select suitable persons for its maximum benefit. An exception is made only for experts in particular areas, based on the Company's consideration. Another key criterion for considering the qualifications of candidates is the number of listed companies where the person is serving as a director or an executive, which should not exceed five. One PTTEP Director is holding a directorship at more than five listed companies, but this has not affected his performance. He has dedicated his time for the Company and has always been present at meetings with valuable suggestions and recommendations made for the Company. PTTEP keeps shareholders informed of meeting attendance records so that shareholders may consider replacements for those who complete their terms. Information regarding directorship holding in other companies is reported in the 56-1 Form and on the Company's website. At present, no director resumes position of director or management in more than 5 listed companies. The term of the Standing Subcommittees, namely the Audit Committee, the Remuneration Committee, the Nominating Committee, the Corporate Governance Committee and the Risk Management Committee is three-year.

#### (1.4) Definition of Independent Director Qualifications

This has been detailed under Topic 8.1.3.

#### (1.5) Policy and Procedures for Serving as Other Companies' Directors of the President and Chief Executive Officer (CEO) and Management

PTTEP values the experience to be acquired by the CEO and other Management members through their director service in other organizations. However, to allow them to devote their time to its business, the Company requires that the CEO and members of the Management may serve as directors of other business entities (apart from self-owned or family businesses) only as necessary and as long as such positions do not compromise the business interests of PTTEP. In any case, prior approval is needed from an authorized person, and the name PTTEP or their positions in PTTEP cannot be used in any way to involve any other company's business. Nevertheless, any PTTEP management or employee assigned to serve as a director, a management committee member, or a secretary in an organization or party involved in the exploration and production business, or a business directly related to it, must return to PTTEP any compensation given to him or her from such capacity. In other cases, he or she can keep the compensation. This information will be disclosed in the



attachment 1: The detail of the executives and the controlling persons of the company. There is no one now working more than 5 listed companies. At present, no management resumes position of director or management in more than 5 listed companies.

### (1.6) Segregation of the Chairman and the CEO and their authority and duties

The Chairman of the Board and the CEO are two separate persons, both elected from Directors. The Chairman stays away from day-to-day management, as there is a clear separation between policy-making, monitoring and assessment, and management execution. The Chairman's leadership plays a key role in ensuring the Board's efficiency and independence of the Management, deciding agenda items under the Board's responsibility along with the CEO, and efficiently chairing Board and shareholders' meetings. This is done by encouraging all Directors to actively take part in such meetings, including raising critical questions, consulting, guiding, supervising, and regularly supporting the operation of the Management through the CEO. At the same time, the Board refrains from interference in routine tasks or business activities of the Management. The Chairman also ensures that the Directors observe PTTEP GCG. Whereas the CEO takes full responsibility of Company management execution under the authority framework assigned by the Board in line with PTTEP's rules. Moreover, to distinguish his roles and responsibilities, the Chairman must not hold any position in any committee.

### (1.7) Independence of Chairman

PTTEP has determined that, in the election of the Chairman, independence will be the foremost factor for deliberation. Unless there is a greater necessity, other Directors are to be considered. Nevertheless, PTTEP's Chairmen have consistently performed their duties independently. Moreover, PTTEP has instituted the Chairman's performance evaluation by the entire Board to gain feedback as guidelines for improving and auditing his performance. The appraisal outcome has been disclosed in Form 56-1 and the annual report.

Apart from the Chairman, all other Directors always express their free views about the Company business in Board meetings and committee meetings, as well as in their other work performances. This is to ensure that the business administration is efficient, proper, transparent, and beneficial to shareholders at large.



## (1.8) Corporate Secretary

This is detailed under Topic 8.1.7.

## (2) The Standing Sub-committees

The Board has appointed standing sub-committees (or simply 'sub-committees'), consisting of qualified Directors, to handle specific tasks for the Board as defined by the scope of each sub-committee. Their qualifications, terms, and scopes of responsibility have been defined in their respective charters. A majority of their members are Independent Directors, and so is the Chairman of each sub-committee, with the exception of the Risk Management Committee. The Chairman of the Board does not belong to any sub-committee. The sub-committees regularly report their findings to the Board and each year report their performance to the shareholders in Form 56-1 and the annual report.

PTTEP constitutes five sub-committees, namely the Audit Committee, Remuneration Committee, Nominating Committee, Corporate Governance Committee (CGC), and Risk Management Committee. Their names, responsibilities, number of meetings, individual attendances, and reports appear under Topics 8.1.2 and 8.5.

## (3) Roles and Responsibilities of the Board

### (3.1) Corporate Governance Policy

Since 2001, the Board has defined a policy on good corporate governance (GCG) and made it a written rule. The policy is revised every year, and the current revision is the sixth one in line with GCG Principles for Listed Companies in the Stock Exchange of Thailand of 2006 and those of The Organisation for Economic Cooperation and Development (OECD). Besides, the policy is comparable with that of leading international oil companies and suggestions from various institutes. The essence of GCG principles involves the rights of shareholders, the equitable treatment of shareholders, role of stakeholders, disclosure and transparency and responsibilities of the Board, which supports efficient management with business ethics by observing the six following principles:

- (i) Accountability
- (ii) Responsibility
- (iii) Fairness and Integrity



- (iv) Transparency
- (v) Creation of Long Term Value to All Stakeholders
- (vi) Promotion of Best Practice

The Company distributed its Good Corporate Governance and Business Ethics booklet to Directors, executives, and all employees for use as a reference and as guidelines to follow. All must sign their names as a commitment to performing to their highest standards based on GCG and Code of Business Conduct. The GCG and Business Ethics booklet was also distributed to joint-venture partners, government agencies overseeing PTTEP, and organizations in frequent contact with PTTEP, and interested persons. The information is also posted on the Company's website under the topic of Good Corporate Governance so that shareholders, investors, and interested persons may easily access to the information.

PTTEP continued to focus on promoting the understanding of GCG and Business Ethics to Directors and all employees through activities including orientation sessions for new Directors and employees including newly appointed management. Furthermore, it also organized CG Visit for the Corporate Governance Committee to meet with management and employees of each group in order to follow-up the GCG promotion and CG Leader performance of the management.

PTTEP has launched a CG Clinic as a channel for staff to get information about GCG and Business Ethics. The Corporate Secretary is responsible for answering queries. PTTEP has developed communication channels of GCG information according to its content for its employees as follows:

- CCS CG Information Center, for general information concerning GCG practices
- CCS Compliance News Alert, for reminders about relevant rules and laws, including insider trading, or for alerts on relevant, upcoming rules and laws.

PTTEP commits to develop the good corporate governance and to have an assessment by the external third party every 3 years in accordance with its Good Corporate Governance and Code of Business Conduct. The assessment had been conducted by TRIS Corporation Limited (TRIS) last year. In 2011, we have improved our performance according to TRIS' recommendations in various aspects such as an enhance understanding on



related transaction of the executives and staff via e-mail monthly or shareholder's rights protection by formulating security trading restriction at some period of time, etc.

### (3.2) Code of Business Conduct

Valuing ethical business conduct, PTTEP regards the business ethics as a precursor to desirable behavior that defines the framework and guiding principles for good business conduct for the Board, management, and all employees to observe for the benefit of efficiency and ethics through respect for rights and treatment of stakeholders equitably, with fairness, and openness to scrutiny. This would not only foster confidence and acceptance of PTTEP's efficiency and transparency, but also foster long-term value for the stakeholders and fairness to all.

PTTEP's Code of Business Conduct was made in a written form and is reviewed annually. In 2011, the business ethics on gifts, entertainment and bribery has been amended to cover the anti-corruption which is the significant issue of concern among the local and international society and the subject has been changed to gifts, entertainment and anti-corruption. The business ethics consists of 13 subjects governing desirable behavior and reflects the organization values in business operation that the Directors, the Management, and all employees must observe. The subjects of the Code of Business Conduct are as follows:

- 1) Respecting the law and political neutrality
- 2) Internal control
- 3) Human resources
- 4) Confidentiality
- 5) Disclosure of information
- 6) Use of inside information
- 7) Conflicts of interest
- 8) Procurement and contracts
- 9) Gifts, entertainment, and anti-corruption
- 10) Accounting and finance
- 11) Use of information technology and communications



12) Safety, security, health, and environment

13) Corporate social responsibility

PTTEP instituted an assessment of 2011 Code of Business Conduct Practice Rating Program in work unit (at the department level upward) to determine management and employees' compliance with the Code of Business Conduct. The results of the assessment will be used for further development and promotion of the code among employees. The results this year showed that the Company received an overall score of 4.15 out of 5, against 4.30 in 2010 (1 = need urgent improvement, 2 = need improvement, 3 = average, 4 = good, and 5 = very good).

### (3.3) Conflicts of interest

Published in the GCG Policy, PTTEP demands that all Directors and employees avoid any conflicts between personal and corporate interests. Here are the essences.

- Decisions about Company business by all Directors and employees must solely be for the best interests of PTTEP without the influence of personal gains or those of related parties.

- All Directors, management, and employees must review and report all conflicts of interest to the Company.

In addition, PTTEP has devised the following measures:

- All Directors, management, and employees strictly comply with laws, rules, and regulations, particularly those of SET concerning connected transactions.

- Avoidance of financial involvement and relationship with external parties by all Directors, management, employees, or their related persons that could compromise PTTEP's interests, bring about conflicts of interest, or hamper efficient business conduct

- When Directors, management, and employees involve in any hiring, selecting, deciding, or approving transactions that may cause them a conflict of interest, they must report to supervisors or those with joint approval authority by using PTTEP's form for



reporting conflicts of interest. Also, they must withdraw from such processes or from undertaking transaction with PTTEP.

- All Directors, management, and employees reviews and self assess on conflicts of interest as specified in annual self-appraisal forms.
- All Directors, management, and employees must immediately notify their potential conflicts of interest, when in doubt. This applies when they or their related persons take part or hold shares in any business entity that engaged in transactions with PTTEP that might cause potential conflicts of interest.

In deliberating connected transactions during 2011, PTTEP complied with the above-mentioned policy, SET rules and regulations on connected transaction of 2003 and the notification of the Capital Market Supervisory Board No. Tow Chaw 21/2551, concerning rules on connected transactions. Furthermore, PTTEP has improved the practice of this matter by proposing all transactions to the Audit Committee's meeting though the approval authority belongs to the management for transparency and fairness. Board resolutions concerning these transactions were strictly made among non-connected Directors. Details about connected transactions of 2011 appear in item 11.

### (3.4) Internal Control and Internal Audit

PTTEP implements an internal control policy that is sufficient and acceptable for Company risks and prevailing business circumstances, or the activities of individual departments. To ensure suitable control measures with prevailing circumstances, environment, and risks, the Internal Audit Department regularly monitors internal control practices.

The Board, management, and all employees collectively decide business procedures to ensure achievement of the objectives with reasonable confidence:

- Efficient and effective operations, including prudent use of resources
- Accurate, reliable, and timely financial reporting
- Compliance with Company policies, laws, and regulations.



The Company's internal control process was based on the regulations of The Committee of Sponsoring Organizations of the Treadway Commission (COSO) and that of the Office of the Auditor General of Thailand, and consists of five components:

(i) Control Environment: A proper control environment fosters control awareness in those conducting business with competence, integrity, and a Business Ethics. It covers the formulation of business directions and policies, business expansion, organization, and clear definition of responsibilities. It entails proper delegation of authorities and responsibilities. In short, PTTEP is determined to uphold the GCG principles.

(ii) Risk Assessment: Recognizing the value of risk management, the Company has set up a risk management department to take charge of risk analysis, assessing probabilities and potential impacts, and taking action to ensure acceptable risk management. PTTEP classifies risk management at the corporate level, linking to its strategic directions and strategies, and the operating level, to be managed by departments. With clear risk management procedures, all risks come under the supervision of the Risk Management Committee. (Details as under Risk Management)

(iii) Control Activities: PTTEP has designed its business to function systematically and efficiently. Also, to prevent and minimize operation risks, the Company operates under four essential regulations: human resource management, finance and accounting, budgeting, and procurement regulations, including the charters of the five sub-committees. These regulations frame PTTEP's management and operation control. The Company has also devised a Delegation of Authority and Signatures (DAS) table for the CEO to clearly delegate authority to the Company's functional management, resulting in practical and easily-tracked courses of action.

PTTEP has developed the Corporate Governance Framework (CGF) indicating the principle and structure of management and supervision between the corporate and other assets. This is applied to make clear about the role, the duty and responsibility in working together between the corporate and the assets. In addition, the company has applied it with the PTTEP Australasia project for the first time. It is expected that the company will apply to cover other projects under the company's operation in the future



In term of working process, PTTEP has worked in details in Project Realization Process (PREP) to make clear and standardize for petroleum exploration and production. The process will be indicated very clear with several stages such as activity, deliverable, Value Assurance Check and Approver. Each stage will be set systematically to minimize the risk and being easier for examination. During the previous year, the company has applied the PREP for the activity of Exploration and Appraisal and Drilling.

In term of compliance, PTTEP has assigned the Corporate Secretary Office to be in charge of monitoring, controlling and supervising the company's operation so that it strictly complies with relevant laws and regulations. This compliance covers all areas where we operate in order to minimize the risk from non compliance. In addition, new rules and regulations shall be notified to all related parties. In case of doubt about legal matters, a consultation shall be sought in order to have a mutual general understanding before complying consistently.

(iv) Information and Communication: The Company institutes efficient and effective communication procedures for information, both internally and externally, for complete, accurate, and timely decision-making. Information is either financial or non-financial. Internally, through the Intranet (via Internal Communication as the information center), PTTEP provides employees with adequate and timely information needed for doing their work, as well as communication between management and employees to improve job coordination and execution to fulfill goals. Externally, the Company has an effective procedure in place to provide sufficient information and deliver reports on its performance to various institutions in a timely and efficient way as required by relevant regulations, for good coordination and business appreciation.

PTTEP has an information control system for the transmission and reception of information and clearly allocates tasks along with responsible persons, authority, and units concerning information and communication technology. In addition, the Company has classified levels of access to confidential information in all its departments to give access to authorized personnel only.

(v) Monitoring and Evaluation: PTTEP has clear control and operating performance assessment, as well as that of risk management performance. Under the risk assessment monitoring procedure, findings are regularly reported to the Risk Management



Committee. Corporate performance is assessed every quarter of the year, with each department reporting its results against plans and performance indicators to the Board. In addition, the Internal Audit department monitors and assesses internal control outcome, and then reports its findings to the Audit Committee.

Findings of internal control assessment for 2011 appear under Topic 10.

### (3.5) Risk Management

Defining a risk management policy for the Company, the Board appointed the Risk Management Committee as a standing sub-committee under a charter of 2005. This sub-committee ensures that PTTEP business operation follows the risk management policy.

In charge of the adequacy of risk management systems and the effectiveness of risk management for the Company, the Risk Management Department not only investigates and indicates risks or anomalies hampering business operation against strategic and operating goals; alleviates or eliminates such risks in a systematic and efficient way; periodically reporting to risk owners, the Management, the Risk Management Committee, and the Board, and summarizes its activities for reporting to the Board for consideration of process adequacy, cultivation of a culture, and awareness for risk management in its business for each company unit.

### (3.6) Board Meetings

As a rule, the Board schedules the meeting dates for each year in advance and has a clear meeting agenda for each month. In 2011, it scheduled each month's meeting for the fourth Thursday and also set aside an off-site meeting for devising strategies, which the Company highly valued. Special meetings were also held as appropriate. There were altogether 18 meetings. In addition, there was one meeting exclusively held among Directors in the absence of the Management before the regular meeting of July 2011. Independent Directors Committee also held their quarterly meetings before the regular meetings of March, June, September, and December. The Board always received invitations to the meetings, draft minutes, and information related to the meeting agenda ahead of meeting dates.

The Chairman and the President and CEO usually consider matters to be included in the agenda of Board meetings. Directors can also propose matters for



consideration and they propose issues both in the Board meetings without executives and those of Independent Directors Committee. In 2011, there were altogether 91 matters raised for consideration. High on the agenda included the business direction and strategic policies, annual budget, financial statements, the consideration of procurement on vessel service from the Thai company, project investment, the election of a new director to fill the vacancy, the appointment of standing subcommittees, improvement or issuance of the Company's regulations, such as, the Compliance Charter B.E. 2011. There were 146 matters raised for acknowledgement, most of them concerning reports of operating results, progress of various projects, portfolio review, relinquishment of onshore concessions, progress of project management, the process and tools for business expansion, Project Look Back during 2000 – 2010, the relinquishment of concession areas, investment in PTTEP share status, position changes of Directors during the year, appointments of executives, activities to support social and environment development, oil price risk management and reports from standing subcommittees. The Board meeting normally lasts about three hours with the presence of the Corporate Secretary, who is responsible for providing directors with advice concerning related regulations to ensure correct practice and for taking minutes of the meeting as well as collecting and filing all documents.

The Board's decision will be based on majority vote by applying one many one vote rule. A director who has conflicts of interest on any particular matter shall not attend the meeting and vote on that matter. In case the vote cast is equal, the Chairman shall exercise a casting vote.

In addition, in these following cases, it is required to obtain approval from the shareholders' meeting not less than three-fourths of the total entitled votes present at the Meeting:

- (1) Sale or transfer of the Company's business wholly or partly to other persons
- (2) Purchase or transfer of other companies of private company's business to PTTEP
- (3) Conclusion, amendment or termination of the contract related to the lease of PTTEP's business for a whole or a substantial part, authorization of other persons to



manage the Company's business or the merging with other entities for the purpose of profit sharing.

- (4) Amendment of the Company's affidavits or Articles of Association.
- (5) Capital increase or decrease, debenture issuance, business and company dissolution.
- (6) In case where PTTEP or its subsidiaries agree to enter into a connected transaction or to acquire or dispose the Company's or its subsidiaries' assets as defined in the SET's Notification as the case may apply.

The meeting minutes covered all essential issues and all the minutes were unanimously approved, particularly for matters requiring deliberation. Names of those meeting participants who gave opinions, queries, and clarifications in each meeting were clearly recorded. All documents were systematically filed under tight security. As a rule, all Directors attended each Board meeting except for due reasons of absence. Whenever possible, Directors sent an apology letter to the Chairman when they could not attend a meeting.

### (3.7) Self-assessment of the Board

PTTEP has stipulated in its GCG the assessment of the performance of the Board, the Chairman, and the Sub-committees – that their performance must be self-assessed against the performance assessment forms and the annual Performance Agreements, and that the performances of the Chairman and Standing Sub-committees must be assessed each year, using the evaluation forms defined by the Nominating Committee.

The Board assessment divided into three parts: individual self-assessment, cross-assessment for individuals, and the entire Board assessment. All sub-committees are evaluated by both the committee member themselves and other directors as well. The Chairmen performance is also assessed by all directors. PTTEP will propose these scores to the Board and disclose the scores in the annual report. PTTEP then gathers the comments and suggestions made in the evaluation forms as guidelines for improving the performance of the Board and the Company.

For 2011, a weighting factor for each topic has been fixed as same as in 2010. As regards the grading scale for these assessments, a '1' stands for 'seriously needs improvement', a '2' for 'fair', a '3' for 'standard', a '4' for 'good,' and a '5' for 'very good'.



- Self-assessment scores by individual Directors averaged 4.66 against 4.74 in the previous year, very close to the highest score of 5

- Cross-assessment scores averaged 4.89, against 4.84 in the previous year, very close to the highest score of 5

The Board as a group performed in two aspects:

- 1) Against Performance Agreements, with a 50% weighting factor, averaged 3.86, against 4.38 in the previous year

- 2) Against self-assessment forms of the entire Board, with a 50% weighting factor, averaged 4.74, same score as last year, very close to the highest score of 5

On the whole, the Board averaged 4.30 against 4.56 in the previous year, very close to the highest score of 5.

- The Audit Committee scored 4.77 against 4.83 in the previous year, very close to the highest score of 5

- The Remuneration Committee scored 4.83 against 4.90 in the previous year, very close to the highest score of 5

- The Nominating Committee scored 4.57 against 4.74 in the previous year and very close to the highest score of 5

- The Corporate Governance Committee scored 5.00 against 4.85 in the previous year, very close to the highest score of 5

- The Risk Management Committee scored 4.87 against 4.79 in the previous year, very close to the highest score of 5

- The Chairman of the Board earned 4.94 from the rest of the Board members, against 4.91 in the previous year, very close to the highest score of 5

The Company will use the Board evaluation result of 2011 for further improvement in 2012 accordingly.

### (3.8) Directors' and Executives' Compensation

#### (3.8.1) Directors and Standing Sub-committees' Compensation



PTTEP's policy for compensation paid to the Directors and members of the Sub-committees is clear and transparent. The Remuneration Committee decides and reviews such compensation based on not only suitability, but also the Board's and Company's performance, practices of leading SET-listed companies of the same size and industry, and the scope of responsibility and the economic situation and proposes it for approval from shareholders' meeting. The 2011 AGM approved Directors' and Sub-committee members' remuneration effective from 2011 onward as proposed by the Remuneration Committee, as detailed below:

(i) Directors' remuneration at the same rate as the remuneration in 2010 detailed as follows:

(i.i) Retainer fee at Baht 37,500/person/month, paid in full each month.

(i.ii) Meeting fee at Baht 25,000/person/meeting, paid only to those in attendance.

(i.iii) Annual bonuses for all Directors will be paid out if dividends are paid to shareholders in a given year; payouts would amount to 0.1% of the net profit for the same year with the total limited to Baht 40 million, paid according to the tenure of each Director.

(i.iv) The Chairman of the Board shall receive an extra 25 percent of the fees and bonus.

(ii) The Standing Sub-committees consisting 5 Sub-committees according to the Company's Article of Association, namely, the Corporate Governance Committee, the Audit Committee, the Remuneration Committee, the Nominating Committee and the Risk Management Committee shall receive the remuneration as follows:

(ii.i) The Audit Committee will receive a meeting fee of 30,000 Baht/person/meeting. This has increased from years 2010 and 2009 for which the payment rate was 25,000 Baht/person/meeting. Rationale for this increase stems from the expanded number of committee responsibilities and from the need for a comparable fee as compared to listed companies of the same size within the same industry.



(ii.ii) The Remuneration Committee, the Nominating Committee, the Corporate Governance Committee and the Risk Management Committee will receive the meeting fee of 25,000 Baht/person/meeting at the same rate of 2010 and 2009.

(ii.iii) The Chairman of Sub-committees shall receive an extra 25 percent of the meeting fee.

(ii.iv) The payment will not apply when the meeting resolutions conducted by circulating.

(ii.v) The committee members who are the executive management top down from the top management will not receive the remuneration.

Individual director's compensation details concerning retainer fees, meeting fees, and bonuses, as well as meeting fees for sub-committees, appear under Topic 8.3.1

### (3.8.2) Compensation Policy for Affiliates'/Subsidiaries' Board Members

This has to do with entities set up by PTTEP to serve as mechanisms for conducting businesses for PTTEP for its best interests under various business conditions. These are treated as Company assets in line with legal criteria or investment conditions. Some of these have operated as full-fledged companies. As a rule, the boards of these companies are kept to a bare minimum, for instance, Executive Vice President, Senior Vice President, and/or Vice President directly responsible for the success of the projects under such subsidiaries and associated companies. PTTEP rules and procedures therefore apply, as these are assets managed in the best interests of the Company.

Executives assigned to serve on behalf of PTTEP as directors of subsidiaries and affiliates engaged in petroleum exploration and production, or directly related ones, including PTTEP Services Co., Ltd., are not entitled to extra compensation, as this is considered PTTEP's direct business and part of routine work. For other cases, they may receive such compensation, as it is considered extra duties, including service for PTT ICT Solutions Co., Ltd., and Energy Complex Co., Ltd. This provision is clearly stated in the GCG principles of PTTEP.



### (3.8.3) CEO's Compensation

The CEO's compensation package is clearly and transparently decided by the Remuneration Committee with the endorsement of the Board. Consideration is given to performance appraisal outcome, Company performance, prevailing industry and business practices of companies with similar sizes, as well as job responsibilities and the economic situation.

Assessment of the CEO's performance is made transparently and clearly according to the result of the Company's 2011 Key Performance Indicator (KPI) by the Remuneration Committee and approved by the Board as check-and-balance to monitor the performance of the CEO against short-term and long-term goals. Besides allowing for GCG practices, this would make the deliberation of the CEO's compensation transparent and suitable while also enabling him to apply the findings to improve performance.

### (3.8.4) Executive Management's Compensation

The Remuneration Committee reviews and recommends the criteria or procedures for defining the salary structure for executive management that are fair and reasonable while reflecting the Company's performance for the Board's approval. Executives' salary structures are determined by market comparison with other leading oil and gas companies' criteria, procedures, pay rates, salary surveys, and with consideration to their individual scopes of accountability.

The CEO decides individual executive management's compensation. Annual merit increases of executive management are tied to individual performance, the Company's performance, and key performance indicators (KPIs) achievement of each division.

To maintain its competitiveness in the oil and gas market, PTTEP participates in annual compensation surveys along with other leading oil and gas companies to obtain sufficient information to report to the Board for possible adjustment in competitive compensation strategy when there is a significant compensation change in the marketplace.



In compliance with GCG and transparency, PTTEP discloses the Management's compensation, including their PTTEP shares and ESOP warrants, in the annual report.

### (3.9) The Board of Directors' and Executives' Training

#### (3.9.1) Directors' Development

##### (i) Orientation for new Directors

PTTEP organizes orientation for each new Director as follows:

(1) The CEO and executives will present information to introduce new director to the Company's business and business direction, petroleum exploration and production knowledge and technique, related laws, PTTEP GCG and business ethics as well as necessary and useful information for effective director performance.

(2) New Director will receive the Director's manual, which provides essential information, such as strategy, related laws and rules, and PTTEP GCG and Business Ethics. The Company will keep updating the Director's manual and improving it for reference in performing directors' duties.

New Director after attending the orientation shall evaluate the orientation efficiency so that the Company can improve it. Moreover, a director elected the Board Chairman will be presented how to be an efficient Board Chairman and how to conduct the Board of Directors' and shareholders' meetings.

##### (ii) Directors' training

PTTEP has knowledgeable Directors who are always eager to learn about their duties and the business, which it always supports. In 2011, directors' trainings are as follows:

Name of Director	Courses
1. Mr. Viraphol Jirapraditkul	1. Role of the Nomination and Governance Committee (RNG 1/2011) organized by IOD



Name of Director	Courses
2. Mr. Tevin Vongvanich	<ol style="list-style-type: none"><li>1. Role of the Compensation Committee (RCC 13/2011) organized by IOD</li><li>2. "The Senior Executive in Justice Class 15" lectured by Court of Justice, Justice College, Judicial Training Institute</li></ol>
3. General Lertrat Ratanavanich	<ol style="list-style-type: none"><li>1. Financial Statements for Directors (FSD 13/2011) organized by IOD</li><li>2. Directors Forum 1/2011 organized by IOD</li><li>3. Role of the Compensation Committee (RCC 13/2011) organized by IOD</li></ol>

12 directors have so far attended Director Certification Program (DCP) and 1 Director attended Accreditation Program (DAP) out of altogether 15 directors. PTTEP has applied membership of Thai Institute of Directors Association for every director and will distribute the relevant training program or the supplementary document for training to the director for further study. Details of the attendance in training provided by IOD as well as other institutions are shown in Attachment 1.

Moreover, PTTEP also invited an external speaker to lecture in order to enhance certain knowledge for the directors and the executives. PTTEP invited Khunying Chada Watanasirikul, the Chairman of IOD, to give the lecture on 'the role of the Board to anti-corruption' in order to express commitment of the Company to develop its business operation in accordance with the good practice for anti-corruption, which is a part of the good corporate governance. PTTEP also regularly informs and reminds Directors of their responsibilities under the law and guidelines on GCG to reinforce their understanding.

### (3.9.2) Executive Development and Succession Planning

PTTEP has a management competency evaluation through an assessment center and compared the evaluation result with PTTEP Management Success Profile consisting of Competency, Personal Attribute, Organization Knowledge and Experience. Each executive will be informed of the result for identifying a development plan to enhance management competency and leadership.



In additional, PTTEP has a systematic succession plan for key position to replace retirement and/or to fill new positions as a result of company expansion. The succession planning will be conducted and selected by the Career Review Board based on qualification, knowledge, capacity and experience in certain positions. Once the Career Review Board can select the successor, the company will set the individual development plan both in short term and long term time so that the successor is ready to work at the scheduled period.

## 8.5 Report of the Sub-committees

### 8.5.1 Report of the Corporate Governance Committee 2011

Valuing compliance with its corporate governance (CG) policy and code of business conduct, PTTEP has continually improved its practices, for which the Board of Directors has assigned the Corporate Governance Committee this responsibility. This sub-committee, consisting of at least three Independent Directors, supervises and promotes compliance with the above-mentioned policy and code across the Company.

The year 2011 this sub-committee ran by 2 groups of committee. The first—serving from January 1, 2011, to February 21, 2011, and acting until April 24, 2011—was chaired by Mr. Vudhibhandhu Vichairatana, with M.R. Pongsvas Svasti and Mr. Chakkrit Parapuntakul serving as members. Serving from April 25, 2011, to April 24, 2014, the current sub-committee is chaired by Mr. Viraphol Jirapraditkul, with Mr. Chakkrit Parapuntakul and Mr. Krairit Euchukanonchai (serving from November 25, 2011, replacing Mr. Bhusana Premanod, who resigned on October 26, 2011) serving as members. All members attended the four meetings held during the year, with the following essences.

(1) Assessed and revised the above-mentioned policy, code of business ethics, and guidelines in compliance with good corporate governance, international practices and leading companies' practices, and recommendations of various institutions for the Board's approval.

(2) Promoted compliance through PTTEP's business and the performance of the Board, executives, and employees with the above-mentioned policy and code by monitoring and recommending promotional activities for each quarter of the year. This applied to PTTEP's actions on complaints filed through the CG Hotline. The sub-committee also met management teams during CG Visit activities to monitor the promotion of CG and executives' CG Leadership



performance. In addition, the sub-committee participated in and stressed the significance of corporate governance at two CG training sessions for new executives and three for new hires in 2011.

(3) Ensured assessment of code of business conduct compliance, which was undertaken internally.

(4) Formulated a CG reporting guideline in line with the Stock Exchange of Thailand criteria for distribution to stakeholders in the annual report.

(5) Considered and submitted to the Board a charter for the Board itself to serve as proper, tangible framework and guidelines for compliance on a par with those of leading companies.

(6) Reviewed the charter for the sub-committee itself and its reports for 2011 to improve its roles and responsibility to include oversight of corporate social responsibility (CSR) work and conform to the charters for other sub-committees, and to disclose reports on its performance for the year.

(7) Considered and submitted to the Board a rule for compliance for PTTEP Group.

(8) Provided recommendations on and joined the monitoring of CSR activities, including CSR plans, to ensure proper, sustainable CSR action plans.

The Corporate Governance Committee regularly reported all meeting outcomes to the Board. Throughout the year, it performed all assignments under its charter of 2005 and amendments with prudence, competence, and independence, and provided candid views for the maximum benefit of PTTEP, the shareholders, and stakeholders.

*Viraphol Jirapraditkul*

(Mr. Viraphol Jirapraditkul)

Chairman of the Corporate Governance Committee



## 8.5.2 Report of the Audit Committee 2011

Consisting of three qualified Independent Directors with experience in finance and accounting, law, and related technical practices, the Audit Committee is chaired by Mr. Ampon Kittiampon, with Mr. Chaikasem Nitisiri and Gen. Lertrat Ratanavanich as members. All are knowledgeable and experienced in reviewing financial statements.

In its performance, the sub-committee relied on the following approach:

- Ensure the efficient execution of PTTEP's audit system
- Emphasis on compliance audit, particularly on the part of subsidiary companies, with a focus on strict and regular compliance
- Promotion of a preventive system to ensure alerting systems for business processes in case of irregularities.

All members performed their duties and responsibilities as assigned by the Board of Directors in accordance with the regulations of the Audit Committee, which aligns with the Stock Exchange of Thailand regulations. During 2011, it held 10 meetings with perfect attendance, completing the tasks summarized below:

(1) Reviewed the quarterly and annual financial statements with the Management and the external auditor (The Office of the Auditor General) and asked questions and provided recommendations to ensure the accuracy and creditability of the accounting system and financial information, as well as accurate, sufficient, and timely disclosure of significant matters to meet the accounting standards and requirements of relevant laws and regulations.

(2) Each quarter of the year, deliberated the Management's discussion and analysis (MD&A) in consultation with the Management and called to attention issues affecting PTTEP's business, which the Management was to define measures to control, monitor, and report periodical progress on.

(3) Reviewed PTTEP's performance to ensure the Company's compliance with the securities and stock exchange laws, the Stock Exchange of Thailand's rules and regulations, and other laws related to PTTEP's business.



(4) Deliberated and supported the disclosure of connected transactions to ensure accuracy and completeness; the Committee viewed that these transactions were reasonably executed for the maximum benefit of PTTEP.

(5) Reviewed PTTEP's internal controls and internal audit system to ensure their adequacy, suitability, and effectiveness. The sub-committee considered the following matters particularly essential:

- Governance of overseas projects where PTTEP was the operator. The sub-committee advocated self-assessment of internal controls to ensure the sufficiency of internal control to accommodate Company expansion. In valuing the governance of joint-venture projects, the sub-committee consulted the management to undertake a review of management systems and the governance of joint-venture projects for greater efficiency.

- Progress tracking of Enterprise Resource Planning project implementation, requiring departments responsible for the project to give periodical reports.

(6) Deliberated and proposed that the Office of the Auditor General continue to serve as the external auditor, decided the audit fees for 2011

(7) Attended meetings with the external auditor and the internal audit department in the absence of PTTEP management to acknowledge the approach and audit plans of the external auditor and problems faced during its audit to seek solutions. This year, two such meetings took place.

(8) Approved the amendment to the 2011 Audit Charter

(9) Reviewed and amended the 2011 regulations of the Audit Committee

(10) Considered the independence of the internal audit department and endorsed the appointment, transfer, and performance merit considerations or punitive measures for the chiefs of the internal audit department.

(11) Endorsed the plans of the internal audit department and reviewed audit result. The sub-committee stressed the planning of audits and alignment of audits with PTTEP's key risks.

(12) Screened the budget and manpower requirements of the internal audit department.



(13) Assessed this year's performance by completing a self-assessment, assessment by the Board of Directors, and assessment by related agencies, the result of the assessment revealed that the performance of the Audit Committee remained effective.

The Audit Committee continued to regularly submit all minutes of its meetings to the Board.

In conclusion, for the year, the Audit Committee's opinions are as follows:

- PTTEP's accounting system and financial reports were accurate, creditable, and contained complete, adequate, and timely essential information.
- PTTEP's internal controls were adequate, suitable, and adaptable to evolving circumstances to suit its present and future business operations while complying with all relevant laws and regulations.
- The Office of the Auditor General—PTTEP's external auditor—was independent and experienced in auditing its financial reports to ensure accuracy and reliability, as well as complete, adequate, and timely disclosure of essential information.
- Based on its review of connected transactions or items with potential conflicts of interest, the Audit Committee regarded PTTEP's disclosure of information as accurate and complete, and such items carried fair conditions and prices, which had won the prior approval of the Management or the Board.

*Ampon Kittiampon*

(Mr. Ampon Kittiampon)

Chairman of the Audit Committee



### 8.5.3 Report of the Nominating Committee 2011

PTTEP's good corporate governance requires the Nominating Committee to be made up of at least three Directors, while the Chairman and the majority of members must be Independent Directors. Bound by the Nominating Committee Charter, they serve for three years at a time.

The current Nominating Committee (serving from 23 June 2009 to 22 June 2012) is chaired by Mr. Sommai Khowkachaporn (Independent Director), with the rest made up of Mr. Chaikasem Nitisiri (Independent Director), who replaced Mr. Chulasingh Vasantasingh on 19 May 2011, and Mr. Pailin Chuchottaworn, who replaced Mr. Prasert Bunsumpun on 1 December 2011.

During the year, the sub-committee performed Board-assigned duties under its own charter prudently, competently, and independently in recruiting Directors, replacing those that had completed their terms or resigned; nominating sub-committee members and chairmen; examining performance agreements for the Board and performance assessment forms for the Board, the Chairman, sub-committees, and the President and CEO. Seven meetings were held during the year with perfect attendance. Members with vested interests duly abstained on relevant matters. All meeting outcomes were reported to the Board.

PTTEP has publicized details about the criteria and processes for recruitment of Directors and the President and CEO in the annual report.

*Sommai Khowkachaporn*

(Mr. Sommai Khowkachaporn)

Chairman of the Nominating Committee

### 8.5.4 Report of the Remuneration Committee 2011

The Board of Directors appointed the Remuneration Committee, which consists mainly of independent directors and of which the Chairman is also an independent director, to consider the compensation suitability for the Board, the sub-committees, and the President and CEO, as well as the salary structure for senior management. The underlying principles taken into consideration are fair and reasonable criteria, procedures, and structures.



One meeting was held during the past year to fulfill the sub-committee's roles and responsibilities (spelled out by the Board in the Remuneration Committee Charter) prudently and independently. All members attended the meeting, and a report of its outcomes was filed to the Board. Below is a summary of its work for the year.

- Deliberation of the compensation for the Board and the sub-committees was based on their respective performance. Taken into consideration were the assessment of the Board as a whole, together with its achievement against the performance indicators defined since the beginning of the year by the Nominating Committee in the performance agreement (with 50% weighting average each), the company performance, alignment with the compensation of listed industry peers and companies of similar sizes, duties and responsibilities of the Board and the sub-committees, together with the overall economic situation.

- Deliberation of the compensation for the CEO & President, incorporating incentives for his commitment to corporate growth and based on his performance against the indicators defined in his annual performance agreement. It was the Nominating Committee's decision that he should have the same KPIs as the corporate ones so as to illustrate his accountability for guiding the company toward its goals. Again, the Remuneration Committee also takes into account the compensation of listed industry peers and companies of similar sizes when considering the CEO & President's remuneration.

- Acknowledgment of executive management's salary structure. The sub-committee regarded that PTTEP's structure, in comparison with those of leading companies in the exploration & production and the oil & gas businesses, still suited present circumstances.

Having executed its duties in a fair, transparent, and reasonable manner so as to bolster confidence among all stakeholders, the sub-committee has also disclosed the compensation for the Board, sub-committees, and executives in this annual report.

*Lertrat Ratanavanich*

(General Lertrat Ratanavanich)

Chairman of the Remuneration Committee



### 8.5.5 Risk Management Committee Report 2011

The PTTEP Risk Management Committee currently consists of four members; chaired by Mr. Pichai Chunhavajira, with Mr. Sommai Khowkachaporn, Mr. Viraphol Jirapraditkul and Mr. Anon Sirisaengtaksin serving as members. During the year, Mr. Chitrapongse Kwangsukstith and Mr. Vudhibhandhu Vichairatana ceased to be directors and members of the committee when they completed their terms at the annual general meeting on 30 March 2011. On 25 April 2011 Mr. Wichai Pornkeratiwat and Mr. Viraphol Jirapraditkul were appointed members. Mr. Wichai Pornkeratiwat resigned from the Board and the committee, with effect from 24 November 2011.

The Risk Management Committee members performed their duties and responsibilities as assigned by the Board of Director and in accordance with the Risk Management Charter. During 2011, the Committee held 12 meetings which can be summarized as follows:

- (1) Improved Enterprise Risk Management Framework to ensure the effectiveness of risk management process to mitigate risk into acceptable levels and evolving circumstances.
- (2) Supported corporate strategy, PTTEP conducted extensive qualitative and quantitative evaluation of its Corporate Risk Profile. The Risk Management Committee was able to provide constructive insight and direction on how to mitigate risks and oversight over the progress of the measures taken to mitigate those risks, which ranged from strategic or operational risks. The Enterprise Risk Management Dashboard established an ownership and a “Risk Owner” responsible for following up and reporting on the current status of identified risks, formulation and execution of appropriate actions with which to mitigate such risks.
- (3) Evaluated and authorized appropriate measures to manage and mitigate critical risks to PTTEP. Provided oversight over new investments and the oil price hedging program, prior to board approval.
- (4) Considered the corporate strategic plan, key performance indicators, 2011 annual budget, and relevant risks prior to board approval.

The committee reported its findings to the Board on a regular basis.



In summary, it is our view that the committee has performed its duties in 2011 prudently and independently while providing candid views to all parties for the benefit of PTTEP, all shareholders, and stakeholders.

*Pichai Chunhavajira*

(Mr. Pichai Chunhavajira)

Chairman of the Risk Management Committee

## 8.6 Use of Inside Information

Details appear under 8.4.2

## 8.7 Personnel

8.5.1 As of 31 December 2011, PTTEP and its subsidiaries (namely PTTEPS, PTTEP Services and PTTEP AA) had a headcount of staff and seconded staff of 3,602, classified by Functional Group as follows:

Functional Group	Number (person)
(1) Domestic Asset	1047
(2) Engineering, Operations and Supply Chain	1005
(3) Finance and Accounting	237
(4) Geosciences and Exploration	194
(5) Human Resources, Reputation and Business Services	372
(6) International Asset	531
(7) Strategy and Business Development	72
(8) Functions reporting to President and CEO	144
<b>Total</b>	<b>3,602</b>

8.5.2 PTTEP's headcount has featured no significant changes and the Company has seen no significant labor disputes over the past three years.



8.5.3 In 2011, the total compensation (salaries, bonuses, and provident fund contributions) of PTTEP, PTTEPS, PTTEP Services staff, and seconded staff amounted to Baht 4,616,935,721.71.

#### 8.5.4 Human Resource Development Policy

In order to improve staff competency and strengthen organizational capability for the continuing expansion of company's business, both in Thailand and overseas, PTTEP has improved its human resources development systems and processes by implementing its competency-based training and development approach to accelerate the development. Based on this competency concept, the company has provided training throughout the past year via the following channels:

(a) In-house and External Training

The company provided in-house training and external training, both locally and overseas, to its staff at all levels, including management. This training comprised a great variety of courses, including technical and professional training, SSHE training, IT training, English language training, organizational knowledge as well as business administration and management training.

(b) Long-term Training and Development Programs

Long-term company training and development programs prepared employees for future roles and assignments in various current and upcoming projects. The programs were provided to selected staff and were conducted from 1-3 years in duration. By this approach, the staff undertook on-the-job training, both in Thailand and overseas, with business partners as well as services companies, such as Total, Chevron, and Schlumberger.

(c) Master's Degree Scholarship Programs

The company provided scholarships to selected employees to help them pursue master's degree studies at world-class top universities in:

- 1) Petroleum geosciences
- 2) Petroleum engineering
- 3) Other engineering that related to company business

Moreover, the company also provided master's degree scholarships in management at Thailand reputable institute such as:



- 1) SASIN Graduate Institute of Business Administration of Chulalongkorn University.
- 2) Offshore Technology and management at the Asian Institute of Technology in Thailand
- 3) Petroleum geosciences (international program) at Chulalongkorn University.



## 9. Internal controls

PTTEP recognizes that effective risk management and internal controls are crucial to efficient business operations as they prevent and mitigate risks that lead to major losses which impact its business operations and ensure its compliance with relevant laws and regulations.

PTTEP has designed, implemented, assessed and continuously improved its internal control system based on the five components of the regulations of The Committee of Sponsoring Organizations of the Treadway Commission (COSO) which are summarized below:

### (1) Control environment

- In place is a clear, suitable organization structure and line of command that are compatible with its current and future business execution.
- In place is a mechanism to clearly define corporate objectives and goals, as is another to define key performance indicators (KPIs) at the corporate, unit, and individual levels.
- In place are a clear corporate governance policy and a clear code of business conduct, both in writing, with an annual review for possible amendment; also in place is a unit-level assessment of conformance to the code.
- The Corporate Governance Committee devises a CG policy and monitors its implementation.
- PTTEP has a written policy on acknowledgment of complaints and protection of whistle-blowers.
- In place is a competency-based training and development system.

### (2) Risk assessment

- Annual and long-term plans are in place with due regard for external risks (oil price and foreign exchange rates) and internal ones (including exploration, new venture, and safety risks).
- The Risk Management Committee devises the corporate risk management policy and a related framework apart from ensuring successful corporate and project risk management, meeting 12 times this year.



- The Operation Risk Committee manages technical aspects and supports project operations for greater efficiency, meeting 10 times this year.

(3) Control activities

- In place are procedure manuals and an authorization manual, which are constantly amended to suit business execution

- Business processes are amended for greater clarity and are standardized for the petroleum exploration and production business. In place is a Value Assurance Check panel with systematic approvers for individual work stages.

- A corporate governance framework has been developed for the corporate unit for PTTEP's various projects for clarity in roles and responsibilities among them.

- In place is a compliance unit responsible for inspecting and supervising business for strict compliance with laws and regulations to minimize risks of non-compliance. It also notifies all parties involved about upcoming laws and regulations.

- In place is employee training on governance and internal controls, as is self-assessment of internal controls. Corporate units and PTTEP-operated projects in other countries conduct the assessment of key business processes under COSO's approach so that these units may appreciate the importance of internal controls, are confident that business processes accompany adequate governance and internal controls, and devise internal control improvement plans once defects are detected.

- In place is a knowledge management unit designed to constantly promote employee education.

(4) Information and communication

- In place are a communication system and channels inside and outside the organization.

- In place is clear job segregation and designation of responsible people for assorted business systems

- Rights for access to confidential information are classified for all units for control of access to data files.



- In place is an information technology (IT) system, with the SAP software applied to enterprise resource planning to link business systems to one single system for efficient analysis and assessment of outcomes, as well as for planning purposes. These units include finance and accounting, procurement, human resources, inventory, and maintenance.

(5) Monitoring and assessment

- In place are clear monitoring and assessment mechanisms in comparison with KPIs. Assessment findings are reported to the Management every month and to the Board every quarter.

- The Audit Committee and Internal Audit review business processes and monitor plans to upgrade oversight and internal controls, based on self-assessment findings of different units and projects to ensure that its internal control oversight system is adequate and effective.

At the Meeting No. 1/2012/344 of January 30, 2012, which the Audit Committee also attend. The Board endorsed the Audit Committee's opinion on the adequacy of internal controls, that is, PTTEP had designed and conformed to its internal controls adequately to minimize key risks potentially harming its operations, and once defects had been detected, it constantly formulated and improved the system to suit its business, both current and future, in conformance to relevant laws and regulations.

In addition, the financial statements of PTTEP and its subsidiaries for 2011, audited by the Office of the Auditor General—the independent and external auditor, have not identified any significant weakness in internal controls which may have an impact or cause disruption in business operations.



## 11. Connected Transactions

### 10.1 Connected Transactions in 2011

#### (1) Regular Commercial or Business-Supporting Items

Connected Company	Shares in PTTEP	Transaction	2011 Value	Necessity and Reason
PTT Plc. (PTT)	65.286 %	1.1 Petroleum product sales: <ul style="list-style-type: none"><li>- Crude oil: 9.50 MMBBL</li><li>- Natural gas: 386,609.00 MMSCF</li><li>- LPG: 86,292.00 metric tons</li><li>- Condensate: 11.87 MMBBL</li></ul>	Baht 140,106 million	Prices were market-based, reflecting those quoted by project partners to PTT.
		1.2 Petroleum product purchase: <ul style="list-style-type: none"><li>- Jet fuel: 1.79 million liters</li><li>- High-speed diesel: 74.37 million liters</li></ul>	Baht 2,177 million	The Board of Directors approved this contract with PTT under price formulas and a five-year agreement (2009 – 2013), under which prices were based on market competitiveness and reasonable conditions.



## (2) Property Leases

Connected Company	Shareholding	Transaction	2011 Value	Necessity and Reason
Energy Complex Co., Ltd.	PTTEP held 50% in Energy Complex Co., Ltd.	The Board of Directors, at Meeting No. 1/2553/307 on January 28, 2010 passed a resolution for PTTEP to sign the lease agreement with Energy Complex for 47,000 square meters for three years, from October 1, 2009, to September 30, 2012, for Baht 1,105 million for office space, storage, and multipurpose areas.	Baht 444 million	The rates for such space leases were assessed by a third party based on the standard method and compatible with market rates.

## (3) Service Agreement with PTT ICT Solutions Co., Ltd.

Connected Company	Shareholding	Transaction	2011 Value	Necessity and Reason
PTT ICT Solutions Co., Ltd. (PTT ICT)	PTTEP holds 20% of shares in PTTEP ICT. Other shareholders consist of PTT (20%), PTTEP Global Chemical (40%), and Thaioil (20%)	The Board of Directors, at Meeting No. 10/2549/254 on September 29, 2006, passed a resolution for PTTEP to sign a service agreement with PTT ICT, which will provide all information and communication technology services (ICT services) for a five-year term starting from July 1, 2006. The total service charge for PTTEP will be approximately Baht	Baht 214 million	This was in compliance with the ICT policy under the PTT Group management concept for synergy.



		702 million.		
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## 10.2 Procedure for approving connected transactions

PTTEP's Board considers all transactions that may involve conflicts of interest, including related or connected transactions, to ensure that they comply with sound business ethics and meet the scrutiny of the Audit Committee for defined items. As well, the Board supervises all transactions to see that they meet the criteria of the Stock Exchange of Thailand and the Securities and Exchange Commission. Information disclosure on potential conflicts must be considered by the Board to ensure accurate and adequate disclosure.

PTTEP has clearly set up a policy on conflicts of interest, covering the procedures to report such conflicts to ensure that the Board and employees strictly comply with the principles concerned. In addition, for any transactions in which Directors, employees, or related persons could derive personal benefits from entering into transactions with the Company, such Directors or employees are not permitted to participate in the approval of such transactions, and the prices must be properly defined in a manner consistent with that offered to any external party.

## 10.3 Comments of the Audit Committee

PTTEP's Audit Committee reviewed and determined that the decisions and actions taken by the Board or the Management were based on the appropriateness and fairness of all connected transactions that occurred in 2011.

## 10.4 Future connected transactions

All future connected transactions will be conducted as part of the normal course of business with neither special favors nor transfers of benefits between PTTEP and its subsidiaries or any connected person. PTTEP will strictly comply with the regulations of SET and other regulatory authorities related to connected transactions based on reasonableness, appropriateness, and fairness, and for the utmost benefits of all shareholders and stakeholders, which is consistent with PTTEP's good corporate governance policy.



## 11. Financial Position and Result of Operation

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

The Company's management has determined the US Dollar as the functional currency and has presented its financial statements in US Dollars in accordance with Thai Accounting Standard No. 21 "The Effects of Changes in Foreign Exchange Rates". In addition, the Stock Exchange of Thailand and the Department of Business Development require entities to present their financial statements in Thai Baht. The Group, therefore, presents its financial statements in Thai baht by translating them from US Dollars.

Therefore, the significant financial information and financial ratios for 2009-2011 are presented in US Dollars to reflect the Group's financial position and results of operations. However, the Group has adopted Thai Financial Reporting Standard No.21 (revised 2009) "The Effects of Changes in Foreign Exchange Rates" since 1 January 2011. Therefore, the financial statements for 2011 have been prepared in US Dollars compared with the financial statements for 2010 restated. The financial statements for 2009 presented for comparative purposes have been translated to US Dollars from the audited financial statement presented in Thai Baht and reported to the Stock Exchange of Thailand on February 17, 2010; however, Thai Financial Reporting Standard No.21 (revised 2009) has not yet been applied for the financial statement for 2009. The statements of financial position as at December 31, 2009 have been translated by using the average closing rate as of December 30, 2009. The Statements of income and statements of cash flows have been translated by using the average mid-rates of 2009.



## 11.1 Summary of Financial Information

PTT Exploration and Production Public Company Limited and Subsidiaries  
Statement of Financial position  
As at December 31,

	2009 *		2010		2011	
	Thousand US Dollar	%	Thousand US Dollar	%	Thousand US Dollar	%
<b>Assets</b>						
<b>Current Assets</b>						
Cash and cash equivalents	1,462,399	16.2	1,979,478	18.5	1,350,530	9.6
Trade receivable - parent company	327,210	3.6	328,153	3.1	484,200	3.4
Trade accounts receivable	100,260	1.1	61,342	0.6	150,155	1.1
Other accounts receivable	-	-	58,669	0.5	201,887	1.4
Inventories	31,436	0.3	18,456	0.2	17,360	0.1
Materials and supplies, net	244,107	2.7	239,295	2.2	271,130	1.9
Other current assets	199,209	2.2	122,737	1.1	262,527	1.9
<b>Total Current Assets</b>	<b>2,364,621</b>	<b>26.2</b>	<b>2,808,130</b>	<b>26.3</b>	<b>2,737,799</b>	<b>19.4</b>
<b>Non-current assets</b>						
Investments in associates	27,640	0.3	24,601	0.2	26,923	0.2
Long-term loans to related parties	15,126	0.2	19,695	0.2	18,485	0.1
Property, plant and equipment, net	6,194,568	68.7	6,794,617	63.5	9,300,912	65.8
Goodwill	-	-	7,314	0.1	329,695	2.3
Intangible assets, net	119,195	1.3	183,187	1.7	1,136,555	8.0
Deferred income tax assets	256,023	2.8	469,797	4.4	510,603	3.6
Other non-current assets	38,175	0.4	386,404	3.6	70,460	0.5
<b>Total Non-current assets</b>	<b>6,650,727</b>	<b>73.8</b>	<b>7,885,615</b>	<b>73.7</b>	<b>11,393,633</b>	<b>80.6</b>
<b>Total Assets</b>	<b>9,015,348</b>	<b>100.0</b>	<b>10,693,745</b>	<b>100.0</b>	<b>14,131,432</b>	<b>100.0</b>
<b>Liabilities and Shareholders' Equity</b>						
<b>Current Liabilities</b>						
Trade Accounts payables	27,532	0.3	67,420	0.6	72,996	0.5
Current portion of long-term debts	309,498	3.4	-	-	687,772	4.9
Short-term loans	57,987	0.6	263,502	2.5	315,545	2.2
Working capital to co-venturers	19,546	0.2	33,418	0.3	35,665	0.3
Accrued expenses	621,127	6.9	603,161	5.6	995,314	7.0
Accrued interest payable	7,148	0.1	18,312	0.2	29,583	0.2
Income tax payable	570,518	6.3	738,359	6.9	802,476	5.7
Financial derivative assets	-	-	976	-	46,419	0.3
Short-term provision	26,175	0.3	130,449	1.2	75,772	0.5
Other current liabilities	44,544	0.5	68,467	0.6	78,255	0.6
<b>Total Current Liabilities</b>	<b>1,684,075</b>	<b>18.7</b>	<b>1,924,064</b>	<b>18.0</b>	<b>3,139,797</b>	<b>22.2</b>
<b>Non-current liabilities</b>						
Bonds	1,466,975	16.3	2,319,410	21.7	2,251,987	15.9
Finance lease liabilities	-	-	-	-	617,861	4.4
Deferred income tax liabilities	316,365	3.5	-	-	617,861	4.4
Other non-current liabilities	449,312	5.0	199,034	1.9	918,666	6.5
Deferred income	-	-	21,722	0.5	25,203	0.4
Provision for decommissioning costs	683,905	7.6	725,804	6.8	703,998	5.0
Other non-current liabilities	125,633	1.4	65,652	0.7	124,998	0.9
<b>Total Non-current liabilities</b>	<b>3,042,190</b>	<b>33.8</b>	<b>3,361,644</b>	<b>31.4</b>	<b>4,679,973</b>	<b>33.1</b>
<b>Total Liabilities</b>	<b>4,726,265</b>	<b>52.4</b>	<b>5,285,708</b>	<b>49.4</b>	<b>7,819,770</b>	<b>55.3</b>
<b>Shareholders' Equity</b>						
<b>Share capital</b>						
Issued and paid-up share capital	129,238	1.4	129,391	1.2	129,475	0.9
Share premium	449,598	5.0	462,090	4.3	469,655	3.3
Currency translation differences	-	-	-	-	-	-
<b>Retained earnings</b>						
<b>Appropriated</b>						
Legal reserve	12,964	0.1	12,964	0.1	12,964	0.1
Reserve for expansion	431,231	4.8	431,231	4.0	431,231	3.1
<b>Unappropriated</b>						
Other components of Shareholders' Equity	3,342,462	37.1	4,345,041	40.6	5,254,384	37.2
Other components of Shareholders' Equity	(76,410)	(0.8)	27,320	0.3	13,953	0.1
<b>Total Shareholders' Equity</b>	<b>4,289,083</b>	<b>47.6</b>	<b>5,408,037</b>	<b>50.6</b>	<b>6,311,662</b>	<b>44.7</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>9,015,348</b>	<b>100.0</b>	<b>10,693,745</b>	<b>100.0</b>	<b>14,131,432</b>	<b>100.0</b>
Book value per share (US Dollar)	1.29		1.63		1.90	
Issued and fully paid-up capital at the end of year (Thousand shares)	3,312,561		3,317,448		3,319,985	

\* Assets and Liabilities have been translated from audited financial statement presented in Thai Baht by using the average closing rate as of December 30, 2009 for Baht 33.3688 per 1 US dollar and Shareholders' Equity has been translated by using historical rate.



PTT Exploration and Production Public Company Limited and Subsidiaries  
Statements of Income  
For the years ended December 31,

	2009 **		2010		2011	
	Thousand US Dollar	%	Thousand US Dollar	%	Thousand US Dollar	%
<b>Revenues</b>						
Sales	3,370,128	96.0	4,329,635	95.5	5,439,722	95.7
Revenue from pipeline transportation	109,742	3.1	110,836	2.4	124,071	2.2
Interest income	10,975	0.3	11,795	0.3	16,239	0.3
Other revenues	19,012	0.5	79,505	1.8	105,061	1.8
<b>Total Revenues</b>	<b>3,509,857</b>	<b>100.0</b>	<b>4,531,771</b>	<b>100.0</b>	<b>5,685,093</b>	<b>100.0</b>
<b>Expenses</b>						
Operating expenses	347,848	9.9	458,390	10.1	625,396	11.0
Exploration expenses	215,170	6.1	86,924	1.9	216,890	3.8
Administrative expenses	147,639	4.2	192,465	4.2	257,409	4.5
Petroleum royalties and remuneration	410,245	11.7	525,329	11.6	645,468	11.4
Depreciation, depletion and amortization	870,798	24.8	1,017,342	22.4	1,117,346	19.7
Loss from derivative financial instruments	-	-	3,468	0.1	11,057	0.2
Loss from Montara incident	265,004	7.6	14,410	0.3	5,331	0.1
Managements' remuneration	4,552	0.1	5,915	0.1	4,571	0.1
Loss from foreign exchange	14,823	0.4	85,854	1.9	64,886	1.1
Other expenses	-	-	47,740	1.1	-	-
Finance costs	54,551	1.6	104,546	2.3	123,557	2.2
<b>Total Expenses</b>	<b>2,330,630</b>	<b>66.4</b>	<b>2,542,383</b>	<b>56.1</b>	<b>3,071,911</b>	<b>54.0</b>
Share of gain (loss) from associates	(521)	-	(1,347)	-	2,430	-
<b>Income before income taxes</b>	<b>1,178,706</b>	<b>33.6</b>	<b>1,988,041</b>	<b>43.9</b>	<b>2,615,612</b>	<b>46.0</b>
Income taxes	(532,560)	15.2	(607,563)	13.4	(1,147,365)	20.2
<b>Net income</b>	<b>646,146</b>	<b>18.4</b>	<b>1,380,478</b>	<b>30.5</b>	<b>1,468,247</b>	<b>25.8</b>
Basic earning per share (US Dollar)	0.20		0.42		0.44	
Diluted earning per share (US Dollar)	0.20		0.42		0.44	
Weighted average number of outstanding ordinary shares (Thousand share)	3,309,079		3,314,906		3,319,078	

\*\* Statements of income have been translated from audited financial statement presented in Thai Baht by using the average mid-rates of 2009 for Baht 34.2858 per 1 US dollar.



PTT Exploration and Production Public Company Limited and  
Subsidiaries  
Statements of Cash flows  
For the years ended December 31,

	2009 **	2010	2011
	Thousand US Dollar	Thousand US Dollar	Thousand US Dollar
Cash flows from operating activities			
Income before income taxes	1,178,706	1,988,041	2,615,612
Adjustment to reconcile income before income taxes to net cash provided by (used in ) operating activities			
Share of (gain) loss from associates	521	1,347	(2,430)
Depreciation, depletion and amortization expenses	870,798	1,017,342	1,117,346
Amortization of prepaid expenses	2,097	4,564	5,714
Amortization of exploration expenses	165,408	46,056	150,450
(Gain) loss on disposal of assets	102,051	(11,266)	1,726
Income recognized from deferred income	2,550	(15,443)	(11,455)
Loss from Montara incident	90,577	-	-
Loss from derivative financial instruments	-	3,468	11,057
Provision for Employee benefits	11,705	13,068	15,264
(Gain) loss on foreign exchange	(24,631)	188,333	(62,284)
Interest income (higher) less than interest expenses	40,561	90,590	103,957
	2,440,343	3,326,100	3,944,957
Changes in operating assets and liabilities	(1,189,490)	(666,048)	(1,036,853)
Net cash provided by operating activities	1,250,853	2,660,052	2,908,104
Cash flows from investing activities			
(Increase) decrease in loans to related related parties	38,799	(2,530)	274
Advance for the purchase of partnership units	-	(342,000)	(1889,560)
Increase in investments in related parties	(16,212)	-	-
Interest received from loans	1,300	606	2,158
Increase in property, plant and equipment	(1,732,168)	(1,944,320)	(2,206,095)
Increase in intangible assets	(105,975)	(43,563)	(114,199)
Net cash used in investing activities	(1,814,256)	(2,331,807)	(4,207,422)
Cash flows from financing activities			
(Decrease) increase in short-term loans	(39,687)	205,269	63,707
Proceeds from long-term loans	-	-	616,303
Redemption of bonds	-	(285,393)	-
Proceeds from bonds	1,165,209	693,683	698,020
Interest paid	(41,973)	(63,191)	(123,106)
Proceeds from common stock	10,705	12,645	7,649
Dividends paid	(389,848)	(379,986)	(560,133)
Net cash provided from (used in) financing activities	704,406	183,027	702,440
Net increase in cash and cash equivalents	141,003	511,272	(596,878)
Cash and cash equivalents at the beginning of the year	1,259,013	1,462,399	1,979,478
	1,400,016	1,973,671	1,382,600
Adjustment for the effect of exchange rate changes on cash and cash equivalents	62,383	5,807	(32,070)
Cash and cash equivalents at the end of the year	1,462,399	1,979,478	1,350,530

\*\* Statements of cashflows have been translated from audited financial statement presented in Thai Baht by using the average mid-rates of 2009 for Baht 34.2858 per 1 US dollar.



## Summary significant financial ratio table

		Financial Ratio		
		2009	2010	2011
<b>Liquidity Ratio</b>				
Current Ratio	(times)	1.40	1.46	0.87
Quick Ratio / Acid Ratio	(times)	1.12	1.26	0.70
Cash flow from Operations to current liabilities ratio	(times)	0.81	1.48	1.19
Account Receivable Turnover	(times)	9.25	10.87	10.87
Collection Period	(days)	39	34	34
<b>Profitability Ratio</b>				
Profit Margin	(%)	18.57	31.09	26.39
Return on Equity ( ROE )	(%)	15.99	28.17	25.06
<b>Efficiency Ratio</b>				
Return on Assets	(%)	8.22	14.05	11.82
Return on Fixed Assets	(%)	27.81	37.24	32.13
Assets Turnover	(times)	0.44	0.45	0.45
<b>Financial Policy Ratio</b>				
Debt - to -Equity	(times)	1.10	0.48	0.61
Times Interest Earned	(times)	33.69	41.56	42.39
Dividend Ratio	(%)	40.00	40.00	40.00
<b>Data Per Share</b>				
Book value per share	(USD)	1.29	1.63	1.90
Net Profit per share	(USD)	0.20	0.42	0.44
Dividend per share	(THB)	2.68	5.03	5.40
<b>Growth Rate</b>				
Total Asset	(%)	26.21	18.66	32.40
Total Liabilities	(%)	51.41	11.84	48.46
Sales	(%)	(12.87)	28.47	25.30
Net Profit	(%)	(46.84)	113.65	6.36



## 11.2 Management Discussion and Analysis of Operation Results in 2011

### 11.2.1 PTTEP Performance

Global economy has slowdown with volatility in the year 2011. The major factors affecting the global economy are sluggish economy in the U.S., public debt crisis in European countries, natural disaster in Japan, and political unrests in the MENA region. These factors supported the rise in oil price, as well as affecting the developing countries and the emerging countries, particularly the Chinese economy, which, while remain strong growth, has lower growth rate due to the lower export volume. These situations have also affected the slowdown of Thai economy. The Office of the National Economic and Social Development Board (NESDB) has revised the economic growth projection for the year from the previous projection of 3.5%-4.0%, down to only 1.5%. The major factors suppressing the Thai economy are the impact from the global economy, which effected especially on the export sector; and the flooding incident in Thailand during the third and fourth quarter, which has broad impact on production sector, agricultural sector, industrial sector, and tourism sector.

On the energy policy, the government issued measures to ease the burden on public spending by temporary deferring the oil-fund collection on certain types of fuels. As a result, short-term fuel demand rose. In the long-term, the government announced the policy to restructure the energy price to reflect the actual cost by gradually floating the prices of Natural Gas for Vehicles (NGV) and Liquefied Petroleum Gas (LPG) starting from January 16th 2012. The energy price restructure will result in the domestic energy demand that is based on the market mechanism and the country's growth rate, in order to prepare for the ASEAN Economic Community (AEC) in the year 2015. In addition, the government increased the target usage of alternative energy from 20% to 25% by the year 2020, which includes promoting the use of natural gas instead of diesel fuel in the transport sector. This may result in the lower than expected growth rate of demand for fossil fuels. Furthermore, the government plans to develop natural gas resources in Thailand-Cambodia overlapping area to meet future demand.

As the world economy and the Thai economy are very fragile and highly uncertain, PTTEP has continuously monitored the economics closely and revised its action plan and investment plan accordingly for consistency with its strategic directions. PTTEP continues to increase efficiency and develop 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 year 2011, the company drilled exploration wells in several projects.

**Arthit project:** The petroleum has been discovered in appraisal well Arthit-14-19 A&B, in which will be developed further.

**PTTEP Australasia project:** The Cash-Maple field locating in Timor Sea, the company has drilled the appraisal well Cash-2. The natural gas has been discovered and the result of this appraisal well is important information for the Preliminary Front End Engineering Design (Pre-FEED) to estimate the potential of the development of the Floating Liquefied Natural Gas (FLNG) project in Timor Sea. FLNG is the project with the purpose to facilitate the development of the natural gas in the remote area. In addition, the company will continue drilling additional appraisal wells in 2012 to confirm the petroleum reserves and evaluate the commercial potential of the field.

As for the exploration block WA-397-P, Browse Basin, in which PTTEP holds 20% participation interest, the exploration well Omar-1 was drilled to the total depth of 5,229 meters and encountered some hydrocarbons which are not sufficient for commerciality.

In addition, the exploration well Kingtree-1 in project AC/P24 and the exploration well Ironstone-1 in project AC/P40 were drilled to the total depth of 1,472 and 1,492 meters respectively and encountered some hydrocarbons which are not sufficient for commerciality.

**Oman 44 Project:** The drilling result of exploration well Munhamir-3 to discover more petroleum reserve in the Munhamir oil field yielded petroleum discovery but not enough quantity for commerciality. Nonetheless, in 2012, PTTEP plans to produce additional condensate from the production well Munhamir-2. The additional production from Munhamir field, together with the current gas and condensate production from Shams gas field, will increase the petroleum production from Oman 44 project.

**Myanmar M3 Project:** Gulf of Martaban, Republic of the Union of Myanmar. As a result of the natural gas discovery in the exploration well, Aung Sinkha-2 PTTEP has accelerated the 3-D seismic survey of 1,000 square kilometers from the first quarter of 2012 to the fourth quarter of 2011, in order to align with the appraisal drilling plan in the fourth quarter of 2012. Currently, PTTEP is preparing the area to be surveyed in conjunction with relevant government agencies. In addition, Myanma Oil and Gas Enterprise (MOGE) has approved in principle for the extension of exploration



period of 1 year, for PTTEP to continue with the drilling of exploration and appraisal wells, in order to prove the commerciality.

**Indonesia Semai II Project:** PTTEP entered into joint venture and hold 28.33% participation interest; with Murphy Semai Oil Co. Ltd. as the operator. An exploration well, Lengkuas-1, was drilled at the water depth of 1,095 meters. The well was drilled to a total depth of 6,500 meters and encountered some hydrocarbons which are not sufficient for commerciality. However, the data gathered from the Lengkuas-1 is crucial for further study and evaluation of petroleum potential of the Semai II project and the basin. The study and evaluation results will be beneficial for the company's exploration and investment plan in the area.

**MTJDA-B17 Project:** There was the drilling of an exploration well and an appraisal well. Petroleum was discovered in 5 wells, which confirms the potential of the area.

**Development:** PTTEP has accelerated the development of various projects to start up production as planned.

**PTTEP Australasia Project, Montara field:** Development of Montara Field is progressing, with the installation of the new wellhead platform completed. The drilling of the production well has commenced, and is expected to begin production in the second half of 2012

Regarding the implementation of the Montara Action Plan proposed to the Australian Government, PTTEP has received approval from the Australian government to continue petroleum exploration and production operations in Australia. The company has continued to report the progress of the implementation of the Action Plan to the Department of Resources and Energy of Australia. PTTEP is currently in the process of taking lessons learned from the Montara incident to analyze and improve the operations as the "Corporate Lessons Learned" including to extend the lesson learned to subsidiaries in other countries. PTTEP remains committed to prevent similar incidents in the future.

For the compensation claim, ending the year 2011, PTTEP has received total compensation claim of USD 119.5 million to date.

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



**Bongkot Project:** The construction and installation of processing platform, wellhead platform, and living quarter platform of the Bongkot South project were completed. The initial production of natural gas is expected by the first half of 2012.

**Myanmar Zawtika Project:** The project is currently under process of the constructions of the processing platform & bridge, wellhead platform and intra-field sealines, offshore gas export pipeline, and onshore gas export pipeline and facilities. PTTEP expects to start up natural gas production from Zawtika Project in 2013.

**Algeria 433a & 416b Project:** The project is currently under process of the design of detailed engineering for processing and pipeline. As for the construction of living quarter and facilities, the technical and commercial evaluation of the contracts have been approved. In addition, the drilling of the development well has begun in late 2011 and expected the initial production within the year 2014.

**Production:** PTTEP continuously put efforts to maintain the current production level and increase production from new projects.

**Canada Oil Sands KKD Project:** Production from Canada Oil Sands KKD Project has commenced in 2011 and has continuously increased its production from the Leismer area. The total production in Leismer area was approximately 3 million barrels in November 2011. The average production rate for the fourth quarter 2011 was approximately 14,300 barrels per day, and the maximum production rate reaching approximately 18,190 barrels per day during December 2011. In addition, an evaluation of installing the fourth stream generator to increase the production rate to 22,000 barrels per day was conducted, prior to the Leismer Expansion plan, which aims to increase production to 40,000 barrels per day in 2015. For the Corner area, the study period has been extended, in order to evaluate in more details of the development plan and overall budget to maximize the value of the investment and construction process. It is expected that there will be a Final Investment Decision (FID) in 2013 and start production by the year 2016.

**Vietnam 16-1 Project:** has commenced its first production on August, 2011 with the initial flow rate of approximately 15,000 barrels per day. The current average production rate is approximately 32,000 barrels per day.

**Arthit Project:** PTTEP and the joint venture partners (the sellers) reviewed the development and production plan of the project to recover the limited natural resources to support the



Kingdom's energy demand and the dependency on the domestic reserves; as a result, the amendment of the Gas Sales Agreement was agreed and signed by the sellers and PTT Public Company Limited (the buyer). The key contents of the amendment include the adjustment of the Daily Contract Quantity (DCQ) from 330 million cubic feet per day (MMSCFD) to 220 MMSCFD and the adjustment in gas price formula to reflect the same level of return.

As for Arthit North Project, PTTEP has been the operator and the sole shareholder of the Arthit North Project since 2006 to produce the natural gas via FPSO (Floating Production Storage and Off-Loading). At present, Arthit North has stopped the production since 28 Nov 2011 due to the FPSO rental agreement ended.

Nonetheless, PTTEP plans to produce the remaining natural gas from the field at Arthit Processing Platform in 2012, where PTTEP and Arthit joint venture partners, Chevron Thailand Exploration and Production, Ltd. (Chevron) and Mitsui Oil Exploration Co., Ltd. (MOECO), have entered into the Arthit North Participation agreement on 29 Dec 2011 with 80% 16% and 4% participation interests respectively. This agreement will be effective in January 2012 in order to deliver the natural gas to produce at Arthit Processing Platform.

**Impact from the flood in Thailand:** During October 2011, there has been a major flood in Thailand, impacting the petroleum transportation of the company. As a result, the production levels have been decreased in some part of S1, PTTEP1, Bongkot, Yadana, and Yetagun projects. However, the mentioned projects were able to resume to normal operation and production rate early in the fourth quarter. In addition, the major flood has also impacted the natural gas demand in the fourth quarter, reducing the natural gas demanded from Bongkot Project, Yadana Project, and Yetagun Project, resulting in the total gas sales volume to decrease 5% compared to the third quarter of 2011.

**Portfolio Management:** PTTEP has operated continuously in the areas of Portfolio Management, which aims to manage risk and to have appropriate level of investment in each project, as well as to have the experienced technology experts as an operator.

**PTTEP Australasia Project:** In March 2011, PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AAA) has signed an agreement to acquire an additional 20 percent from the joint venture in the exploration block AC/RL7 in Australia. As a result, PTTEP AAA has 100% share in the block AC/RL7.



In June 2011, PTTEP Australia Offshore Pty Ltd (a subsidiary of PTTEP) has relinquished the share of 22.21% in block AC/P 36 in Australia after fulfillment of the exploration work commitment.

In July 2011, the Australian Government has granted PTTEP Australasia (Ashmore Cartier) Pty Ltd. (A subsidiary of the PTTEP) to be entitled to 100 % share of the block AC/P54 for the period of six years on July 7, 2011 onwards.

In September 2011, PTTEP Australasia Pty Ltd (a subsidiary of PTTEP) has relinquished the joint venture of 20% in the concession WA-378-P.

**Sidi Abd El Rahman Offshore Project:** PTTEP has carefully analyzed the remaining potential of the concession and decided to inform the partner in January 2011 to relinquished 30% share in project Sidi Abd El Rahman Offshore, Republic of Egypt after fulfillment of the exploration work commitment.

**Myanmar M4 Project:** PTTEP has relinquished the entire area of Exploration Block M4 in the Union of Myanmar after fulfillment of the exploration work commitment. The termination was effective as of May 2011.

**New Zealand Great South Project:** PTTEP has ceased the exploration and relinquished the block PEP 50121, which has been evaluated to have low petroleum potential, to the Government of New Zealand. The relinquishment was approved in August 2011.

In addition, PTTEP New Zealand Limited (PTTEP NZ), a subsidiary of PTTEP and its joint venture have signed a farm-out agreement of the two areas in the New Zealand Great South Project, PEP 50119 and PEP 50120, to Shell New Zealand Limited (Shell), who has extensive experience in the field of deepwater petroleum exploration and production. Both areas are located off the coast of the South Island of New Zealand, which is a frontier area. This farm-out contract resulted in PTTEP share down from 36 to 18 percent whereas Shell's share up to 50 percent. Furthermore, PTTEP NZ is filing for approval of combining the concession block PEP 50119 and PEP 50120, together with the extension of the concession area of 1,367 square kilometers from New Zealand Government in September 2011, in order to have the concession cover all area with potential in the block PEP 50121.

**Indonesia South Mandar, Sadang, and South Sageri Project:** PTTEP has signed a farm-out agreement of the three deep-offshore exploration blocks in the Makassar Strait in Indonesia



to Total. The farm-out agreement includes (1) South Mandar block, where PTTEP (Operator) diluted its share from 67% to 34%, with Talisman (33%) and Total (33%). (2) Sadang block, where PTTEP diluted its share from 40% to 30%, with Total (30%) and Talisman (40% and Operator). (3) South Sageri block, where PTTEP diluted its share from 30% to 20%, with Total (45%), and Talisman (35% and Operator). The dilution in exploration blocks is one of PTTEP strategies to manage our exploration portfolio. PTTEP believes that Total, PTTEP's long time strategic partner in the Gulf of Thailand, will bring its recognized worldwide deep-offshore technology and experiences to the assets in Indonesia.

### 11.2.2 Results of Operations

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

The Company has determined the USD to be its functional currency. However, in 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 for the two years ending 31 December is below:

#### Results of Operations – Full Year Comparison

Earnings summary	Millions of US Dollar		Millions of Baht	
	2011	2010	2011	2010
Total Revenues	5,685	4,532	173,375	143,506
Total Expenses	(3,072)	(2,543)	(93,657)	(80,493)
Operating Income	2,613	1,989	79,718	63,013
Gain(Loss) from the investments in associates	2	(1)	75	(45)
Income before income taxes	2,615	1,988	79,793	62,968
Income Taxes	(1,147)	(608)	(35,045)	(19,194)
Net income	1,468	1,380	44,748	43,774
Diluted earnings per share	0.44	0.42	13.48	13.20
Income from normal operation	1,659	1,292		
Gain(Loss) from non recurring items	(191)	88		
Net income	1,468	1,380		



Regarding the results of operations (Unaudited) for the year 2011, PTTEP and its subsidiaries' totaled a net profit of USD 1,468 million (equivalent to 44,748 million baht) or USD 0.44 per share-diluted (equivalent to 13.48 baht per share-diluted), an increase of USD 88 million or 6% compared with 2010's net profit of USD 1,380 million (equivalent to 43,774 million baht) or USD 0.42 per share-diluted (equivalent to 13.20 baht per share-diluted). Return on shareholder's equity for 2011 was 25%.

However, PTTEP and subsidiaries' net profit amounted to USD 1,468 million for 2011, comprising the recurring net profit for this year, which amounted to USD 1,659 million, and the loss from non-recurring items, which amounted to USD 191 million.

For the results of recurring operations in 2011, PTTEP and subsidiaries' recurring net profit was USD 1,659 million, an increase of USD 367 million or 28% against last year which was USD 1,292 million. Return from normal operation on shareholder's equity for 2011 was 28%.

For 2011, total revenues for PTTEP and its subsidiaries amounted to USD 5,685 million (equivalent to 173,375 million baht), an increase of USD 1,153 million or 25% against last year which was USD 4,532 million (equivalent to 143,506 million baht). The increase was mainly due to higher sales of petroleum of USD 1,110 million, resulting from (1) the higher average petroleum sales price for 2011, which rose to USD 55.49 per BOE compared with 2010 when it was at USD 44.83 per BOE; however (2) the higher sales volume for this year rose to 265,047 BOED compared with for last year of 264,575 BOED. The increased sales volume largely came from natural gas and condensate sales volume from the MTJDA-B17 project and the higher Diluted Bitumen (Dilbit) sales volume from the Canada Oil Sands KKD project, which started its production in the first quarter of 2011, as well as the increased crude oil sales volume from the Vietnam 16-1 project, which started its production in the third quarter of 2011. On the other hand, natural gas and condensate sales volumes from the Arthit decreased resulting from a lower daily contract quantity, in addition to crude oil and natural gas sales volume from the B8/32 & 9A project decreased when compared with the volumes of last year.

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

This year, other income increased, principally because of the recognition of other income from the transfer of interest in Myanmar Zawtika, New Zealand Great South, Indonesia South



Mandar, Indonesia South Sageri and Indonesia Sadang projects. However, other income from insurance claim from Montara incident decreased in 2011. There was a recognition of additional insurance claims amounting to USD 36 million in 2011; whereas, this insurance claim was recognized, amounting USD 44 million last year.

PTTEP and its subsidiaries incurred expenses for 2011 amounting to USD 3,072 million (equivalent to 93,657 million baht), an increase of USD 529 million compared with USD 2,543 million (equivalent to 80,493 million baht) for 2010. The increase was due to the following:

(1) Operating expenses increased amounting to USD 167 million, mainly from the Canada Oil Sands KKD and the Vietnam 16-1 project as the projects started production in 2011.

(2) Exploration expenses increased amounting to USD 130 million due to following reasons:

- Increased exploratory well write-off costs amounting to USD 104 million, primarily from the Indonesia Semai II amounting to USD 57 million, PTTEP Australasia amounting to USD 37 million, Myanmar M3, M7 & M11 (Aung Sinkha-1) amounting to USD 17 million, and Bongkot project amounting to USD 10 million in 2011, while there were exploration well write-off costs amounting to USD 46 million mainly from the Myanmar Zawtika project amounting to USD 31 million in 2010.

- Increased geology and geophysics studies cost amounting to USD 26 million from the Algeria Hassi Bir Rekaiz, Canada Oil Sands KKD and Indonesia Malunda projects amounting to USD 10 million, 8 million and 8 million respectively.

(3) Increased petroleum royalties were occurred amounting to USD 120 million resulting from increased sales revenues.

(4) Depreciation, depletion and amortization expenses escalated, amounting to USD 100 million, mainly from an increase of the number of completed assets of S1, Contract 4, and Arthit projects and from the Canada Oil Sands KKD and the Vietnam 16-1 project, as these projects started production in 2011.

In 2011, PTTEP and subsidiaries incurred higher income tax expenses compared with those of 2010, totaling USD 539 million, in accordance with the higher petroleum



taxable income. Moreover, the changes in foreign exchange of THB against USD resulted in an increase of deferred tax expenses which are non-recurring items.

For 2011, PTTEP and subsidiaries incurred a loss from non-recurring items of USD 191 million. An increased loss of USD 279 million, while against that a gain from non-recurring items from last year of USD 88 million, stemmed from the following:

(1) Increased income tax expenses in 2011 of USD 305 million, mainly owing to the higher deferred income tax liabilities because of a decrease of net assets after they were translated into USD on 31 December 2011, when compared with net assets after they were translated into USD on 31 December 2010, given the Baht depreciation against the USD. This decrease of net assets resulted in a decrease of depreciation expenses in USD and will result in an increase of income tax expenses in the future, accordingly.

(2) Decreased foreign exchange losses of USD 21 million. In 2011, PTTEP and its subsidiaries recognized a foreign exchange loss, which was mainly due to loss from foreign exchange of loans in USD currency from PTTEP Canada Limited; while, PTTEP and its subsidiaries recognized a higher foreign exchange loss in 2010 mainly due to net liabilities in Thai Baht currency.

### 11.2.3 Financial position

	Unit : Millions of US Dollar		Unit : Millions of Baht	
	Dec 31, 2011	Dec 31, 2010	Dec 31, 2011	Dec 31, 2010
Total Assets	14,159	10,694	448,712	322,430
Current Assets	2,765	2,808	87,634	84,669
Non-current Assets	11,394	7,886	361,078	237,761
Total Liabilities	7,847	5,286	248,687	159,371
Current Liabilities	3,167	1,924	100,373	58,013
Non-current Liabilities	4,680	3,362	148,314	101,358
Shareholders' Equity	6,312	5,408	200,025	163,059
Total Liabilities and Shareholders' Equity	14,159	10,694	448,712	322,430

As of December 31, 2011, PTTEP and subsidiaries commanded total assets of USD 14,159 million (equivalent to 448,712 million baht), an increase of USD 3,465 million higher than the total on hand at the end of 2010 at which point total assets were USD 10,694 million (equivalent to 322,430 million baht). This increase was mainly due to (1) an increase of USD



2,506 million in exploration and production assets, mostly from the purchase of 40% of the partnership units in the Canada Oil Sands KKD Project; (2) an increase of USD 1,277 million in intangible assets and goodwill, chiefly from the purchase of the partnership units in Canada Oil Sands KKD Project; (3) a decrease in cash and cash equivalent of USD 629 million mostly from payment for additional investment in oil and gas properties, the payment to purchase 40% of the partnership units in the Canada Oil Sands KKD Project, income tax payment for 2010, dividend payment for the second half of 2010 and for the first half of 2011, together with the net effect of cash inflow from operations, debenture issuance and syndicated loans; (4) a decrease in deposits for the purchase of partnership units of USD 342 million from a final payment to purchase the partnership units in the Canada Oil Sands KKD Project.

Most current assets as of December 31, 2011 were in cash and cash equivalents, parent company accounts receivable, trade accounts receivable, and materials and supplies. A large proportion of the non-current assets were (1) assets used in joint-venture exploration and production, presented under Property, Plant, and Equipment; (2) intangible assets; and (3) deferred income taxes. PTTEP and subsidiaries Current Ratio as of December 31, 2011, was 0.87 times.

PTTEP and subsidiaries had total liabilities of USD 7,847 million (equivalent to 248,687 million baht), an increase of USD 2,561 million higher than the total at the end of 2010, when total liabilities were USD 5,286 million (equivalent to 159,371 million baht), principally due to (1) an increase of current liabilities of USD 1,243 million, primarily from the current portion of the long term debt of USD 688 million, the accrued expenses of USD 392 million, and tax payable of USD 64 million (2) an increase of USD 720 million in deferred income tax liabilities mainly from the Canada Oil Sands KKD project; and, (3) an increase in long term borrowings of USD 618 million from syndicated loans.

PTTEP maintains the company's Short-term Financing Program ("PF") which involves the company's issuance of Bills of Exchange (B/Es) via Public Offering to institutional and high net-worth investors. B/Es are to be issued with a total revolving credit of up to Baht 50,000 million which was approved by the Resolution of the Board of Directors' meeting in February 2009 and again in November 2010. As of December 31, 2011, there were no outstanding B/Es.



PTTEP issued warrants to directors, management and employees of 2 million units on August 1, 2002, 2 million units on August 1, 2003, 2.8 million units on August 1, 2004, 2.8 million units on August 1, 2005 and 2.8 million units on August 1, 2006, with the exercise prices of Baht 111 per share, Baht 117 per share, Baht 183 per share, Baht 278 per share and Baht 456 per share respectively. As of April 12, 2006 the company registered the change in its par value from Baht 5 each with 664.40 million ordinary shares to Baht 1 each with 3,322 million ordinary shares. The change of its par value affected the exercise ratio of the warrants from 1:1 to 1:5 including the exercise price from Baht 111, Baht 117, Baht 183, Baht 278 and Baht 456 to Baht 22.20, Baht 23.40, Baht 36.60, Baht 55.60 and Baht 91.20 respectively.

The last exercise date under the Employee Stock Option Program (ESOP) was July 31, 2011. As of December 31, 2011, the total number of shares exercised was 59.99 million shares.

For the year that ended on December 31, 2011, PTTEP and subsidiaries had a net cash flow from operations of USD 2,994 million, chiefly due to the higher sales revenue resulting from the higher average petroleum sales price during this year.

PTTEP and subsidiaries had a net cash flow used in investment activities of USD 4,325 million, mainly resulting from the higher investment in oil and gas properties for exploration and production from the Canada Oil Sands KKD, Bongkot, PTTEP Australasia and Arthit project of which totaled USD 2,335 million, and also from the final payment of USD 1,890 million completed in accordance with the Partnership Unit Sale Agreement with Statoil Canada Ltd. and Statoil Canada Holdings Corp to purchase 40% of the partnership units in the Canada Oil Sands KKD project.

PTTEP and subsidiaries had a net cash flow provided by financing activities of USD 702 million, mainly enabled by (1) cash received from the bonds issuance of USD 698 million (2) net proceeds from a syndicated loan of USD 616 million (3) net proceeds from a short-term loan of USD 64 million (4) cash received from the issuance of common stock based on the ESOP of USD 7 million; while (5) dividend paid of USD 270 million for the second half of 2010 and USD 290 million for the first half of 2011; and, (6) interest paid of USD 123 million.

As of December 31, 2011, PTTEP and subsidiaries had cash and cash equivalents of USD 1,350 million, a decrease of USD 629 million from the end of 2010.



#### 11.2.4 Impact on Operating Results

During 2011, the global economy has been volatile throughout the year. The major factors against the oil price are global economics issues especially the slowing economy of the U.S., public debt in the EU, and the slowing growth of China. As a result, the world's oil demand has declined. On the other hand, the major factors supporting oil price is the political unrest in the MENA region throughout 2011, resulting in the uncertainty of the supply from the region. The average Dubai oil price in 2011 was USD 105.6 per barrel, higher than 2010's average of USD 78.2 per barrel by approximately 35%. The rising oil prices will positively impact operations in petroleum production and exploration as well as the rising competition.

As the global economy and oil price have been very volatile, PTTEP has continuously monitored the changing economic situation and energy demand and has moved in response to the challenging business environment as follows:

**Responding to the increase in energy demand-** PTTEP has reviewed the supply plan and improved production in order to support the rise in energy demand. PTTEP has been cooperating with the related government agencies to collectively outline the optimal supply plan from both domestic and neighboring countries, in both short and long term, and adjusted its production plan as well as project development plan.

Even though 2011 is filled with the unexpected events, resulting in the reduction of production in some project such as the adjustment of the daily contract quantity (DCQ) of Arthit project, the delay of Montara project due to delay in the procedures with the Australian government in order for PTTEP to continue its operation in Australia, and the major flood in Thailand resulting in some production reduction in S1 and PTTEP1 project. Nonetheless, there have been the efforts to increase production in Bongkot Project, S1 Project, and MTJDA-B17 Project in order to accommodate the loss production in response to the changing environment. In addition, PTTEP constantly developing various technologies in exploration and production and seeking the investment opportunities in order to increase the reserve, with the purpose of meeting the nation's demand.

**Improving the efficiency and cost optimization** - PTTEP regards efficiency improvement and cost optimization as a key component for long term value creation and sustainable growth. PTTEP continues its focus on Operational Excellence (OE) and has initiated



the Operational Benchmarking program in order to excel in operations and able to compete in an increasingly competitive environment

The trend of the cost of petroleum exploration and production industry has been in an increasing trend, as well as the fact that PTTEP has unconventional projects and increasing oil producing projects, in order to maintain the optimal operating cost and maintain the level of return, PTTEP has continuously operates in the area of cost optimization, for instance, the supply chain plus project and the Zero Unplanned Shutdown program.

In addition, PTTEP has its main focus on Safety, Security, Health and Environment (SSHE). One example is that the project Step Change in SSHE was kicked-off in 2011 with the target of being LTI (Loss Time Injury) free organization by 2013. Moreover, there were various initiatives on the environment as PTTEP announced Climate Change Policy in recognizing PTTEP role in supporting global energy demand in parallel with the responsibility in the sustainable development of petroleum resources. A living example of PTTEP environmental initiatives is the "Natural Gas for Community Farmers and Environment Project" where PTTEP constructed a food-processing plant, equipped with natural gas distribution pipeline, for the Banana Processing Cooperative Ltd. of Tambon Nong Tum. The system enabled the cooperative to use natural gas surplus from oil production process from S1 Project instead if the more costly LPG fuel.

**Expanding Abroad** – PTTEP has continuously expand its investment according to the strategic investment by pursuing a suitable investment opportunities, includes seeking strategic partner for investment in various projects abroad, focusing on the strategically targeted countries to be the growth platform for future expansion such as the PTTEP Australasia Project and the Canada Oil Sands KKD Project.

**Managing Portfolio and Reviewing Investment** - PTTEP has review its focused countries by prioritize the countries in order of opportunity and appropriateness in investment by analyzing various factors including petroleum potential, geological factors, government's fiscal regimes, political and business risk, and competitive advantages. In addition, PTETP has set up the portfolio management department in order to manage risks and appropriately allocate the investment in each project to align with the strategic direction of the company.



Managing Risks on oil price volatility - PTTEP continuously conducted oil price hedging programs (Derivative on Oil Price Hedged) for the petroleum products from PTTEP group, using the Brent crude oil price as a reference, as well as closely monitoring the changing economy and events that may impacted the oil price.

Capability Development - PTTEP has been continually improving the capability of the organization, particularly the capabilities urgently required including the deepwater drilling, the long term capability development, and leadership development program; in order to align with the global growth direction. Moreover, PTTEP constantly improves its work process, for instance, the new "Enterprise Resource Planning (ERP)" project which will be an efficient and comprehensive set of integrated and cross-functional business processes for all PTTEP's domestic and overseas operations.



PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES  
STATEMENTS OF INCOME

Unit :

	Consolidated			
	For the fourth quarter		For the year	
	2011	2010	2011	2010
<b>Revenues</b>				
Sales	1,441	1,156	5,440	4,330
Revenue from pipeline transportation	31	30	124	111
Other revenues				
Gain on foreign exchange	50	10	-	-
Interest income	6	3	16	12
Other revenues	54	5	105	79
<b>Total revenues</b>	<b>1,582</b>	<b>1,204</b>	<b>5,685</b>	<b>4,532</b>
<b>Expenses</b>				
Operating expenses	181	99	625	458
Exploration expenses	27	19	217	87
Administrative expenses	90	73	258	193
Petroleum royalties and remuneration	168	144	645	525
Depreciation, depletion and amortization	268	232	1,117	1,017
Other expenses				
Loss on foreign exchange	-	-	65	86
Loss from Montara incident	2	(1)	5	14
FPSO Settlement	-	-	-	48
Loss from derivative financial instruments	4	1	11	4
Management's remuneration	1	1	5	6
Finance costs	34	32	124	105
<b>Total expenses</b>	<b>775</b>	<b>600</b>	<b>3,072</b>	<b>2,543</b>
Share Gain (loss) from the investments in associates	1	-	2	(1)
<b>Income before income taxes</b>	<b>808</b>	<b>604</b>	<b>2,615</b>	<b>1,988</b>
Income taxes	319	222	1,147	608
<b>Net income</b>	<b>489</b>	<b>382</b>	<b>1,468</b>	<b>1,380</b>
<b>Earnings per share</b>				
Basic earnings per share	0.14	0.12	0.44	0.42
Diluted earnings per share	0.14	0.12	0.44	0.42



### 11.3 Audit fee and Significant Accounting Policies

#### 11.3.1 Remuneration of Auditor

##### (1) Audit fee

For the year 2011, PTTEP and its subsidiaries, both domestic and overseas have an Audit fee with the Office of the Auditor General and other Audit firms, totaling an amount of USD 0.8 million.

##### (2) Non-Audit fee

In addition, for the year 2011, PTTEP paid a non-audit services fee to The Office of The Auditor General totaling USD 0.5 million. This fee is charged for the preparation of a Letter of Comfort for the Offering Memorandum for international bond issuance.

#### 11.3.2 Summary of the Auditors' Report for the past 3 years (2009-2011)

The Office of the Auditor General expressed clean opinion in the Auditors' Report on the PTTEP consolidated financial statements for the past 3 years.



12. Other related information

- None -



## Part 2

### Information Certification

The Company has reviewed this Annual Registration Statement with caution and certified that the information disclosed herewith is complete, accurate, and truthful and not cause any misunderstanding and does not omit any important information that needs to be disclosed. Moreover, the Company also certifies that:

(1) The Financial Statement and other financial details that are summarized in this Annual Registration Statement represent complete and accurate information regarding the performance and the cash flow of the Company and its subsidiaries.

(2) The Company maintains an effective disclosure system that will assure the Company discloses all true and important information of the Company and its subsidiaries and for ensuring compliance.

(3) The Company maintains an effective internal control system and for ensuring compliance. The Company has communicated our internal control assessment as of 31 December 2011 to the external auditor and the Audit Committee; this assessment included any default, change and misconduct which may affect the reporting of the Company and its subsidiaries' financial statements.

Therefore, as evidence that these documents constitute the entire set that the Company has certified; the Company has authorized Mr. Theerasak Tancharoenlarp to initial all pages. If any page is without Mr. Theerasak Tanchareonlarp's initials, the Company does not certify that the information given is the true copy.

	<u>Name</u>	<u>Position</u>	<u>Signature</u>
	Mr. Anon Sirisaengtaksin	The President and Chief Executive Officer, Authorized Director who can sign to bind the Company	<hr/> - Signed -
Authorized Person :	Mr. Theerasak Tancharoenlarp	Corporate Secretary	<hr/> - Signed -



**Attachment 1: Information of the Management and Controller of the Company**

1. PTTEP's Board of Directors

As of 1 January 2012, PTTEP's Board of Directors consists of 15 directors. Details of 15 current directors and 9 directors retiring from the office during the year 2011 are as below;

Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(1) Mr. Norkun Sittiphong - Chairman - Chairman of the Independent Director Committee	58	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Ph.D. (Mechanical Engineering), Oregon State University, U.S.A.</li> <li>M.Sc. (Mechanical Engineering), Oregon State University, U.S.A.</li> <li>B. Eng. (Mechanical Engineering), Chulalongkorn University</li> </ul>			Nov. 2011 – Present	● Director	● Thailoil Plc.
					July 2011 – Present	● Chairman	● PTT Plc.
					Dec. 2010 - July 2011	● Director	● PTT Plc.
					Jan. 2008 – Dec. 2010	● Chairman	● PTT Plc.
		2009 - 2011	● Chairman	● PTT Aromatics and Refining Plc.			
		2008 - 2009	● Chairman	● IRPC Plc.			
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>Role of the Chairman Program (RCP) 21/2009</li> </ul>			none		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> <li>The National Defense Course (Class 47), The National Defense College</li> <li>Capital Market Academy Leadership Program (Class 4), Capital Market Academy</li> </ul>			2010 – Present	● Permanent Secretary	● Ministry of Energy
					2008 – Present	● Director	● Nuclear Power Program Development Office
					2003 - 2010	● Deputy Permanent Secretary	● Ministry of Energy



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(2) Mr. Pichai Chunhavajira - Independent Director - Chairman of the Risk Management Committee - Director from private sector	62	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>• Doctor of Philosophy (Honorable Financial Management), Maharakham University</li> <li>• Honorary Degree Doctor of Philosophy (Accounting), Thammasat University</li> <li>• Master of Business Administration in Finance, Indiana University of Pennsylvania, U.S.A.</li> <li>• Bachelor of Accounting, Thammasat University</li> </ul>			2010-Present	• Chairman	• Thairoil Plc.
					2009-2011	• Director	• PTT Plc.
					1998-2011	• Director	• Bangchak Petroleum Plc.
					2005-2011	• Director	• Thai Airways International Plc
			2009-2011	• Director	• IRPC Plc.		
			2005 - 2010	• Director	Thairoil Plc.		
			2005-2009	• Director	• PTT Chemical Plc.		
			1996-2009	• Director	• Dhipaya Insurance Plc.		
			2007-2009	• Director	• PTT Aromatics and Refining Plc.		
			2003-2008	• Director	• Siam Commercial Bank Plc.		
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>• Director Accreditation Program (DAP) 49/2005</li> <li>• Director Certification Program (DCP) 143/2011</li> </ul>			2008 - Present	• Chairman	• Thairoil Ethanol Co.,Ltd.
					2004 - Present	• Director	• Thai Lube Base Plc.
					2000 - 2011	• Director	• Thairoil Power Co.,Ltd.
					2000 -2009	• Chairman	• Thai Petroleum Pipeline Co., Ltd.
					Other organizations		
					2011 - Present	• Director	• Small and Medium Enterprise Development Bank of Thailand
					2008 - Present	• University Member Council	• Assumption University Council



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		Other Training <ul style="list-style-type: none"> <li>• Capital Market Academy Leadership Program (Class 5), Capital Market Academy</li> <li>• The Joint State-Private Sector Regular Course, The National Defense College (Class 13)</li> </ul>			Other organizations		
					June 2011 - Present	• President	• Federation of Accounting Professions
					2011 - Present	• University Member Council	• Thammasat University
					2011 - Present	• President	• Thammasat Association
					2005 - June 2011	• Vice President and Chairman	• The Managerial Accounting Committee, Federation of Accounting Professions
					2003-2009	• Chairman Investment Administration Sub-Committee	• Social Security Fund



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(3) Mr. Sommai Khowkachaporn - Independent Director - Chairman of the Nominating Committee - Member of the Risk Management Committee - Director from private sector	63	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>● Master of Business Administration, Long Island University, New York, U.S.A.</li> <li>● Bachelor of Business Administration, University of the East, Philippines</li> </ul>			Feb. 2011 - Nov. 2011	● Director	● PTT Plc.
		Training of Thai Institute of Directors Association			2004 - present	● Director,	● Thai Lube Base Plc.
		<ul style="list-style-type: none"> <li>● Audit Committee Program (ACP) 4/2005</li> <li>● Director Certification Program (DCP) 27/2003</li> <li>● Finance for Non-Finance Director (FND) 5/2003</li> <li>● DCP Refresher 1/2005</li> </ul>			2008 - 2011	● Director	● PTT Aromatics and Refining Plc.
		Other companies			2008 - 2011	● Director	● IRPC Plc.
		Other organizations	None				
			2011 - present	● Director	● Small and Medium Enterprise Development Bank of Thailand		
			2011 - present	● Director	● Industrial Estate Authority of Thailand		
			1996 - 2009	● Vice Director	● National Science Museum		



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(4) Mr. Viraphol Jirapraditkul - Independent Director - Chairman of the Corporate Governance Committee - Member of the Risk Management Committee	56	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Master of Economics in Energy Economics, University of Calgary, Canada</li> </ul>			None		
		<ul style="list-style-type: none"> <li>Master of Economics, National Institute of Development Administration</li> </ul>			Other companies		
		<ul style="list-style-type: none"> <li>Bachelor of Economics, Thammasat University</li> </ul>			None		
		Training of Thai Institute of Directors Association			Other organizations		
		<ul style="list-style-type: none"> <li>Director Certification Program (DCP) 116 /2009</li> <li>Role of the Nomination and Governance Committee (RNG) 1/2011</li> </ul>			March 2011-present	<ul style="list-style-type: none"> <li>Director General</li> </ul>	<ul style="list-style-type: none"> <li>Department of Energy Business</li> </ul>
Other Training	2006 - March 2011	<ul style="list-style-type: none"> <li>Director General</li> </ul>	<ul style="list-style-type: none"> <li>Energy Policy and Planning Office, Ministry of Energy</li> </ul>				
	2007 - Feb. 2011	<ul style="list-style-type: none"> <li>Board Member</li> </ul>	<ul style="list-style-type: none"> <li>Electrical and Electronics Institute</li> </ul>				
	2007 - Feb. 2011	<ul style="list-style-type: none"> <li>Board Member</li> </ul>	<ul style="list-style-type: none"> <li>The Energy Fund Administration Institute</li> </ul>				
<ul style="list-style-type: none"> <li>Senior Executive Service Program (Class 1), Office of the Civil Service Commission</li> </ul>	2008 - Present	<ul style="list-style-type: none"> <li>Board Member</li> </ul>	<ul style="list-style-type: none"> <li>Ramkhamhaeng University Council</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>• Program for Chief Information Officer, Office of the Civil Service Commission and National Electronics and Computer Technology Center</li><li>• National Defense College 2007</li></ul>					



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(5) Mr. Tevin Vongvanich - Director	53	Education	75,500 Shares (0.0022%)	None	Other listed companies		
		<ul style="list-style-type: none"> <li>• Master of Sciences (Petroleum Engineering), University of Houston, U.S.A.</li> <li>• Master of Sciences (Chemical Engineering), Rice University, U.S.A.</li> <li>• Bachelor of Engineering (Chemical Engineering), Chulalongkorn University</li> </ul>			2009 - Present	• CFO	• PTT Plc.
		Training of Thai Institute of Directors Association			2010 - Present	• Director	• Thailoil Plc.
		<ul style="list-style-type: none"> <li>• Director Certification Program (DCP) 21/2002</li> <li>• Financial Statements for Directors (FSD) 6/2009</li> <li>• Role of the Compensation Committee (RCC) 12/2011</li> </ul>			2009 - 2011	• Director	• PTT Chemical Plc.
		Other Training			2009 - 2011	• Director	• PTT Aromatics and Refining Plc.
		<ul style="list-style-type: none"> <li>• Senior Executive Program (S.E.P. 7), Sasin Graduate Institution of Business Administration of Chulalongkorn University</li> <li>• Capital Market Academy Leadership Program (Class 6), Capital Market Academy</li> <li>• Program for Global Leadership, Harvard Business School, U.S.A.</li> <li>• Democracy for Senior Executives Program (Class 10), King Prajadhipok's Institute</li> <li>• National Defence College (NDC 2009)</li> </ul>			2009 - 2010	• Director	• Bangkok Aviation Fuel Services Plc.
			2007 - 2010	• Director	• Bangchak Petroleum Plc.		
			Other companies				
			2009 - 2011	• Chairman	• PTT ICT Solutions Co.,Ltd.		
			2008 - 2011	• Director	• PTT International Co.,Ltd.		
			Other organizations				
			2010 - Present	• Chairman	• Thailand Management Association		



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(6) Mr. Chakkrit Parapuntakul - Independent Director - Member of the Corporate Governance Committee	52	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>● Master of Business Administration, Angelo State University, Texas, U.S.A.</li> <li>● Bachelor of Accounting, Thammasat University</li> </ul>			2008 - Present	<ul style="list-style-type: none"> <li>● Advisor to the Audit Committee</li> </ul>	<ul style="list-style-type: none"> <li>● Eastern Water Resources Development and Management Plc.</li> </ul>
		Training of Thai Institute of Directors Association			2004 - Present	<ul style="list-style-type: none"> <li>● Chairman of the Audit Committee</li> </ul>	<ul style="list-style-type: none"> <li>● Pongsaap Plc.</li> </ul>
		<ul style="list-style-type: none"> <li>● Director Accreditation Program (DAP), 8/2004</li> <li>● Audit Committee Program (ACP), 5/2005</li> </ul>			Other companies		
		Other Training			2010 - 2011	<ul style="list-style-type: none"> <li>● Chairman</li> </ul>	<ul style="list-style-type: none"> <li>● Thailand Post Co., Ltd.</li> </ul>
		<ul style="list-style-type: none"> <li>● Capital Market Academy Leadership Program (Class 11), Capital Market Academy</li> <li>● National Defense College (Class 52)</li> <li>● Program for Chief Information Officer(Class 46), Office of the Civil Service Commission</li> </ul>			Other organizations		
	2009 -Present	<ul style="list-style-type: none"> <li>● Director General</li> </ul>	<ul style="list-style-type: none"> <li>● Public Debt Management Office</li> </ul>				
	2008-2009	<ul style="list-style-type: none"> <li>● Deputy Director-General</li> </ul>	<ul style="list-style-type: none"> <li>● Public Debt Management Office</li> </ul>				
	2002-2008	<ul style="list-style-type: none"> <li>● Director</li> </ul>	<ul style="list-style-type: none"> <li>● International Finance Bureau, Public Debt Management Office</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>Executive Development Program (EDP) Class 66, Kellogg School of Management, Chicago</li></ul>			2011 - Present	<ul style="list-style-type: none"><li>Deputy Chairman</li></ul>	<ul style="list-style-type: none"><li>Financial Institutions Development Fund (FIDF)</li></ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(7) Mr. Ampon Kittiampon - Independent Director - Chairman of the Audit Committee	56	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Ph.D. (Applied Economics), Clemson University, South Carolina, U.S.A.</li> <li>M.S. (Economics), Northeastern University, Boston, U.S.A.</li> <li>Bachelor of Arts (Social Sciences), Kasetsart University</li> </ul>			2009 - Present	<ul style="list-style-type: none"> <li>Chairman,</li> </ul>	<ul style="list-style-type: none"> <li>Thai Airway International Plc.</li> </ul>
					2005 - 2011	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT Aromatics and Refining Plc.</li> </ul>
					2004 - 2011	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> </ul>
					Other companies		
					none		
					Other organizations		
	Training of Thai Institute of Directors Association	2010 - Present	<ul style="list-style-type: none"> <li>Secretary General to the Cabinet</li> </ul>	<ul style="list-style-type: none"> <li>The Secretariat of the Cabinet</li> </ul>			
<ul style="list-style-type: none"> <li>Director Certification Program (DCP) 80/2006</li> </ul>	2006 - Present	<ul style="list-style-type: none"> <li>Member</li> </ul>	<ul style="list-style-type: none"> <li>Council of State</li> </ul>				
Other Training	2004 - Present	<ul style="list-style-type: none"> <li>Member</li> </ul>	<ul style="list-style-type: none"> <li>Bank of Thailand</li> </ul>				
<ul style="list-style-type: none"> <li>Chief Information Officer (CIO) (Class 3), The Office of the Civil Service Commission (OCSC) and National Science and Technology Development Agency</li> <li>The National Defence Course (Class 45), The National Defence College</li> </ul>	2004 - Present	<ul style="list-style-type: none"> <li>Member</li> </ul>	<ul style="list-style-type: none"> <li>Monetary Policy Committee</li> </ul>				
	2011 - Present	<ul style="list-style-type: none"> <li>Honorary Committee</li> </ul>	<ul style="list-style-type: none"> <li>The Council of Walailak University</li> </ul>				
	2011 - Present	<ul style="list-style-type: none"> <li>The Expert Judicial Administration Commissioner</li> </ul>	<ul style="list-style-type: none"> <li>The Office of Judiciary</li> </ul>				
	2004 - Sep. 2010 and 2011 - Present	<ul style="list-style-type: none"> <li>Civil Service Commissioner</li> </ul>	<ul style="list-style-type: none"> <li>The Office of the Civil Service Commission</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>• Innovation for Economic Development (IFED), Harvard Kennedy School</li></ul>			2004 - 2010	<ul style="list-style-type: none"><li>• Secretary General</li></ul>	<ul style="list-style-type: none"><li>• The Office of National Economic and Social Development Board</li></ul>
					2004 - 2010 2006 - 2008	<ul style="list-style-type: none"><li>• Committee</li><li>• Member</li></ul>	<ul style="list-style-type: none"><li>• The Board of Investment</li><li>• The National Legislative Assembly</li></ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(8) Mr. Chaikasem Nitisiri - Independent Director - Member of the Audit Committee and - Member of the Nominating Committee	63	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Honorary Doctorate Degree of Laws, Ramkhamhaeng University</li> <li>Honorary Doctorate Degree of Laws, North-Chiang Mai University</li> <li>LL.M. Columbia University, U.S.A.</li> <li>Thai Barrister-at-Law</li> <li>LL.B. (Honours) Chulalongkorn University</li> </ul>			2008 - Present:	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Thaioil Plc.</li> </ul>
					2008 - 2011	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> </ul>
					2007 - 2010	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Thai Airways International Plc.</li> </ul>
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>Directors Certification Program (DCP) Class 8/2001</li> <li>The Role of the Chairman Program (RCP) Class 16/2007</li> <li>Financial Statements for Directors (FSD) Class 5/2009</li> </ul>			None		
					Other organizations		
	2009 - Present:	<ul style="list-style-type: none"> <li>Senior Public Prosecutor (Advisor To The Attorney General)</li> </ul>	<ul style="list-style-type: none"> <li>Office of the Attorney General</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<p>Other Training</p> <ul style="list-style-type: none"> <li>● Certificate in International Procurement, Georgetown University, U.S.A.</li> <li>● Certificate, National Defense College, Class 38</li> <li>● Certificate, Politics and Governance in Democratic Systems for Executives Course Class 9/2006</li> <li>● Capital Market Academy Leader Program Class 5/2007</li> <li>● Public Director Certification Program, Public Director Institute (PDI) Class 6/2010 King Prajadhipok's Institute</li> </ul>			<p>2008 - Present</p> <ul style="list-style-type: none"> <li>● Director, Executive Board Chairman</li> </ul> <p>2007 - Present</p> <ul style="list-style-type: none"> <li>● Member</li> </ul> <p>2006 - Present</p> <ul style="list-style-type: none"> <li>● Member</li> </ul> <p>2003 - Present</p> <ul style="list-style-type: none"> <li>● Member</li> </ul> <p>2007 - 2009</p> <ul style="list-style-type: none"> <li>● Attorney General</li> </ul> <p>2003 - 2007</p> <ul style="list-style-type: none"> <li>● Deputy Attorney General</li> </ul>	<ul style="list-style-type: none"> <li>● Government Housing Bank</li> <li>● Nation University Board</li> <li>● Saint John University Board</li> <li>● Council of State Committee</li> <li>● Office of the Attorney General</li> <li>● Office of the Attorney General</li> </ul>	



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(9) General Lertrat Ratanavanich - Independent Director - Vice Chairman of the Independent Director Committee - Chairman of the Remuneration Committee - Member of the Audit Committee	64	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>● MSSM, University of Southern California, USA.</li> <li>● SMCE, Massachusetts Institute of Technology, USA.</li> <li>● BSCE, The Citadel, USA.</li> </ul>			None		
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>● Director Certification Program</li> <li>● The Role of Chairman</li> <li>● Finance for Non-Finance Director</li> <li>● Financial Statements for Directors (FSD) 13/2011</li> <li>● Directors Forum 1/2011</li> <li>● Role of the Compensation Committee (RCC) 13/2011</li> </ul>			None		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> <li>● Executive Program (Class 4), Capital Market Academy</li> <li>● National Defense College, class 5</li> </ul>			2005 - Present	<ul style="list-style-type: none"> <li>● Justice</li> </ul>	<ul style="list-style-type: none"> <li>● The highest judicial court-martial member</li> </ul>
					2009 - 2011	<ul style="list-style-type: none"> <li>● Vice Chairman (2)</li> </ul>	<ul style="list-style-type: none"> <li>● The Senate Affairs Committee</li> </ul>
	2009 - 2011	<ul style="list-style-type: none"> <li>● Director and Chairman</li> </ul>	<ul style="list-style-type: none"> <li>● Subcommittee Study on Constitution Amendments and Other Related Laws, in Solidarity Committee for Political Reform and Study of the Constitution Amendments, the National Assembly</li> </ul>				
	2008 - 2011	<ul style="list-style-type: none"> <li>● Senator, Chairman</li> </ul>	<ul style="list-style-type: none"> <li>● The Senate Committee on Energy</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>• National Security and International Security, Harvard University, USA</li><li>• Senior Managers in Government, Harvard University, USA</li></ul>			2008 - 2011	<ul style="list-style-type: none"><li>• Member</li></ul>	<ul style="list-style-type: none"><li>• King Prajadhipok's Institute Council</li></ul>
					2007 - 2008	<ul style="list-style-type: none"><li>• Director</li></ul>	<ul style="list-style-type: none"><li>• Industrial Estate Authority of Thailand</li></ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(10) Mr. Krairit Euchukanonchai - Independent Director - Member of the Corporate Governance Committee - Director from private sector	56	Education	Spouse: 10,000 Shares Total: 10,000 Shares (0.0003%)	None	Other listed companies		
		<ul style="list-style-type: none"> <li>MBA (Banking and Finance), North Texas State University, U.S.A.</li> <li>Bachelor of Science, Chulalongkorn University</li> </ul>			2011 - Present	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT Public Company Limited</li> </ul>
		Training of Thai Institute of Directors Association			2006 - Present	<ul style="list-style-type: none"> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>Krung Thai Asset Management Public Company Limited</li> </ul>
		<ul style="list-style-type: none"> <li>Director Certification Program (DCP) 59/ 2005</li> </ul>			2001 - 2011	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Siam Commercial New York Life Insurance Public Company Limited</li> </ul>
		Other companies					
		None					
		Other organizations					
					2008 - 2011	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Office of Small and Medium Enterprises Promotion (OSMEP)</li> </ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(11) Mr. Pailin Chuchottaworn - Director - Member of the Nominating Committee - Member of the Remuneration Committee	55	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>● Ph.D. of Engineering (Chemical Engineering) Tokyo Institution of Technology, Japan</li> <li>● Master of Engineering (Chemical Engineering) Tokyo Institution of Technology, Japan</li> <li>● Bachelor of Engineering (Chemical Engineering) (Hons.), Chulalongkorn University</li> </ul>			Sep. 2011 - Present	<ul style="list-style-type: none"> <li>● President and Chief Executive Officer</li> </ul>	<ul style="list-style-type: none"> <li>● PTT Plc.</li> </ul>
		Training of Thai Institute of Directors Association			2009 - Present	<ul style="list-style-type: none"> <li>● Director and Secretary to the Board</li> </ul>	<ul style="list-style-type: none"> <li>● IRPC Plc.</li> </ul>
		<ul style="list-style-type: none"> <li>● Director Certification Program (DCP) 51/2004</li> <li>● Director Accreditation Program (DAP) 24/2004</li> <li>● Finance for Non-Finance Director (FND) 14/2004</li> </ul>			June 2011 - Sep. 2011	<ul style="list-style-type: none"> <li>● Chief Operations Officer, Upstream Petroleum and Gas Business Group, Acting Chief Executive Officer,</li> </ul>	<ul style="list-style-type: none"> <li>● IRPC Plc.</li> </ul>
					2009 - May 2011	<ul style="list-style-type: none"> <li>● Senior Executive Vice President, PTT, working as Chief Executive Officer</li> </ul>	<ul style="list-style-type: none"> <li>● IRPC Plc.</li> </ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		Other Training			Other companies		
		<ul style="list-style-type: none"> <li>● PTT Executive Leadership Program, GE Crotonville, U.S.A.</li> <li>● NIDA Executive Leadership Program 2007, Wharton University of Pennsylvania, U.S.A.</li> <li>● Industrial Liaison Program (ILP) 2005, Massachusetts Institute Technology, U.S.A.</li> <li>● Top Executive Program in Commerce and Trade (TEPCOT) Year 1, University of the Thai Chamber of Commerce</li> <li>● Capital Market Academy Leadership Program (Class 8), Capital Market Academy</li> <li>● The Joint State - Private Sector Course, National Defense College, (Class of 22nd)</li> </ul>			May 2011 - Sep 2011 2006 - May 2011 2008 - 2009  2006 - 2008  June 2011 - Sep 2011	<ul style="list-style-type: none"> <li>● Chairman</li> <li>● Director</li> <li>● Senior Executive Vice President, Petrochemicals &amp; Refining Business Unit, PTT, working as President</li> <li>● Executive Vice President, Petrochemicals &amp; Refining Business Unit, PTT, working as President</li> <li>● Chairman</li> </ul>	<ul style="list-style-type: none"> <li>● PTT Asahi Chemical Co., Ltd.</li> <li>● PTT Polymer Marketing Co., Ltd.</li> </ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>The 7<sup>th</sup> "Corporate Governance for Directors and Top Executives of State Enterprises and Public Organizations", Year 2011 King Prajadhipok's Institute</li></ul>			2009 - June 2011 2008 - 2009	<ul style="list-style-type: none"><li>Director,</li><li>Senior Executive Vice President, Petrochemicals &amp; Refining Business Unit, PTT, working as President</li></ul>	<ul style="list-style-type: none"><li>PTT Polymer Marketing Co., Ltd.</li><li>PTT Polymer Marketing Co., Ltd.</li></ul>
					Other organizations		
					None		



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(12) Ms. Varanuj Hongsaprabhas Independent Director	63	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>• M.S. (Financial Management), North Carolina State University</li> </ul>			2010 - 2011	• Director	• TOT Plc.
		<ul style="list-style-type: none"> <li>• B.A. (Economics), North Carolina State University</li> </ul>			Other companies		
					2009 - 2010	• Director	• ACT Mobile Co., Ltd
		Training of Thai Institute of Directors Association			Other organizations		
<ul style="list-style-type: none"> <li>• Director Certification Program (DCP) 84/2007</li> <li>• The Role of Chairman (RCP) 23/2010</li> <li>• Audit Committee Program (ACP) 22/2008</li> </ul>	2006 - 2009	• Director	• Port Authority of Thailand				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(13) General Pornchai Kranlert Independent Director	60	Education		None	Other listed companies		
		<ul style="list-style-type: none"> <li>• Master of Public Administration, National Institute of Development Administration</li> <li>• Bachelor of Political Science, Ramkhamhaeng University</li> </ul>			2005 – 2006	<ul style="list-style-type: none"> <li>• Director</li> </ul>	<ul style="list-style-type: none"> <li>• IRPC Plc.</li> </ul>
		Other Training			Other companies		
		<ul style="list-style-type: none"> <li>• National Defense College (Class 44)</li> <li>• Capital Market Academy (Class 8)</li> </ul>			None		
					Other organizations		
					2007 – 2011	<ul style="list-style-type: none"> <li>• Special Advisor</li> </ul>	<ul style="list-style-type: none"> <li>• Office of the Permanent Secretary for Defence</li> </ul>
	2006 – 2007	<ul style="list-style-type: none"> <li>• Deputy of Chief of Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Royal Thai Armed Forces Headquarters</li> </ul>				
	2005 – 2006	<ul style="list-style-type: none"> <li>• Assist of Commander in Chief</li> </ul>	<ul style="list-style-type: none"> <li>• Royal Thai Army</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(14) Mr. Manas Jamveha Independent Director	55	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Master of Business Administration, Sukhothai Thammathirat Open University</li> <li>Master of Political Science, Thammasat University</li> <li>Bachelor of Law, Thammasat University</li> </ul>			None		
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>Directors Certification Program (DCP) 71/2008</li> </ul>			None		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> <li>Certificate on National Defense (Class 50)</li> <li>Certificate from Public Director Institute (PDI 1)</li> <li>Certificate on Top Executive Political Top Executive Program</li> <li>Executive Development Program, Kellogg School of Management, Northwestern University, U.S.A.</li> <li>Middle Management Professional, Revenue Canada</li> </ul>			2011 - Present	<ul style="list-style-type: none"> <li>Deputy Permanent Secretary</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Finance</li> </ul>
					2010 - 2011	<ul style="list-style-type: none"> <li>Inspector General</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Finance</li> </ul>
	2008 - 2010	<ul style="list-style-type: none"> <li>Advisor on Fiscal System Development</li> </ul>	<ul style="list-style-type: none"> <li>Comptroller General's Department</li> </ul>				
	2005 - 2008	<ul style="list-style-type: none"> <li>Deputy Comptroller General</li> </ul>	<ul style="list-style-type: none"> <li>Comptroller General's Department</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(15) Mr. Anon Sirisaengtaksin - Director - President and Chief Executive Officer - Member of the Risk Management Committee	59	Education	106,000 shares (0.0031%)	None	Other listed companies		
		<ul style="list-style-type: none"> <li>The Honorary Degree of Doctor of Public Administration, Bangkokthonburi University</li> <li>Master of Business Administration, Thammasat University</li> <li>Bachelor of Sciences, Chulalongkorn University</li> </ul>			2008 - Present	<ul style="list-style-type: none"> <li>Senior Executive Vice President seconded to PTTEP</li> </ul>	PTT Plc.
		Training of Thai Institute of Directors Association			2004 - 2009	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Bangkok Polyethylene Plc.</li> </ul>
		<ul style="list-style-type: none"> <li>Director Accreditation Program (DAP) 52/2006</li> <li>Director Certification Program (DCP) 73/2006</li> </ul>			2004 - 2009	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Thai Lube Base Plc.</li> </ul>
		Other Training			2002 - 2008	<ul style="list-style-type: none"> <li>Senior Executive Vice President Corporate Strategy and Development</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> </ul>
		<ul style="list-style-type: none"> <li>Certificates in Project Investment Appraisal and Management, Global Leadership, Harvard University, U.S.A.</li> </ul>			Other companies		
	2010 - Present	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTTEP FLNG Holding Co., Ltd.</li> </ul>				
	2010 - Present	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT FLNG Ltd.</li> </ul>				
	2009 - Present	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Bangkok Commercial Asset Management Co., Ltd.</li> </ul>				
	2006 - 2009	<ul style="list-style-type: none"> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>PTT ICT Solutions Co., Ltd.</li> </ul>				
	2006 - 2009	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>HMC Polymers Co., Ltd.</li> </ul>				
	2006 - 2009	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Thai Paraxylene Co., Ltd.</li> </ul>				
	2005 - 2009	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Independent Power (Thailand) Co., Ltd.</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years			
					Period	Position	Function/Company/Type of Business	
		<ul style="list-style-type: none"><li>• Certificate of Leadership Program (Class of 1) Capital Market Academy</li></ul>			2004 - 2009	<ul style="list-style-type: none"><li>• Director</li></ul>	<ul style="list-style-type: none"><li>• Alliance Refining Co., Ltd.</li></ul>	
						2004 - 2009	<ul style="list-style-type: none"><li>• Director</li></ul>	<ul style="list-style-type: none"><li>• Star Petroleum Refining Co., Ltd.</li></ul>
						2004 - 2009	<ul style="list-style-type: none"><li>• Director</li></ul>	<ul style="list-style-type: none"><li>• PTT Polyethylene Co., Ltd.</li></ul>
						2000 - 2009	<ul style="list-style-type: none"><li>• Director</li></ul>	<ul style="list-style-type: none"><li>• PTT Natural Gas Distribution Co., Ltd.</li></ul>
						Other organizations		
					2009 - Present	<ul style="list-style-type: none"><li>• Council Committee</li></ul>	<ul style="list-style-type: none"><li>• King Mongkut's Institute of Technology Ladkrabang Council</li></ul>	



Director who retired in year 2011

Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(1) Mr. Vudhibhandhu Vichairatana	63	Education/	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>• Master of Arts in Economics , University of Arkansas, U.S.A.</li> <li>• Bachelor of Arts in Economics, Stephen F. Austin State University, U.S.A.</li> </ul>			2002 - 2008	• Director	• Airports of Thailand Plc.
					2004 - 2007	• Director	• Thai Military Bank Plc.
					2004 - 2006	• Director	• Thai Airways International Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>• Director Certification Program (DCP)113/2009</li> <li>• Director Accreditation Program (DAP)49/2005</li> <li>• The Role of Chairman Program (RCP)3/2001</li> <li>• 2005 Survey on Corporate Governance of Listed Companies</li> <li>• Successful Formulation and Execution the Strategy (SFE) 2/2008</li> </ul>			None		
	Other organizations						
	2009 - Present	• Chairman of Executive Board	• Princess Maha Chakri Sirindhorn Anthropology Centre				
	2003 - 2008	• Budget Director	• Bureau of the Budget				
	2001 - 2008	• Director	• Provincial Electricity Authority				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<p>Other Training</p> <ul style="list-style-type: none"><li>• Corporate Governance Program for Director and Senior Management of State Enterprises and Public Organizations (Special Class), Ministry of Finance</li><li>• Senior Executive Program (Class 15) Office of the Civil Service Commission (OCSC)</li><li>• National Defence College (Class No. 38)</li></ul>					



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(2) Mr. Chitrapongse Kwangsukstith	62	Education	222,000	None	Other listed companies		
		<ul style="list-style-type: none"> <li>• Doctorate Degree in Industrial Engineering, Lamar University, U.S.A.</li> <li>• Master Degree in Industrial Engineering, Lamar University, U.S.A.</li> <li>• Bachelor of Engineering(Mechanical Engineering), Chulalongkorn University</li> </ul>	Shares Spouse: 165,000		2011 - Present	• Director	• PTT Plc.
		<ul style="list-style-type: none"> <li>• Director Certification Program (DCP) 42/2004</li> <li>• Finance for Non-Finance Director (FND) 9/2004</li> <li>• Role of the Compensation Committee (RCC) 10/2010</li> <li>• Non-Executive Director : Role and Expectations of Corporate Governance</li> </ul>	Shares Total: 387,000		2009 - 2011	• Director	• IRPC Plc.
		Training of Thai Institute of Directors Association	Shares (0.0117%)		2008 - 2009	• Director	• PTT Aromatics and Refining Plc.
		Other Training			2003 - 2009	• Chief Operating Officer, Upstream Petroleum and Gas Business Group	• PTT Plc.
		<ul style="list-style-type: none"> <li>• Stanford Executive Program, Stanford University, U.S.A</li> <li>• National Defence College (Class No. 12)</li> </ul>			Other companies		
					2009 - Present	• Chairman	• PTT International Co., Ltd.
		2010 - Present	• Chairman	• PTT FLNG Ltd.			
		2009 - 2011	• Acting President	• PTT International Co.,Ltd.			
		2009 - Present	• Chairman	• Sakari Resources Co., Ltd.			
		2009 - 2011	• Chairman	• PTT Green Energy Pte. Ltd..			
		2004 - 2011	• Director	• Independent Power (Thailand)Co., Ltd.			
		2004 - 2011	• Chairman	• PTT Utility Co., Ltd.			
		2004 - 2010	• Chairman	• PTT LNG Co., Ltd.			
		2004 - 2010	• Chairman	• Energy Complex Co., Ltd.			



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
					2003 - 2010	<ul style="list-style-type: none"><li>Chairman</li></ul>	<ul style="list-style-type: none"><li>PTT Natural Gas Distribution Co., Ltd.</li></ul>
					2004 - 2009	<ul style="list-style-type: none"><li>Director</li></ul>	<ul style="list-style-type: none"><li>Ratchaburi Power Co. Ltd.</li></ul>
					Other organizations		
					2003 - Present	<ul style="list-style-type: none"><li>President</li></ul>	<ul style="list-style-type: none"><li>Thailand Association for Natural Gas Vehicles</li></ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(3) Mr. Chulasingh Vasantasingh	61	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Honorary Doctorate Degree of Laws, Chulalongkorn University</li> <li>Honorary Doctorate Degree of Laws, Ramkhamhaeng University</li> </ul>			2011 - Present	● Director	● PTT Plc.
		<ul style="list-style-type: none"> <li>Honorary Doctorate Degree of Laws, Yo-Nok University</li> </ul>			2010 - Present	● Director	● Krung Thai Bank Plc.
		<ul style="list-style-type: none"> <li>Master of Comparative Law University of Illinois, U.S.A.</li> <li>Barrister at Law, the Institution of Legal Education</li> <li>Bachelor of Laws (LLB.) (Hons.), Chulalongkorn University</li> </ul>			2010 - Present	● Director	● Thai Airways International Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>Director Certification Program (DCP) 35/2003</li> <li>Director Certification Program Refresher 1/2008</li> <li>Finance for Non-Finance Director (FND) 7/2003</li> </ul>			None		
Other organizations							
2009 - Present					● Attorney General	● The Office of the Attorney General	
2005 - Present					● Director	● Thai Bar Association	
2004 - Present					● Board of the Property Management	● Chulalongkorn University	
2004 - 2010					● Director	● Electricity Generating Authority of Thailand	



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"> <li>● Audit Committee Program (ACP) 17/2007</li> <li>● Audit Committee : from 5 year-experiences to the highly effective thinking</li> <li>● Audit Committee - Practices Concerning Manual of the Audit Committee of State Enterprises</li> <li>● Independence of the Director Managing the Conflicts of Interest for the Independent Director</li> <li>● 2005 Survey on Corporate Governance of Listed Companies</li> <li>● Board Failures and How to Fix it</li> <li>● Understanding the Fundamental of Financial Statements Program (UFS) 1/2006</li> </ul>					
		Other Training					
		<ul style="list-style-type: none"> <li>● Degree, National Defense College (Class No. 388)</li> </ul>					



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>● Certificate, Institute of Administration Development</li><li>● Certificate, Politics and Governance in Democratic Systems for Executives Course</li><li>● National Defense College (Class No. 38)</li><li>● Capital Market Academy Leader Program (Class 5), Capital Market Academy</li><li>● Certificate, Harvard Business School, U.S.A.</li></ul>					



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(4) M.R.Pongsvas Svasti	54	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>● M.P.A. (Public Policy and Management), Harvard University, U.S.A.</li> <li>● M.S. (Industrial Management), University of Central Missouri, U.S.A.</li> <li>● B. S. (Computer Science), Southeast Missouri State University, U.S.A.</li> </ul>			2009 - Present	● Audit Committee	● IRPC Plc.
					2006 - Present	● Audit Committee	● MFEC Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>● Director Certification Program (DCP) Class of 44</li> </ul>			None		
		<ul style="list-style-type: none"> <li>● Director Accreditation Program (DAP) Class of 15</li> <li>● Audit Committee Program (ACP) Class of 5</li> </ul>			Other organizations		
		Other Training			2004 - Present	● Associate Professor, Operations Management	● Thammasat Business School
		<ul style="list-style-type: none"> <li>● Chief Information Officer Program Class 9, Office of the Civil Service Commission and NECTEC</li> </ul>			2011 - Present	● Audit Committee	● Deposit Protection Agency
					2011 - Present	● Director	● Industrial Estate Authority of Thailand
					2011 - Present	● Advisor	● Thailand Board of Investment
	2006 - 2010	● Dean	● College of Innovation, Thammasat University				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(5) Mr. Bhusana Premanode	57	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>• Doctorate Degree in Bioengineering, Imperial College, University of London, UK</li> </ul>			2010 - 2011	• Director	• PTT Plc.
		<ul style="list-style-type: none"> <li>• Doctorate Degree of Business Administration in Finance, Somerset University, UK</li> </ul>			Other companies		
		<ul style="list-style-type: none"> <li>• Master of Management, Sasin Graduate Institution of Business Administration of Chulalongkorn University</li> </ul>			None		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> <li>• National Defence College (Class No. 39)</li> </ul>			Present	• Visiting professor	• Imperial College, University of London, UK
	2009 - 2011	• Member	• Atoms for Peace Board				
	2009 - 2010	• Member	• Designated Areas for Sustainable Tourism Administrative Board				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(6) Mr. Prasert Bunsumpun	59	Education	50,000 Shares (0.0015%)	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Honorary Doctorate Degree of Business Administration Mahasarakham University</li> <li>Honorary Doctorate Degree of Business Administration in General Management, Phetchaburi Rajabhat University</li> <li>Honorary Doctorate Degree of Business Administration, National Institute of Development Administration</li> <li>Honorary Doctorate Degree of Engineering, Chulalongkorn University</li> <li>Master of Business Administration, Utah State University, U.S.A.</li> <li>Bachelor of Engineering (Civil Engineering), Chulalongkorn University</li> </ul>			2011 - Present	● Chairman	● PTT Global Chemical Plc.
		Training of Thai Institute of Directors Association			2011 - Present	● Chairman	● IRPC PLC.
		<ul style="list-style-type: none"> <li>Director Accreditation Program (DAP) 26/2004</li> </ul>			2011 - Present	● Director	● Shin Corporation Plc.
					2011 - Present	● Director	● Krung Thai Bank Plc.
					2006 - 2011	● Vice Chairman	● IRPC Plc.
					2007 - 2011	● Director	● PTT Aromatics and Refining Plc.
					2005 - Jan. 2010	● Vice Chairman	● PTT Chemical Plc.
					Feb. 2010 - June 2010	● Chairman	● PTT Chemical Plc.
					July 2010 - April 2011	● Director	● PTT Chemical Plc.
					2003 - 2011	● Director, President and Chief Executive Officer	● PTT Plc.
					2008 - 2010	● Director	● Siam City Bank Plc.
					2004 - 2010	● Director	● Thaioil Plc.



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		Other Training <ul style="list-style-type: none"> <li>● Capital Market Academy Leadership Program (Class 3), Capital Market Academy</li> <li>● National Defense College (Class No. 10)</li> <li>● Politics and Government in Democracy for Executives (Class 6), King Prajadhipok's Institute</li> <li>● Certificate in Advance Management Program, Harvard Business School, U.S.A.</li> </ul>			Other companies		
					2003 - 2011	● Chairman	● Independent Power (Thailand) Co., Ltd.
					2003 - 2011	● Director	● Thailoil Power Co., Ltd.
					2003 - Present	● Chairman	● Thai Lube Base Plc.
					Other organizations		
					None		



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(7) Mr. Witoon Simachokedee	57	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Ph.D. (Public Administration), Ramkhamhaeng University</li> <li>Master of Business Administration, Thammasat University</li> <li>Bachelor of Engineering (Electrical Engineering), Kasetsart University</li> <li>Bachelor of Laws, Thammasat University</li> </ul>			2008 - 2011	<ul style="list-style-type: none"> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>Ratchaburi Electricity Generating Holding Plc.</li> </ul>
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>Financial Statements for Directors (FSD) Class 4/2009</li> <li>Director Certification Program (DCP) Class 115/2009</li> </ul>			None		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> <li>Corporate Governance for Board of Directors and Executive of State Enterprise and Public Organization Class 1, Public Director Institute</li> </ul>			2011 - Present	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>Small and Medium Enterprise Development Bank of Thailand</li> </ul>
					2009 - Present	<ul style="list-style-type: none"> <li>Permanent Secretary</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Industry</li> </ul>
	2008 - 2011	<ul style="list-style-type: none"> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>The Electricity Generating Authority of Thailand</li> </ul>				
	2009	<ul style="list-style-type: none"> <li>Director General</li> </ul>	<ul style="list-style-type: none"> <li>Department of Industrial Works, Ministry of Industry</li> </ul>				
	2008 - 2009	<ul style="list-style-type: none"> <li>Director General</li> </ul>	<ul style="list-style-type: none"> <li>Department of Primary Industries and Mines Ministry of Industry</li> </ul>				
	2006-2008	<ul style="list-style-type: none"> <li>Deputy Permanent Secretary</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Industry</li> </ul>				



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"><li>• Top Executive Program in Commerce and Trade Class 2, University of Thai Chamber of Commerce</li><li>• Top Management Program Class 33, Office of the Civil Service Commission</li><li>• National Defense Course for the Joint State-Private Sector Class 16, National Defense College</li><li>• Politics and Governance in Democratic Systems for Executive Course Class 11, King Prajadhipok's Institute</li></ul>					



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(8) Mr. Wichai Pornkeratiwat	59	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Master's in Public Administration, National Institute Development Administration</li> <li>Bachelor's in Engineering (Electrical Engineering), Khon Kaen University</li> </ul>			2010 - Present	<ul style="list-style-type: none"> <li>Senior Executive Vice President, Gas Business Unit</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> </ul>
		Other Training			2009 - 2010	<ul style="list-style-type: none"> <li>Executive Vice President, Natural Gas Vehicle</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> </ul>
		<ul style="list-style-type: none"> <li>Asean Executive Program (AEP), GE Management Development Institute</li> <li>Senior Executive Program (SEP), Sasin Graduate Institute</li> <li>NIDA Wharton Executive Leaders, The Wharton School University Of Pennsylvania</li> </ul>			2002 - 2008	<ul style="list-style-type: none"> <li>Executive Vice President, Project Management, Exploration, Production and Gas Business Group,</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> </ul>
		Other companies					
		2010 - Present			<ul style="list-style-type: none"> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>PTT LNG Co., Ltd.</li> </ul>	
		2010 - Present			<ul style="list-style-type: none"> <li>Acting Managing Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT FLNG Ltd.</li> </ul>	
2008 - 2009	<ul style="list-style-type: none"> <li>Acting Managing Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT LNG Co., Ltd.</li> </ul>					



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
(9) Mr. Naris Chaiyasoot	56	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> <li>Ph.D. Economics, University of Hawaii, U.S.A.</li> <li>M.A. Economics (English Program), Thammasat University</li> <li>B.A. Economics (Hon.) Thammasat University</li> </ul>			2008 - 2011 2009 - 2011	<ul style="list-style-type: none"> <li>Acting Chairman</li> <li>Director</li> </ul>	<ul style="list-style-type: none"> <li>PTT Plc.</li> <li>Thaioil Plc.</li> </ul>
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> <li>Director Certification Program (DCP) 82/2006</li> <li>Director Accreditation Program (DAP) 32/2005</li> <li>Chartered Director Class (CDC) 3/2008</li> <li>Finance for Non-Finance Director (FND) 19/2005</li> </ul>			2010 - Present	<ul style="list-style-type: none"> <li>Board Member</li> </ul>	<ul style="list-style-type: none"> <li>Thai Prosperity Advisory Co., Ltd.</li> </ul>
		Other Training			Other organizations		
		<ul style="list-style-type: none"> <li>The National Defence Course (Class 39) The National Defence College</li> </ul>			2011 - Present 2011 - Present	<ul style="list-style-type: none"> <li>Director-General</li> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>The Treasury Department</li> <li>Small and Medium Enterprise Development Bank of Thailand</li> </ul>
					2010 - 2011 2010 - Present	<ul style="list-style-type: none"> <li>Board Member</li> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>Bank of Thailand</li> <li>Deposit Protection Agency</li> </ul>
					2007 - 2011 2000 - Present 1997 - Present	<ul style="list-style-type: none"> <li>President</li> <li>President</li> <li>Chairman</li> </ul>	<ul style="list-style-type: none"> <li>Thammasat Association</li> <li>Thailand Special Olympics</li> <li>National Economics Research Council</li> </ul>



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none"> <li>Capital Market Academy Leadership Program (Class 4), Capital Market Academy</li> </ul>			1994 - Present  2010 - 2011  2010 - 2011  2010 - 2011  2010 - 2011  2010 - 2011  2009 - 2010  2008 - 2009  2006 - 2008	<ul style="list-style-type: none"> <li>President,</li> <li>Director-General,</li> <li>President</li> <li>Board Member</li> <li>Board Member</li> <li>Board Member</li> <li>Deputy Permanent Secretary</li> <li>Inspector Chief General</li> <li>Inspector General</li> </ul>	<ul style="list-style-type: none"> <li>East West Center and Hawaii Alumni Group of Thailand</li> <li>The Fiscal Policy Office, Ministry of Finance</li> <li>Export-Import Bank of Thailand</li> <li>Capital Market Supervisory Board</li> <li>National Economic and Social Development Board</li> <li>Government Pension Fund</li> <li>Ministry of Finance</li> <li>Ministry of Finance</li> <li>Ministry of Finance</li> </ul>



Criminal offense record during the past 10 years

- |   |    |
|---|----|
| a) Being adjudged of convicting a crime or being on trial for convicting a crime                          | No |
| b) Being adjudged bankrupt or a receiver is appointed   | No |
| c) Being a management in the company or partnership which is adjudged bankrupt or a receiver is appointed | No |

Remarks: The name and number (s) of the authorized directors who may sign to bind the Company: Mr. Pailin Chuchottaworn and Mr. Tevin Vongvanich can sign jointly and affix the Company's seal, or Mr. Anon Sirisaengtaksin, the Chief Executive Officer, can sign singly.



2. Management

As of 31 December 2011, PTTEP has 12 managements with the following details:

Name/Position	Age (year)	Education/Training	% of Share holding*	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/ Type of Business
Mr. Anon Sirisaengtaksin President and Chief Executive Officer					Please see no.1		
Mr. Somkiet Janmaha Executive Vice President, Geosciences, Reservoir Engineering and Exploration Group	57	M.S. (Geophysics), Stanford University, U.S.A. IOD: DCP 50(2547)	326,100 shares (0.009822 %)	None	2010 - Present	• Executive Vice President, Geosciences Reservoir Engineering and Exploration Group	PTTEP
					2005-2010	• Vice President, Geosciences and Exploration Group	PTTEP
Mr. Asdakorn Limpiti Executive Vice President, Strategy and Business Development Group	57	M.S.E. (Chemical Engineering), University of Michigan, U.S.A.	45,000 shares spouse 63,000 shares total 108,000 share (0.003253 %)	None	2010-Present	• Executive Vice President, Strategy and Business Development Group	PTTEP
					2005-2010	• Vice President, Strategy and Capability Development Division	PTTEP



Name/Position	Age (year)	Education/Training	% of Share holding*	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/ Type of Business
Mr. Chatchawal Eimsiri Executive Vice President , attached to President and Chief Executive Officer	52	M.Sc. (Operation Research), London School of Economics and Political Science, University of London, United Kingdom	None	None	2010- 2011	<ul style="list-style-type: none"> <li>Executive Vice President, Finance and Accounting Group</li> </ul>	PTTEP
					2000-2010	<ul style="list-style-type: none"> <li>Vice President, Finance and Accounting Division</li> </ul>	PTTEP
Mr. Somporn Vongvuthipornchai Executive Vice President, International Asset Group	53	Ph.D. (Petroleum Engineering), University of Tulsa, U.S.A.	142,000 shares spouse 3,000 shares total 145,000 shares (0.004367 %)	None	2010-Present	<ul style="list-style-type: none"> <li>Executive Vice President, International Assets Group</li> </ul>	PTTEP
					2006-2010	<ul style="list-style-type: none"> <li>Vice President, International Assets</li> </ul>	PTTEP



Name/Position	Age (year)	Education/Training	% of Share holding*	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/ Type of Business
Mr. Prisdapunt Pojanapreecha Executive Vice President, Engineering, Operations and Supply Chain Group	59	B.S. (Geology), Chiangmai University and Post Graduate Diploma (Petroleum Exploration), University of Trondheim	319,000 shares (0.009608)	None	2010-Present	• Executive Vice President, Engineering, Operations and Supply Chain Group	PTTEP.
					2007-2010	• Regional Vice President, Thai Offshore Assets	PTTEP
Mr. Luechai Wongsirasawad Executive Vice President, Human Resources Reputation and Business Services Group	56	B.Eng. (Electrical Engineering), Chulalongkorn University IOD: DCP 49 (2547)	109,800 shares (0.003307 %)	None	2010-Present	• Executive Vice President, Human Resources Reputation and Business Services Group	PTTEP
					2005-2010	• Vice President, Human Resources and Business Services Divisions	PTTEP
Mr. Suraphong Iamchula Executive Vice President, Domestics Assets Group	58	B.Sc. (Geology) Chiangmai University	88,400 shares (0.2663%)	None	2010-Present	• Executive Vice President, Domestics Assets Group	PTTEP
					2007-2010	• Vice President, Operations Support Division	PTTEP
Ms. Penchun Jarikasem Executive Vice President, Finance and Accounting Group	56	M.Sc.( Business Administration), Thammasart University	None	None	2006-2011	• Executive Vice President, Corporate Finance	PTT
Mr. Yongyos Krongphanich Senior Vice President, Accounting Division	51	M.Sc.( Accounting), Thammasart University	67,500 shares (0.002277 %)	None	2010-2011	• Vice President, Joint Venture Myanmar Asset	PTTEP
					2009-2010	• Senior Manager, Joint Venture Projects	PTTEP



Name/Position	Age (year)	Education/Training	% of Share holding*	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/ Type of Business
Ms. Chanamas Sasnanand Vice President, Finance Department	42	M.Sc.( Business Administration), University of South Carolina	8,500 shares (0.000256 %)	None	2011	• Vice President, Finance Department	PTTEP
					2010	• Acting Manager, Finance Department	PTTEP
					2007-2010	• Assistance Manager, Investor Relations	PTTEP
Ms. Jaroonsri Wankertphon Vice President, Corporate Accounting Department	46	M.Sc.( Financial Accounting), Thammasart University	75,600 shares (0.002277 %)	None	2010-Present	• Vice President, Corporate Accounting Department	PTTEP
					2008-2010	• Manager, Corporate Accounting Department	PTTEP
					2007-2008	• Manager, Project Accounting Department	PTTEP
					2004-2007	• Finance and Administration Manager, Seconded to Hoan Vu JOC , Vietnam	PTTEP

**Attachment 2: Directors of Subsidiaries and Associated Companies**

1. Subsidiary: as of 31 January 2012, there are 52 subsidiaries.

No.	Name	Subsidiaries													
		PTTEPI	PTTEPS	PTTEP Services	PTTEPA	Orange	PTTEP MEA	PTTEPO	PTTEP HV	PTTEP HL	PTTEP KV	PTTEP SV	PTTEPH	ATL	PTTEP AG
1.	Mr. Asdakorn Limpiti	/					/								
2.	Mr. Prapat Soponpongpipat	/													
3.	Mr. Pairoj Rangponsumrit		/		/	/									
4.	Mr. Kittisak Hiranyaprathip		/												
5.	Mr. Kitinan Manlekha			/											
6.	Mr. Somkiet Janmaha				/				/						
7.	Ms. Pranot Tirasai					/									
8.	Mr. Piya Sukhumpanumet					/									
9.	Mr. Owas Chinoroje						/								/
10.	Mr. Preecha Peomwattanachai						/				/				
11.	Ms. Suchitra Suwansinpan							/				/			
12.	Mr. Somporn Vongvuthipornchai								/						
13.	Mr. Surachai Tanasomboonkit								/		/				
14.	Mr. Wanchai Mahasuwannachai									/					
15.	Mr. Piya Wichitchanya									/	/				
16.	Mr. Yongyos Krongphanich											/			
17.	Mr. Prapat Soponpongpipat												/		
18.	Mr. Kanok Intharawijitr												/		
19.	Mr. Phongsthorn Thavisin														/

Remarks 1. / : Director

X : Chairman

/// : Executive Director



No.	Name	Subsidiaries													
		PTTEP OM	PTTEP IH	PTTEP SA	PTTEP ID	PTTEP EG	PTTEP BD	PTTEP NZ	PTTEP SVPC	PTTEP IR	PTTEP BH	JV Marine	JV Shore Base	PTTEP FH	PTTEP NL
1.	Mr. Somkiet Janmaha	/													
2.	Mr. Montri Rawanchaikul	/													
3.	Ms. Suchitra Suwansinpan		/												
4.	Mr. Anun Chonchawalit		/												
5.	Mr. Somchai Manopinives			/											
6.	Mr. Kanok Intharawijitr			/											
7.	Mr. Waranon Laprabang				/				/		/				
8.	Mr. Terapol Phoonsiri				/										
9.	Ms. Pornthip Uyakul					/	/	/							
10.	Mr. Owas Chinoroje					/									
11.	Ms. Jaroonsri Wankertphon						/								
12.	Mr. Preecha Peomwattanachai							/							
13.	Mr. Prisdapunt Pojanapreecha								/						
14.	Mr. Surachai Tanasomboonkit								/						
15.	Mr. Khajohn Bhasavanija									/	/				
16.	Mr. Chumpol Rojanachan										/				
17.	Mr. Piya Sukhumpanumet											/	/		
18.	Mr. Suraphong lamchula												/		
19.	Mr. Anon Sirisaengtaksin													/	
20.	Mr. Asdakorn Limpiti													/	
21.	Mr. Phongsthom Thavisin													/	
22.	Mr. Anun Chonchawalit														/
23.	Mr. Theerasak Tancharoenlarp														/

Remarks 1. / : Director X : Chairman /// : Executive Director



No.	Name	Subsidiaries												
		PTTEP NC	PTTEPR	PTTEP SAER	PTTEP CIF	PTTEP CA	PTTEP SMD	PTTEP SS	PTTEP SD	PTTEP ML	PTTEPB	PTTEP SM		
1.	Mr. Yothin Tongpenyai	/			/	/								
2.	Ms. Elenora Jongsma	/												
3.	Orangefield Trust (Netherlands) B.V.	/												
4.	Ms.Chanamas Sasnanand		/	/						/				
5.	Mr. Anun Chonchawalit		/											
6.	Mr. Owas Chinoroje			/										
7.	Ms. PENCHUN Jarikasem				/									
8.	Mr. Michael Laffin				/	/								
9.	Mr. Thanyaporn Vangvasu					/	/							
10.	Mr. Terapol Phoonsiri						/		/	/				
11.	Mr. Nawee Anantraksakul						/	/						
12.	Mr. Somchai Manopinives							/	/					
13.	Ms. Jaroonsri Wankertphon								/					
14.	Mr. Chumpol Rojanachan										/			

No.	Director	Subsidiaries												
		PTTEP AU	PTTEP AP	PTTEP AA	PTTEP AO	PTTEP AB	PTTEP AT	PTTEP AIF	PTTEP AAF	PTTEP AAP	PTTEP AAT	PTTEP AAO	PTTEP AAA	PTTEP AAS
1.	Mr. Somporn Vongvuthipornchai	X	X	X	X	X	X		X	X	X	X	X	X
2.	Mr. Chalermkiat Tongtaow	/	/	/	/	/	/		/	/	/	/	/	/
3.	Mr. Ken Fitzpatrick	/	/	/	/	/	/	/	/	/	/	/	/	/
4.	Ms. PENCHUN Jarikasem							X						

Remarks 1. / : Director X : Chairman /// : Executive Director



2. Associated Company: as of 31 January 2012, there are 12 associated companies

No.	Name (only Director, management and employee of PTTEP Group)	Associated Companies										
		Energy Complex	PTT ICT	B 8/32 Partners	MGTC	CPOC	Shoreair	Troughton Island	Erawan FSO 2 Bahamas	PTT FLNG	LAL	NST Supply Base
1.	Mr. Asdakorn Limpiti	/							/			
2.	Ms. Pranot Tirasai	/		/								
3.	Ms. Penchun Jarikasem	/	/									
4.	Mr. Suraphong lamchula			/		/						
5.	Mr. Kanok Intharawijitr				/							
6.	Ms. Natruedee Khositaphai				/*							
7.	Mr. Prisdapunt Pojanapreecha					/						
8.	Mr. Andy Jacob						/	/				
9.	Mr. Gavin Ryan						/	/				
10.	Mr. Piya Sukhumpanumet							/**			/	
11.	Mr. Anon Sirisaengtaksin								/			
12.	Mr. Phongsthorn Thavisin								/			
13.	Mr. Yothin Tongpenyai									/		
14.	Mr. Piroj Samutthananont									/		

\* Alternate Director

\*\* Assume the Vice President as addition position.

Remarks 1. /: Director X: Chairman ///: Executive Director

2. The other 6 associated companies have no director from PTTEP which are:

(1) TPC and Asia Pacific Marine Service are governed through shareholders' meetings.

(2) HV JOC and HL JOC are governed by Management Committee (MC), of which PTTEP's representative is Mr. Prapat Sophonpipat as Member, with Mr. Surachai Tanasomboonkit as Alternate Member.

(3) GBRS is governed by MC, of which PTTEP's representative is Mr. Prapat Sophonpipat as Member, with Mr. Owas Chinoroje as Alternate Member.

(4) KKD Oil Sands (Formerly, SCP) is governed by MC, of which PTTEP's representatives are Mr. Asdakorn Limpiti, Mr. Phongsthorn Thavisin and Mr. Yothin Tongpenyai as Member.



## Attachment 3: Supplemental Information on Petroleum Exploration and Production Activities

### (A) PTTEP and its Subsidiaries' Petroleum Reserves Report As of December 31, 2011

The total Proved Reserves of PTT Exploration and Production Public Company Limited (PTTEP) and its subsidiaries as of December 31, 2011 are shown in the attached table. The Proved Reserves are reviewed annually by company's earth scientists and reservoir engineers to ensure rigorous professional standards. The Proved Reserves are reported on a gross basis, which includes the company's net working interest and related host country's interest.

No reserve quantities have been recorded for the hydrocarbon discoveries in Vietnam B & 48/95 Project and Vietnam 52/97 Project since no Gas Sales Agreement (GSA) has been established.

The total Proved Reserves (Consolidated Companies) as of December 31, 2011 of PTTEP and its subsidiaries are 275 Million Stock Tank Barrels (MMSTB) for crude and condensate<sup>1</sup>, and 4,529 Billion Standard Cubic Feet (BSCF) for gas. The total Proved Reserves (Consolidated Companies) in term of oil equivalent are 969 Million Barrels (MMBOE), of which approximately 47 percent of the total Proved Reserves is Proved Developed Reserves. Proved Reserves of crude and condensate are approximately 28% while, for gas, are 72% of the total Proved Reserves in terms of oil equivalent.

The total production in 2011 (Consolidated Companies) was 110.0 MMBOE (30 MMSTB of crude and condensate<sup>1</sup>, and 501 BSCF of gas) or the production rate of approximately 301,367 Barrels of Oil Equivalent per Day (BOED). The decrease was approximately 2,656 BOED or 0.87% lower than that of last year. The production decrease was attributed to the unexpected inundation in the Northern and Central Regions of Thailand in the fourth quarter of 2011, resulting in lower oil production from Thailand Onshore fields as well as lower gas nominations from gas projects in the Gulf of Thailand and the Gulf of Martaban due to lower demands. However, these production decreases were offset by 2 new overseas projects, namely Canada KKD Oil Sands and Vietnam 16-1 projects that were put on production in 2011.

<sup>1</sup> Included the proved reserves and production of LPG and Bitumen



	Proved Reserves of Crude and Condensate <sup>(1)</sup>			Proved Reserves of Natural Gas <sup>(1)</sup>			Proved Reserves of Crude, Condensate and Natural Gas <sup>(1)(2)</sup> Barrel of Oil Equivalent		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic <sup>(2)</sup>	Foreign	Total
Company's share of reserves of consolidated companies									
As of December 31, 2009	126	92	218	3,254	2,395	5,649	662	437	1,099
1) Revision of previous estimates	1	4	5	61	13	74	12	7	19
2) Improved recovery	16	-	16	19	-	19	18	-	18
3) Extensions and discoveries	2	-	2	55	46	101	11	7	18
4) Purchases/Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
5) Production	(24)	(3)	(27)	(397)	(121)	(518)	(91)	(20)	(111)
<b>Total consolidation companies</b>									
As of December 31, 2010	121	93	214	2,992	2,333	5,325	612	431	1,043
Company's share of reserves of consolidated companies									
As of December 31, 2010	121	93	214	2,992	2,333	5,325	612	431	1,043
1) Revision of previous estimates	24	(1)	23	(224)	(31)	(255)	(20)	(7)	(27)
2) Improved recovery									
3) Extensions and discoveries	6	-	6	27	-	27	11	-	11
4) Purchases/Sales of Petroleum in Place	5	36	41	128	-	128	26	36	62
5) Production	-	21	21	-	(195)	(195)	-	(10)	(10)
<b>Total consolidation companies</b>									
As of December 31, 2011	131	144	275	2,542	1,987	4,529	541	428	969

(1) The proved reserves are reported on a gross basis which includes the company's net working interest and the related host country's interest.

(2) Included the proved reserves and production of LPG and Bitumen.



(B) Capitalized costs relating to oil and gas producing activities

Capitalized costs represent cumulative expenditures for proved and unproved properties, and support equipment and facilities used in oil and gas exploration and production operations together with related accumulated depreciation, depletion, amortization and impairment.

Proved properties include exploration & development wells, equipment, transportation pipeline and related producing facilities associated with proved reserves project. Unproved properties represent amounts associated with non-proved reserve project. Support equipment and facilities include warehouse, field offices, vehicles and movable assets used in oil and gas producing activities.

The net capitalized costs represent the undepreciated value for these assets.

(Unit: Million US Dollar)	2011	2010
Proved properties	14,458	10,889
Unproved properties	1,107	173
Accrued decommissioning costs	695	750
Support equipment and facilities	<u>153</u>	<u>120</u>
Gross capitalized costs	16,413	11,932
Accumulated depreciation, depletion, amortization and impairment	<u>(6,089)</u>	<u>(5,034)</u>
Net capitalized costs	<u>10,324</u>	<u>6,898</u>



## (C) Costs Incurred in oil and gas property acquisition, exploration, and development activities

Costs incurred in oil and gas property acquisition, exploration and development activities represent amounts both capitalized and charged to expense during the year. Property acquisition costs include costs to purchase proved and unproved properties.

Exploration costs include the costs of geological and geophysical work, carrying and retaining undeveloped properties, and drilling and equipping exploratory wells.

Development costs include costs associated with drilling and equipping development wells, improved recovery systems, facilities for extraction, treating, gathering and storage, producing facilities for existing developed reserves, and costs associated with transportation pipeline.

(Unit: Million US Dollar)	2011			2010		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	-	1	1	1	-	1
- Unproved	-	704	704	-	-	-
Exploration costs <sup>(1)</sup>	144	309	453	62	158	220
Development costs	<u>989</u>	<u>2,773</u>	<u>3,762</u>	<u>1,111</u>	<u>312</u>	<u>1,423</u>
Total	<u>1,133</u>	<u>3,787</u>	<u>4,920</u>	<u>1,174</u>	<u>470</u>	<u>1,644</u>

(1) Exploration costs include transferring of exploration well costs to development well costs for future production.

**(D) Results of operations for producing activities**

Results of operations from oil and gas producing activities for the year 2010 and 2009 are shown in the following table.

Operating costs include lifting costs incurred to operate and maintain productive wells and related equipment. Exploration expenses consist of geological and geophysical costs, and dry hole costs.

General administrative expenses are expenses directly related to oil and gas producing activities.

Depreciation, Depletion and Amortization expense relates to capitalized costs incurred in acquisition, exploration and development activities, transportation pipeline, including amortized decommissioning costs.

Other income/expenses include pipeline transportation income and foreign exchange gains and losses.

Income tax expenses are based on the results of operations from petroleum producing activities.

General corporate overhead and finance costs are excluded from the results of operations for petroleum producing activities.

(Unit: Million US Dollar)	2011			2010		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Gross revenues :						
Sales – Related parties	4,185	412	4,597	3,466	348	3,814
Sales – Third parties	391	452	843	331	185	516
Total Sales	4,576	864	5,440	3,797	533	4,330
Expenses :						
Operating expenses	407	216	623	352	103	455
Exploration expenses	30	187	217	23	63	86
General administrative expenses	77	66	143	66	35	101
Petroleum royalties and remuneration	574	72	646	477	49	526
Depreciation, depletion and amortization	897	210	1,107	834	176	1,010
Loss from Montara Incident	-	5	5	-	14	14
Other (income)/ expenses	4	(185)	(181)	(45)	(72)	(117)
Total expenses	1,989	571	2,560	1,707	368	2,075
Results before income taxes	2,587	293	2,880	2,090	165	2,255
Income tax expenses (benefit)	1,058	100	1,158	700	30	730
Net results of operations	<u>1,529</u>	<u>193</u>	<u>1,722</u>	<u>1,390</u>	<u>135</u>	<u>1,525</u>



(E) Standardized Measure of Discounted Future Net Cash Flows (SMDCF) Relating to Proved Oil and Gas Reserves

The standardized measure of discounted future net cash flows related to the above proved oil and gas reserves, is computed by applying 12-month average prices\* (with consideration of price changes only to the extent provided by contractual arrangements), to the estimated future production of year-end proved oil and gas reserves remaining less estimated future expenditures (based on year-end costs) to be incurred in developing and production the proved reserves.

Future income taxes are calculated by applying the appropriate year-end statutory tax rates to the future pre-tax net cash flows and reduced by applicable tax deductions or tax credits.

Net Cash flows are discounted using a rate of 10% per year to reflect the estimated timing of the future cash flows.

Discounted future cash flow estimates like those shown below are not intended to represent estimates of the fair value of oil and gas properties. Estimates of fair value should also consider probable and possible reserves which may become proved reserves in the future, anticipated future oil and gas prices, interest rates, changes in development and production costs and risks associated with future production. Because of these and other considerations, any of fair value is necessarily subjective and imprecise.

\* Twelve-month average prices are calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month.

(Unit: Million US Dollar)	Domestic		Foreign		Total	
	2011	2010	2011	2010	2011	2010
Future cash inflows	23,196	21,050	21,038	14,847	44,234	35,897
Future production costs	(2,649)	(2,438)	(4,816)	(2,218)	(7,465)	(4,656)
Future development costs	(6,233)	(4,973)	(3,070)	(3,112)	(9,303)	(8,085)
Future income tax expenses	<u>(4,351)</u>	<u>(3,706)</u>	<u>(2,796)</u>	<u>(2,368)</u>	<u>(7,147)</u>	<u>(6,074)</u>
Future net cash flows	9,963	9,933	10,356	7,149	20,319	17,082
10% annual discount	<u>(2,793)</u>	<u>(2,915)</u>	<u>(4,727)</u>	<u>(3,786)</u>	<u>(7,520)</u>	<u>(6,701)</u>
Standardized measure of discounted future net cash flows (SMDCF)	<u>7,17</u> <u>0</u>	<u>7,01</u> <u>8</u>	<u>5,629</u>	<u>3,363</u>	<u>12,79</u> <u>9</u>	<u>10,38</u> <u>1</u>



## Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Unit: Million US Dollar)	2011	2010
Present value at beginning of year	10,381	9,012
Sales and transfers of oil and gas produced, net of production costs	(4,100)	(3,492)
Development costs incurred during the period	1,880	2,128
Net changes in prices and production costs	8,970	1,844
Net changes in development costs	(2,902)	(1060)
Extensions, discoveries and improved recovery	1,474	804
Revisions of previous quantity estimates	(454)	423
Purchases / sales of petroleum in place	(565)	0
Accretions of discount	(811)	601
Net changes in income taxes	<u>(1,074)</u>	<u>121</u>
Present value at the year end	<u>12,799</u>	<u>10,381</u>



## (F) Other information

## Productive Oil/Condensate and Gas Wells

The numbers of productive wells at December 31, 2011 were as follows:

	Oil/Condensate*		Gas	
	Gross	Net	Gross	Net
Thailand	684	288	1,006	377
Foreign				
Southeast Asia	12	3	95	41
Middle East and Others	21	9	8	8
Total	<u>717</u>	<u>300</u>	<u>1,109</u>	<u>426</u>

\* include Bitumen Wells

## Drilling in Progress of Oil/Condensate\* and Gas Wells

The numbers of wells in progress at December 31, 2011 were as follows:

	Gross	Net
<u>Exploratory</u>		
Thailand	2	2
Foreign		
Southeast Asia	1	0.5
Middle East and Others	2	0.6
Total	<u>5</u>	<u>3.1</u>
<u>Development</u>		
Thailand	21	10.5
Foreign		
Southeast Asia	4	1.1
Australia	1	0.9
Middle East and Others	2	1.4
Total	<u>28</u>	<u>13.9</u>

\* include Bitumen Wells



## Net Oil/Condensate\* and Gas Wells Drilled Annually in 2011

	Net Productive wells drilled	Net dry well drilled
<u>Exploratory</u>		
Thailand	5.3	1
Foreign		
Southeast Asia	4	1.8
Australia	0.8	2.1
Middle East and Others	30	18
Total	<u>40.1</u>	<u>22.9</u>
<u>Development</u>		
Thailand	141.6	3.9
Foreign		
Southeast Asia	1.4	-
Australia	1	-
Middle East and Others	5	-
Total	<u>149</u>	<u>3.9</u>

\* include Bitumen Wells

Gross wells include the total number of wells in which the company has an interest excluding utility wells.

Net wells are the sum of the company's fractional interests in gross wells.



Quarterly Information in 2011 and 2010 (unaudited) for the consolidated financial statement are as follows:

	(Unit: US Dollar)				
<u>Year 2011</u>	<u>4thQ</u>	<u>3rdQ</u>	<u>2ndQ</u>	<u>1stQ</u>	
Revenues					
Sales	1,440,651,768	1,373,546,481	1,420,253,743	1,205,269,909	
Revenue from pipeline transportation	31,033,243	34,413,783	32,591,372	26,032,563	
Other revenues					
Gain on foreign exchange	49,780,106	-	3,467,412	62,778,540	
Interest income	6,168,391	4,301,144	2,780,461	2,988,758	
Other revenues	53,905,990	9,838,249	28,208,434	13,108,003	
<b>Total Revenues</b>	<b>1,581,539,498</b>	<b>1,422,099,657</b>	<b>1,487,301,422</b>	<b>1,310,177,773</b>	
Expenses					
Operating expenses	177,925,911	178,654,705	148,754,325	120,061,022	
Exploration expenses	27,071,538	51,237,763	76,035,541	62,545,119	
Administrative expenses	89,070,143	49,105,660	58,828,262	60,404,469	
Petroleum royalties and remuneration	167,633,500	163,396,751	171,627,884	142,810,043	
Depreciation, depletion and amortization	267,591,706	272,365,810	279,413,569	297,975,028	
Other expenses					
Loss on foreign exchange	-	180,912,028	-	-	
Loss from Montara incident	4,297,651	1,033,629	-	-	
Loss from derivative financial instruments	3,623,747	2,019,730	2,353,816	3,059,338	
Management's remuneration	2,156,086	852,820	676,927	884,796	
Other expenses	-	-	-	-	
Finance costs	35,167,465	32,830,745	31,604,288	23,954,550	
<b>Total Expenses</b>	<b>774,537,747</b>	<b>932,409,641</b>	<b>769,294,612</b>	<b>711,694,365</b>	
Share of gain (loss) from associates	1,224,201	(853)	553,534	653,034	
Income before income taxes	808,225,952	489,689,163	718,560,344	599,136,442	
Income taxes	(319,093,659)	(240,100,824)	(348,521,606)	(239,648,726)	
<b>Income for the year</b>	<b>489,132,293</b>	<b>249,588,339</b>	<b>370,038,738</b>	<b>359,487,716</b>	
Earnings per share					
Basic earnings per share	0.15	0.08	0.11	0.11	
Diluted earnings per share	0.15	0.08	0.11	0.11	



(Unit: US Dollar)

<u>Year 2010</u>	<u>4thQ</u>	<u>3rdQ</u>	<u>2ndQ</u>	<u>1stQ</u>
<b>Revenues</b>				
Sales	1,155,652,954	1,086,992,392	1,107,749,435	979,239,865
Revenue from pipeline transportation	29,779,705	28,859,314	30,363,404	21,833,685
Other revenues				
Gain on foreign exchange	10,236,657	-	12,097,006	-
Interest income	3,143,486	2,835,531	2,558,793	3,257,389
Gain on financial derivatives	-	-	2,347,005	-
Other revenues	9,523,034	51,113,966	15,232,525	3,635,610
<b>Total Revenues</b>	<b>1,208,335,836</b>	<b>1,169,801,203</b>	<b>1,170,348,168</b>	<b>1,007,966,549</b>
<b>Expenses</b>				
Operating expenses	96,918,633	131,882,479	141,246,933	88,341,620
Exploration expenses	19,280,288	39,519,877	12,899,427	15,224,870
Administrative expenses	71,556,330	44,846,953	36,041,742	40,019,968
Petroleum royalties and remuneration	144,083,990	133,958,144	124,812,718	122,474,002
Depreciation, depletion and amortization	231,985,633	279,570,354	265,713,435	240,072,240
Other expenses				
Loss on foreign exchange	-	87,170,847	-	21,016,941
Loss from Montara incident	5,903,700	8,506,400	-	-
Loss from derivative financial instruments	1,116,867	1,920,888	-	2,777,783
Management's remuneration	2,558,591	1,051,341	1,049,548	1,255,889
Other expenses	-	47,739,610	-	-
Finance costs	31,958,610	27,920,498	22,318,145	22,348,322
<b>Total Expenses</b>	<b>605,362,642</b>	<b>804,087,391</b>	<b>604,081,948</b>	<b>553,531,635</b>
Share of gain (loss) from associates	690,255	(195,503)	(159,688)	(1,682,598)
<b>Income before income taxes</b>	<b>603,663,449</b>	<b>365,518,309</b>	<b>566,106,532</b>	<b>452,752,316</b>
Income taxes	(221,844,421)	(29,721,072)	(214,626,840)	(141,370,365)
<b>Income for the year</b>	<b>381,819,028</b>	<b>335,797,237</b>	<b>351,479,692</b>	<b>311,381,951</b>
<b>Earnings per share</b>				
Basic earnings per share	0.12	0.10	0.11	0.09
Diluted earnings per share	0.12	0.10	0.11	0.09



## Five-year petroleum sales volume and unit price summary

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Net sales of petroleum (BOED)	265,047	264,575	233,756	219,314	179,767
Average petroleum unit prices					
Average unit prices of crude oil and condensate (US Dollar per BBL)	102.23	73.77	58.03	91.38	67.37
Average unit prices of natural gas (US Dollar per MMBTU)	6.00	5.52	5.17	5.17	4.57
Average unit prices of petroleum (US Dollar per BOE)	55.49	44.83	39.53	49.69	39.78
Lifting cost (US Dollar per BOE)	4.35	3.75	3.16	2.46	2.33