



Annual Registration Statement

As of 31 December 2012

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 th & 19 th – 36 th 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	www.pttep.com
E-mail	To contact Independent Director: independentdirector@pttep.com To contact Investor Relations: IR@pttep.com To contact Corporate Secretary: corporatesecretary@pttep.com
Registered Capital	Baht 3,969,985,400, divided into 3,969,985,400 ordinary shares, Baht 1 each
Paid-up Capital	Baht 3,969,985,400, divided into 3,969,985,400 ordinary shares, Baht 1 each (as of 31 December 2012)



1.2 Subsidiary's Information

As of 31 December 2012, there are 59 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 Africa Investment Limited ¹	PTTEP AI	50,000	USD 1	ordinary share	PTTEPH 100%
19.	PTTEP Rommana Company Limited	PTTEPR	50,000	USD 1	ordinary share	PTTEP AI 100%
20.	PTTEP Sidi Abd El Rahman Company Limited	PTTEP SAER	50,000	USD 1	ordinary share	PTTEP AI 100%
21.	PTTEP Bangladesh Limited	PTTEP BD	50,000	USD 1	ordinary share	PTTEPH 100%
22.	PTTEP South Asia Limited	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%

¹ Formerly, PTTEP Egypt Company 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 ² (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 ³	
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 AAP 100%
34.	PTTEP Australasia (Operations) Pty Ltd	PTTEP AAO	106,686,517	AUD 0.20	ordinary share	PTTEP AAP 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 ⁴ (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 ⁵	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%

² 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).

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

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

⁵ 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	- ⁶	-	-	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%
48.	Cove Energy Limited ⁷	Cove	508,912,947	GBP 1	ordinary share	PTTEP AI 100%
49.	Cove Energy East Africa Limited	CEEAL	1,000	EURO1	ordinary share	Cove 100%
50.	Cove Energy Mozambique Rovuma Onshore Limited	CEMROL	1,000	EURO1	ordinary share	CEEAL 100%
51.	Cove Energy Mozambique Rovuma Offshore Limited	CEMROFL	1,000	EURO1	ordinary share	CEEAL 100%
52.	Cove Energy Kenya Limited	CEKL	1,000	KSHS 100	ordinary share	CEEAL 99.9% Cove 0.1%
53.	Cove Mozambique Terra Limitada	CMTL	50,000	MCN 1	ordinary share	CEMROL 100%
54.	Cove Mozambique Energia Limitada	CMEL	50,000	MCN 1	ordinary share	CEMROFL 100%
Service Business						
55.	PTTEP Services Limited (Personnel Services Support)	PTTEP Services	100,000	Baht 10	ordinary share	PTTEP 25% PTTEPI 75%

⁶ PTTEP NC has total amount of Member Contribution of USD 1,000,050,000.

⁷ PTTEP AI holds 100% of shares in Cove since 5 October 2012.



No.	Company Name	Abbreviation	Number of Shares Sold	Share Price	Share Type	Shareholders
56.	Andaman Transportation Limited (Investment in Gas Pipeline for Myanmar Project)	ATL	62,500	USD 1	ordinary share	PTTEPO 80% MOGE 20% ⁸
57.	PTTEP Southwest Vietnam Pipeline Company Limited (Investment in Gas Pipeline for Vietnam Project)	PTTEP SVPC	50,000	USD 1	ordinary share	PTTEPH 100%
58.	PTTEP Australia International Finance Pty Ltd (Raise Fund for PTTEP Business)	PTTEP AIF	50,000	AUD 1	ordinary share	PTTEP AP 100%
59.	PTTEP Canada International Finance Limited (Raise Fund for PTTEP Business)	PTTEP CIF	50,000	CAD 1	ordinary share	PTTEP NC 100%

⁸ 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 December 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	PTT ICT	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	- ⁹	-	-	PTTEP 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 Minh City, S.R. Vietnam						
	Telephone: (848) 3829-9359						
	Facsimile: (848)-3822-6106						
8.	Hoan-Vu Joint Operating Company	Petroleum Exploration and Production	HV JOC	- ⁹	-	-	PTTEP HV 25% PVEP 50% SOCO 25%
	Head Office: Suite 2006, Me Linh Point Tower, 2 Ngo Duc Ke Street, District 1, Ho Chi Minh 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	Operation of Air Base (Secondary)	-	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						

⁹ 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
	Telephone: (61) 8-8922-0930						
	Facsimile: (61) 8-8922-0910						
11.	Groupement Bir Seba	Petroleum Exploration and Production	GBRS	- ¹⁰	-	-	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 (vessel)	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: -						

¹⁰ 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
	Facsimile: -						
14.	KKD Oil Sands Partnership ¹¹	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 th 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. 48% PTTEP CA 32% FCCL Partnership 32%
	Head Office: Suite 3600, 308 – 4 th 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 ¹²	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 th Floor, Ratchadapisek Rd., Chatuchak, Bangkok 10900						
	Telephone: 66 (0) 2545-5555						
	Facsimile: 66 (0) 2545-5454						

¹¹ Formerly, Statoil Canada Partnership

¹² 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

Baht Debentures

- Baht 2,500 Million Bonds – Issued March 2003
- Baht 40,000 Million Bonds – Issued May 2009
- Baht 5,000 Million Hybrid Bonds – Issued June 2012

Name TMB Bank Public Company Limited

Location Floor 5A, 3000 Phahon Yothin Road, Chatuchak, Bangkok, Thailand 10900

Tel. +66-2299-1536, +66-2299-1321

Fax +66-2242-3270

Bondholders' Representative

1. Baht 40,000 Million Bonds – Issued May 2009
2. Baht 5,000 Million Hybrid Bonds – Issued June 2012

Name Siam Commercial Bank Public Company Limited



Location 2nd – 3rd Floor, Building 2, 1060 Phetchaburi Road, Makkasan,
Ratchthewe, Bangkok, Thailand 10400

Tel. +66-2256-2316

Fax +66-2256-2401, +66-2256-2402

US\$ Debentures

Trustee

1. US\$ 500 Million Bonds issued in July 2010
2. US\$ 700 Million Bonds issued in April 2011

Name BNY Mellon Corporate Trust

Location BNY Mellon Corporate Trust, 1 Temasek Avenue, #03-01 Millenia
Tower, Singapore 039192

Tel. +65-6432-0351, +65-6432-0354, +65-6432-0356

Fax +65-6883-0338

3. US\$ 500 Million Bonds issued in June 2012

Name Citicorp International Limited

Location 55/F, One Island East, 18 Westlands Road, Island East, Hong Kong

Tel. +852-3419-8839

Fax +852-2323-0279

**Registrar and Noteholders' Representative****1. US\$ 200 Million Bonds issued in August 2010**

Name	Bangkok Bank Public Company Limited
Location	333 24 th Floor, Securities Service Department, Silom Road, Bangrak, Bangkok, Thailand 10500
Tel.	+66-2230-1894
Fax	+66-2636-5697

Bill of Exchange**Registrar & Paying Agent****1. Bills of Exchange (B/Es) with a total revolving credit of up to Baht 50,000 million**

Name	TMB Bank Public Company Limited
Location	Floor 5A, 3000 Phahon Yothin Road, Chatuchak, Bangkok, Thailand 10900
Tel.	+66-2299-1536, +66-2299-1321
Fax	+66-2242-3270

Bank Loan**Facility Agent****1. US\$ 500 Million Loan Agreement dated in November 2010**

Name	The Bank of Tokyo-Mitsubishi UFJ, Ltd.
Location	6/F., AIA Central, 1 Connaught Road, Central, Hong Kong
Tel .	+852-2823-6698, +852-2823-6691-3
Fax	+852-2823-6686

**2. CAD 300 Million Loan Agreement dated in April 2012**

Name Sumitomo Mitsui Banking Corporation

Location 7-8/F, One International Finance Centre, 1 Harbour View Street, Central,
Hong Kong

Tel. +852-2206-2130

Fax +852-2206-2988

3. GBP 950 Million Loan Agreement dated in May 2012

Name UBS AG, Singapore Branch

Location 5 Temasek Boulevard, #18-00 Suntec Tower Five, Singapore 038985

Tel. +65-6495-5617, +65-6495-5616

Fax +65-6495-8609

Equity**Process Agent**

Name CT Corporation System

Location 111 8th Avenue New York, New York, United States 10011

Tel. +1-213-337-4605

Fax +1-213-614-7903

Financial Derivatives**Cross Currency and Interest Rate Swap Counter Party****1. Baht 2,500 Million Bonds issued in March 2003**

Name KASIKORNBANK PUBLIC COMPANY LTD.

Division Capital Markets Business Division



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

Tel. +66-2470-2020

Fax +66-2470-3065

Cross Currency Swap Counter Party**1. Baht 5,000 Million Bonds issued in May 2009**

Name DEUTSCHE BANK AG, Bangkok Branch

Division Corporate Treasury Sales

Location 63 Athenee Tower, 27-29 Floor, Wireless Road, Lumpini,
Pathumwan, Bangkok, Thailand 10330

Tel. +66-2646-5139

Fax +66-2651-5892

2. Baht 11,700 Million Bonds issued in May 2009

Name SIAM COMMERCIAL BANK PUBLIC COMPANY LTD.

Division Corporate Banking Division 4, Wholesale Banking Group

Location 8th Floor, Zone B, 9 Rutchadapisek Road, Chatuchak,
Chatuchak, Bangkok, Thailand 10900

Tel. +66-2544-2483

Fax +66-2937-7969

Name KASIKORNBANK PUBLIC COMPANY LTD.

Division Capital Markets Business Division



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

Tel. +66-2470-2020

Fax +66-2470-3065

Name DEUTSCHE BANK AG, Bangkok Branch

Division Corporate Treasury Sales

Location 63 Athenee Tower, 27-29 Floor, Wireless Road,
Lumpini, Pathumwan, Bangkok, Thailand 10330

Tel. +66-2646-5139

Fax +66-2651-5892

3. Baht 5,000 Million Bonds issued in May 2009

Name KASIKORNBANK PUBLIC COMPANY LTD.

Division Capital Markets Business Division

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

Tel. +66-2470-2020

Fax +66-2470-3065

Name CITIBANK, N.A. Bangkok Branch

Division Corporate Sales and Structuring

Location Interchange 21 Bldg., 399 Sukhumvit Road,
Klongtoeynua, Wattana, Bangkok, Thailand 10110



Tel. +66-2788-2822

Fax +66-2788-4825, +66-2788-4826

Name DEUTSCHE BANK AG, Bangkok Branch

Division Corporate Treasury Sales

Location 63 Athenee Tower, 27-29 Floor, Wireless Road,
Lumpini, Pathumwan, Bangkok, Thailand 10330

Tel. +66-2646-5139

Fax +66-2651-5892

Cross Currency Swap Counter Party USD/CAD**1. US\$ 150 Million Intercompany Loan**

Name KRUNGTHAI BANK PUBLIC COMPANY LTD.

Division Corporate Sales, Treasury

Location Building 1 (Nana Nue), 5th Floor, 35 Sukhumvit Road,
North Klongtoey, Wattana, Bangkok, Thailand 10110

Tel. +66-2208-4815

Fax +66-2256-8398

Interest Rate Swap Counter Party**1. US\$ 500 Million Loan Agreement dated in November 2010**

Name JP Morgan Chase Bank, N.A., Bangkok Branch

Division Corporate Sales Credit & Rates Markets



Location	Bubhajit Building 20, North Sathorn Road, Silom Bangrak, Bangkok, Thailand 10500
Tel.	+66-2684-2256
Fax	+66-2684-2260
Name	The Royal Bank of Scotland N.V., Bangkok Branch
Division	FICC Sales & Trading
Location	3 rd -4 th Floor, Bangkok City Tower 179/3 South Sathorn Road Thung Maha Mek, Sathorn, Bangkok, Thailand 10120
Tel.	+66-2659-3576
Fax	+66-2679-5908
Name	Barclays Bank PLC
Division	Investment Banking
Location	Level 28 One Raffles Quay South Tower Singapore 048583
Tel.	+65-6308-3454
Fax	+65-6308-2020

2. US\$ 50 Million Loan Agreement dated in December 2010

Name	The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch
Division	Corporate Marketing and Sales
Location	HSBC Building 968 Rama IV Road



Silom, Bangrak, Bangkok Thailand 10500

Tel. +66-2614-4847, +66-2614-4848, +66-2614-4849

Fax +66-2632-4831

(3) Auditor

Name Office of the Auditor General of Thailand

Address Soi Areesampan, Rama VI Road, Phayathai,
Bangkok 10400, Thailand

Telephone 66 (0) 2271-8150

Facsimile 66 (0) 2618-5783

(4) 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 -

Name Mr. Bhusana Premanode

Address 1/99 Moo 2, Vibhavadi Rangsit Road, Talad Bangkhen, Lak Si,
Bangkok, Thailand 10210

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2. Risk Factors

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

1.1 Internal Risk Factors

1.1.1 New Project Investment Risks

PTTEP's investment strategy seeks to expand interests both domestically and internationally, with a focus on projects that align with its strategic plan to increase petroleum production and reserves to meet long term energy demands. The investment decisions the company makes are assessed through the evaluation of a set of criteria ranging from petroleum potential, whether it is an opportunity in a target country, the type of petroleum technology involved and whether it is an investment with a strategic partner. In addition PTTEP periodically rebalances its strategic policy and reassess and expands its investment plans in core areas, emphasizing opportunities at the exploration phase or through mergers and acquisitions (M&A). The focus for increased investment is assessed from a "growth platform" perspective and whether through that investment PTTEP is able to mobilize inherent advantages it might already have; due to prior investment in those countries, meaning that new acquisitions can be leveraged to deliver benefits with existing projects and has the potential to increase growth opportunities.

Nevertheless all new investments contain inherent risks. Therefore PTTEP has instituted risk mitigation guidelines as part of its screening process for the assessment of each investment – which provides consideration of the many varied aspects, from taking into account petroleum potential of an area, the potential reserves, operational risks, operators' capability (in non-op investments) attractiveness of fiscal regimes, contract adherence, political stability, economic and fiscal stability, international relations, geographical conditions, size and project characteristics. In addition, risk prevention measures must be identified ahead of time. These risk factors are taken into account and mitigated using profitability analyses.

In view of such risks, PTTEP has instituted a process to scrutinize investment for each new project by presenting it before the Early Opportunity Review Committee who assess and ensure it adheres to corporate investment direction and policy. The committee analyses assorted factors from business rationales to technology, whether it is conventional or



unconventional development. Each new investment, including farm-in and farm-out projects, must secure endorsement from the aforementioned committee and a Management Committee before securing another endorsement from the Risk Management Committee, prior to final approval from the Board.

1.1.2 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 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 study and analysis 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 geoscience 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, PTTEP set up a risk management mechanism for its technical consideration by using a peer review through the 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 of the planned exploration wells during the annual work program and budget formulation period. Such process ensures efficient allocation of funds based on accepted risk profiles.



1.3 Project Development Risks

Recognizing the potential for 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 while working with contractors, 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, the contract departments must ensure that PTTEP personnel master contractual terms and conditions and that they consult the Legal Department.



1.1.4 Production Risks

Production disruption tends to result from aging equipment and operation errors, which may make production target 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 reduces instances of production losses due to worn-out equipment and improves on equipment efficiency, through raising the efficiency of preventive maintenance and inspection. The ultimate goal in the future is zero unplanned shutdowns.

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

1.1.5 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 internationally, in particular those with crude oil potential, to increase its portion of oil reserves. A case in point is its investment in the Canada Oil Sands KKD Project. 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 entered into 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.

1.1.6 Organization Capability Risks

Because human resources 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 and technology in support of future growth strategies, consisting of M&As, exploration, deep water drilling and oil sand and heavy oil

2) Develop 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 attain job values comparable to management whilst 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 given assignments. PTTEP has also devised plans to recruit and develop human resources 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.



1.1.7 Safety, Security, Health, and Environmental Risks

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

In view of Safety, Security, Health, and Environmental (SSHE) risks, PTTEP has drawn up a clear SSHE policy and constantly improved its SSHE performance to add security and efficiency to its business. In 2011, the Step Change in SSHE Project was initiated, with a primary goal of becoming an LTI-free (lost-time- injury-free) organization by this year in addition to upgrading capability to become a national E&P entity known and trusted for safety, and sustainable growth. Emphasis will be on continuous development of SSHE management systems to define and improve work procedures to always be timely while enriching the SSHE culture through the expressed desires of executives, participation of personnel, and assessment of operation for the purpose of continuous improvement.

1.1.8 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 requirements and financial projection, 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 obligations with commercial banks.



1.2 External Risk Factors

1.2.1 Political Risks in Other Countries

Due to PTTEP's foreign investment policy to meet 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 considerable political risks, and therefore PTTEP appointed a geopolitical risk team to monitor all these factors and periodically analyze and report on the development of these forms of risk and formulate possible scenarios for the consideration of management and relevant units for their decision-making on new investments and assessment of security risks in countries of existing investments where PTTEP staff are based. PTTEP bases its risk rating scores on such assessments before investing in new projects. In addition, PTTEP liaises closely with the Ministry of Foreign Affairs and Thai embassies in all these countries to ensure that PTTEP's execution is well-supported by the state and aligns with the national policy.

1.2.2 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 by setting up a Compliance department. A compliance unit is responsible for inspecting and supervising business for strict compliance with all relevant laws and regulations to minimize risks of non-compliance, and ensuring PTTEP directors, executives and employees of such compliance. Measures or process for non-compliance is set up. Examples are collection and arrangement of database of unit-level compliance, development of compliance management, warning for compliance schedules, training and advice for compliance, and review and report of compliance.



1.2.3 Price Risks

In 2012, the price of oil was considerably volatile, with Brent crude in the USD 84-1301 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 economic 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 recognized 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.

1.2.4 Exchange Rate Risks

Effective from January 1 2012, PTTEP has opted to make 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 to 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 more complicated, 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 a 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 this 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.

1.2.5 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 mitigate 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 lessen 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 2012

3.1.1 Investment of PTTEP and its subsidiaries

In January, the Company signed a joint operating agreement in the Myanmar Zawtika project with Myanmar Oil and Gas Enterprise (MOGE), where MOGE would hold a 20.0% interest in the project. As a result, PTTEPI held 80 percent participating interest and remained the operator in this project.

In May, PTTEP AI, the Company's wholly-owned subsidiary, made an offer to acquire the entire amount of shares in Cove Energy (Cove), the major assets of which are:

- Mozambique Rovuma Offshore Area 1 Project, which Cove had 8.5% interest
- Mozambique Rovuma Onshore Project, which Cove had 10.0% interest
- Kenya L5, L7, L11A, L11B and L12 Project, which Cove had 10.0% interest
- Kenya L10A block, which Cove had 25.0% interest
- Kenya L10B block, which Cove had 15.0% interest

Later in August, PTTEP AI successfully acquired Cove by fulfilling all conditions in the offer for Cove shares at the amount 1,221.4 million Pounds Sterling (or equivalent to 1,916.97 million US Dollars). Payment was made by the Company's cash on hand and proceeds from the bridge financing facility. In October, PTTEP AI held 100% interest in Cove.

In June, PTTEP SA and partner successfully won the bidding to conduct exploration activities in blocks PSC-G and EP-2 in Myanmar as a result of the Myanmar Onshore Blocks Bidding Round 2011.

In August, PTTEP AA attended the hearing of and pleaded guilty in the prosecution by the the National Offshore Petroleum Safety and Environmental Management (NOPSEMA) relation to incompliance with regulations from the Montara Incident at the Darwin Magistrates Court. A penalty of totaling 510,000 Australian Dollars has been handed down by



the court. The amount is within the provision that has already been set up in 2009 Financial Statement.

In September, PTTEPI selected Total E&P Myanmar (Total) and JX Nippon Oil & Gas Exploration (Myanmar) Limited (JX Myanmar) as partners of M11 with working interests of 40.0% and 15.0% respectively. The Company remains the operator and continues to own a 45.0% interest in the project.

In October, Company's Extraordinary General Meeting of the shareholders passed a resolution to approve the preferential public offering of maximum 650 million newly issued shares.

In December, the Company successfully completed the offer and allocation of newly issued shares. Consequently, the Company announced the result of the allocation and the first day of trade for the newly issued shares to the Stock Exchange of Thailand.

3.1.2 Achievement

In June, the Greater Bongkot South, Bongkot Project, began its first production of natural gas and condensate and reached a stable gas production of 320 MMscf/d and a condensate production rate of 9,000 Bbls/d.

In July, Vietnam 16-1 Project completed the installation of the second wellhead platform (WHP-H4) in Te Giac Trang Field, a month ahead of schedule. This resulted in the increase in crude oil production from 42,000 Bbls/d to 55,000 Bbls/d.

In July, PTTEP AA, a subsidiary of PTTEP, completed the drilling of appraisal well, Maple-2, the Cash-Maple field (Permit AC/RL 7), located in Timor Sea, Australia. This resulted in the discovery of natural gas with a flow rate of 30 MMscf/d and condensate with a flow rate of 696 Bbls/d respectively. The result of the drilling of this appraisal well is an important step to assess the petroleum potential of the project.

In November, PTTEP (the operator) and its partners completed the drilling of exploration well Mouia Aissa-1 (MAS-1), which was the sixth exploration well in the Hassi Bir Rekaiz blocks, located in the eastern zone of Algeria. The result of the drilling was a discovery of crude oil with a flow rate of 5,243 Bbls/d and natural gas with a flow rate of 5 MMscf/d. In 2012, the Company drilled a total of seven wells, six of which were successful.



In the fourth quarter, S1 Project successfully increased its production capacity through various initiatives, such as drilling of additional production wells, processed workover wells and installed beam pumps. These resulted in the increase in average production level above 30,000 Bbls/d from that of 2011 at 22,808 Bbls/d.

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 December 2012, PTTEP and its subsidiaries and associated companies had 44 petroleum exploration and production projects in 12 countries. Twenty-two projects are currently under the exploration phase, three under the development phase, and nineteen 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
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 & 28/48 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)



No.	Project Name	Phase	Location	Participation Interest	Operator
15.	B8/32 & 9A Project	Production	Gulf of Thailand	25%	Chevron
16.	G 4/48 Project	Production	Gulf of Thailand	5%	Chevron
Overlapping Area: 2 projects					
1.	MTJDA-B17 Project	Production	Thailand-Malaysia	50%	CPOC
2.	G9/43 Project	Exploration	Thailand-Cambodia	100%	PTTEP
Overseas: 26 projects					
Myanmar					
1.	Myanmar M3 & M11 Project	Exploration	Gulf of Martaban	100%	PTTEP
2.	Myanmar Zawtika Project	Development	Gulf of Martaban	100%	PTTEP
3.	Yadana Project	Production	Gulf of Martaban	25.5%	TOTAL
4.	Yetagun Project	Production	Gulf of Martaban	19.31784%	Petronas
5.	Myanmar PSC G & EP 2 Project	Exploration	Onshore	90%	PTTEP
Vietnam					
6.	Vietnam 9-2 Project	Production	Offshore	25%	HV JOC
7.	Vietnam 16-1 Project	Production	Offshore	28.5%	HL JOC
8.	Vietnam B & 48/95 Project	Exploration	Offshore	8.5%	Chevron
9.	Vietnam 52/97 Project	Exploration	Offshore	7%	Chevron
Cambodia					
10.	Cambodia B Project	Exploration	Offshore	33.333334%	PTTEP



No.	Project Name	Phase	Location	Participation Interest	Operator
Indonesia					
11.	Indonesia Malunda Project	Exploration	Offshore	100%	PTTEP
12.	Indonesia South Mandar Project	Exploration	Offshore	34%	PTTEP
13.	Indonesia Semai II Project	Exploration	Offshore	28.33%	Murphy
14.	Indonesia Sadang Project	Exploration	Offshore	30%	Tarisman
15.	Indonesia South Sageri Project	Exploration	Offshore	20%	Tarisman
Oman					
16	Oman 44 Project	Production	Onshore	100%	PTTEP
Algeria					
17.	Algeria Hassi Bir Rekaiz Project	Exploration	Onshore	24.5%	PTTEP
18.	Algeria 433a & 416 b Project	Development	Onshore	35%	GBRS
New Zealand					
19.	New Zealand Great South Project	Exploration	Offshore	18%	OMV New Zealand
Australia					
20.	PTTEP Australasia Project	Development	Offshore	100%	PTTEP
21.	Australia WA-423-P Project	Exploration	Offshore	30%	Murphy Australia WA-423-P Oil



No.	Project Name	Phase	Location	Participation Interest	Operator
Canada					
22.	Canada Oil Sands KKD Project	Production	Onshore	40%	Statoil
Mozambique					
23.	Mozambique Rovuma Offshore Area 1 Project	Exploration	Offshore	8.5%	Anadarko
24.	Mozambique Rovuma Onshore Project Project	Exploration	Onshore	10%	Anadarko
Kenya					
25.	Kenya L10A & L10B Project	Exploration	Offshore	25%	BG
26.	Kenya L5, L7, L11A, L11B & L12 Project	Exploration	Offshore	10%	Anadarko

Principal Projects

3.2.1.1 Principal Projects Under Production

The Company classifies a project as under production when there are production activities. The production and sales volumes stated below refer to the total production and sales volumes of a project.

Thailand

Arthit Project

Arthit Project is located in the southern part of the Gulf of Thailand, adjacent to the eastern end of Bongkot concession area. The Company currently has 80.0% interest in the Arthit project and is also the operator. First production commenced in March 2008 with 330 MMscf/d of natural gas and 16,000 Bbls/d of condensate. From 2010 to 2011, in accordance with the terms and conditions of the Gas Sale Agreement (GSA), we drilled the initial field reserves. The gas production profile was revisited based on official initial field reserves and production performance to optimize the reserves and prolong the production plateau under



take-or-pay basis according to the long term GSAs with PTT. It was then agreed that new daily contract quantity would be 220 MMscf/d as of December 2011.

In 2012, Arthit Project continuously engaged in exploration and development activities, from the drilling of eight appraisal wells to the construction of wellhead platforms, gas pipelines and production wells to maintain production levels. Average sales volume from the project was 237 MMscf/d of natural gas and 10,532 Bbls/d of condensate.

G50/8 was in the second exploration period (from December 19, 2010 to December 18, 2013). With the successful discovery of an exploration well, Department of Mineral Fuel (DMF) approved the production area in March 2012 with a development plan for the first production in 2015 via Arthit's central processing platform.

B6/27 Project

B6/27 Project is located in the Gulf of Thailand, approximately 25 km offshore from the Chumphon Province. Currently, the Company holds a 60.0% interest and is the operator of this concession. .

From 2005 to 2007, the Nang Nuan field, produced an average of approximately 1,400 Bbls/d. After 2007, however, the project stopped crude oil production due to a decline in the production rate. In 2009, the project re-initialized exploration studies which include new three-dimensional seismic data acquisition and re-processing existing data. Most of the exploration studies have been completed and the project plans to begin appraisal drilling in the end of 2013.

B8/32 & 9A Project

B8/32 & 9A Project is located in the Gulf of Thailand off the Chumporn coast. The Company holds 25.0% interest in the project with Chevron as the operator. The project currently has in effect long-term GSAs with PTT and sale agreements for the sale of crude oil under spot cargo with other purchasers.

In 2012, B8/32 & 9A Project continuously engaged in exploration and development activities with more exploration and development wells drilled. Sales volume averaged at 31,669 Bbls/d of crude oil and 124 MMscf/d of natural gas.



Bongkot Project

Bongkot Project is the largest field in the Gulf of Thailand, located in the southern part of the area, 203 km off the coast of Songkhla Province. The project has been in production since 1993. The Company holds 44.4445% interest and is also the operator of the project. All of the natural gas and condensate produced at Bongkot is sold to PTT, under take-or-pay basis, according to a long-term purchase agreement in which the project agreed to deliver a daily contract quantity of 550 MMscf/d

In 2009, the Company and its joint venture partners officially signed a GSA with PTT for the natural gas produced at Bongkot South, which is the area that was additionally discovered petroleum and later developed, with a daily contract quantity of 320 MMscf/d of natural gas. The signing of the GSA raised the total daily contract quantity of the Bongkot project to 870 MMscf/d. Since June 2012, Bongkot South was able to deliver natural gas production at the level indicated above and condensate at 11,000 Bbls/d. These production rates will increase the overall Bongkot production capacity to represent approximately 20% of Thailand's natural gas supply. This is both a testament to PTTEP's operations and a motivational drive for the company to supply energy to meet increasing domestic demand.

In 2012, sales volume averaged 750 MMscf/d and 27,203 Bbls/d for natural gas and condensate respectively.

Contract 3 Project

Contract 3 Project, which includes G 6/50 block, is located north of the Bongkot project in the Gulf of Thailand, off the coast of Surat Thani Province. The Company currently holds 5.0% interest in the project with Chevron as the operator. All of the natural gas and condensate produced at Contract 3 is sold to PTT on a take-or-pay basis pursuant to long-term gas purchase agreements.

In 2012, the project continuously drilled development wells as well as carried on development activities. Sales volume averaged 551 MMscf/d for natural gas, 24,350 Bbls/d for crude and 15,673 Bbls/d for condensate.



Contract 4 Project

Contract 4 Project is located northwest of Bongkot in the Gulf of Thailand off the coast of Songkhla Province. The Company currently holds 45.0% interest in the project with Chevron as the operator. All of the natural gas produced at Contract 4 is sold to PTT on a take-or-pay basis pursuant to a long-term GSA and condensate agreement.

In 2012, the project completed the drilling of 2 exploration wells and additional development wells. Sales volume averaged at 385 MMscf/d for natural gas and 14,868 Bbls/d for condensate.

E5 Project

E5 Project is located onshore at Namphong, Khon Kaen Province. The Company currently holds 20.0% in the project with ExxonMobil as the operator. All of the natural gas produced by the E5 project is sold to PTT on a take-or-pay basis pursuant to a long-term gas purchase agreement. PTT then transports the gas to an EGAT power plant.

In 2012, sales volume for the project averaged at 14 MMscf/d for natural gas.

G 4/43 Project

G 4/43 Project is located in the Gulf of Thailand. The Company currently holds 21.375% interest in the project with Chevron as the operator. Long-term GSAs with PTT and sales agreements for the sale of crude oil under spot cargo with other purchasers have been signed.

In 2012, the project completed the drilling of 3 exploration wells. Sales volume averaged at 6,966 Bbls/d for crude oil and 1 MMscf/d for natural gas.

G 4/48 Project

G 4/48 Project is located in the Gulf of Thailand offshore from Surat Thani Province. The G4/48 project's proximity to existing Contract 3 facilities will improve the economies of scale of both projects as certain equipments and production activities may be jointly used. The Company currently holds 5.0% interest in the project with Chevron as the operator.



In 2012, the project completed the drilling of 2 development wells. Sales volume averaged at 9 MMscf/d for natural gas and 2,244 Bbls/d for crude oil.

PTTEP 1 Project

PTTEP 1 Project is located in central Thailand in the Suphan Buri and Nakhon Pathom provinces. PTTEPI is currently the sole owner and operator of the project. Crude oil produced at PTTEP 1 is transported via roadway and railway to the Bangchak refinery and eventually sold to PTT at the Bangchak refinery.

In 2012, the project completed the drilling of additional production wells and conducted the Waterflood Study project in the U-Thong block to maximize crude oil discovery and compensate for declining production. Production of crude oil from new production wells commenced in the fourth quarter of 2012. Crude oil sales volume in 2012 averaged at 1,372 Bbls/d.

S1 Project

S1 Project is the largest domestic onshore assets in Thailand, located in the Sirikit field in Kamphaengphet, Sukhothai and Phitsanulok provinces. The project marked its 30th anniversary in 2012. The Company is the sole owner and operator of the project. Produced stream from the S1 project is composed of crude oil, natural gas, and LPG. Crude oil produced at S1 is sold to PTT and transported via trucks and rails to Thai Oil Public Company Limited and Bangchak refineries. Produced gas is processed through an LPG plant to capture LPG (C3&C4) products and sold to PTT and EGAT as fuel for generating power and to PTT NGV as compression gas.

In 2012, the project completed the drilling of 4 exploration and appraisal wells, additional production wells, as well as completed well workover and installed beam pumps to increase production profile. The project plans to fully explore the remaining area to assess the hydrocarbon potential of the concession. S1 Project grew its production level from 22,808 Bbls/d in 2011 to reach over 30,000 Bbls/d by the fourth quarter of 2012. Sales volume averaged 28,004 Bbls/d of crude oil, 24 MMscf/d of natural gas, and 253 metric tons per day of LPG during 2012.



Sinphuhorm (EU-1 and E5 North)

The Company holds 20.0% interest in the Sinphuhorm Project, located in Udon Thani and Khon Kaen provinces in the northeast of Thailand, through its subsidiary PTTEP Siam. Production of Sinphuhorm commenced in November 2006 and long-term GSAs with PTT have been signed.

In 2012, the project completed the 3D seismic interpretation and currently is on process of evaluating the results for future drilling program. Sales volume average 93 MMscf/d of natural gas and 427 Bbls/d of condensate during the year.

Overlapping Area

MTJDA-B17 Project

In 1994, PTTEPI, a wholly-owned subsidiary of the Company, formed a joint operating agreement with Carigali, a wholly-owned subsidiary of PETRONAS, the Malaysian state oil company, named Carigali-PTTEPI Operating Company Sdn. Bhd., to explore and develop Blocks B-17 and C-19. PTTEPI owns a 50.0% interest in a special purpose company that acts as operator of Blocks B-17 and C-19. Subsequently, Carigali assigned all of its interests under the JOA to PC JDA Ltd. On September 30, 2004, PTTEPI and PC JDA Ltd. (as “contractors”) and the MTJA (Malaysia-Thailand Joint Authority) signed a production sharing contract for the right to explore and produce petroleum in Block B-17-01, with the contractors and MTJA sharing any potential production.

PTTEPI, PC JDA and MTJA (the “Sellers”) executed a GSA for the sale of the natural gas to be produced from the MTJDA-B17 project to PTT. The agreement covers blocks B-17 & C-19 and B-17-01 of the MTJDA-B17. The MTJDA-B17 project began first commercial production in February 2010. The current daily contract quantity for the delivery of natural gas is 335 MMscf/d.

In 2012, the project completed the drilling of 1 exploration well and additional production wells. Sales volume averaged at 342 MMscf/d for natural gas and 7,150 Bbls/d for condensate.



Overseas

Canada Oil Sands KKD Project

In 2011, PTTEP CA, a subsidiary of the Company, acquired a 40.0% interest in the Canada Oil Sands KKD Project in Alberta, Canada, from Statoil, the operator of the project. The project has up to 4.3 billion Bbls of recoverable bitumen resources with an expected project life of over 40 years, as estimated by a leading external petroleum consultant.

All produced bitumen blend are sold to Statoil under a Bitumen Blend Sale Agreement. The sales agreement is a long-term agreement or until certain production volumes are reached. Once those volumes are reached, the Company can exercise an option to take its share of production. Upon the commencement of commercial production, the price of the bitumen will be set according to a formula that references market benchmarks and pre-determined adjustments for delivery costs, U.S. duties and marketing fees.

The project's development pilot, the Leismer Demonstration Plant (the "LDP"), began first production in 2011. Bitumen sales volume averaged approximately 16,343 Bbls/d in 2012. As for the plans to increase production capacity (Leismer Expansion) to 40,000 Bbls/d, the project is in the process of determining the well pad location, conducting detailed studies of the requirement of additional facilities and preparing for approval on such details from the Energy Resources Conservation Board (ERCB).

Moreover, the project plans to further increase production capacity from Corner, a petroleum area with approximate capacity of 40,000 Bbls/d. The area is currently undergoing a study period for more detailed evaluation of the development plan and overall budget with the aim of maximizing investment value and efficient construction process. A Final Investment Decision (FID) is expected in end of 2013 or early 2014 and startup of production within 3 years after FID.

In 2012, the project completed the Winter Evaluation Program (WEP) for 2011-2012, which covered the drilling of 161 appraisal wells and 3-D and 4-D seismic studies in Leismer, Thornbury and Hangingstone. Program results are used to evaluate the production of Leismer and assess the potential of Thornbury and Hangingstone. In the fourth quarter of 2012, the project is preparing for the 2012-2013 WEP and identifying positions and locations for



appraisal wells and seismic with the purpose of further development in Leismer, Corner and Thornbury.

Oman 44 Project

The Company wholly owns and operates Oman 44 Project, located onshore, to the west of Muscat, the Sultanate of Oman. Gas and condensate production began in the Shams field in 2007. Long-term GSAs on a take-or-pay basis have been signed with the Oman Ministry of Oil and Gas.

In 2012, the project successfully discovered crude oil from the drilling of development and appraisal wells in the Munhamir field and the new field, Shams-E South. This contributed to production increase by the fourth quarter of 2012, from approximately 1,500 Bbls/d to approximately 4,500 Bbls/d, a significant value added to the project. Sales volume averaged 40 MMscf/d of natural gas and 2,983 Bbls/d of condensate during the year.

Vietnam 9-2 Project

Vietnam 9-2 Project is located offshore to the southeast of Vung Tau City, Vietnam, with first The Company currently has 25.0% interest in the project. The crude oil produced is sold to Binh Son Refinery and Petrochemical Company Ltd. according to a term sales agreement. The gas produced is sold to Vietnam Oil and Gas Group, a Vietnamese state-owned enterprise, for domestic consumption. First production was dated in 2008.

In 2012, sales volume averaged 15 MMscf/d of natural gas and 6,022 Bbls/d of crude oil for the project.

Vietnam 16-1 Project

Vietnam 16-1 Project is located offshore to the southeast of Vung Tau City, Vietnam. The Company currently has 28.5% interest in the project. First production commenced in 2011 with the sale through Vietnam domestic refineries and export according to an agreement.

In 2012, the project began crude oil production from the second wellhead platform (WHP-H4) of Te Giac Trang field, the installation of which was completed in July 2012, one month earlier than scheduled. This allows an increase in crude oil production from 42,000 Bbls/d to approximately 55,000 Bbls/d. Crude oil sales averaged 39,425 Bbls/d during the year.



Yadana Project

Yadana Project is a large gas project located in the Gulf of Mottama, Myanmar. PTTEPI, the Company's wholly owned subsidiary, holds 25.5% working interest with Total as the operator of the project. Natural gas produced from the project is sold to PTT on a take-or-pay basis pursuant to a 30-year GSA and certain portion is sold to Myanmar Oil & Gas Enterprise (MOGE) to domestic use in Myanmar.

To transport natural gas from Yadana to Thailand, PTTEP Offshore Investment Limited (the Company's wholly owned subsidiary) and its joint venture partner established a gas transportation company, Moattama Gas transportation Company (MGTC), to construct and operate an onshore pipeline section from the Yadana development area to the Thai border. Consequently, PTT completed an onshore pipeline section from the Thai border to the EGAT electric power generating plant in Ratchaburi Province, near Bangkok.

In 2012, the project drilled an additional horizontal development well to maintain natural gas production level. Sales volume averaged 772 MMscf/d of natural gas during the year, sold to PTT and MOGE at 586 MMscf/d and 186 MMscf/d respectively.

Yetagun Project

Yetagun Project is located in the Gulf of Mottama, southeast of the Yadana project. PTTEPI, the Company's wholly owned subsidiary, holds 19.3% interest in the project with PC Myanmar (Hong Kong) Limited as the current operator. All natural gas from the Yetagun Project is sold to PTT on a take-or-pay basis pursuant to a 30-year agreement.

To transport natural gas from Yetagun to Thailand, PTTEPO and its joint venture partners construct and operate an offshore pipeline and an onshore pipeline (parallel to the Yadana pipeline) from the project to the Thai border.

In 2012, to maintain production level in accordance with GSA, the project completed the construction of Yetagun Booster Compression Platform (YBC Platform) and started to deliver gas to PTT in April 2012. Moreover, the project completed the Front End Engineering Design (FEED) for the Yetagun North Project and began its development phase. Sales volume averaged 393 MMscf/d of natural gas and 9,873 Bbls/d of condensate during the year.



3.2.1.2 Principal Properties Under Development

The Company classifies a property as under development there are development activities, but there are relatively minimal or no production activities.

Overseas

Algeria 433a & 416b Project

Algeria 433a & 416b Project is located in the eastern zone of Algeria, southeast of Algiers. The Company holds 35.0% interest in the project.

In 2012, the project is progressing with the engineering, procurement and construction work ("EPC") and the drilling of the development well for the first phase of development for the Bir Saba Oil Field. Oil production is scheduled to begin in 2014 with an expected capacity of 20,000 Bbls/d.

PTTEP Australasia Project

In 2009, the Company acquired 100.0% of the ordinary shares of Coogee Resources Limited, which was later renamed to PTTEP Australasia Pty Ltd. (PTTEP AA). PTTEP AA owns development and exploration assets located in the Timor Sea.

PTTEP AA's portfolio of properties under exploration is primarily located in the Vulcan sub-basin of the Timor Sea. These projects include AC/P54, AC/P33, AC/P34, AC/P17, AC/P24, AC/P4, AC/P40 and AC/RL7, in which it has interests ranging from 50.0% to 100.0%. The Company has reprocessed available seismic data to confirm the recoverable potential of these projects.

PTTEP AA also operates AC/RL 6, which contains the Audacious field, and AC/RL4 and AC/RL5, which contains the Tenacious field, in the Vulcan sub basin. Engineering studies have been conducted to assess development options for these fields. In 2011, appraisal well Cash 2 of the Cash-Maple field in AC/RL7 was drilled and natural gas was discovered. In 2012, a second appraisal well, Maple 2, was spudded, confirming the resources estimates. Data from this discovery will help appraise the potential for gas production at the Cash-Maple field and the development of natural gas in remote areas of the Timor Sea. The Company is in the process of considering commercial options for the Cash-Maple field. FLNG production is an



option to be used to develop this project. The Company will consider further appraisal programs and development options for 2014.

PTTEP AA also has a number of interests in the Browse Basin. These interests include a 20.0% interest in the Woodside projects of WA-396-P and WA-397-P. In 2012, the Woodside joint ventures were evaluating 3D seismic information to assess the potential of these projects.

Montara Project

Montara Project is located approximately 250 km northwest of Australia's Kimberley coastline. Development drilling activities were completed at the end of July 2012. The floating production storage and offloading (FPSO) unit arrived at the Montara field in November 2012. Currently underway are the hook-up and commissioning process and preparation for production, which is expected in the second quarter of 2013 with an expected maximum capacity of 35,000 Bbls/d.

The Montara Incident

In August 2009, an oil leak began during the Montara project's development well drilling. PTTEP AA stopped the leak in November 2009. A new project team is now in place and fully involved in the management of the project and the implementation of the Action Plan that resulted from the Commission of Inquiry. Operations are expected to commence in the second quarter of 2013.

Montara Commission of Inquiry and Montara Action Plan

In November 2009, the Department of Resources, Energy and Tourism (DRET) Minister established the Commission of Inquiry to investigate the likely causes of the incident and the resulting environmental impacts of the Montara Incident. The Commission of Inquiry's final report recommended that the DRET Minister conduct a review of PTTEPAA's license to operate the Montara field.

PTTEP AA, in conjunction with industry experts and the relevant Australian regulatory bodies, developed the Action Plan as a coordinated response to the issues identified in the Commission of Inquiry's final report. PTTEP AA had completed all of the items listed in the Action Plan. In February 2011, the DRET Minister decided not to pursue further inquiries or



reviews of PTTEP AA's petroleum titles as the Action Plan resolved the issues identified by the Commission of Inquiry effectively. This decision was conditioned on PTTEP AA implementing the Action Plan under a monitoring program overseen by Noetic.

The Company entered into a Deed of Agreement with the Australian government in respect of PTTEP AA's operations and the monitoring plan overseen by Noetic to cover the arrival of the Montara Venture into Australia, commencement of production and four months of steady production.

On August 31, 2012, the Darwin Magistrates' Court handed PTTEP AA a penalty of 510,000 Australian Dollars for four charges brought forward. No further expenses have been declared from the court ruling.

Regarding the compensation claim, the Company has received, from the start of the Montara incident to the end of fourth quarter in 2012, a total compensation claim of USD 212 million. The remaining claims are in progress.

Regarding the claim that was submitted by the Government of Indonesia for compensation due to oil leaks from the Montara incident, the Company is continuously assessing the case with the government through scientific evidences to determine the impact (if any).

Zawtika Project

Zawtika project is located in the Gulf of Mottama, Myanmar. PTTEPI owns 80.0% of and is the operator of the project, with MOGE holding the remaining 20.0%. PTTEPI entered into a 30-year GSA with PTT and MOGE at a daily contract quantity of 300 MMscf/d (240 MMscf/d of which to Thailand and 60 MMscf/d of which to Myanmar).

In 2012, the project is in the process of construction of the processing platform and bridge, wellhead platforms and intra-field sealines, offshore gas export pipeline, and onshore gas export pipeline and facilities. Much of the construction work has been completed. The project is expected to commercially deliver natural gas in early 2014.



3.2.1.3 Principal Properties Under Exploration

The Company classifies a property as under exploration when there are exploration activities, but there are relatively minimal or no development or production activities.

Thailand

A4, 5 and 6/48 Project

The A4, A5 and A6/48 Blocks are located in the deep waters of the Andaman Sea, in the Andaman Basin and Mergui Basin, Thailand. PTTEPI owns and operates 100.0% of the blocks. 2D seismic acquisition and processing, as well as extensive geology and geophysics studies on the blocks were conducted.

In 2012, the project has conducted further geological studies to assess petroleum potential of the area and interpret the result of the re-processed 2D seismic data. The project also proceeded with 3D seismic acquisition of the area with high potential and expects to complete the process in early 2013.

L21 and 28/48 Project

L21 and 28/48 Project is located in the Khon Kaen and Chaiyaphum provinces in north-eastern Thailand. PTTEPI owns 70.0% of and operates the project. The project drilled the first exploration well, Ratana-1, in L28/48 in December 2010 and encountered series of gas shows. However, the well drilling was suspended in late 2011 due to operational problems arising during the well testing. During 2012, the project analyzed the data collected from the drilling of Ratana-1 well to further assess petroleum potential and prepare for the drilling of exploration well Ratana-2 to confirm the petroleum potential of the Ratana complex.

As for the L21/48 project, additional 2D seismic acquisition have been completed in late 2012.

L22/43 Project

L22/43 Project is located in Phitsanulok and Pichit provinces. PTTEPI owns and operates 100.0% of the project. In 2011, two exploration wells were drilled with one well determined to be commercially viable. The production license was approved by the petroleum committee on July 17, 2012. The reservation area, which is 12.5% of total area, was approved



by DMF on September 18, 2012. The project is currently in the process of designing the production facilities for Wang Phai Sung A well (WPG-A01).

L53/43 and L54/43 Project

L53/43 and L54/43 Project is located in Suphan Buri, Kanchana Buri, Ayutthaya and Ang-Thong provinces, adjacent to PTTEP 1. PTTEPI owns a 100.0% interest in and operates the project. Production commenced in October 2010 and the oil produced is being sold to PTT's Bangchak refinery.

In 2012, the project completed the drilling of exploration wells at Bung Krathiam-B (BKM-B), block L53/43 and Nong Pak Chi (NPI-A), block L54/43. Flow rate testing through nitrogen lift for the above-mentioned exploration wells resulted in the crude oil flow rates of 1 Bbl/d and 600 Bbls/d respectively. During November 13-19, 2012, the Company submitted a letter of request for reservation area and prepared to submit the documents for the production license area (PLA) to DMF. Sales volume averaged 12.28 Bbls/d of crude oil during 2012.

Overlapping Area

G9/43 Project

G9/43 Project is located is located in the Gulf of Thailand. PTTEPI owns and operates 100.0% of the project. Activities at this project have been suspended pending the resolution of a boundary dispute. There are ongoing negotiations between the governments of Thailand and Cambodia.

Overseas

Algeria Hassi Bir Rekaiz Project

Algeria Hassi Bir Rekaiz Project is located onshore in the eastern zone of Algeria and covers an area of approximately 5,378 sq. km. The Company holds a 24.5% working interest and is the operator of the project.

PTTEP and its partners have planned in the first exploration phase of Hassi Bir Rekaiz project to drill nine exploration wells during late 2011 to early 2013. In 2012, the Company completed the drilling of seven wells with six success wells. Currently the drilling of the remaining wells is ongoing to confirm the petroleum potential.



Australia WA-423-P Project

Australia WA-423-P Project is located offshore of Western Australia. The Company holds 30.0% interest in the project with Murphy Oil as the operator.

In 2011, the Company reprocessed and interpreted 3D seismic data to determine the prospect location for an exploration commitment well (Eupheme-1). The well was drilled in the fourth quarter of 2012.

Cambodia B Project

Cambodia B Project located offshore Cambodia. PTTEPI operates and holds 33.333334% working interest in the project. The Company drilled all three commitment wells during 2008 – 2012. The Company has submitted a withdrawal notification letter to the government of Cambodia and is waiting for the approval.

Indonesia Malunda Project

Indonesia Malunda Project is located offshore in the Makassar Straits, off the coast of the Sulawesi and Kalimantan islands in Indonesia. The Company owns a 100.0% interest in and is the operator of the project.

The Company acquired exploration rights to the project in May 2010. The project is currently in the early exploration period. A 3D seismic survey was completed in 2011 and geological studies are currently ongoing.

Indonesia Sadang Project

Indonesia Sadang Project is located offshore in the Makassar Straits, off the coast of the Sulawesi and Kalimantan islands in Indonesia. The Company owns a 30.0% interest in the project with Talisman as the operator.

The Company and Talisman acquired the exploration rights to the project in May 2010. In 2011, Total joined the project, acquiring a 10.0% interest from the Company and a 20.0% interest from Talisman, for an aggregate interest of 30.0%. The project is currently in the early exploration period. A 3-D seismic survey was completed in 2011 and geological studies are currently ongoing.



Indonesia Semai II Project

Indonesia Semai II Project is located offshore, to the southwest of West Papua, Indonesia. The Company owns a 28.3% interest in the project with Murphy Oil as the operator.

The Company and its partners acquired the exploration rights to the project in November 2008. The project is currently in the exploration period. Exploration drilling of the Lengkaus-1 well commenced in late 2010. In 2011, the Lengkaus-1 well reached a depth of 6,500 meters and encountered some hydrocarbons which were not sufficient for commercial production. Lengkaus-1 data is currently being evaluated and additional geological studies are being conducted to gauge the potential of the Semai II project and further develop exploration and investment plan for the area.

Indonesia South Mandar Project

Indonesia South Mandar Project is located offshore in the Makassar Straits, off the coast of the Sulawesi and Kalimantan islands in Indonesia. The Company owns a 34.0% interest in and is the operator of the project.

The Company and Talisman acquired the exploration rights to the project in May 2010. In 2011, Total joined the project, acquiring a 33.0% interest from the Company. The project is currently in the early exploration period. A 3D seismic survey was completed in 2011 and geological studies are currently ongoing.

Indonesia South Sageri Project

Indonesia South Sageri Project is located offshore in the Makassar Straits, off the coast of the Sulawesi and Kalimantan islands in Indonesia. The Company owns a 20.0% interest in the project with Talisman as the operator

The Company and Talisman acquired the exploration rights to the project in May 2010. In 2011, Total joined the project, acquiring a 10.0% interest from the Company and a 35.0% interest from Talisman, for its total 45.0% interest. The project is currently in the early exploration period. A 3D seismic survey was completed in 2011 and geological studies are currently ongoing.



Kenya L5, L7, L11A, L11B and L12 Project

Kenya L5, L7, L11A, L11B and L12 Project is located offshore of Kenya. The Company, through its wholly-owned subsidiary Cove, owns a 10.0% working interest for the blocks covering an area of 22,959 sq. km., with Anadarko the operator of the project. Two 3D seismic surveys were completed in 2011 and drilling of exploration wells is planned for 2013.

Kenya L10A and L10B Project

Kenya L10A and L10B Project is located offshore of Kenya. The Company, through its wholly-owned subsidiary Cove, owns a 25.0% working interest in blocks L10A and a 15.0% working interest in blocks L10B, with BG the operator of both areas. L10A and L10B together cover an area of 10,516 sq. km, and a program of 2D and 3D seismic surveys was recently completed on these blocks.

Mozambique Rovuma Offshore Area 1 Project

The Company owns, through its wholly-owned subsidiary Cove, an 8.5% working interest in Mozambique Rovuma Offshore Area 1 (also referred to as the Rovuma Project). Anadarko is the operator.

Total discovered recoverable resources in Area 1 are currently estimated at over 32 to 65 TSCF of natural gas. A reserve certification process has been commenced, and is targeted to be completed in 2013. Beyond the discoveries to date, the Area 1 partnership is planning to continue exploration drilling in 2013.

In December 2012, the partnership awarded the contractors to perform Front End Engineering Design (FEED) for both onshore LNG construction and offshore installation to support production and construction of the LNG plant with the initial capacity of 10 MMtpa (two trains with 5 MMtpa each). The partnership is currently negotiating with the LNG purchasers. First production and gas sales are expected in late 2018 or 2019.

Mozambique Rovuma Onshore Project

The Company owns, through its wholly-owned subsidiary Cove, a 10.0% working interest in the onshore concession area of the Rovuma Block covering 13,500 sq. km. Anadarko is the operator. A work program comprising a 1,000 km of 2D seismic survey is expected to be completed by early 2013, followed by a potential two well drilling program.



Myanmar M3 and M11 Project

The Myanmar M3 and M11 projects are located in the Gulf of Martaban, Myanmar. PTTEPI holds 100.0% interest in the Myanmar M3 project. In 2011, exploration drilling began in M3 and, in 2012, natural gas was discovered in exploration well Aung Sinkha-2.

The Myanmar M3 project is in the middle of extending the exploration period to 7 years, as approved by the government of Myanmar, to prove the project's commerciality. The project is currently progressing with the drilling of four appraisal wells, with the first well drilled on February 4, 2013.

In January 2012, the Company selected and received approval from MOGE for TOTAL E&P Myanmar (Total) and JX Nippon Oil and Gas Exploration (Myanmar) Limited (JX Myanmar) to become partners of the Myanmar M11 project with working interests of 40.0% and 15.0% respectively. The Company remains the operator of the project with 45.0% interest.

The M11 deep water block is also in the process of preparation for an exploration well and securing drilling rig.

Myanmar PSC-G and EP2 Project

Blocks PSC-G and EP-2 are located onshore in the Central Myanmar Basin, west of the capital, Nay Pyi Taw, with the approximate acreages of 13,330 and 1,345 sq. km, respectively. On June 6, 2012, Myanmar announced that PTTEP SA, one of the Company's subsidiaries, together with Win Precious Resources successfully bid to explore and develop Blocks PSC-G and EP-2 as a result of the Myanmar Onshore Blocks Bidding Round 2011 and held the official production sharing contract signing ceremony on the same date. PTTEP SA has a 90.0% working interest in and is the operator of the project. The project is planning exploration activities for 2-D seismic, followed by drilling of exploration wells.

New Zealand Great South Project

New Zealand Great South Project is located in the Great South Basin, New Zealand. The Company owns 18.0% interest in the project. The 2D seismic acquisition studies for this project commenced in November 2007 and geological studies commenced in January 2008. Additional 2D seismic acquisition studies commenced in 2010. In 2011, the project ceased exploration and relinquished its interest in PEP-50121, which was evaluated to have low



petroleum potential, to the government of New Zealand. In March 2012, the regulatory authority New Zealand Petroleum and Minerals approved an application to redefine the area comprising PEP-50119 to also include the area which formerly was included in PEP-50120. The Company and project partners surrendered the license for PEP-50120. 3D seismic acquisition commenced in December 2011 and seismic processing was completed in the fourth quarter of 2012. The project is currently assessing the petroleum potential to determine additional drilling program.

Vietnam B & 48/95 Project

Vietnam B & 48/95 Project is located offshore of Vietnam. The Company owns 8.5% interest in the project with Chevron as the operator. The front-end engineering design for this project was awarded in February 2010 and was completed in the first quarter of 2011. The operator is currently negotiating a GSA with the Vietnamese government.

Vietnam 52/97 Project

Vietnam 52/97 Project is located offshore of Vietnam. The Company owns 7.0% interest in the project with Chevron as the operator. The front-end engineering design for this project was awarded in February 2010 and was completed in the first quarter of 2011. The operator is currently negotiating a GSA with the Vietnamese government.

3.2.1.4 Projects Relinquished in 2012

Bahrain 2 Project

The Company owned a 100.0% interest in and operated the Bahrain 2 project, located offshore, in the north of Bahrain. 2D seismic acquisition and processing activities, as well as external geological studies were conducted in 2009. The project completed the drilling of the project's first exploration well (Jarim-3) in June 2012. Subsequently on September 2, 2012, the National Oil & Gas Authority acknowledged the project's fulfilment of work and financial commitment of the first exploration period and approved its notification of the relinquishment of the entire area of Bahrain 2.



Myanmar M7 Project

PTTEPI relinquished exploration block M7 effective on February 1, 2012 after fulfillment of the exploration work commitments.

PTTEP Australasia Project

In 2012, the Company relinquished the following blocks for PTTEP Australasia project.

On September 29, 2011, PTTEP Australasia Pty Ltd relinquished its joint venture interest of 20.0% in the concession block WA378P, which was approved by the government of Australia on March 7, 2012.

On March 27, 2012, PTTEP Australasia Pty Ltd relinquished its joint venture interest of 35.0% in the concession block AC/P32, which was approved by the government of Australia on August 8, 2012.

On October 10, 2012, PTTEP Australasia (Ashmore Cartier) Pty Ltd relinquished its entire interest of 100.0% in the concession block AC/P40, which will become effective upon the approval from the government of Australia.

Rommana Project

The Company owned a 30.0% interest in the Rommana project, located onshore in Sinai in the north-eastern part of Egypt. Three exploration wells were drilled between January 2011 and January 2012, resulting in no significant petroleum found. On May 11, 2012, the project's exploration period expired and the Company relinquished its interest in the project. The notification of relinquishment was approved by the government of Egypt on April 11, 2012.

Sidi Abd El Rahman Offshore Project

The Company owned a 30.0% interest in the Sidi Abd El Rahman Offshore project, located in the Mediterranean Sea, northwest of Egypt. In March 2011, the project fulfilled its exploration work commitment and the Company submitted its notification of relinquishment of the area, subject to the approval of the government of Egypt.



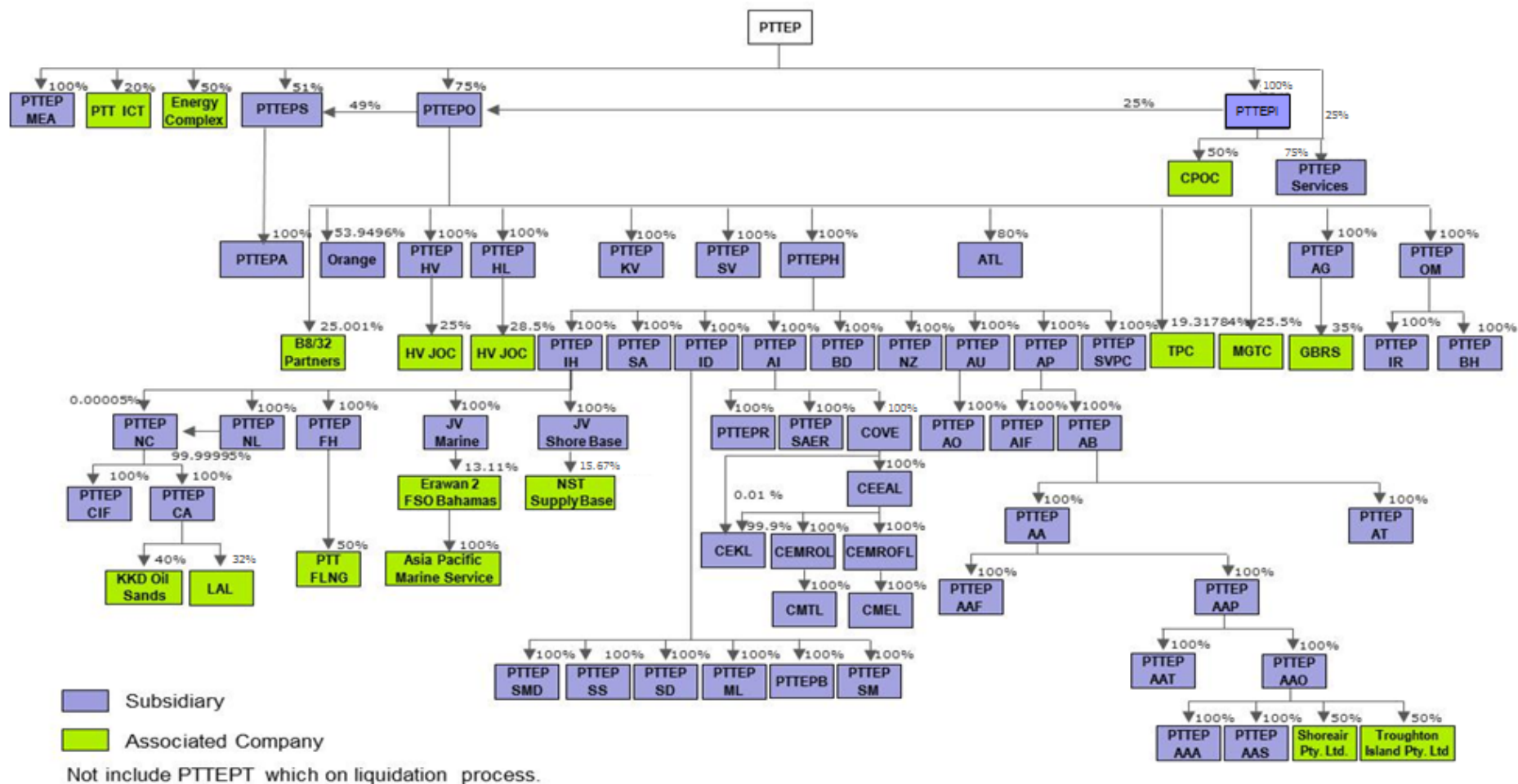
3.2.2 Structuring Policy for PTTEP Group

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 31 December 2012, PTTEP invested in 76 legal entities, comprising 59 subsidiaries and 17 associated companies. The PTTEP Group shareholding structure is illustrated as follows:





3.3 Revenue Structure

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

PTTEP and its subsidiary's revenues are mainly from sales of petroleum products of which its price is marked to the world fuel price in US Dollars. Thus, PTTEP and its subsidiaries' revenue structure of 2010 – 2012 are presented here in US Dollars in order to reflect the company's revenue structure.

The petroleum exploration and production projects which generated revenues for PTTEP and its subsidiaries comprised 20 projects: the Bongkot, Contract 4, S1, Yadana, Yetagun, Contract 3, B8/32 & 9A, PTTEP1, E5, B6/27, Sinphuhorm, G4/43, Oman 44, Arthit, Vietnam 9-2, 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 2010-2012

Product	Operated by	Shareholding by	% of interest		2010		2011		2012	
			2011	2012	Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Petroleum Exploration and Production Segment										
Crude	PTTEP	-	-	-	184.24	4.07	257.49	4.53	312.87	4.46
	PTTEPI	PTTEP	100.00	100.00	60.67	1.34	70.17	1.23	81.01	1.15
	PTTEPS	PTTEP	51.00	51.00	426.18	9.40	627.98	11.05	789.23	11.24
		PTTEPO	49.00	49.00	-	-	-	-	-	-
	PTTEPO ¹	PTTEP	75.00	75.00	283.91	6.26	314.11	5.52	327.17	4.66
		PTTEPI	25.00	25.00	-	-	-	-	-	-
	PTTEP HV	PTTEPO	100.00	100.00	55.33	1.22	60.36	1.06	65.67	0.94
	PTTEPT ²	PTTEPI	100.00	100.00	1.68	0.04	-	-	-	-
	PTTEP AP	PTTEPH	100.00	100.00	60.40	1.33	-	-	-	-
PTTEP HL	PTTEPO	100.00	100.00	-	-	149.95	2.64	509.33	7.25	
Natural Gas	PTTEP	-	-	-	1,611.16	35.55	1,619.77	28.49	2,045.27	29.13
	PTTEPI	PTTEP	100.00	100.00	506.16	11.17	659.95	11.61	837.59	11.93
	PTTEPS	PTTEP	51.00	51.00	41.48	0.92	51.40	0.90	48.88	0.70
		PTTEPO	49.00	49.00	-	-	-	-	-	-
	PTTEPO ¹	PTTEP	75.00	75.00	77.53	1.71	80.22	1.41	87.82	1.25
		PTTEPI	25.00	25.00	-	-	-	-	-	-
	PTTEP HV	PTTEPO	100.00	100.00	2.26	0.05	1.59	0.03	1.68	0.02
	PTTEP OM	PTTEPO	100.00	100.00	16.66	0.37	16.30	0.29	-	-
	PTTEPT ²	PTTEPI	100.00	100.00	0.26	0.01	-	-	-	-
LPG	PTTEP	-	-	-	5.60	0.12	6.58	0.11	7.10	0.10
	PTTEPS	PTTEP	51.00	51.00	16.80	0.37	19.75	0.35	21.30	0.30
		PTTEPO	49.00	49.00	-	-	-	-	-	-
Condensate	PTTEP	-	-	-	835.98	18.45	1,145.45	20.15	1,073.42	15.29
	PTTEPI	PTTEP	100.00	100.00	89.49	1.97	134.34	2.36	125.01	1.78
	PTTEPS	PTTEP	51.00	51.00	1.80	0.04	2.24	0.04	2.50	0.04
		PTTEPO	49.00	49.00	-	-	-	-	-	-



Product	Operated by	Shareholding by	% of interest		2010		2011		2012	
			2011	2012	Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Condensate (continued)	PTTEP OM	PTTEPO	100.00	100.00	52.04	1.15	72.18	1.27	98.19	1.40
Diluted Bitumen	PTTEP CA	PTTEP NC	100.00	100.00	-	-	149.89	2.64	255.52	3.64
Total					4,329.63	95.54	5,439.72	95.68	6,689.56	95.28
Overseas Pipeline Segment										
Gas Pipeline Transportation	MGTC	PTTEPO	25.50	25.50	71.43	1.58	80.00	1.41	95.33	1.36
	TPC	PTTEPO	19.3178	19.3178	39.41	0.87	44.07	0.78	55.35	0.79
Total					110.84	2.45	124.07	2.19	150.68	2.15
Other Segment										
Other Revenues	PTTEP	-	-	-	32.33	0.71	18.59	0.33	31.64	0.45
	PTTEPI	PTTEP	100.00	100.00	5.76	0.13	30.14	0.53	14.37	0.20
	PTTEPO ¹	PTTEP	75.00	75.00	3.10	0.07	5.55	0.10	5.49	0.08
		PTTEPI	25.00	25.00	-	-	-	-	-	-
	PTTEP HV	PTTEPO	100.00	100.00	0.05	0.00	0.10	0.00	0.09	0.00
	PTTEP HL	PTTEPO	100.00	100.00	0.02	0.00	0.04	0.00	0.06	0.00
	PTTEP OM	PTTEPO	100.00	100.00	-	-	-	-	0.94	0.01
	MGTC	PTTEPO	25.50	25.50	0.10	0.00	0.58	0.01	0.59	0.01
	TPC	PTTEPO	19.3178	19.3178	-	-	0.23	0.00	0.23	0.00
	ATL ⁴	PTTEPO	100.00	80.00	-	-	-	-	0.03	0.00
		PTTEP	25.00	25.00	0.38	0.01	0.86	0.01	1.14	0.02
	PTTEPT ²	PTTEPI	75.00	75.00	-	-	-	-	-	-
		PTTEPI	100.00	100.00	-	-	0.08	0.00	0.07	0.00
	PTTEPS	PTTEP	51.00	51.00	2.44	0.05	5.21	0.09	1.91	0.03
		PTTEPO	49.00	49.00	-	-	-	-	-	-
	PTTEP AP	PTTEPH	100.00	100.00	45.29	1.00	41.42	0.73	93.95	1.34
	PTTEP NZ	PTTEPH	100.00	100.00	-	-	7.51	0.13	0.02	0.00



Product	Operated by	Shareholding by	% of interest		2010		2011		2012	
			2011	2012	Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Other Revenues (continued)	PTTEP AI ³	PTTEP H	100.00	100.00	-	-	-	-	0.34	0.01
	PTTEP SM	PTTEP ID	100.00	100.00	1.83	0.04	-	-	-	-
	PTTEP SMD	PTTEP ID	100.00	100.00	-	-	3.13	0.05	2.11	0.03
	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	-	-	1.74	0.03	-	-
		PTTEP NL	99.99995	99.99995	-	-	-	-	-	-
	PTTEP CA ⁵	PTTEP NC	100.00	100.00	-	-	3.77	0.07	25.33	0.36
	PTTEP CIF	PTTEP NC	100.00	100.00	-	-	0.29	0.01	0.02	0.00
	COVE	PTTEP AI ³	-	100.00	-	-	-	-	0.10	0.00
	CEEAL	COVE	-	100.00	-	-	-	-	2.00	0.03
Total					91.30	2.01	121.30	2.13	180.43	2.57
Grand Total					4,531.77	100.00	5,685.09	100.00	7,020.67	100.00

¹ PTTEPO has shareholding in Orange Energy Limited and B 8/32 Partners Limited, which holds the project's concession.

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

³ The name of PTTEP Egypt Company Limited (PTTEP EG) was changed to PTTEP Africa Investment Limited (PTTEP AI).

⁴ On January 5, 2012, PTTEP Offshore Investment Limited (PTTEPO) with Myanmar Oil and Gas Enterprise (MOGE) has entered into Shareholders Agreement with Andaman Transportation Limited (ATL) to invest in Zawtika gas transportation project. The MOGE's investment is under 'the Agreement Establishing the Rights and Obligations of the Andaman Transportation Limited', which stated that, if MOGE exercised its rights to invest 20% of participating interest under the Production Sharing Contract, MOGE will have rights to invest in the common stock of ATL at the same proportion. As a result of entering into this agreement, the proportion of shareholders' interest of PTTEPO in ATL has been changed to 80% and MOGE has held another 20% shareholders interest effective on the date that both parties signed the agreement. The proportion change in the investment resulted in the change of ATL from a subsidiary to a jointly controlled entity. MOGE had paid for the actual participation interest totaling to US Dollar 6.22 million and paid for an increase in capital of its shareholders interest of US Dollar 12,500.

⁵ On November 8, 2012, PTTEP CA has sold 8% of its interest in LAL to FCCL PARTNERSHIP which resulted in a decrease in its interest in LAL from 40% to 32%.



For 2012, total revenues for PTTEP and its subsidiaries amounted to USD 7,021 million (equivalent to 218,137 million baht), an increase of USD 5,685 million or 24% against last year which was USD 5,685 million (equivalent to 173,375 million baht). The increase was mainly due to higher sales of petroleum of USD 1,249 million, resulting from (1) the higher average petroleum sales price for 2012, which rose to USD 64.86 per BOE compared with 2011 when it was at USD 55.49 per BOE; (2) the higher sales volume for this year rose to 275,923 BOED compared with for last year of 265,047 BOED. The increased sales volume largely came from crude sales from the Vietnam 16-1 project due to production ramp up from 8 new wells. The increased in crude sales also from the S1 project from new wells and higher beam pump activities. Moreover, bitumen sales from Canada oil sand KKD project also increased due to the production ramp up phase. However, the sales of natural gas decreased due to the net effect of the production stoppage of the Arthit-North project since the quarter 4 of 2011; whereas, the natural gas sales of Bongkot project increased from the Greater Bongkot South area which started its production in the quarter 2 of 2012.

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

This year, PTTEP and subsidiaries' other revenues increased principally because of the recognition of other income from the insurance claim from the Montara incident amounting USD 92 million in 2012; whereas, this insurance claim was recognized, amounting USD 36 million in 2011.



3.4 PTTEP Business Targets during 2012-2016

The current situation presents more challenges and difficulties for petroleum exploration and production as a result of a rapidly changing environment and fewer available hydrocarbons. In addition, to gain additional hydrocarbons in fields with more complex geology, advanced technology and higher capabilities are required. Also, there is a need to maintain environmental and social equilibrium. Therefore, PTTEP reviewed and amended its Mission and Vision to achieve better operational efficiency; and the company strategy is formulated to achieve this refined mission and vision. Such attempts will wheel the Company to become a Thai petroleum exploration and production company which develops sustainably and adheres to international standards. The key notions of our mission and vision are that PTTEP explores and produces petroleum domestically and abroad to provide energy security for Thailand and other countries where we operate, and to create sustainable value for investors, communities and society. Besides, PTTEP also aspires to become Asia's leading petroleum exploration and production company.

In strategic planning, PTTEP has three major means to become a Thai petroleum exploration and production company which grows sustainably while adhering to international standards which are Production, Reserves and Return on Investment

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 2012-2016 and results of corporate strategy execution during 2012 are summarized as follows:



3.4.1 Quantitative Target

Quantitative targets for sales in 2012 and 2016 are 284,000 and 324,000 Barrels of Oil Equivalent per Day (BOED), respectively, where the cumulative average growth rate in 2012 is approximately 3 percent. In 2012, PTTEP average petroleum sales was 276,000 BOED. Even though 2012 has many incidents affecting the production level in some projects such as the delayed of Montara project and Gear Bongkot South project. However, the company has increased petroleum production of project Bongkot, Arthit, and S1 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 2012, 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 2012, the total revenue of PTTEP and its subsidiaries was 7,021 million USD (equivalent to 218,137 million baht), as revenue from sales of 6,689 million USD (equivalent to 207,851 million baht) and other income of 332 million USD (equivalent to 10,286 million baht) and net profit of 1,846 million USD (equivalent to 57,316 million baht). In 2012, the company has the project progress as followed.

Exploration and Appraisal: PTTEP carries on exploration activities domestically and internationally to assess field potential and estimate petroleum reserves. In 2012, the company conducted exploration and appraisal activities in several projects.

- PTTEP Australasia Project: The project has completed 3-D seismic testing and drilling of appraisal well, Maple-2, Cash-Maple field, located in Timor Sea, Australia, in July 2012 with the discovery of natural gas. This discovery, in addition to that of Cash-2 well drilled at end of 2011, yielded a flow rate of natural gas of approximately 30 million square cubic feet per day (MMSCFD) and a condensate flow rate of 696 barrels per day (BPD). Currently, the company is assessing the commercial viability of the project.



- Myanmar M3 and M11 Projects: The projects are located in the Gulf of Martaban, south of Yangon, Republic of the Union of Myanmar. Currently, the exploration period is being extended to 7 years in order to prove the project's commerciality. Preparation for appraisal well drilling program in M3 block is ongoing. The M11 deep water block is also in the process of preparation for an exploration well.

- Indonesia Semai II Project: The project is conducting a geological study to assess petroleum potential and to define the location of the second exploration well, which is planned for a shallow water drilling site in 2013.

- Algeria Hassi Bir Rekaiz Project: The project's first exploration phase consists of drilling 9 exploration wells, 7 of which have been completed with successful discovery of crude oil in 6 of the completed wells. Currently, the project is progressing to complete the drilling of the remaining exploration wells by early 2013 to confirm their petroleum potential.

- Canada Oil Sands KKD Project: The project completed the Winter Evaluation Program (WEP) for 2011-2012, which covered the drilling of 161 appraisal wells and 3-D and 4-D seismic studies in Leismer, Thornbury and Hangingstone. Program results are used to evaluate the production of Leismer and assess the potential of Thornbury and Hangingstone.

In Q4 of 2012, the project is preparing for the 2012-2013 WEP and identifying positions and locations for appraisal wells and seismic testing with the purpose of further development in Leismer, Corner and Thornbury. The program is expected to cover drilling of approximately 92 wells and 3-D and 4-D seismic coverage of approximately 134 square kilometers.

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

- PTTEP Australasia Project: The project completed the drilling of 3 production wells and a gas injection well in July 2012. The floating production and storage offloading (FPSO) vessel arrived at the Montara field in November 2012. Currently underway are the hook-up and commissioning process and preparation for production.



Regarding the compensation claim, PTTEP has received, from the start of the Montara incident to the end of fourth quarter in 2012, a total compensation claim of USD 212 million. The remaining claims are in progress.

Regarding the claim that was submitted by the Government of Indonesia for compensation due to oil leaks from the Montara incident, PTTEP is continuously assessing the case with the government through scientific evidences to determine the impact (if any).

- Myanmar Zawtika Project: In early 2012, PTTEP International Limited (PTTEPI) signed a joint operating agreement with Myanmar Oil and Gas Enterprise (MOGE). MOGE then held 20 percent participating interest in the Myanmar Zawtika Project, in accordance with the Production Sharing Contract. As a result, PTTEPI held 80 percent participating interest and remained the operator in this project. To date, the project is now in the process of constructing the Zawtika processing platform & bridge, wellhead platforms and intra-field sealines, offshore gas export pipeline, and onshore gas export pipeline and facilities. More than 63 percent of construction work has been completed. The project is expected to start production process in 2013 and commercially deliver natural gas in early 2014.

- Algeria 433a & 416b Project: The project targets to complete the drilling of 4 production wells in 2012, of which 3 have already been completed. The flow rate of crude oil stood approximately at 4,000 BPD. The project continues to progress with the drilling of the fourth well and the construction of processing and pipeline facilities (EPC1), as well as the construction of the living quarters and utility facilities (EPC2) in the development area. The project is expected to begin production within 2014.

- Canada Oil Sands KKD Project: The Corner Field study period has been extended for more detailed evaluation of the development plan and overall budget with the aim of maximizing investment value and efficient construction process. . A Final Investment Decision (FID) is expected in end of 2013 or early 2014 and startup of production within 3 years after FID.

- Mozambique Rovuma Offshore Area 1 Project: In August 2012, PTTEP Africa Investment Limited (PTTEP AI), a subsidiary of PTTEP, successfully completed the acquisition of Cove Energy. As a result, PTTEP AI currently holds 8.5% interest in the Mozambique Rovuma Offshore Area 1 project, the operator of which is Anadarko.



Located in Mozambique, the Mozambique Rovuma Offshore Area 1 is an area with substantial natural gas resources. Exploration activities have taken place and discoveries of natural gas have been made in the project with expected resources of over 65 trillion cubic feet (TCF). Significantly, potential exists to develop the area into liquefied natural gas (LNG) project. After PTTEP AI became a project partner, a key milestone for development activities was reached when the Front End Engineering Design (FEED) for both onshore LNG construction and offshore installation were awarded.

Moreover, Anadarko, as the operator of Mozambique Offshore Area 1, reached Heads of Agreement (HOA) with Eni, as the operator of Mozambique Offshore Area 4. The two operators will conduct separate, yet coordinated offshore development activities, while jointly planning and constructing common onshore liquefaction facilities at Cape Afungi, in Cabo Delgado Province of northern Mozambique.

Production: PTTEP is continuously striving to maintain current production levels and increase production levels from new projects.

- Bongkot Project: On June 16th, 2012, Greater Bongkot South, Bongkot Project reached a stable gas production rate of 320 MMSCFD, as required by the Gas Sales Agreement with PTT, and a condensate production rate of 9,000 BPD. On July 15, 2012, Greater Bongkot North field achieved a record production level for condensate at 25,019 BPD. Consequently, on August 5, 2012, the field reached a total production of condensate of 100 million barrels. As for natural gas production, the field reached an average production level of 596 MMSCFD during 2012.

Overall, at Bongkot Project, which consists of both Greater Bongkot North and Greater Bongkot South fields, natural gas production capacity increased to more than 900 MMSCFD, which signifies about 20% of Thailand natural gas demand.

- S1 Project: The project reached the highest production level of crude oil at 35,176 BPD in December 2012. This achievement stands out as the highest ever record of production level since the inception of the project. Average production of crude oil in 2012 stood at approximately 28,000 BPD.

- Canada Oil Sands KKD Project: Average bitumen production for the Leismer area in the fourth quarter of 2012 was approximately 15,700 BPD, which came from 22



pairs of steam-assisted gravity drainages and production wells from 4 well pads. Total production in the Leismer area, since its initial production, stood at approximately 9 million barrels as of November 2012. Well Pad 5 is expected to be ready for production by the fourth quarter of 2013.

As for the plans to increase production capacity (Leismer Expansion) to 40,000 BPD, the Company is determining the well pad location, conducting detailed studies of the requirements of additional facilities and preparing to seek approval details from the Energy Resources Conservation Board (ERCB).

- Oman 44 Project: The Company increased crude oil production rate from approximately 1,500 BPD to 4,600 BPD with the discovery of crude oil from the drilling of development and appraisal wells in the Munhamir field and the new field, Shams-E South. In 2012, average production of crude oil and condensate stood at approximately 2,960 BPD and that of natural gas stood at 42 MMSCFD. Progress is being made with construction and testing, in compliance with engineering standards, of the pipeline from Shams-9ST production well to the main processing unit of the Shams field. Production of natural gas and condensate started from Shams-9ST on December 30th, 2012.

- Vietnam 16-1 Project: On July 6, 2012, production from the second wellhead platform (WHP-H4) of Te Giac Trang field successfully began. As a result, the project increased its production of crude oil from 41,000 BPD to approximately 55,000 BPD.

(2) Expansion for Sustainable Growth

Expanding Abroad : In 2012 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 and also Conventional and Unconventional projects, focusing on the strategically targeted countries to be the growth platform for future expansion such as Myanmar, East Africa and acquisition or investment in petroleum in Thailand which will be end of concession in the next 10 years.

In 2012, PTTEP successfully completed the acquisition of Cove Energy Plc. which petroleum covers the area in Republic of Kenya and Mozambique which consists of Rovuma Area one is an area with substantial natural gas resources. Exploration activities have taken place and discoveries of natural gas have been made in the project with expected



resources of over 60 trillion cubic feet. In addition, the expansion in an exploration on onshore areas in Myanmar (PSC-G and EP-2) had also been made.

Managing Portfolio and Reviewing Investment : PTTEP has operated continuously in the area of Portfolio Management. This aims for appropriate investment both in value added projects and risk management. To keep pace with changing social, economic and political conditions, the company studies and analyzes the factors and the impact of its investment on a regular basis to derive and manage its investment considerations and decisions. In addition, the company reviews its target for expansion (Focused Countries) by grouping the countries based on the opportunities, appropriateness and consistency with the company's direction and goals. The analyses are based on numerous factors such as petroleum potential, geography, government share, political and business risks, and competitive advantage(s).

In 2012, PTTEP International Limited (PTTEPI), a wholly owned subsidiary of PTTEP, has selected Total E&P Myanmar (Total) and JX Nippon Oil & Gas Exploration (Myanmar) Limited (JX Myanmar), a wholly owned subsidiary of JX Nippon Oil & Gas Exploration Corporation (JX NOEX), to become partners in Block M11 with 40% and 15% participation interests, respectively. PTTEPI will remain the operator, holding a 45% participation interest. The transaction is subject to official approval from the government of the Republic of the Union of Myanmar. Introduction of partners into Block M11 constitutes an integral component of PTTEP's strategy in its portfolio management, aiming to both add value to the project and risk management.

(3) Organization Capability Development

Improving the efficiency and cost optimization : PTTEP, together with its parent company, PTT Public Company Limited (PTT), and other companies under the PTT Group, embarked on its innovative PTT Group Operational Excellence Transformation Project to initiate the PTT Group Operational Excellence Management System (OEMS). Its focused objective centers on driving the Group into becoming a Leading Enterprise in the energy industry. The project team consists of representatives from PTT, PTTEP and other companies under the PTT Group. Our standard operations manuals were successfully established and adopted by PTT Group and will become the template for future operational excellence and



process improvement initiatives. Each company in the PTT Group will jointly develop the framework of the project to help achieve its objective.

Moreover, as the outlook for operating costs indicate an increasing trend, including the unconventional project and the higher liquid production in PTTEP's portfolio, the company manages its operating costs to maintain costs and returns at suitable levels. As a representative example, Supply Chain Plus is an initiative to assist in management of procurement costs, and helped PTTEP reduce costs at 22% more than its targeted savings of USD 90 million.

Safety, Security, Health and Environment (SSHE) and Sustainable Development (SD) : PTTEP aims to become a Loss Time Injury free organization in 2013 through compulsory management of safety, security, health and environment in all parts of the organization. PTTEP has therefore applied and monitored standard measurements from International Association of Oil and Gas Producers (OGP) such as Lost Time Injury Frequency (LTIF), Total Recordable Injury Rate (TRIR), Loss of Primary Containment Rate (LOPCR), and Chemical and Hydrocarbon Spill Rate. The comprehensive safety system can mitigate risks and reduce effect of incidents. In 2012, PTTEP achieved its best safety performance ever with the record for Lost Time Injury Frequency (LTIF) and Total Recordable Injury Rate (TRIR) at the ratios of 0.19 and 1.87 respectively. LTIF is lowered by 45% compared with 2011, which placed the company in a good position to be ranked in the top quartile amongst the International Association of Oil and Gas Producers (OGP).

Furthermore, On 25 July 2012, PTTEP introduced its Life Saving Program, which encourages its employees and contractors to strictly follow the rules and policies on safety through use of 18 Life Saving Icons, derived from OGP studies of major accidents that resulted in serious losses or injuries in the exploration and production business.

PTTEP has the strategy to deliver long-term sustainable development and meet its 900,000 BOED production target by 2020 through investment opportunities that yield sustainable growth as well as achieve economic, social and environmental sustainability. In 2011, PTTEP proudly established its Sustainable Development Committee, comprising representatives from operational and executive levels, to provide governance and support to



different organizations in the company with aligned objectives. PTTEP targets listing on the Dow Jones World Sustainability Index (DJSI World) by 2014.

Staff Capability Development : PTTEP has been continually improving the capability of the organization focusing on staff capability development which urgently required including the exploration, drilling as well as the long term capability development and leadership development program, in order to align with the global growth direction.

PTTEP has reviewed and adjusted corporate values to EP SPIRIT to support PTTEP's sustainable growth as strategic planned to align with values of PTT group (SPIRIT) which is important for development and growth efficiency and align with the direction of PTT group, it has planned and will be communicated in 2014.

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. The system will be start in 2013

Organization Capability Development : PTTEP acknowledges the importance of capability improvement by focusing on the potential of people, technology and processes to prepare for business growth and meet challenges in different countries around the world. In 2012, PTTEP continued this focus with establishment of its Center of Excellence, or COE. The COE aims to create a clear-cut plan to study, research, and collect data, including in-depth knowledge and technology in four dimensions: Exploration, Deep Water Exploration and Production, Unconventional Oil and Gas Development, and Mergers and Acquisitions. Additionally, the initiative of a Technology Center, which centralizes the latest technological developments and also serves as a knowledge warehouse to further develop the capability of employees and the organization, has been brought forward and is expected to begin from 2013 onwards.

Corporate Social Responsibility (CSR): PTTEP recognizes the importance of natural preservation, along with sustainable development in communities surrounding the areas of operation. In 2012, PTTEP engaged in environmental conservation activities, especially in the area of restoration and conservation of natural resources, together with sustainable development activities in communities surrounding the areas of operation. Examples of such activities include



submerging of the Royal Thai Navy Battleship for Underwater Learning Center, one of the CSR programs to restore aquatic resources and the ecosystem in the coastal area, the mangrove plantation project, jointly with Chulalongkorn University, both of which took place in Chumporn province, as well as the mangrove conservation project with the local community, the Conserve Songkhla Lake with PTTEP project, and the water bank program, all three of which took place in Songkhla province. PTTEP has also continuously planned for further CSR programs for 2013.



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 and Warehouse

To provide jetty service support to PTTEP's own and affiliated offshore operating assets, as well as other offshore oil and gas operating companies in the Gulf of Thailand, such as Chevron, Hyundai, Pearl Oil and Thai Nippon Steel etc.

Our jetty is one of Thailand's leading shore base facilities for Petroleum Exploration and Production activities, with a total length of 380 meters capable for 6 standard supply vessels berthing. Storage facilities and handling equipment, silo and bulk loading system, have been built or procured in compliance with relevant international standards. We emphasize on controlling system and continuous improvement of business process, particularly in the area of Safety, Security, Health and Environment (SSHE), with ISO14001, OHSAS18001 and ISPS (International Ship and Port Facilities Security Code - by Marine Safety and Environment Bureau, Royal Thai Marine Department.) certification.

Warehouse and Yard area which provide 2 locations, Ranong and Songkhla with total area about 25 Rai and 58 Rai, respectively. Both locations provide for Free Zone and Non-Free Zone area for safely storing all petroleum equipment such as tubing, casing and drilling equipment. Apart of modern warehouse operation, safety is the important issue to be monitored. Therefore, CCTV has been installed at strategic locations throughout the Base and strictly monitored by officers 24 hours a day.

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 Solutions Co., Ltd, an affiliate with 20% shares owned by PTTEP, has signed an agreement with PTTEP to provide all PTTEP information technology and communication services in accordance with the PTTEP Board of Director's resolution number 10/2549/254 dated September 29th, 2006. The agreement includes infrastructure design and implementation services, consultancy services, procurement services, and outsourcing services to support PTTEP information technology and communication needs. The 4.5-year renewal contract period has been in effect since July 1st, 2011 and is based on the PTT Group ICT Policy Strategy of driving and increasing synergy 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 Obtaining Business License and Concession

PTTEP does its petroleum exploration and production in the Kingdom 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. Inside the Kingdom, 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, which is the responsible agency, delineates exploration blocks, and then invites oil companies to submit applications for concessions. The Petroleum Committee considers applications for concessions. In this



connection, the sub-committee will initially screen the information stated in the applications, and the Minister of Energy is empowered 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 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 spread the risks. In a joint venture, one company will be designated “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 who participate in the joint venture are called “non-operators”. The operators manage operations and make cash calls on all non-operators to finance the work program. Non-operators through their representation on the management committee participate in technical and financial decisions. Generally, an oil company as it grows in experience seeks to become an operator in order to assume a greater role in management and operations.

4.2.3 Nature of Operations and Investment Decisions

Before oil company decides to invest in petroleum exploration in the Kingdom and abroad, it has to 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. In addition, there must be a chance of finding a source of petroleum that has commercial viability. The success ratio of drilling of exploration wells in neighboring areas is taken into account. If the company decides to invest, 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, and may take 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 contract 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, as amended. Several major features of these laws are:

- (1) an applicant for a concession must be a limited company or a juristic person which has the same status as a limited company established under the laws 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 terms);
- (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

* Currently 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.

**Summary 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



4.3 Marketing and Competition

PTTEP has invested in 44 E&P projects: 17 domestic and 27 overseas. PTTEP's petroleum products include natural gas, crude oil, condensate, and LPG, mainly marketed domestically to satisfy Thailand's energy demand. Moreover, its overseas expansion of E&P and sales business represents additional means of forging energy security and generating income for Thailand.

In 2012, total sales by PTTEP and its subsidiaries averaged 275,923 BOED, a 4 percent increase from the previous year. Most of the incremental sales came from natural gas and condensate from the Bongkot South Gas Field, which went on stream in February 2012. The average production of Natural gas and condensate from Bongkot South Gas Field is 203 MMSCFD and 7,116 BPD. The average production of crude oil from the S1 Project increased from 22,808 to 28,004 BPD. The average production of Diluted Bitumen or Dilbit from the Canada Oil Sands KKD Project rose from 14,300 to 16,343 BPD, and average crude oil production from the Vietnam 16-1 Project rose from 10,528 to 42,124 BPD.

For 2012, the total sales ratio of natural gas and liquid (crude oil and condensate) was 66% : 34% by volume, or 46% : 54% by revenue, as shown below.

Products	2010	2011	2012	2010	2011	2012
	Volume	Volume	Volume	Value (Million USD)	Value (Million USD)	Value (Million USD)
Crude Oil (MMBBL)	14.45	14.16	19.18	1,072.42	1,480.07	2,085.28
Natural Gas (MMSCF)	421,922.40	417,090.97	412,042.44	2,255.50	2,429.23	3,021.24
LPG (Metric Tons)	72,689.38	86,292.37	92,732.81	22.40	26.33	28.40
Condensate (MMBBL)	13.36	12.92	12.32	979.31	1,354.20	1,299.12
Diluted Bitumen (MMBBL)	-	2.07	3.77	-	149.89	255.51



4.3.1 Marketing Characteristics

PTTEP, by and large, sells its output 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 the power sector, the petrochemical sector, transportation sector, other industries and households.

The marketing of petroleum products varies with their characteristics and field location, which in turn differentiate market and sales price structures, as described below.

(1) Natural gas:

Due to capital-intensive investment in developing oil and gas fields, gas sales agreements (GSAs) must be agreed to or signed between buyer and seller before any major investment is made. GSAs are typically long-term contracts, 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 Central Processing Platform (CPP), 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 Myanmar-Thai border. The seller is responsible for investment in the transmission pipelines from the Central Processing Platform to the border area. Gas prices are usually linked to fuel oil and key economic indices to reflect the investment costs and be competitive compared to fuel oil 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 volume; the buyer must pay for the committed volume of gas as stipulated in the GSA, whether or not the full amount is taken. As a consequence, the buyer is entitled to take delivery free of charge in subsequent years (Make-up gas). On the other hand, should the seller fail to deliver as nominated by the buyer, the buyer is entitled to an agreed discount price of the undelivered volumes as stipulated in the agreement.

(2) Condensate and crude oil:

Condensate and crude oil prices are determined by their properties and benchmarking with other benchmarked crude 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 the S1 Project is sold to PTT under a long-term contract at a price referenced to the ex-refinery prices announced by the Joint Committee on Energy Policy Administration. Sales of petroleum products from international fields varies from country to country as detailed below:

(1) Yadana and Yetagun Projects in the Republic of the Union of Myanmar: Approximately 80% of the produced natural gas from Yadana Project is primarily sold to Thailand (through PTT, the buyer), and the remaining 20% is sold to Myanmar for its domestic power generation. Nearly all of the condensate from Yetagun Project is sold and consumed in Myanmar, with the excess volume sold in regional spot markets. All the gas output from the Yetagun project is currently sold to PTT for consumption in Thailand.

(2) MTJDA-B17 Project from B-17 of the Malaysia-Thailand Joint Development Area: Presently, all produced natural gas is sold to PTT, the buyer, for consumption in Thailand. Starting in 2015, however, it will be rerouted to Malaysia according to the Gas Balancing Agreement between PTT and Petrolim Nasional Berhad. The condensate output will be marketed and sold by a co-marketing agent of PTT and Petco Trading Labuan Company Limited by auction in spot markets.

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

(4) Vietnam 9-2 and Vietnam 16-1 Projects in the Socialist Republic of Vietnam: All the oil output produced from the Vietnam 9-2 Project is sold to Binh Son Refining and Petrochemical Company LTD (BSR), a refinery in the Socialist Republic of Vietnam, for consumption in Vietnam. Produced crude from the Vietnam 16-1 Project is sold in spot markets by auction, whereas the produced gas from both projects is sold to the Vietnam Oil and Gas Group, a state enterprise, for consumption in Vietnam.

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



Competition

The E&P industry in Thailand is an oligopoly since it requires high investment and advanced technology. Due to high demand, especially for natural gas, the GSAs are predominantly long-term contracts, with take-or-pay clauses to guarantee the market. This is to attract investment in the business.

In 2012, Thailand energy demand grew steadily. According to a report by the Energy Policy and Planning Office (EPPO), demand for energy was at 1.94 million BOED, increasing 4.8% from the previous year due to Thailand's economic expansion, public investment and state expenses, and investment acceleration for business rehabilitation after the floods in late 2011.

Natural gas demand increased 7.4% (or approximately 874,000 BOED), given the increases in demand from the power generation sector, transportation sector, industry and the petrochemical sector. Natural gas demand exceeded domestic supply which led to an increase in LNG imports in 2012.

Oil consumption is expected to rise by 3.3% (or 694,000 BOED) from 2011, whereas consumption of lignite/coal and water energy/electricity is estimated to increase by 2.8% and 1.9% from 2011, respectively.

As for the market situation in 2013, the Fiscal Policy Office, Ministry of Finance, forecasts Thailand's economy to continue growing and to be propelled by rising demand from the public i.e. government expenditure to stimulate the economy and on long-term water management plan and demand from international market which forecasted expanding.

Despite the risks, the global economy is expected to start recovering in late 2013. To have energy prices reflect real energy costs and improve efficiency of energy usage, the Thai government's policy is set for energy price restructuring. The LPG refinery price, in particular, will be set to reflect the global market as a means to lower LPG imports, encourage more domestic production and lessen the Oil Fund burden.

Meanwhile, oil prices are likely to increase due to the global economic recovery that buoys the rising global demand for crude oil, but the rise is not expected to be severe. Nevertheless, risks to the global recovery remain e.g., the US economic recovery, the European economic problem, consistent economic growth in China and emerging markets. Major



countries continue to stay sensitive to likely sharp rises in the global oil price e.g. In addition, increases of crude oil volume in the United States may lessen the US demand for crude oil imports.

The Thai government has been preparing the country for the Asean Economic Community (AEC) with amendment of rules for trade and investment. This will help the country to reap full benefits from the liberal trade, capital movement and freer flow of labor under the AEC, which will take shape in 2015. As the ASEAN countries remain its major markets, the PTT Group of Companies also has formulated its plan for the upcoming AEC with its long experience and success in distribution of crude oil and petroleum products at competitive prices. This combines with a linkage of the petroleum and petrochemical sections where their operations are fully integrated. The company is confident that such factors remain its strength for more trade opportunities and higher competitiveness among other Asean rivals.

PTTEP, one of PTT Plc's subsidiaries, has expanded its Asean investment while adhering to its commitment as the national energy company in exploring for energy sources and strengthening Thailand's energy stability for the long term.

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 2012, the total Proved Reserves of all PTTEP and subsidiary' projects are 263 Million Stock Tank Barrels (MMSTB) for crude oil and condensate¹, and 4,182 Billion Standard Cubic Feet (BSCF) for gas. The total Proved Reserves (Consolidated Companies) in term of oil equivalent is 901 Million Barrels (MMBOE). Details are shown in the following table.

¹ Included the Proved Reserves of LPG and Bitumen



	Crude & Condensate Proved Reserves (1) (2)			Natural Gas Proved Reserves (1)			Crude, Condensate, and Natural Gas Proved Reserves (1) (2)		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels of Oil Equivalent)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Proved Reserves As of December, 31, 2011	131	144	275	2,542	1,987	4,529	541	428	969
Revision of Previous Estimates	12	1	13	120	(18)	102	33	(5)	28
Improved Recovery	7	-	7	11	-	11	9	-	9
Extensions and Discoveries	2	2	4	35	2	37	7	3	10
Purchases / Sales of Petroleum in place	-	-	-	-	-	-	-	-	-
Production	(27)	(9)	(36)	(378)	(119)	(497)	(89)	(26)	(115)
Proved Reserves As of December, 31, 2012	125	138	263	2,330	1,852	4,182	501	400	901

(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



4.4.3 PTTEP Petroleum Production

In 2012, the total production of PTTEP and its subsidiaries is 115 MMBOE or equivalent to the production rate of approximately 313,293 Barrels of Oil Equivalent per Day (BOED), approximately 11,926 BOED or 3.96% increase from last year. The production increase was attributed to the increase in production of Bongkot, Vietnam 16-1, and S1 projects.

4.5 Environmental Impact

An effective environmental management system is developed and implemented for our 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) Establishment of greenhouse gas reduction target to be at least 20% from its business-as-usual case in by 2020.

(4) Implementation of the ISO14064-1:2006 Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and GHG Protocol. The system is now being implemented at PTTEP's domestic operational projects.

(5) Development of "Green Practices" with the long-term implementation plan toward 2020 to ensure that the environmental impacts caused by company's activities are minimal.

(6) 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.

(7) 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.

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



(9) Oil Spill Response Plan: oil spill equipment 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 a registered member of the OSRL (Oil Spill Response Limited) to assist in the mitigation of environmental impacts.

(10) 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.

(11) PTTEP promotes and strengthen safety, security, health and environmental (SSHE) awareness and culture for all staff including top management via training, meetings, SSHE publications and SSHE 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.

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

(12) Promotion of the program “Life Saving Program”: To improve our SSHE performance towards SSHE Excellence and become an LTI-Free organization by 2013, the Life Saving Program was launched in 2012 as part of “Step Change in SSHE Program”. The program’s prime objective is to promote compliance culture. The program comprises 18 safety icons, based on analysis of industry incidents (OGP – International Association of Oil and Gas Producers) that lead to fatalities and serious injuries. The Life Saving Program identifies the critical controls that shall be in place prior to undertaking work.

(13) 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.

(14) 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. PTTEP aims to be certified for Sustainability Report in the GRI A+ level by 2013 and become a company listed in the Dow Jones Sustainability Index by 2014. Additionally, during 11-12 December 2555, the company also held PTTEP’s Journey towards sustainability exhibition week for the first time. The objective of exhibition was to create understanding and awareness for the employees and stakeholders in having a responsibility to society and the environment to achieve sustainable development.



Implementation results over the past 3 years

During the past 3 years (2010-2012), 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) Arthit Project – with the scope of “exploration and production of natural gas and condensate”.
- (3) S1 Project – with the scope of “exploration and production of petroleum”
- (4) PTTEP 1 Project – with the scope of “ exploration and production”
- (5) PTTEP's Petroleum Support Base, Songkhla – with the scope of “Provision of logistic services to offshore oil and gas operations”.
- (6) 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”.

Consequently, PTTEP is constantly improving and developing its Environmental Management System Standard to comply with international standards ISO 14001 revised edition (ISO14001:2004) for all of PTTEP's operational assets 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.

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 three of PTTEP's operating sites which are S1, PTTEP1 and Petroleum Support Base (Songkhla).

With regards to spill incidents in years 2010, 2011, and 2012, spills were accounted for 1.63, 0.50, and 0.43 tonnes per million tonnes of production respectively. From these figures, it indicates that the level of spillage in the year 2012 is within estimated target which is approximately 3.60 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 2011 with the average spill rate of 7.94 tonnes per million tonnes of production.

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 Lost Time Injury Frequency (LTIF) rate and Total Recordable Injury Rate (TRIR). In 2012, LTIF and TRIR are determined at 0.19 and 1.87 respectively with further decreasing trend.

In response to PTTEP's rapid growth, the reinforcement of SSHE Management System was conducted throughout PTTEP business life cycle in both domestic and international units, to encourage same standard practice throughout the company.

Over the past 3 years, PTTEP's total amounts of investment on environmental improvement programs are 186.3, 133.4, and 178.8 million Thai Baht in 2010, 2011, and 2012 respectively.

According to the Kyoto Protocol under the United Nations Framework Convention on Climate Change (UNFCCC), it is not mandatory for Thailand to reduce greenhouse 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 greenhouse gas emissions reductions in its operations through Clean Development Mechanism (CDM) and other projects that have economic 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 **30,000** tonnes of carbon dioxide per year.



Disputes or lawsuits regarding the environment and solutions (if any).

There is no legal dispute about the environment.



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 Properties¹

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, 2012, 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	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	45
8. Arthit (Block B14A, B15A, B16A) ²	80
<u>PTTEPI's joint ventures</u>	<u>Company's interest (%)</u>
9. G4/48	5
10. Contract 3 (Block G6/50)	5
11. Yetagun	19.31784
12. G4/43	21.375
13. Yadana	25.50
14. Cambodia B	33.333334
15. Bongkot (Block G12/48)	44.4445
16. Contract 4 (Block G7/50)	45
17. MTJDA - B17 (Block B-17 and B-17-01)	50
18. L 21 and L28/48	
● L 21 and L28/48	70
● L 29/48 ⁴	-
19. Arthit (Block G9/48) ³	-



20.	Arthit (Block G8/50)	80
21.	PTTEP1	100
22.	G9/43	100
23.	L 22/43	100
24.	Myanmar M3 and M11	
	• M3	100
	• M11 ⁷	45
	• M7 ⁶	-
25.	Myanmar Zawtika ⁵	80
26.	L53/43 & L54/43	100
27.	A4,5 & 6/48	100
	<u>PTTEPO's joint venture</u>	<u>Company's interest (%)</u>
28.	B8/32 & 9A ⁸	25.0010
	<u>PTTEP SV's joint venture</u>	<u>Company's interest (%)</u>
29.	Vietnam 52/97	7
	<u>PTTEP KV's joint venture</u>	<u>Company's interest (%)</u>
30.	Vietnam B & 48/95	8.50
	<u>PTTEP HL's joint venture</u>	<u>Company's interest (%)</u>
31.	Vietnam 16-1	28.50
	<u>PTTEP HV's joint venture</u>	<u>Company's interest (%)</u>
32.	Vietnam 9-2	25
	<u>PTTEP OM's joint venture</u>	<u>Company's interest (%)</u>
33.	Oman 44	100
	<u>PTTEP AG's joint venture</u>	<u>Company's interest (%)</u>
34.	Algeria 433a & 416b	35
	<u>PTTEPS's joint venture</u>	<u>Company's interest (%)</u>
35.	Sinphuhorm (EU-1)	20
36.	B6/27	60
37.	S1	75
	<u>PTTEP AO's joint venture</u>	<u>Company's interest (%)</u>
38.	Australia WA 423 P	30
	<u>PTTEP BH's joint venture</u>	<u>Company's interest (%)</u>
39.	Bahrain 2 ⁹	-
	<u>PTTEPR's joint venture</u>	<u>Company's interest (%)</u>
40.	Rommana ¹⁰	-
	<u>PTTEP SEMI II Limited 's joint venture</u>	<u>Company's interest (%)</u>
41.	Indonesia Semai II	28.33



<u>PTTEP SAER's joint venture</u>	<u>Company's interest (%)</u>
42. Sidi AbdEl Rahman Offshore ¹¹	30
<u>PTTEP SA</u>	<u>Company's interest (%)</u>
43. Myanmar PSC G & EP 2 Project ¹²	90
<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 ¹³ and AC/P54)	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 and AC/RL6 (exclude Audacious))	50
● PTTEP Australasia (AC/P32) ¹⁴	-
● PTTEP Australasia (WA396P and WA397P)	20
● PTTEP Australasia (WA378P) ¹⁵	-
● PTTEP Australasia (AC/P 17) ¹⁶	100
<u>PTTEP AI</u>	<u>Company's interest (%)</u>
51. Cove Energy	
● Mozambique Rovuma Offshore Area 1 Project	8.5



● Mozambique Rovuma Onshore Project	10
● Kenya L10A	25
● Kenya L10B	15
● Kenya L5, L7, L11A, L11B & L12 Project	10

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

² On December 29, 2011, PTTEP Exploration and Production Public Company Limited (PTTEP) and other joint venture partners in the Arthit project which comprise of Chevron Thailand Exploration and Production, Ltd. (Chevron) and Moeco Thailand Co., Ltd. (MOECO), have re-entered into the North Arthit Participation Agreement. The participation interest under the agreement for PTTEP, Chevron, and MOECO are 80%, 16%, and 4%, respectively. The remaining natural gas reserve from the Arthit – North Arthit project will be produced using the centralized production rig, which is used for the production of the Arthit project. The North Arthit Participation Agreement was effective in January 2012 and PTTEP had received the payment for re-entering for participation rights in February 2012.

³ On January 18, 2012, PTTEP International Limited (PTTEPI) which holds the concession block G9/48, had fulfilled its phase 2 exploration obligation under the concession and has sent the notification to the Department of Mineral Fuels to terminate and relinquish this concession block.

⁴ On December 24, 2012, PTTEP International Limited had been officially approved for the relinquishment in L29/48 concession block after fulfillment of the exploration work commitment.

⁵ On January 5, 2012, PTTEP International Limited (PTTEPI) entered into a Joint Operating Agreement in the Zawtika project with Myanmar Oil and Gas Enterprise (MOGE). Under the Production Sharing Contract, MOGE will hold 20% of participation interest in the Zawtika project and with a supplementary arrangement between PTTEPI and MOGE, MOGE has the rights to invest in the project after the development project has been approved by paying the actual expenditures of the participation interest. However, PTTEPI will maintain 80% of participation interest and will be an operator of this project. The agreement was retroactively effective from August 15, 2011.

⁶ On February 1, 2012, PTTEP International Limited (PTTEPI) had terminated and relinquished the exploration block M7 in the Union of Myanmar after fulfillment of the exploration work commitment.

⁷ On September 3, 2012, PTTEP International Limited (PTTEPI), an operator and a sole owner of shares in concession block M11, entered into the Farmout Agreement with Total E&P Myanmar (Total) and JX Nippon Oil&Gas Exploration (Myanmar) Limited (JX Myanmar) in which, PTTEPI transferred the 40% and 15% participation interest to Total and JX Myanmar, respectively. However, PTTEPI maintain itself as an operator and hold the participation interest of 45%. On January 23, 2013, the government of the Republic of the Union of Myanmar has officially approved the transfer of PTTEPI's participation interest of Block M11 and the agreement was retroactively effective from September 3, 2012.

⁸ PTTEPO has shareholding in Orange Energy Limited and B 8/32 Partners Limited, which holds the project's concession.

⁹ On September 2, 2012, PTTEP Bahrain Company Limited had been officially approved by the National Oil & Gas Authority to terminate and relinquish its 100% participating interest in Bahrain 2 concession block after fulfillment of the exploration work commitment.



- ¹⁰ On April 10, 2012, PTTEP Rommana Company Limited and its joint venture had terminated their 30% joint interest from the Rommana concession block of the Rommana project in the Arab Republic of Egypt. The termination was officially approved by the government of the Arab Republic of Egypt on April 11, 2012.
- ¹¹ In March 2011, PTTEP Sidi Abd El Rahman Company Limited has withdrawn its entire 30% participation interest from Sidi Abd El Rahman Offshore Project in the Arab Republic of Egypt after fulfillment of the exploration work commitment. The withdrawal will be fully effective upon receiving an official approval from the government of the Arab Republic of Egypt.
- ¹² On June 6, 2012, PTTEP South Asia Limited (PTTEP SA) together with Win Precious Resources Pte. Ltd. (WPR) have been selected to operate onshore exploration blocks PSC-G and EP-2 in the Republic of the Union of Myanmar with the participating interests of 90% and 10%, respectively.
- ¹³ On October 10, 2012, PTTEP Australasia (Ashmore Cartier) Pty Ltd had terminated its 100% participating interest in AC/P 40 concession block. The termination is under the process of approval of the Government of Australia.
- ¹⁴ On March 27, 2012, PTTEP Australasia Pty Limited withdrew its 35% participation interest from the concession block AC/P32 under the PTTEP Australasia Project in Australia. The withdrawal was officially approved by the government of Australia on August 8, 2012.
- ¹⁵ On September 29, 2011, PTTEP Australasia Pty Limited withdrew the entire 20% of participation interest from the concession WA-378-P under the PTTEP Australasia Project in Australia. The withdrawal was officially approved by the government of Australia on March 7, 2012.
- ¹⁶ On September 20, 2012, PTTEP Australia Timor Sea Pty Ltd has been officially approved by the government of Australia for the transfer of 50% participating interests in the concession block AC/P17 under the PTTEP Australasia project in Australia from the existing joint venture partner, resulting in the Company holding a 100% participation interest in the concession block.



As at December 31, 2012, 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	6.87	-	2.18	9.05
Building and Construction	12.58	-	49.02	61.60
Acquisition Cost	242.67	-	-	242.67
Geological and Geophysical Survey	131.19	-	-	131.91
Exploration / Delineation Well	814.07	-	-	814.07
Development Well	1,523.30	-	0.05	1,523.35
Production Facilities	6,942.83	417.91	17.92	7,378.66
Other Development Cost	292.33	-	-	292.33
Decommissioning Cost	656.35	-	-	656.35
Support Facilities and Other Assets	46.49	-	24.50	70.99
Allowance for Impairment	(209.29)	-	-	(209.29)
Total	10,459.39	417.91	93.67	10,970.97

Intangible Assets, Net	Exploration and Evaluation Assets	Goodwill	Other	Consolidated* Total
Acquisition Cost	796.42	-	-	796.42
Exploration/ Delineation Well and Others	2,384.19	908.55	61.52	3,354.26
Allowance for Impairment	(3.46)	(7.31)	-	(10.77)
Total	3,177.15	901.24	61.52	4,139.91

* Inter-company transaction have already been eliminated

5.2 Investments

As at December 31, 2012, PTTEP has 59* subsidiaries and 16** 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
Subsidiaries company						
PTTEPI	Petroleum E&P	516.38	100	516.38	1,805.54	PTTEP 100%
PTTEPO	Petroleum E&P	0.007	75	0.005	903.81	PTTEP 75%
			25	0.002	301.76	PTTEPI 25 %
PTTEP SV	Petroleum E&P	0.05	100	0.05	(12.19)	PTTEPO 100%
PTTEP KV	Petroleum E&P	0.05	100	0.05	(19.23)	PTTEPO 100%
PTTEP HL	Petroleum E&P	0.05	100	0.05	(7.54)	PTTEPO 100%



Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
PTTEP HV	Petroleum E&P	0.05	100	0.05	(19.22)	PTTEPO 100%
PTTEP OM	Petroleum E&P	0.05	100	0.05	(101.45)	PTTEPO 100%
PTTEP AG	Petroleum E&P	0.05	100	0.05	(120.99)	PTTEPO 100%
PTTEPT ¹	Petroleum E&P	2.54	100	2.54	(2.59)	PTTEPI 100%
PTTEP Services	Services	0.03	25	0.01	0.57	PTTEP 25%
			75	0.04	4.75	PTTEPI 75%
PTTEPS	Petroleum E&P	4.00	51	99.79	155.12	PTTEP 51%
			49	95.18	123.32	PTTEPO 49%
PTTEP IR	Petroleum E&P	0.05	100	0.05	(81.81)	PTTEP OM 100%
PTTEP BH	Petroleum E&P	0.05	100	0.05	(34.05)	PTTEP OM 100%
PTTEPH	Petroleum E&P	0.05	100	0.05	(865.74)	PTTEPO 100%
PTTEP ID	Petroleum E&P	0.05	100	0.05	(111.65)	PTTEPH 100%
PTTEPB	Petroleum E&P	0.05	100	0.05	(11.21)	PTTEP ID 100%
PTTEPA	Petroleum E&P	0.007	100	0.007	(0.004)	PTTEPS 100%
PTTEP AI ²	Petroleum E&P	0.05	100	0.05	(121.98)	PTTEPH 100%
PTTEPR	Petroleum E&P	0.05	100	0.05	(15.62)	PTTEP AI 100%
PTTEP SAER	Petroleum E&P	0.05	100	0.05	(33.76)	PTTEP AI 100%
PTTEP AU ^{***}	Petroleum E&P	0.45	100	0.05	(66.18)	PTTEPH 100%
PTTEP BD	Petroleum E&P	0.05	100	0.05	(11.30)	PTTEPH 100%
PTTEP SA	Petroleum E&P	0.05	100	0.05	(1.70)	PTTEPH 100%
PTTEP NZ	Petroleum E&P	0.05	100	0.05	(19.07)	PTTEPH 100%
PTTEP SM	Petroleum E&P	0.05	100	0.05	(74.93)	PTTEPID 100%
PTTEP AP ^{***}	Petroleum E&P	0.04	100	0.04	(255.09)	PTTEPH 100%
PTTEP IH	Petroleum E&P	0.05	100	0.05	(278.14)	PTTEPH 100%
PTTEP SVPC	Gas pipeline transportation	0.05	100	0.05	(0.17)	PTTEPH 100%
PTTEP FH	Petroleum E&P	0.001	100	0.001	(16.88)	PTTEPIH 100%
JV Shore Base	Petroleum E&P	0.05	100	0.05	(3.47)	PTTEPIH 100%
PTTEP NL	Petroleum E&P	0.05	100	0.05	(257.29)	PTTEPIH 100%
JV Marine	Petroleum E&P	0.05	100	0.05	1.11	PTTEPIH 100%
PTTEP SMD	Petroleum E&P	0.05	100	0.05	(3.61)	PTTEPID 100%
PTTEP SS	Petroleum E&P	0.05	100	0.05	(2.75)	PTTEPID 100%
PTTEP SD	Petroleum E&P	0.05	100	0.05	(3.74)	PTTEPID 100%
PTTEP ML	Petroleum E&P	0.05	100	0.05	(15.10)	PTTEPID 100%
PTTEP NC ⁷	Petroleum E&P	1,000.05	0.00005	0.0005	(1.43)	PTTEPIH 0.000050%
			99.99995	1,000.05	794.51	PTTEPNL 99.99995%



Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
PTTEP CA	Petroleum E&P	1,000.05	100	1,000.05	790.01	PTTEPNC 100%
PTTEP CIF	Petroleum E&P	0.05	100	0.05	2.32	PTTEPNC 100%
PTTEP MEA ⁷	Petroleum E&P	0.05	100	0.05	0.04	PTTEP 100%
Cove Energy ^{****}	Petroleum E&P	21.13	100	21.13	14.73	PTTEP AI 100%
<u>Associated company</u>						
EnCo	Commerce	49.58	50	24.79	24.05	PTTEP 50% PTT 50%
PTT ICT	Services	3.94	20	0.79	3.70	PTTEP 20% PTT 20% ATC 20% PTTCH 20% TOP 20%
PTTEP AP's Associates ⁴	Services	0.97	50	0.48	3.45	PTTEP AAO 50%
<u>Jointly controlled entities</u>						
CPOC	Petroleum E&P	0.10	50	0.05	0.05	PTTEPI 50 % CARIGALI 50%
MGTC	Natural gas pipelines - Overseas	0.03	25.5	0.008	69.16	PTTEPO 25.50% UNOCAL 28.2625% TOTAL 31.2375% MOGE 15.0%
TPC	Natural gas pipelines - Overseas	0.10	19.3178	8.01	49.04	PTTEPO 19.3178% PETRONAS 40.9102% NIPPON 19.3178% MOGE 20.4542%
Orange	Petroleum E&P	4.00	53.9496	329.77	184.07	PTTEPO 53.9496% MOECOI 36.0504% PSI 10%
B8/32 Partners	Petroleum E&P	4.40	25.0009	109.95	51.06	PTTEPO 25.0009% MOECOI 16.7064% PSI 4.6346% Chevron 53.6583%



Company	Type of Business	Paid-in Capital (Million USD)	% of interest	Cost Method (Million USD)	Equity Method (Million USD)	Major shareholder
Jointly controlled entities (continued)						
PTT FLNG	Petroleum E&P	0.0006	50	0.0006	(16.83)	PTTEPFH 50% PTTI 50%
Erawan2	Petroleum E&P	0.0001	13.11	22.29	23.79	JV Marine 13.11% Chevron 65.91% Mitsui Oil 20.98%
KOSP	Petroleum E&P	3,966.47	40	2,484.17	2,482.75	PTTEP CA 40% Statoil Canada 60%
LAL ⁵	Services	21.17	32	6.09	6.36	PTTEP CA 40% Statoil Canada 60%
GBRS	Petroleum E&P	-	35	-	-	PTTEP AG 35% PVEP 40% Sonatrach 25%
ATL ³	Natural gas pipelines	0.05	80	0.05	(26.11)	PTTEPO 80% MOGE 20%
NST ⁶	Petroleum E&P	32.20	15.67	5.05	1.66	JV Shore Base 15.67% Chevron Thailand E&P 62.86% Mitsui Oil Exploration 20.58% Palang Sophon 0.33% KrisEnergy 0.56%

⁵ Including Orange Energy Limited which accounted for using proportionate consolidation for jointly controlled entity

⁶ 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, GBRS, ATL and NST

^{***} Details of PTTEP AU's subsidiaries and PTTEP AP's subsidiaries are as follows:-

Company	Registered country	% of interest
PTTEP Australia Offshore Pty Limited (PTTEP AO)	Australia	100%

Company	Registered country	% of interest
PTTEP Australia Browse Basin Pty Limited (PTTEP AB)	Australia	100%
PTTEP Australia International Finance Pty Limited (PTTEP AIF)	Australia	100%
PTTEP Australasia Pty Limited (PTTEP AA)	Australia	100%
PTTEP Australia 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%

**** Details of Cove Energy's subsidiaries are as follows:-

Company	Registered country	% of interest
Cove Energy Mozambique Rovuma Onshore Limited	Cyprus	100%
Cove Energy East Africa Limited	Cyprus	100%
Cove Energy Mozambique Rovuma Offshore Limited	Cyprus	100%
Cove Mozambique Terra Limitada	Mozambique	100%
Cove Mozambique Energia Limitada	Mozambique	100%
Cove Energy Kenya Limited	Kenya	100%

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

² The name of PTTEP Egypt Company Limited (PTTEP EG) was changed to PTTEP Africa Investment Limited (PTTEP AI).

³ On January 5, 2012, PTTEP Offshore Investment Limited (PTTEPO) with Myanmar Oil and Gas Enterprise (MOGE) has entered into Shareholders Agreement with Andaman Transportation Limited (ATL) to invest in Zawtika gas transportation project. The MOGE's investment is under 'the Agreement Establishing the Rights and Obligations of the Andaman Transportation Limited', which stated that, if MOGE exercised its rights to invest 20% of participating interest under the Production Sharing Contract, MOGE will have rights to invest in the common stock of ATL at the same proportion. As a result of entering into this agreement, the proportion of shareholders' interest of PTTEPO in ATL has been changed to 80% and MOGE has held another 20% shareholders interest effective on the date that both parties signed the agreement. The proportion change in the investment resulted in the change of ATL from a subsidiary to a jointly controlled entity. MOGE had paid for the actual participation interest totaling to US Dollar 6.22 million and paid for an increase in capital of its shareholders interest of US Dollar 12,500.

⁴ PTTEP AP's Associates are ShoreAir Pty Ltd and Troughton Island Pty Ltd.

⁵ On November 8, 2012, PTTEP CA has sold 8% of its interest in LAL to FCCL PARTNERSHIP which resulted in a decrease in its interest in LAL from 40% to 32%.

⁶ As at December 13, 2011 JV Shore Base Limited entered into an agreement with NST Supply Base Company Limited to purchase 19.5875% interests of NST Supply Based Company Limited. As at February 3, 2012, NST Supply Base Company Limited has increased its registered share capital which resulted in a decrease in the Group's interests to 15.67% and paid the full amount for capital of its shareholders interest.

⁷ As at December 31, 2012 PTTEP NC and PTTEP MEA have share receivables.

5.3 Net Book Value

As at December 31, 2012, PTTEP's net book value amounted to USD 10,711 million (equivalent to Baht 328,104 million) or USD 2.70 per share (equivalent to Baht 82.65 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, 2012, PTTEP's capital structure consisted of US Dollar 3,773 million interest-bearing liabilities and US Dollar 10,711 million shareholders' equities. The interest-bearing liabilities to shareholders' equities ratio were 0.35 times. Details of the capital structure are as follows:

7.1 Securities

7.1.1 Capital Stock

On October 29, 2012, the Company's Extraordinary General Meeting of the shareholders No.1/2555 passed a resolution to approve the capital of the Company as follow;

- Approval of the reduction of the Company's registered capital from Baht 3,322,000,000 to Baht 3,319,985,400, by canceling 2,014,600 unissued shares, at a par value of Baht 1 per share.
- Approval of the increase of the Company's registered capital from Baht 3,319,985,400 to Baht 3,969,985,400, by issuing 650,000,000 newly issued ordinary shares, at the par value of Baht 1 per share.

The Company received the proceeds from the share capital increase and registered the paid up capital on December 17, 2012

As of December 31, 2012, the Company's registered & paid-up capital was at Baht 3,969,985,400 million consisting of 3,969,985,400 million ordinary shares at the par value of 1 Baht per share.

7.1.2 Bonds and Short-Term Commercial Papers

As of December 31, 2012, the Company's has been rated Baa1, BBB+, A- and AAA by Moody's Investors Service ("Moody's"), Standard & Poor's Ratings Services ("Standard & Poor's") , Japan Credit Rating Agency ("JCR") and TRIS Rating Co., Ltd respectively.



Bonds

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

On June 15, 2012, PTTEP issued 5 million units of registered, unsecured, unconvertible, callable, subordinated debentures with single redemption upon liquidation and with a debentureholders' representative (Hybrid Bonds) each with a face value of Baht 1,000 per unit, totaling Baht 5,000 million. These Hybrid Bonds bear a step-up fixed interest based on the life of the debentures with the interest rate of 5.85% p.a. for the first 10 years, 6.10% p.a. for Year 11 to 30, 6.85% p.a. from Year 31 to 60 and 7.85% p.a. from Year 61 onwards. The Hybrid Bonds have no final maturity date (perpetual) and single bullet payment upon liquidation or early redemption by PTTEP on the 10th anniversary (June 15, 2022) and every coupon payment date afterwards.

PTTEP can defer the coupon payment at its sole discretion; all deferred coupons are cumulative and carry no interest. However, while the coupon payment is being deferred, PTTEP shall not (a) declare or make any dividend payment; (b) make any payment of interest or distribution of any sort on any instrument or security issued by PTTEP which ranks pari passu or junior to the Hybrid Bonds; and (c) redeem, reduce, cancel, buy-back or acquire for any consideration on any instrument or security issued by PTTEP which ranks pari passu or junior to the Hybrid Bonds. The Hybrid Bonds are rated "AA" by TRIS Rating Co., Ltd. Krung Thai Bank, Kasikorn Bank and Siam Commercial Bank were Joint Lead Managers for the issuance. The proceeds from the Hybrid Bonds were utilized for general corporate purposes. The Board of Directors and the general Shareholders' meeting in the year 2010 approved the Company's issuing and offering of debentures, whose approved amount remaining was Baht 88,400 million.



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 2012 was Baht 30,000 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, 2012, there is no outstanding B/Es.

Details of outstanding bonds as of December 31, 2012 are as follows:



1) Details of Baht Bonds (total outstanding Baht 24,200 million) as of December 31, 2012 are as follows:

Debt Security	Issue	Maturity	Tenor	Outstanding	Rate per annum	Credit Rating ¹
Unsecured, unsubordinated Baht Bonds	March 27, 2003	March 27, 2018	15 years	Baht 2,500 million ²	Fixed 4.625%, coupon payment: semi-annually	AAA
	May 29, 2009	May 29, 2014	5 years	Baht 11,700 million ³	Fixed 4.00%, coupon payment: quarterly	AAA
	May 29, 2009	May 29, 2013	4 years	Baht 5,000 million ⁴	Years 1-2: Fixed 3.00%, Years 3-4: Fixed 4.00%, coupon payment: semi-annually	AAA
	May 29, 2009	May 29, 2019	10 years	Baht 5,000 million ⁵	Fixed 4.80%, coupon payment: semi-annually	AAA

¹ By TRIS Rating Co., Ltd. dated August 1, 2012

² In 2005, the Company entered into a Cross Currency Swap transaction with a bank to swap Baht for US Dollar 60.82 million. Under this agreement, interest was charged at the rate of 3.85% per annum. In 2007, the Company swapped the US Dollar with the same bank for Baht 2,500 million (Unwinded Swap transaction). Under this agreement, the interest rate was charged at the rate of 3.30% per annum. In 2011, the Company swapped Baht 2,500 million for US Dollar 82.92 million. Under this agreement, interest rate was charged at the rate of 3.30% per annum.

³ In 2011, the Company entered into a Cross Currency Swap transaction with a bank to swap Baht for US Dollar 389.50 million. Under this agreement, the average interest rate was charged at the rate of 2.67% per annum.

⁴ In 2011, the Company entered into a Cross Currency Swap transaction with a bank to swap (Principal Swap only) Baht for US Dollar 165.89 million.

⁵ In 2011, the Company entered into a Cross Currency Swap transaction with a bank to swap Baht for US Dollar 161.81 million. Under this agreement, the average interest rate was charged at the rate of 4.93% per annum.



2) Details of US Dollar Bonds (total outstanding USD 1,900 million) as of December 31, 2012 are as follows:

Debt Security	Issue	Maturity	Tenor	Outstanding	Rate per annum	Credit Rating
Unsecured, unsubordinated US Dollar Bonds	July 19, 2010	July 19, 2015	5 years	US Dollar 500 million ⁶	Fixed 4.152%, coupon payment: semi-annually	Baa1 by Moody's and BBB+ by Standard & Poor's
	August 4, 2010	August 4, 2015	5 years	US Dollar 200 million ⁷	Fixed 4.152%, coupon payment: semi-annually	Baa1 by Moody's and BBB+ by Standard & Poor's
	April 5, 2011	April 5, 2021	10 years	US Dollar 700 million ⁸	Fixed 5.692%, coupon payment: semi-annually	Baa1 by Moody's and BBB+ by Standard & Poor's
	June 12, 2012	June 12, 2042	30 years	US Dollar 500 million ⁹	Fixed 6.35%, coupon payment: semi-annually	Baa1 by Moody's and BBB+ by Standard & Poor's

⁶ PTTEP Australia International Finance Pty Ltd (PTTEP AIF) was the issuer, fully guaranteed by PTTEP, credit rating by Moody's dated May 25, 2012 and Standard & Poor's dated May 11, 2012

⁷ PTTEP Australia International Finance Pty Ltd (PTTEP AIF) was the issuer, fully guaranteed by PTTEP, credit rating by Moody's dated May 25, 2012 and Standard & Poor's dated May 11, 2012

⁸ PTTEP Canada International Finance Limited (PTTEP CIF) was the issuer, fully guaranteed by PTTEP, credit rating by Moody's dated May 25, 2012 and Standard & Poor's dated May 11, 2012

⁹ PTTEP Canada International Finance Limited (PTTEP CIF) was the issuer, fully guaranteed by PTTEP, credit rating by Moody's dated June 12, 2012 and Standard & Poor's dated May 21, 2012



3) Details of Baht Hybrid Bonds (total outstanding Baht 5,000 million) as of December 31, 2012 are as follows:

Debt Security	Issue	Maturity	Tenor	Outstanding	Rate per annum	Credit Rating ¹⁰
Unsecured, unconvertible, callable, subordinated debentures with single redemption upon liquidation, PTTEP can defer the coupon payment at its sole discretion, Baht Hybrid Bonds ¹¹	June 15, 2011	- payment upon liquidation or - early conditional redemption	Perpetual	Baht 5,000 million	Year 1-10 : 5.85% Year 11- 30: 6.10% Year 31- 60: 6.85% Year 61 onward: 7.85%, coupon payment: quarterly	AA

¹⁰ By TRIS Rating Co., Ltd. dated August 1, 2012

¹¹ Hybrid Bonds are considered as Shareholders' equity



7.1.3 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 January 31, 2013, as publicized on the website of the Stock Exchange of Thailand, the Company's ordinary shares at NVDR were 118,101,932 shares, which represent 2.97% of the total issued and paid-up capital of the Company (3,969,985,400 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 15 February 2013 are as below.

Rank	Top 10 Major Shareholders	Number of Shares	% of total shares
1.	PTT PUBLIC COMPANY LIMITED	2,591,860,489	65.286
2.	THAI NVDR CO.,LTD.	125,115,422	3.152
3.	HSBC (SINGAPORE) NOMINEES PTE LTD	92,795,342	2.337
4.	BNP PARIBAS SECURITIES SERVICES LUXEMBOURG	76,509,894	1.927
5.	STATE STREET BANK AND TRUST COMPANY	73,925,748	1.862
6.	STATE STREET BANK EUROPE LIMITED	70,006,250	1.763
7.	THE BANK OF NEW YORK (NOMINEES) LIMITED	59,441,070	1.497
8.	CHASE NOMINEES LIMITED 42	54,940,105	1.384



Rank	Top 10 Major Shareholders	Number of Shares	% of total shares
9.	NORTRUST NOMINEES LIMITED-NT0 SEC LENDING THAILAND	43,722,630	1.101
10.	BNP PARIBAS SECURITIES SERVICES, LONDON BRANCH	39,827,571	1.003
	Total Shares of Top 10 Major Shareholders	3,228,144,521	81.314
	Issued and Paid-Up Shares as of 15 February 2013	3,969,985,400	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 15 February 2013)	Number of NVDR Issues	% of Total Outstanding Shares in Underlying Stock
1.	STATE STREET BANK AND TRUST COMPANY	42,530,306	1.071
	Total NVDR	42,530,306	1.071

* 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.

Source: <http://www.set.or.th.set/companyholder.do?symbol=PTTEP-R>

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 2013, there are 4 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. The board of directors ,from time to time and in case there are adequate profits, may also decide to pay the interim dividends and subsequently inform the shareholders at the next shareholders' meeting.

However, under terms and conditions of the subordinated capital debentures (PTTEP Hybrid Bond No. 1/2555), if the company defer the interest payment on the debentures, it may not declare or make any dividend payment, make any interest payment or distribution of any sort of any instrument or security that ranks *pari passu* or junior to the subordinated capital debentures.

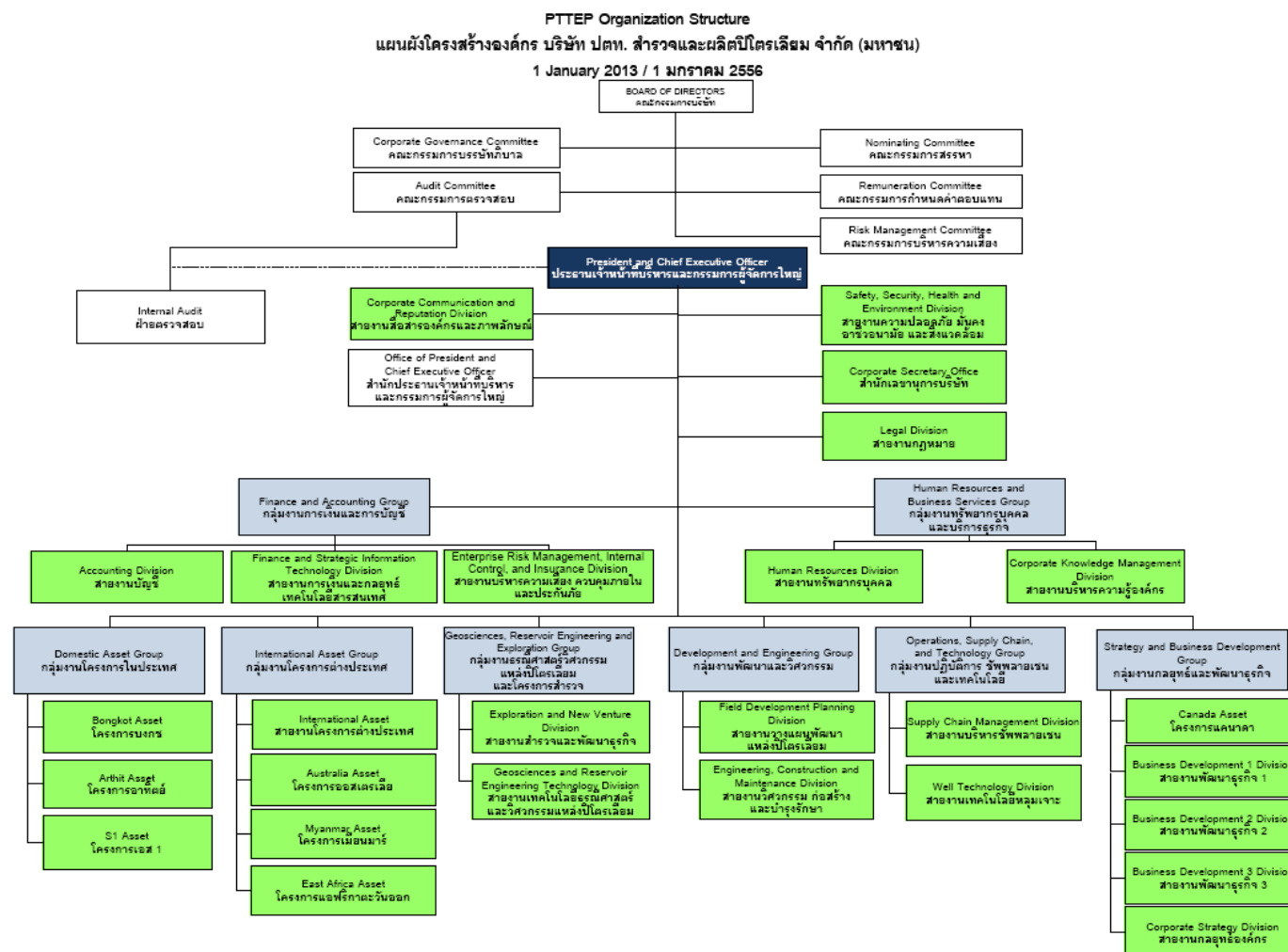
The Company has no dividend policies for its subsidiaries.



8. Management Structure

8.1 Organizational Structure

Organizational Structure as at 1 January 2013





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 laws, 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 govern the Company in accordance with the laws, the Company's objectives, Articles of Association, and shareholder resolutions.
- The Board shall elect among themselves 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 PTTEP Good Corporate Governance

- To establish the PTTEP Good Corporate Governance and Business Ethics and be a role model in adopting these principles for the management and employees to follow.
- To ensure that the Company's operations comply with laws, the Company's objectives, Articles of Association, shareholders' and Board resolutions, related policies including the internal control system as well as the PTTEP Good Corporate Governance and Business Ethics.
- To collaborate with the management in designating the vision, mission, and values that the Company expects to happen with efficient results.
- To consider and approve strategic plans, business direction, and policy for the Company as well as its budget, investment, loans, human resources, and operating goals etc. which submitted by the management, and supervise and regularly monitor the Company's operation in order to achieve its as planned.
- To consider cases related to conflicts of interest with prudent and transparent manner and report to the Company any vested interests or stakes of related persons, prevent misuse of the Company's properties, as well as execution of transactions with the Company's connected persons 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 Chief Executive Officer 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 Chief Executive Officer 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 2013, the Board consisted of 15 directors, with details of current ones and directors whose terms ended during the year shown in Attachment 1.

Names and the number of PTTEP shares held by Directors, and Board Meeting attendances in 2012 are summarized as follows:

Director	Shares as of 1 January		Change	Number of Warrants	Number of Attendance/ Total Meetings
	2012	2013			
1. Mr. Norkun Sitthiphong [#]	-	-	-	-	16/16
2. Mr. Pichai Chunhavajira ^{\$}	-	-	-	-	12/16
3. Mr. Viraphol Jirapraditkul	-	-	-	-	16/16
4. Mr. Prajya Pinyawat [@]	N/A	15,000	N/A	-	11/12
5. Mr. Tevin Vongvanich ^{##}	75,500	90,280	14,780	-	15/16
6. Mr. Chakkrit Parapuntakul	-	-	-	-	14/16
7. Mr. Chaikasem Nitisiri ^{\$}	-	-	-	-	15/16
8. Mr. Ampon Kittiampon ^{\$}	-	-	-	-	16/16



Director		Shares as of 1 January		Change	Number of Warrants	Number of Attendance/ Total Meetings
		2012	2013			
9. General Lertrat Ratanavanich ^{\$, ###}		-	-	-	-	16/16
10. Mr. Wichai Pornkiratiwat ^{@@}		-	-	-	-	8/8
11. Mr. Pailin Chuchottaworn		-	-	-	-	15/16
12. Mr. Manas Jamveha ^{1@}		-	-	-	-	15/16
13. General Pornchai Kranlert ^{1@, \$}		-	-	-	-	16/16
14. Mrs. Varanuj Hongsaprabhas ^{1@, \$}		-	-	-	-	16/16
15. Mr. Achaporn Charuchinda ^{1@@, \$}		N/A	-	N/A	-	-
Ex-Directors in 2012						
1. Mr. Krairit Euchukanonchai [*]		-	-	-	-	3/4
Spouse		10,000	-	(10,000)		
2. Mr. Woraphak Thanyawong ^{**}		N/A	-	N/A	-	9/9
3. Mr. Sommai KhowkAchaporn ^{***}		-	-	-	-	5/5
4. Mr. Anon Sirisaengtaksin ^{***}		106,000	126,752	20,752	-	5/5

หมายเหตุ :

^{\$} Independent

[@] Assumed directorship on March 28, 2012

^{@@} Assumed directorship on June 1, 2012

^{1@} Assumed directorship on January 1, 2012

^{1@@} Assumed directorship and member of Corporate Governance Committee on January 1, 2013

^{*} Resigned from directorship on March 28, 2012

^{**} Assumed directorship on May 1, 2012 and Resigned from directorship on November 6, 2012

^{***} Resigned from directorship on May 1, 2012

[#] Chairman

^{##} President and Chief Executive Officer

^{###} Chairman of the Independent Director

Audit Committee consisted of 7, 8, 9

Remuneration Committee consisted of 9, 10, 13

Nominating Committee consisted of 7, 11, 13

Corporate Governance Committee consisted of 13, 14, 15

Risk Management Committee consisted of 3, 4, 5, 14



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 as follows

(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 the business ethics, which is 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, the management, and all employees comply with the PTTEP Good Corporate Governance and Business Ethics.

(3) To review the Company's corporate governance policy, the business ethics, along with the guidelines and good corporate governance practices, and ensure that all of these are in line 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 the business ethics.

(5) To disclose information about the Company's good corporate governance to stakeholders in the annual report, with the 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 three are current members of the committee with the term from April 25, 2011 to April 24, 2014:

- General Pornchai Kranlert Chairman of the committee
and independent director
- Mrs. Varanuj Hongsaprabhas Member and independent
director
- Mr. Achaporn Charuchinda Member and independent
director

General Pornchai Kranlert and Mrs. Varanuj Hongsaprabhas assumed directorship from April 25, 2012. They replaced Mr. Viraphol Jirapraditkul and Mr. Chakkrit Parapuntakul who assumed directorship during April 25, 2011-April 1, 2012. Mr. Achaporn Charuchinda assumed directorship from January 1, 2013 in replacement of Mr. Woraphak Thanyawong who assumed directorship during May 1, 2012-November 5, 2012 and Mr. Krairit Euchukanonchai who assumed directorship during November 25, 2011-May 28, 2012, respectively.

In 2012, the Committee held four meetings and all incumbent directors attended every meeting, with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office and Corporate Secretary, acting as its secretary and also joined every meeting. 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 executive session meeting with the external auditor at least once a year.

(6) To scrutinize the independence of Internal Audit Department

(7) To endorse the appointment, transfer, merit or punishment considerations, and make performance appraisal for Internal Audit Department head.

(8) To approve the audit plan of Internal Audit Department.

(9) To screen the budget and manpower requirements of Internal Audit Department for the management to forward them to the Board.

(10) To approve the charter of the Internal Audit Department.

(11) To approve a certificate for independence of the Internal Audit Department in a case that he or she has to conduct auditing.

(12) To approve results of audits in the annual audit plan, other results of additional audits as specially requested, and performance of advisory services to other units.

(13) 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.

(14) To review and amend its charter annually.

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

(16) To prepare the Corporate Governance Committee Report and disclose it in the Company's annual report.

The Audit Committee consists of at least three directors all of whom must be independent director with knowledge, expertise, and experience in auditing financial statements.

The following are current members with the term from March 31, 2010 to March 30, 2013:



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

In 2012, the Audit Committee held 16 meetings, where 77 agenda items were considered. 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 new directors or the President and Chief Executive Officer taking into account the Board's composition, skill mix, experience, number of companies 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 new Directors or the President and Chief Executive Officer in advance and/or when there is a vacancy.

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

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

(5) To nominate Directors and Chairman 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 the President and Chief Executive Officer.

The Nominating Committee consists of at least three Directors, most of whom are independent directors, including the Chairman. Of three current members, two are independent directors. The following are current members of the committee with the term from June 23, 2012 to June 22, 2015:

- | | |
|-----------------------------|--------------------------------------|
| - Mr. Chaikasem Nitisiri | Chairman and
Independent Director |
| - Mr. Pailin Chuchottaworn | Member |
| - General Pornchai Kranlert | Member and Independent Director |



Mr. Chaikasem Nitisiri was appointed as Chairman and General Pornchai Kranlert was appointed as a member on April 25, 2012 in place of Mr. Sommai Khowkachaporn. In 2012, the Committee held seven meetings and all incumbent directors attended every meeting, with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office and Corporate Secretary, acting as its secretary and joined every meeting. 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 practices 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 Chief Executive Officer 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 Chief Executive Officer, 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. Of three current members, two are independent directors. The following are current members of the committee with the term from June 28, 2012 to June 27, 2015:

- | | | |
|---|------------------------------|--------------------------------------|
| - | General Lertrat Ratanavanich | Chairman and
Independent Director |
| - | General Pornchai Kranlert | Member and Independent
Director |
| - | Mr. Wichai Pornkeratiwat | Member |



During 2012, there were also other directors on the Remuneration Committee as follows:

Name	Term
General Lertrat Ratanavanich, Chairman	June 16, 2011 – June 22, 2012 June 28, 2012 to the Present
General Pornchai Kranlert, Member	February 22, 2012 – March 28, 2012 April 25, 2012- June 22, 2012 June 28, 2012- the Present
Mr. Wichai Pornkiratiwat, Member	June 28, 2012 – the Present
Mr. Pailin Chuchottaworn, Member	December 1, 2011 – June 22, 2012

In 2012, the Committee had two meetings and all incumbent directors attended every meeting with Mr. Theerasak Tancharoenlarp, Senior Vice President of Corporate Secretary Office and Corporate Secretary, acting as its secretary and joined every meeting. 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, 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, which must be proposed to the Board for consideration 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, one of whom is Independent Director.

- Mr. Prajya	Pinyawat	Chairman
- Mr. Viraphol	Jirapraditkul	Member
- Mr. Varanuj	Hongsaprabhas	Member and Independent Director
- Mr. Tevin	Vongvanich	Member

During the year 2012, Mr. Pichai Chunhavajira, Mr. Sommai Khowkachaporn and Mr. Anon Sirisaengtaksin retired; Mr. Prajya Pinyawat, Mrs. Varanuj Hongsaprabhas and Mr. Tevin Vongvanich were appointed members on May 1, 2012.

In 2012, the Risk Management Committee held 11 meetings, with Ms. Penchun Jarikasem taking the Executive Vice President of Finance and Accounting Group in February, acting as secretary. The sub-committee has disclosed its annual performance in the Report of the Risk Management Committee.



Attendance of Sub-Committees in 2012

Sub-committee Member		Corporate Governance Committee	Audit Committee	Remuneration Committee	Nominating Committee	Risk Management Committee
		Total Meetings: 4 times	Total Meetings: 16 times	Total Meetings: 2 times	Total Meetings: 7 times	Total Meetings: 11 times
1. Mr. Norkun	Sitthiphong	-	-	-	-	-
2. Mr. Pichai	Chunhavajira ¹	-	-	-	-	4/4
3. Mr. Chaikasem	Nitisiri ²	-	16/16	-	6/7	-
4. Mr. Ampon	Kittiampon	-	16/16	-	-	-
5. General Lertrat	Ratanavanich	-	15/16	2/2	-	-
6. Mrs. Varanuj	Hongsaprabhas ^{2,3}	3/3	-	-	-	7/7
7. General Pornchai	Kranlert ²	3/3	-	1/1	4/4	-
8. Mr. Tevin	Vongvanich ³	-	-	-	-	7/7
9. Mr. Viraphol	Jirapraditkul ^{3,4}	1/1	-	-	-	11/11
10. Mr. Chakkrit	Parapuntakul ⁴	1/1	-	-	-	-
11. Mr. Pailin	Chuchottaworn ⁵	-	-	1/1	7/7	-
12. Mr. Wichai	Pornkiratiwat ⁶	-	-	1/1	-	-
13. Mr. Prajya	Pinyawat ³	-	-	-	-	7/7
Ex-Sub-committee Members in 2012						
1. Mr. Sommai	Khowkachaporn ⁷	-	-	-	3/3	4/4
2. Mr. Krairit	Euchukanonchai ⁸	1/1	-	-	-	-
3. Mr. Anon	Sirisaengtaksin ⁹	-	-	-	-	4/4
4. Mr. Woraphak	Thanyawong ³	2/3	-	-	-	-

Remark:¹ Resigned from chairman of Risk Management Committee on April 25, 2012² From April 25, 2012

- Mr. Chaikasem Nitisiri, member of Nominating Committee assumed Chairman of the Nominating Committee.
- Mrs. Varanuj Hongsaprabhas assumed directorship of Corporate Governance Committee.
- General Pornchai Kranlert assumed directorship of Nominating Committee, Remuneration Committee and Chairman of Corporate Governance Committee.

³ From May 1, 2012

- Mr. Woraphak Thanyawong assumed directorship of Corporate Governance Committee.
- Mr. Prajya Pinyawat assumed directorship of Risk Management Committee.
- Mr. Tevin Vongvanich, Mrs. Varanuj Hongsaprabhas and Mr. Viraphol Jirapraditkul assumed directorship of Risk Management Committee.



⁴ Mr. Viraphol Jirapraditkul resigned from Chairman of Corporate Governance Committee and Mr. Chakkrit Parapuntakul resigned from member of Corporate Governance Committee on April 2, 2012.

⁵ Resigned from directorship of Remuneration Committee on June 22, 2012.

⁶ Assumed directorship of Remuneration Committee on June 28, 2012.

⁷ Resigned from chairman of Nominating Committee and directorship of Risk Management Committee on May 1, 2012.

⁸ Resigned from directorship of Corporate Governance Committee on March 28, 2012.

⁹ Resigned from directorship of Risk Management Committee on May 1, 2012.

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 Chief Executive Officer's consideration, as the case may be.

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

(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.

As of January 1, 2013, Independent Director consists of seven members:

- General Lertrat Ratanavanich Chairman of Independent Director
- General Pornchai Kranlert Vice Chairman of Independent Director
- Mr. Pichai Chunchavajira Independent Director
- Mr. Ampon Kittiampon Independent Director
- Mr. Chaikasem Nitisiri Independent Director
- Mrs. Varanuj Hongsaprabhas Independent Director
- Mr. Achaporn Charuchinda Independent Director

In 2012, 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 and joined every meeting. In 2012, 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 company¹, its subsidiaries², and its associated companies³, a related juristic entity⁴, including stocks held by connected persons, as well as nominees⁵.

(2) Is not or has never been an executive director, employee, staff, adviser who receives salary or a controlling person⁶ of PTTEP, its parent company, its subsidiaries, its associated companies, its sister companies⁷, major shareholders or controlling persons of PTTEP unless the foregoing status has ended for at least two years earlier. This shall not include an independent director who was a government officer 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 shareholders⁸, 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 at least two years earlier.

The term 'business relationship' in the above paragraph 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% 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 at least two years earlier.

(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.



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

² 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.

³ 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)

⁴ 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.

⁵ Nominees mean shareholders for other people in a concealed manner.

⁶ Controlling person mean any person who, as a matter of fact, has substantial control over PTTEP in its policy-setting, management, and operations.

⁷ 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.

⁸ 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 January 1, 2013, seven Independent Directors did so under PTTEP's good corporate governance.

The nominating procedure of Independent Director selection is similar to that of PTTEP Directors and the President and Chief Executive Officer as detailed in 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 the President and Chief Executive Officer

(1) Authority vested by shareholder resolutions

The President and Chief Executive Officer are the authorized signatory in dealing with external parties under clause 9, paragraph 6, of the Company's Articles of Association registered at the Ministry of Commerce.

(2) Authority vested by Board resolutions

The Board authorizes the President and Chief Executive Officer 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, Finance and Accounting Charter B.E. 2555, Regulation on Human Resources Management B.E. 2548, 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 Management team members and the controlling persons

Details of current management team members and the controlling persons as of January 1, 2013 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 Chief Executive Office or the management, 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 sub-committees 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. In addition, the Corporate Secretary receives complaints according to the complaint policy and protection.

8.2 Nomination of the Board and Management

8.2.1 Nomination of the Board and the President and Chief Executive Office

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 "item 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 October 1 and December 31 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 no greater 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 Chief Executive Officer 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 Chief Executive Officer is also taken into account. Further information appears in Management Development and Succession Plan.

8.2.2 The Nomination of Executives

The President and Chief Executive Officer 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 consent of the Audit Committee.



8.3 Remuneration of the Management

8.3.1 Remuneration of Directors and Sub-committee Members

Directors		Remuneration							2012 Bonus paid in 2013 \$	Total
		Board		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Meeting Allowance	Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
1. Mr. Norkun	Sitthiphong	800,000	600,000	0	0	0	0	0	4,098,360.66	5,498,360.66
2. Mr. Pichai	Chunhavajira	480,000	480,000	0	0	0	0	200,000	3,278,688.52	4,438,688.52
3. Mr. Viraphol	Jirapraditkul	640,000	480,000	0	50,000	0	0	440,000	3,278,688.52	4,888,688.52
4. Mr. Chakkrit	Parapuntakul	560,000	480,000	0	40,000	0	0	0	3,278,688.52	4,358,688.52
5. Mr. Chaikasem	Nitisiri	600,000	480,000	640,000	0	0	280,000	0	3,278,688.52	5,278,688.52
6. Mr. Ampon	Kittiampon	640,000	480,000	800,000	0	0	0	0	3,278,688.52	5,198,688.52
7. General Lertrat	Ratanavanich	640,000	480,000	600,000	0	100,000	0	0	3,278,688.52	5,098,688.52
8. Mr. Pailin	Chuchottaworn	600,000	480,000	0	0	40,000	280,000	0	3,278,688.52	4,678,688.52
9. Mr. Wichai	Pornkeratiwat	320,000	280,000	0	0	40,000	0	0	1,922,299.57	2,562,299.57
10. Mr. Prajya	Pinyawat	440,000	400,000	0	0	0	0	350,000	2,506,175.61	3,696,175.61
11. Mrs. Varanuj	Hongsaprabhas	640,000	480,000	0	120,000	0	0	280,000	3,278,688.52	4,798,688.52
12. Mr. Manas	Jamveha	600,000	480,000	0	0	0	0	0	3,278,688.52	4,358,688.52



Directors	Remuneration							2012 Bonus paid in 2013 ^{\$}	Total
	Board		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
	Meeting Allowance	Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
13.General Pornchai Kranlert	640,000	480,000	0	150,000	40,000	160,000	0	3,278,688.52	4,748,688.52
14. Mr. Tevin Vongvanich	600,000	480,000	0	0	0	0	0	3,278,688.52	4,358,688.52
Ex-Directors in 2012									
1. Mr. Sommai Khowkachaporn	200,000	160,000	0	0	0	150,000	160,000	1,095,890.41	1,765,890.41
2. Mr. Krairit Euchukanonchai	120,000	120,000	0	40,000	0	0	0	790,478.33	1,070,478.33
3. Mr. Anon Sirisaengtaksin	200,000	160,000	0	0	0	0	0	1,095,890.41	1,455,890.41
4. Mr. Woraphak Thanyawong	360,000	280,000	0	80,000	0	0	0	1,706,714.57	2,426,714.57

Remarks: ^{\$} 2012 bonuses to be paid in 2013 are in accordance with the 2013 AGM resolution on dividend payment

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

In year 2012, 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 Allowance of Sub-committees	Total
	Director Bonus	Meeting and Monthly Allowances		
1. Mr. Krairit Euchukanonchai	606,557.38	170,000.00	115,000.00	891,557.38

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 Chief Executive Officer decides individual executives' compensations. Annual merit increases of executives are tied to their individual performance, the Company's performance, and key performance indicator (KPI) ,which was set in advance, of each division or group, as the case may be.

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, in the annual report.



(1) Cash (compensation and provident fund)

	2011		2012	
	Number	Total Amount (Baht)	Number	Total Amount (Baht)
Salary	8 ⁽⁴⁾	53,898,318	11 ⁽⁵⁾	54,759,421
Bonus		29,756,163 ⁽²⁾		31,571,930 ⁽³⁾
Other compensation ⁽¹⁾		6,520,065		6,830,786
Total		90,174,546		93,162,137

⁽¹⁾ Provident Fund

⁽²⁾ Includes bonuses for 2011, paid in 2012 (paid in January and February)

⁽³⁾ Includes bonuses for 2012, paid in 2013 (paid in January)

⁽⁴⁾ Executives, numbering 8, consist of the President and Chief Executive Officer , Executive Vice Presidents, and and PTT's executive who has been seconded to PTTEP

⁽⁵⁾ Executives, numbering 11, consist of the President and Chief Executive Officer (Mr. Anon Sirisaengtaksin: January 1- April 30, 2012 and Mr. Tevin Vongvanich: May 1-December 31, 2012), Executive Vice Presidents, and PTT's executive who has been seconded to PTTEP

Number of PTTEP Shares Held by the Management and Spouses

Name		Shares as of January 1, 2012	Shares as of January 1, 2013	Change in Shares
1. Mr. Tevin	Vongvanich	75,500	90,280	14,780
2. Mr. Somkiet	Janmaha	326,100	395,100	69,000
3. Mr. Asdakorn	Limpiti	45,00	50,000	5,000
Spouse		63,000	82,000	19,000
4. Mr. Chatchawal	Eimsiri	-	-	-
5. Mr. Somporn	Vongvuthipornchai	142,000	169,800	27,800
Spouse		3,000	3,500	500
6. Mr. Suraphong	Iamchula	88,400	100,700	12,300
7. Mr. Somchai	Manophinivet	N/A	85,498	N/A
8. Mr. Pongsathorn	Taweesin	N/A	-	N/A
9. Mr. Thiti	Mekwichai	N/A	8,000	N/A
10. Ms. Penchun	Jarikasem	-	6,000	6,000



Name		Shares as of January 1, 2012	Shares as of January 1, 2013	Change in Shares
11. Yongyos	Krongphanich ¹	67,500	69,500	2,000
12. Ms. Pornthip	Uyakul ²	N/A	58,593	N/A
13. Mrs. Chanamas	Sasananant	8,500	10,500	2,000
14. Ms. Jaroonsri	Wankertphon	75,600	79,205	3,605

¹ Appointed as Senior Vice President, Finance and IT Strategy Division, Finance & Accounting Group on January 1, 2013

² Appointed as Senior Vice President, Accounting Division, Finance & Accounting Group on January 1, 2013

8.4 Good Corporate Governance Report

The Board realizes the significant and commitment to carry on the business adhering with PTTEP Good Corporate Governance and Business Ethics. We are confident that we can drive PTTEP leading to the goal of “Growth Prosperity Stability Sustainability and Dignity” and trust building to all shareholders and stakeholders. The Board has assigned the Corporate Governance Committee to supervise and assist the PTTEP’s performance in line with its policy and the business ethics, and upgrade its operation excellence standard toward the international best practice. Consequently, during 2012, PTTEP was praised internationally and nationally as shown in the topic of glorious trophy in our Annual Report. PTTEP has complied with the good governance as the listed company of the Stock Exchange of Thailand (SET), in 2006, continuously or better as follows;

8.4.1 The rights of the shareholders and equal treatment

PTTEP realizes and places important on the rights of the shareholders and equal treatment. We, then, unify this in the good corporate governance policy and manage the directions in order to ensure that the basic rights of the shareholder will be protected such as share purchase or transfer; declaration of share ownership; shareholders’ meeting attending or proxy for meeting of shareholders; certain important matters required the shareholders’ vote from the shareholders’ meeting such as the Board’s appointment, the calculation of the Board’s remuneration, the auditor’s appointment; the calculation of the auditor’s remuneration;



connected transactions or acquisition or sales of assets in significant sizes as said in related laws; etc.; any matters that could significantly affect PTTEP. Such matters include profit proportion and sufficient, timely and equal information disclosure. PTTEP promotes the rights of the shareholders as follows;

(1) The 2012 meeting of shareholders consisted of 2012 Annual General Meeting of Shareholders on March 28, 2012 and Extraordinary Meeting of Shareholders No. 1/2012 on October 29, 2012. PTTEP promoted the rights of shareholders for consistent meetings or better as the following.

(1.1) The Company allows the shareholders propose any matter to file in the agenda of the Meeting or nominate any qualified person for director appointment before the Meeting from 1st October to 31st December 2012. The company has generally posted an announcement for director nomination including with the criteria of selection through Stock Exchange of Thailand in advance since September 29, 2012 and the company's website in order to send the message that the company treats all shareholders with equal and fair basis. The propose matter or person will be determined according to the company's rule as provided based on the true benefit for the Meeting. In term of nomination, the qualified person will be selected by the Nominating Committee before proposing the list of candidate to the Board for reconsideration. In addition, the Board shall inform the result with the grounds of selection in the Meeting. It is noted that there is no proposal to the Meeting at all.

(1.2) PTTEP released and notify the date of the 2012 Annual General Meeting of Shareholders two months in advance from January 30, 2012 once the Board decided to set the date of the AGM on March 28, 2012. The deadline of the shareholders' eligibility for the AGM and dividend payment was also set on February 15, 2012 and informed then. The Closing Date of Registration for collecting the list of shareholders was scheduled on February 16, 2012.

(1.3) PTTEP delivered the invitation letter and the supplementary document, in both Thai and English version, to the shareholders 16 days in advance prior to the Meeting. The invitation letter contains sufficient and accurate agendas and supplements with the Board's decision. The agendas was notified clearly which was for either information or consideration together with the attached proxy form as provided by the Ministry of Commerce and the list of the independent directors containing the conflict of interest in any particular matters so that the shareholders can appoint anyone to attend and vote in Meeting instead. The invitation was notified in brief what document is required for identification in the Meeting; how the



Meeting shall be conducted for reserving the rights of the shareholders; the company's Article of Association with regards to voting and conducting shareholder meeting; and venue of the Meeting. Moreover, the Meeting will be disclosed on the website of PTTEP at www.pttep.com both in Thai and English languages in advance 34 days before the Meeting and notify the shareholders again once the information is released which is similar information as delivered to the shareholders.

(1.4) The Company named three independent directors in a proxy form as an option for the shareholders to appoint anyone of them as their representative. The Company also informs the shareholders, among the independent directors, who have conflict of interest in any particular matters. For example, the independent directors whose terms to serve are expired and get nominated for another term will be regarded as having interest in this matter (but not a special interest). The company also recommends the shareholders to use the proxy form that is customized to voting like the shareholders themselves are casting votes on their own.

(1.5) In the Meeting date, PTTEP shall allow the shareholders to register at least two hours before the meeting. The barcode system is used to show each shareholder's record as printed on the registration form or the proxy form for convenience, speed and accuracy. The company also provides duty stamps for proxy.

(1.6) PTTEP provides the guideline of the Meeting to all attendants for understanding of the meeting process, the shareholders' voting and the proxy whose rights cannot be divided except she/he is a C type proxy, vote counting, questions or comments in the Meeting, etc.

(1.7) Before the Meeting, the chairman of the Board assigns the secretary to inform the voting procedure and and vote counting clearly as indicated in the Articles of Association. PTTEP provides the barcode for the shareholders and the proxy, who do not cast votes with ballots yet, to vote in every agenda for accuracy and speed. Voting is in accordance with the Company's Articles of Association and laws. The barcode will represent all agenda's voting results. There are volunteers among the attendants and independent inspectors will be witnesses for vote counting. Besides, PTTEP has separate voting in each agenda for the shareholders' right protection. In term of director appointment, the shareholders are allowed to appoint the director on an individual basis as well.



(1.8) External Independent legal Advisors or inspectors are assigned to oversee the meeting with transparency, laws and the Company's Articles of Association. Inspected issues include document examination process of shareholders or proxies who are eligible for the meeting, quorum, shareholders who having conflicts of interest and did not vote, ballot counting and collection from the attending shareholders, and accuracy of resolutions and voting results.

(1.9) The Company proceeds with all agenda in a respective order, as informed in the invitation letter and has a policy not to add any agenda in the meeting without prior notification so that the shareholders can acknowledge in advance and take time for decision making.

(1.10) The Chairman allocates meeting period in a respective order of agenda, as notified in the invitation letter, with adequacy and transparency. During the meeting, the shareholders are allowed to share their views and make questions, related to business operations and PTTEP agenda, prior to the voting and each agenda's resolution. In addition, the company permits the shareholders to send questions related to the meeting to the Board in advance before the meeting as well.

(1.11) The Company promotes to use the ballot card for voting in every agenda. Different ballot cards are separately managed for each agenda so that the shareholders can cast their votes as they deem appropriate. This card will be returned once the shareholders disagree on or abstain from the voting. The card is useful for vote counting as elected in the proxy form before informing the result of the votes at the Meeting eventually. For the purpose of transparency, PTTEP asks the volunteers among the shareholders and independent inspectors to be witnesses for vote counting. Cards collected and counted will have the witnesses sign on them for further examination.

(1.12) The Company allows the shareholders who attend the Meeting after it is commenced to choose or cast votes in an agenda that is under consideration but has not reached voting stage yet.

(1.13) Directors must attend the meeting and those who are members of sub-committees will make clarification in the agenda and answer shareholders' questions (if any).

(1.14) The Company records the minutes of meeting with accuracy and complete contents, including proposed contents, questions or opinions and PTTEP clarification



made by the directors or the executives in each agenda. The meeting resolution shall be categorized as agree, disagree and abstain. The company shall deliver the minutes of meeting to the Ministry of Commerce and all shareholders after submitting it to the SET and the Securities and Exchange Commission (SEC) within 14 days after the meeting. The minutes are also disseminated on the Company's website. Video with voice clips in Thai and English version is also on the website.

To the Extraordinary Meeting of Shareholders No. 1/2012, dated October 29, 2012, the list of eligible shareholders was set on October 12, 2012. The book closing was scheduled on October 15, 2012. The Company disseminated information beforehand on its website from October 9, 2012. In the meeting, the Company facilitated the shareholders to fully exercise their voting rights with equality, as it did for the Annual General Meeting.

(1) The company disseminates information through the SET, media or print media, the Company's website to the shareholders. This is to make them understand PTTEP's businesses and build up long-term commitment. In 2012, PTTEP organized eight field trips for the shareholders to visit Sirikit oil field in Kam Paeng Petch. The first two trips were postponed from 2011 to February 2012 due to 2011 inundation.

(3) The company provides the channel for the minority shareholders to contact the company directly through the independent directors' e-mail for certain cases such as the directors' activities, the good corporate governance and auditing, etc. Moreover, those shareholders directly contact the company's secretary or Investor Relations for more information.

(4) The company clearly discloses its shareholding structure in its subsidiaries and associated companies to ensure its shareholders with transparency and inspection. There is no cross shareholding or pyramidal shareholding structure.

(5) The company operates its business with effectiveness. It focuses on the sustainable growth for the shareholders' proper and consistent returns.

(6) Internal information control

PTTEP strictly controls its internal information, as provided in PTTEP's good governance, and the business ethics. This is in line with the securities law. The internal control is reviewed on a regular basis for fairness and equality to all stakeholders. The major implementation is described in the followings.

(6.1) The company always informs directors, executives and employees regulations and policies relevant to internal use of information through PTTEP



channels to ensure their acknowledgement and practices and to prevent insider trading for themselves or others, determines penalty, and have supervisors, as CG leaders, to put emphasis on or give suggestion about this matter. In the previous year, there was no report of such misuse of information.

(6.2) Prohibition of securities trading in a specific period, starting from the 2011 financial statements onwards. The corporate secretary will inform directors, executive from Executive Vice President or above, Vice President of the Comptroller General Department and Vice President of Financial Department the period of non-PTTEP shares trading in advance. This includes their spouses and under-aged children. The information disclosure is not allowed for selling/ buying directly or indirectly (for the example, trading by Nominee or holding by personal fund) during the period where the company will disclose the significant information that may affect the price of the share such as one month before the financial statement disclosure to 1 day after submitting such result to the SET in order to wait until the information disseminate to the public thoroughly. The violator shall be charged with ethical punishment and restricted to hold the PTTEP's shares for a long term at least three months after each date of trading.

(6.3) The company shall disclose securities held by directors, executives from Executive Vice President or above, Senior Vice President for Accounting, Senior Vice President of Finance and Strategic Information Technology Division, Vice President of the Comptroller General Department and Vice President of Financial Department in the annual report accurately as provided by the SEC. The Board monitors their performance for the business ethics on internal information control. These persons shall submit their report every time if there is any change in securities holding to the corporate secretary for the Board's further acknowledgement. The office of the corporate secretary will follow up the practices of the business ethics on the internal information use.

(7) Directors and the executives from Executive Vice President or above shall report the conflict of interest either by him/herself and related persons at once if there occurs any conflict. The corporate secretary shall deliver a report to the chairman of the Board and the chairman of the Audit Committee within seven days after receiving such report, as stipulated by the Board, the Securities and Exchange Act (Volume 4), B.E. 2551 and the announcement of the Capital Market Supervisory Board.



(8) PTTEP sets guidelines for practices in the case of the conflict of interest in the good governance and the business ethics for directors, executives and employees. Principles are also determined for directors and executives from Executive Vice President or above to report PTTEP their stakes and related persons' stakes.

Once any conflict takes place, a stakeholder is required to report PTTEP immediately and is excluded or abstained from voting in the matter.

8.4.2 The role of stakeholders

The Board approved PTTEP's mission, placing a focus on rights of stakeholders, provided that PTTEP operates globally to provide reliable energy supply and sustainable value to all stakeholders. Practically, PTTEP pays attention for those who are external and internal stakeholders from shareholders, clients, employees, governments, associated partners, society, communities and environment, sellers/buyers, creditors, competitors, local culture and tradition, human rights.

As a result, PTTEP finally finalised the written practical guideline for PTTEP Good Corporate Governance and Business Ethics. The scope of the business ethics, which regards balance of stakeholders appears in PTTEP's business ethics and its website. PTTEP pay its respect to all stakeholders in everywhere it operates. In 2011, PTTEP joined the United Nations (UN) Global Compact, a UN body for the global sectorial collaboration for development of economic sustainability. The company is strictly responsible for the four main issues that are human rights protection, employment standard, environment protection and anti-corruption. PTTEP also signed an agreement to become a member of Thailand Private Sector Collective Action Coalition Against Corruption since 2010. In the previous year, PTTEP sent its employees in related departments to attend seminars held by organizations, such as Thai Institute of Directors and the Stock Exchange of Thailand. This is to follow up practices related to anti-corruption activities and apply them within the Company. Thailand Private Sector Collective Action Coalition Against Corruption Council requires the Company to answer a self appraisal form, which was developed from the Transparency International Organization's original copy, and to have certain policies and practices, as required. Previously, PTTEP never has any significant dispute or litigation case any major case relevant to corruptions. Currently, the Office of the Corporate Secretary follow, present and report the Board and the Corporate Governance Committee the progress on a regular basis.

The business ethics to PTTEP's main stakeholder groups

(1.1) Shareholders



PTTEP respects the rights of the shareholders and treats all shareholders with equality while adhering to carry on business, subjected to the good governance and the business ethics for sustainable growth and enhance the optimal value for the shareholders, as detailed in 8.4.1.

(1.2) Employees

1. PTTEP adheres to comply with the UN principles without use of illegal workforce in every area it makes investment. The following guideline is described in PTTEP Good Corporate Governance and Business Ethics.

- (i) To strictly understand and comply the relevant law related to the business practice of the company in every area
- (ii) To understand and respect cultural and local custom and tradition without any treatment against them.
- (iii) To equally treat a person, given personal relationship or discrimination in race, gender, age, skin color, religion or any other status not involving with work practices.

2. PTTEP nominates, selects, and employs its staff regarding their records, experience and ability to work in the right position. Employees are consistently developed, promoted in their career path and allowed to join external activities under the Company's policy.

3. PTTEP set up a fair wage system for its staff and the company itself in order to magnetize and retain competent staff. The rate of employment and the present method of wage payment paid by the petroleum entrepreneurs in the country are considered. The different of each position, the required skill and expertise, the level of difficulty to work, the assigned responsibility and the staff's capacity that for their responsibilities will be wholly considered likewise.

4. PTTEP manages and/or enhances the fair welfare for the staff and the company itself. We consider the payment capacity in the present and long term in the future. We emphasize the sustainable welfare for the staff and families' living. Those welfare will be for most staff who cannot provide with their financial capacity plus there is no sufficient



governmental support and lastly this is common provision granted by the petroleum entrepreneurs in the country.

Moreover, PTTEP manage the provident fund for the staff in order to enrich their livings and become work security for them when they resign or retire. The provident fund consists of staff and the company's regular contributions. The company makes monthly contribution at a rate of 15% of the staff's basic salary while the staff contributes 2% on a monthly basis but not exceeding 15%. Receiving this fund is subject to the company's requirement.

5. PTTEP realizes the value and importance in consultation between the staff and the supervisor promptly in order to maintain a good relationship. In case of the conflict between the staff or staff and supervisor, the staff may lodge a complaint as provided by the company. If those who comply with the provided measure and procedure and act with a good faith, they shall get protection without any impact. The company will not deem as employment termination or order penalty that may negatively affect the staff or relevant witnesses.

6. PTTEP gives priority in human resource development in order to enhance capacity for business performance. We deem that human resource is a key to the company. PTTEP supports and promotes staff through training and curriculum in the short and long term. Apart from academic and technical capacity building, we plant the working value altogether so that all staff can work with the same standard as to attain the company's vision and mission as targeted.

7. PTTEP conducted the Employee Engagement Survey in 2011, targeting to understand the employees' perspective to the Company. The survey results were used to formulate the overall plan in 2012 to enhance the employee engagement. Two plans include determination of expectation and target for joint work, and feedback for work among supervisors and employees. This is to have the employees participate in work target establishment and efficient work.

PTTEP is under the implementation and monitoring on a regular basis. The next employee engagement survey will take place in 2013.

Employee Satisfaction Level	Unit	2011	2012
Employee Engagement Index	Highest score= 5	-	4.18
Number of Respondents	% of total employees	-	71%



(1.3) Clients

PTTEP is committed to its mission to be the producer and supplier for crude oil, liquefied natural gas and natural gas at fair and competitive prices. It sells products under short to long term contracts and on spot markets. The company treats all buyers equally for optimal benefit to all parties. The company is committed to strictly comply with contracts and regularly coordinates with buyers so that it can produce and deliver quality product as determined in the contracts and meet demand of the buyer with punctuality.

(1.4) Sellers/buyers

PTTEP regards the sellers/buyers as a major factor to grow its business with sustainability. Therefore, the Company has a policy to equally treat each other as business partners while focusing on the corporate governance.

PTTEP finds trade with and promotion of ethical and environmentally and socially responsible partners as fundamentals for sustainable growth.

As one among Thai organizations abiding by the UN Global Compact in Human Rights, PTTEP promotes and pays respect to human rights protection. The Company will do business with similar-policy partners.

PTTEP established the Sustainable Development Working Team to draft a policy, strategies and plans for promotion of shared value creation with environmentally and socially responsible traders, who follow the UN Global Compact principles in Human Rights through its activities. Traders are required to abide by the following major policies.

1. PTTEP does not support compulsory labour or forced labour
2. Traders are required to abide by labour laws related to that country in a strict manner.
3. Traders are required not to employ child labour whose age is below the legal permission in that country.
4. Traders must eliminate inequal treatment for employment and occupation.

PTTEP is fully committed to include the UN Global Compact principles as a part of the strategy for procurement and business with traders. This is expected to expand into the Company's traders for collaboration and promotion of the sustainable development in the world community.



(1.5) Associated partners

The joint investment project between PTTEP and domestic and overseas associated partners will operate business under the international mutual working agreement. This agreement rules out the rights and duties of associated partners with their eligibility to become the project's management committee, which directs management, procurement of products and services and annual budget with certain scope and resolution. Associated partners are eligible for inspection of financial information and annual financial statements with proper and clear measures. An example includes penalty in a case that associated partners do not abide by an agreement. Transparent dissemination of information remains a focus among associated partners and third parties.

(1.6) Competitors

Based on professionalism and equality, PTTEP treats its competitors under transparent and fair rules. It avoids defaming its competitors by fallacy.

(1.7) Creditors

PTTEP pays attention on rights of all internal and external stakeholders, including its creditors and treats them with equality according to PTTEP's good corporate governance.

Emphasizing on information disclosure to all stakeholders, PTTEP does it with accuracy, completeness, speed and transparency. Important information includes financial data and non-financial information. Financial data, particularly in the part of financial statements, passed auditors' review/inspection, as accurate according to the generally accepted accounting principle, and gained approval from the Audit Committee/the Board prior to disclosing it to the general public.

To its shareholders and other creditors, PTTEP launched debentures, according to the SEC's regulations and announcements, and abided by the Company's policy, objectives and resolutions of the shareholders' meeting in a strict manner. The Company also considered its responsibility to follow the rights and duties of an issuer of debentures and borrowing conditions. Information is fully disclosed to all stakeholders. There is a contingency plan if the stakeholders have damage arising from the Company, which does not comply with the requirements on rights and duties of an issuer of debentures and borrowing conditions.



(1.8) The Government

PTTEP surveys and produces petroleum under relevant state agencies' supervision in the country or other countries where PTTEP makes investment. The government plays a role in supporting and smoothing PTTEP's business according to the policy, rules and regulations in each country. As a result, based on its transparency and integrity, PTTEP regularly coordinates and exchanges information with the local and foreign governments.

PTTEP gives priority to build up and maintain long-term relationship with the local and foreign governments. Activities are held on a regular basis.

(1.9) Community/ society

Having followed the business ethics, corporate social responsibility and its confidence of people's living quality being as a major foundation for sustainable social development, PTTEP operates its core business – petroleum exploration and production, together with development of the society's living quality and culture and environment conservation. This is to help the communities, society and PTTEP grow together under a concept "From assets in the ground to the intellectual property with environmental conservation." Projects for the communities and society are described below.

Community Development

a. Education

- Scholarship
- 7 Pat Tutor Camp
- Mobile library
- Learning Park in Songklha

b. Health Improvement

- Mobile Doctor Unit in the North Eastern area.
- PTTEP's health park
- I love sport with PTTEP
- Mini farm

c. Career Development

- Crab bank
- Natural gas for agricultural community



Natural resources, culture and environment reservation

- a. Thai heritage and global heritage reservation
 - PTTEP conserves Thai Heritage, Global Heritage.
- b. Forest ecological system rehabilitation
 - PTTEP Heart plantation
 - Research for conservation of hornbill
 - Research for conservation of Bengal tiger
- c. Restoration of Thai sea ecological system
 - Open Thai sea heritage under the Patronage of Princess Maha Chakri Sirindhorn
 - Source of learning royal ships under the sea (phase 2)
 - PTTEP conserves Songkhla Lake
 - Research on artificial corals at Tao Island

Employee Engagement

- a. PTTEP volunteer for the Society
 - Promotion of learning the global heritage
 - PTTEP Activity: Take kids to tour the global heritage, No. 6
 - PTTEP's neighbor care

(1.10) Safety, occupational health and environment

Policy setting and guidelines for safety, occupational health in workplace and environment

PTTEP is committed to protecting the health, safety, and security 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 in 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 have 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) Create a proactive and compliant 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 have been assessed and maintained the required level of job and SSHE competency.
- (v) Identify, eliminate or minimized, and manage SSHE risks to be As Low As Reasonably Practicable (ALARP).
- (vi) Reinforce to all employees and contractors that they are responsible for and authorized to stop any work they believe to be unsafe (Stop Work Authority, SWA).
- (vii) Strive to achieve and maintain SSHE excellence by setting measurable SSHE objectives and targets and assessing performances through regular audits and reviews.
- (viii) Develop and maintain active plan for emergency and crisis management.
- (ix) Prevent any incident recurrences through an efficient incident management system.
- (x) Communicate SSHE issues in an open and transparent manner, and SSHE best practices internally 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 (Songkhla), Arthit Project and PTTEP Core Research Center. 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 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 4nd quarter of 2014. 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 in the final step of validation 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 30,000 tonnes of carbon dioxide per year.

For more information on the environment efficiency and conservation projects, please refer to PTTEP Annual Sustainability Report 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. In 2012, a curriculum of SSHE1 training course was conducted to improve SSHE knowledge and awareness of our personnel. Over 1,700 employees and contractors were attended the training course during 2012. 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 SD-SSHE Council meetings which were held quarterly, SSHE Monthly Meetings in each department, Sustainable Development Working 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 guidelines from the International Association of Oil and Gas Producer (OGP) for the development and application of our SSHE MS.

UN Global Compact Principles 7-9 (Environment)

PTTEP ensures that our operations in all areas comply with labor laws of the countries in which it operates and in accordance with the Principle of the United Nations Universal Declaration on the Environment (United Nations (UN) Global Compact). Environment is one of the important principles of the UN Global Compact.

(1.12) Custom and Tradition

PTTEP adheres to local custom and tradition in its operation areas. Training was provided by knowledgeable and experienced instructors, including representatives from the Ministry of Foreign Affairs or Embassy. They gave suggestions and provided information including custom, tradition, careful issues and local practices for employees who will be stationed there so that they understand and behave in a proper manner.

(1.13) Human rights

PTTEP is responsible for labor rights in any operational area with prohibition of direct and indirect employment of child labor and forced labor. This is in consistent with United Nations (UN) for Human Rights. Whether or not a country PTTEP invests in has local laws on human rights, PTTEP makes fair employment with safe work environment and hygiene.



No threat exists among employees or those related to the Company. Ethical partners without any infringement of human rights are employed. PTTEP promotes consultation between executives and employees through the latter's representatives in the welfare committee. Views and suggestion are listened for improvement of welfare and other proper and necessary benefits to enrich employees' quality of living.

(1.14) Laws

PTTEP respects laws in everywhere it operates business with anti-corruption. The Board set legal compliance and anti-corruption in the business ethics. Such includes legal respect and political non-bias. PTTEP directors, executives and employees are required to understand them, strictly abide by laws related to its operations in all areas, and perceive the matter of gifts, reception and non-corruption. The Company's capital or resources shall not be used to support any political party or any politician. PTTEP's personnel must not have corruption, must not give or receive bribery, and must make related persons understand PTTEP stance. They shall inform the Company if a corruption is seen. This issue is in other matters of the business ethics. Such other matters include no request for benefits from the procurement activities, prohibition of no direct or indirect use of power and authority to seek a position or benefits for oneself or others, and prohibition of intellectual property or license violation – particularly for the Company's IT and communications. Thus, PTTEP Group can see its operations with accuracy and efficiency. Directors, executives and employees all must abide by the business ethics.

PTTEP communicates the business ethics internally and externally. Training is provided to executives and employees on a regular basis. Business partners are required to follow PTTEP's business ethics and are informed PTTEP practices regarding New Year's gift reception. The business ethics is disseminated on PTTEP website for outsiders. PTTEP set up the Compliance like the operation supervision department to oversee legal risks and have PTTEP operations to follow related laws.

(2) PTTEP allows the stakeholders to share PTTEP operations through their comments or useful information related to the company's performance and their rights at independentdirector@pttep.com directly. Every view will be screened before forwarding them to the Board in order to ensure that all stakeholders' rights will be protected with fair treatment.



(3) Measures for clueing up, informer and protective mechanism

PTTEP's ultimate goal is to achieve its business by adding value to shareholders and satisfaction to stakeholders in the long term; namely, PTTEP "grows, prospers, be firm, sustain and stay elegant" in its confidence that compliance with PTTEP Good Corporate Governance and Business Ethics will drive PTTEP to the goal. Therefore, the company provides the channel for its staff and the third parties to inform or give information related to any abuse or any mean that violates laws, regulations, good governance, PTTEP's business ethics, the policy, rules, requirements or PTTEP's provisions through CG Hotline.

To ensure their protection after report, PTTEP has a policy for reception of complaints and protection of those who place complaints to avoid unfair treatment or persecution and provide relief for those inform. If a complaint is done with integrity and no purpose to damage PTTEP or any other person, the Company place it with confidentiality. Such complaint will be disclosed to those assigned and related only. Investigation will be done in respective manner said in the policy and the progress will be reported to the CG Committee and the Board on a quarterly basis. The following channels are open for complaints through CG Hotline.

(3.1) Fax no. 02-537-4949

(3.2) E-mail at cghotline@pttep.com

(3.3) CG Hotline Box at PTTEP Office

(3.4) By person or post at the Corporate Secretary Office

In 2012, CG Hotline received four complaints. Two of which were finalized while the other two are under progress. Should the finalized complaints be given response, if a name who makes complaint is specified.

8.4.3 Information disclosure and transparency

Information disclosure is one of the keys for the good corporate governance. PTTEP adheres to information disclosure to the SET and shareholders. All information must be correct, sufficient, prompt, and fair to all parties. The information preparation is in accordance with the business ethics. Inside the company, there are the Investor Relations (IR) and the Corporate Communication and Community Relation which are in charge of providing and replying all queries while PTTEP has certain procedure of information disclosure to the SET.



The key information of the company consists of the financial information and non financial information. In 2012, the financial information, especially in the section of financial statements, was reviewed/ examined and certified correctly in the substantiated auditing by the auditor. Then it was approved by the Audit Committee/ the Board before disclosing to shareholders. The Board reported the financial report in the annual report. Moreover, the company revealed the company's non-audited quarterly and annual financial statements, in addition to the SET's requirements. This is to allow shareholders and investors to receive the information faster. The information before and after review /auditing has no significant change. For the non-financial information, the company disclosed it in accordance with the SET and SEC's requirements. Such information includes related transactions, management analysis, risk management, Annual Corporate Governance Report and the 56-1 Form.

PTTEP information, disclosed to the SET, public, shareholders and investors, will be disseminated in both Thai and English languages on the company's website. Such information includes financial statements, annual report, the 56-1 Form, invitation letter for shareholders' meeting and minutes of meeting, petroleum exploration and production projects, investment projects, the Roadshow information, the quarterly performance report proposed to analysts, Webcast, PR news, report on stability, occupation health, safety and environment compiled in the Annual Sustainable Development Report, etc. Moreover, PTTEP regularly maintain its website so that the users can update and access the information conveniently and beneficially.

- Historical and latest stock performance
- Analyst coverage
- Events and presentations

During 2012, PTTEP disclosed its information through the SET system totally 56 issues with information disclosure of offers and allocation of new shares. During the period for the share offer and new share allocation, the Company had additional channels of information. Such channels included briefing on information of new share offer to the public, exhibitions for more details and call center to answer shareholders and investors.



Activity for Shareholders and Investors in 2012

Activity	Amount (Times)
Domestic and Overseas Roadshows/Conferences	32
Analyst meeting	4
Daily telephone correspondences	4 (Average)
Opportunity Day (by the SET)	1
Shareholders and investors' site visit	9

Aside from the said activities, the company meets with analysts and fund managers (company visits) including conference calls regularly throughout the year at approximately more than 100 meetings. In the Annual General Meeting of Shareholders in 2012 and the Extraordinary Meeting of Shareholders No. 1/2012, the Company's investor relations officer gave information and answered questions to shareholders. This was another channel for PTTEP to disclose its information to shareholders.

PTTEP provides directors, and executives started at the position of the Executive Vice President or above, Senior Vice President of Accounting Department, Senior Vice President of Finance and Strategic Information Technology Division, the Vice President of the Comptroller General's Department and the Vice President of Financial Department to report the conflict of the interest either themselves or other related persons promptly once the conflict is existed. The company's secretary shall deliver this report to the chairman of the Board and the chairman of investigative director within seven days after receiving such report as stipulated by the Board which is in line with the Securities and Exchange Act (No.4), B.E. 2551 and the announcement of the Capital. Market Supervisory Board.

PTTEP has disclosed the role and duties of the Board and the specific committees including the numbers of attending the meeting under the clause 8: Management. Each sub-committee is under the clause 8.5. The reports of the sub-committees and disclosure of committee and the executive's remuneration packages are under the clause 8.4.5 with the responsibility of the Committee (J) and remuneration.

PTTEP is aware of the importance of information disclosure with accuracy, completeness, punctuality and transparency. This is a key part of the good corporate governance and the business ethics. PTTEP is committed to dedicate itself for business operations.



Investor Relations (IR)

Investor Relations (IR) is responsible for communicating information and news that reflects PTTEP's fair value to analysts, shareholders and general investors as provided by the SET and SEC regulations. IR's duty is to build up confidence to analysts and investors, enhance PTTEP's image and good attitude to investors. IR coordinates and give advice about investor relations tasks to executives. Investors or interested persons may contact IR for more information through three channels.

- (1) By phone: 0-2537-4675, 0-2537-4611, 0-2537-4075 and 0-2537-5746
- (2) By e-mail: ir@pttep.com
- (3) By fax: 0-2537-4467

8.4.4 The Board's responsibility

The Board plays a major role to jointly set vision, mission, strategic plan, work plan and budget with the management on a yearly basis. The Board performs its duty with prudence and integrity, which is in compliance with laws, PTTEP's Articles of Association, PTTEP Good Corporate Governance and Business Ethics. The Board also calls for reporting of PTTEP's performance, including operations, finance, implementation according to rules, regulations and policy, on a monthly basis.

(1) The Board's structure

(1.1) Board composition

The Board consists of 15 skilled experts. The number is considered as appropriate for the operation size. Of total Board members, no less than half of the current members shall be non-executive directors, executive directors or independent directors, and at least three are third parties from the private sector. As of January 1, 2013, there are 15 members as follows:

- 14 non-executive directors (93.34% of total members)
- One executive director: President and Chief Executive Officer
- Seven independent directors (46.67% of total members)
- External directors from the private sector

Only PTT Plc is PTTEP's major shareholder while its minor shareholders are disperse. Thus, the Board's elements and proportion remain appropriate to make a balance for shareholders' optimal benefits.



In this regard, names, biography, qualification, experience and shareholding of non-executive directors, executive directors, independent directors, directors from the private sector and directors from PTTEP's major shareholder PTT Plc will be disclosed in Attachment 1: Details of executives and controlling persons, and PTTEP's website.

(1.2) The Board's qualification

(i) Shall possess qualifications in accordance with the public company law, securities and exchange law, the SEC rules, Capital Market Supervisory Board (CMSB) rules, SET rules, and relevant Cabinet resolutions.

(ii) Should contain versatility of expertise with skill mix in the fields of Industry Knowledge, Accounting & Finance, Business Judgment, Management Skill, International Markets, Business Strategy, Crisis Management, Corporate Governance and Legal.

(iii) Be able to dedicate oneself and time to fully perform duties and take responsibility. A director or an executive shall neither hold the director or executive position in more than five listed companies nor be absent from the meeting more than three times without fair reason; otherwise, he or she will be regarded as the unqualified.

(iv) Shall not be more than 70 years old.

(1.3) Determination of the Board's term and the number of companies each director assumes the directorship

PTTEP provides that one-third of total members shall be retired by rotation at the Annual Shareholder's meeting. According to the Articles of Association, the Board shall consist of no more than 15 members. Each member holds a three-year term with no more than three consecutive terms (since 2006). This is to allow PTTEP have directors with versatility of qualifications, as deemed appropriate, for optimal benefit. An exception is that PTTEP considers a member with specific expertise that is useful for its operations.

PTTEP believes that too much stringent requirements will lead to obstacles and limitation of the Nominating Committee's duty in considering the most appropriate candidates for directorship and take proper candidates out of the consideration without other knowledge and capability consideration. The Company may lose benefits and opportunity to gain from those persons who have knowledge and experience accumulated during their directorship.

To directorial qualifications, each director shall assume directorship or executive of no more than five listed companies. Information related to their directorship of



other companies will be revealed in Attachment 1: Details of executives and controlling persons. Currently, no directors hold directorship of more than five listed companies. Each member of sub-committees hold a three-year term. The sub-committees include the Nominating Committee, the Corporate Governance Committee and the Risk Management Committee.

(1.4) Independent director's qualification

Please see details in 8.1.3

(1.5) Policy and practices for President and Chief Executive to assume directorship of other companies

PTTEP realises value of experience President and Chief Executive Officer has accumulated from his/her directorship at other organizations. To have time for PTTEP, as specified in PTTEP Good Corporate Governance and Business Ethics, President and Chief Executive Officer, and executives are able to take directorship at other companies or other organizations (not their own business or family business), as necessary and without damage to PTTEP tasks. Such is required to gain approval from the authorized person. PTTEP and their positions shall not be used in such business operations. Returns of executives, assigned by PTTEP to assume the directorship of any organization or any unit in the petroleum exploration and production or any direct relation, will belong to PTTEP if they perform duty on behalf of PTTEP. In other cases, executives shall reap such return. Information relevant to each director's directorship at other companies is disclosed in Attachment 1: Details of executives and controlling persons. Currently, none of executives assumes directorship or becomes executives in more than five listed companies.

(1.6) Separation of Chairman, President and Chief Executive Officer, and Authority and Duty

Chairman, President and Chief Executive Officer, which are usually different persons, will be elected by the Board. Chairman does not participate in the daily management. Policy, monitoring and daily management are clearly separated. Chairman has leadership and plays a key role for supervising the Board to perform efficient duty and be independent from the management, join hand with President and Chief Executive Officer to determine meeting agenda according to its duty and responsibility, efficiently act as Chairman in the Board and shareholders meetings. Other duties are to oversee directors to adhere to PTTEP Good Corporate Governance and Business Ethics. President and Chief Executive Officer are



responsible for the Company's management under their authority as assigned by the Board. The Chairman does not hold any position in a sub-committee for clarity of duty and implementation.

(1.7) Independence of Chairman

Independence becomes the first priority for PTTEP to elect Chairman. If none is qualified, other directors will be considered for the position. The current Chairman perfectly performs his duties with independence. Chairman shall have performance appraisal by the whole Board for examination and improvement. Result scores are disclosed in the 56-1 Form and the annual report. Details of Chairman's appraisal results appear in of Good Corporate Governance part item 3.7: PTTEP Board's Self Evaluation

Apart from Chairman's independence, all directors express their view on the Company's operations in the Board meetings, sub-committee meetings and other work periods with independence. This is to oversee the management to run operations with efficiency, accurateness, transparency and benefits to shareholders.

(1.8) Corporate Secretary

Please see the clause 8.1.7

(1) Sub-committees

The Board appoints properly skilled experts for the sub-committees, as required by PTTEP regulations, to study and screen work details each sub-committee is responsible for. Each sub-committee's qualifications, term and scope of responsibility and duty are clearly designated in its charter. The Audit Committee and Corporate Governance Committee's members must be independent directors. The Nominating Committee and Remuneration Committee's members comprise mostly of independent directors. Each sub-committee's Chairman is not Chairman or member of all sub-committees simultaneously. All sub-committees, except for the Risk Management Committee, shall have the independent director as their Chairman. The sub-committees will regularly report each of their minutes of meeting to the Board for acknowledgement. Their annual performance will be reported in the 56-1 Form and the annual report.

Currently, PTTEP has five sub-committees: (1) the Corporate Governance Committee; (2) the Audit Committee; (3) the Remuneration Committee; (4) the Nominating Committee; and (5) the Risk Management Committee. Details of director names, duty and



responsibility, the number of meetings, attendance, and performance reports of all sub-committees and each Sub-committee report appear in 8.1.2 and 8.5, respectively.

(3) The Board's Role, Duty and Responsibility

(3.1) Good Corporate Governance Policy

The Board has the written policy for PTTEP Good Corporate Governance and Business Ethics since 2001 with annual review. The sixth version is the latest and in line with the Stock Exchange of Thailand's 2006 good corporate governance for listed companies and the principle of good corporate governance of the Organisation for Economic Cooperation and Development (OECD). PTTEP's good corporate governance policy is comparable to international oil companies and recommendations of institutes. Its content extends from shareholders' right, fair treatment to shareholders, the role of stakeholders, information disclosure to the Board's responsibility for efficient management and ethics. Six following core principles are adhered.

- (i) Accountability
- (ii) Responsibility
- (iii) Fairness and Integrity
- (iv) Transparency
- (v) Creation of Long Term Value to All Stakeholders
- (vi) Promotion of Best Practice

PTTEP distributes good governance and the business ethics booklets to directors, executives and all staff as their reference and compliance.

All shall sign their names on the agreement to bind in self in following the company's good corporate governance and business ethics as an utmost practice. The company circulated the agreement to the associated partners, the supervision unit, the unit which PTTEP always contact with and those who are interested. It is uploaded in the website under the topic of the good corporate governance for more convenience.

PTTEP focuses on enhancing knowledge and understanding of the good corporate governance and the business ethics to directors and personnel continuously. The Board supervises communication in such matter to ensure that directors and personnel adhere to and abide by the policy. The followings are the Board's assignment.



(i) PTTEP Good Corporate Governance and Business Ethics are included in one among others in the orientation for new directors, executives and employees.

(ii) Full-day curriculum is designed for new executives and employees. In 2012, six training courses were provided for 272 employees and one course was provided for eight executives.

(iii) Four CG Visits were organized for the Corporate Governance Committee to meet each department's executives and employees as to monitor promotion and practice of the good corporate governance and the business ethics, performance of executives' CG leaders. CG practices for CG in Process were listened with questions and answers for executives and employees.

(iv) CG Hero was voted to find CG Role Model from executives and employees in each department, which correctly followed the Company's guideline. Such models were accepted and honored more widely.

(v) Business Ethics (BE) E-Learning activity was held as another channel to provide executives and employees knowledge and build up understanding for PTTEP's code of business conduct. The work environment supporting the business ethics was also promoted. This year was the first of this activity for executives and employees combined of 1,793 in Bangkok (as of October 26, 2012) during October 29, 2012 – December 7, 2012. Attendees who passed the test totaled 645 or 35.97%.

(vi) PTTEP has provides the CG Clinic for the staffs asking in general in term of the good governance and the business ethics. The Office of Corporate Secretary Office will be in charge of providing information to staff who raise question and also provides certain ways for communication at any level of staffs throughoutly. The feature of information is divided as follows;

- CCS CG Information Center for general information in regard to PTTEP Good Corporate Governance and Business Ethics
- CCS Compliance News Alert for informing the relevant law compliance, such as Insider trading, or releasing the new enactment applied with the company

PTTEP will report its performance on promotion of the good corporate governance and the business ethics to the Corporate Governance Committee on a quarterly



basis. Thus, the Corporate Governance Committee is able to monitor the results and report its minutes of meeting to the Board every time. The Corporate Governance Committee reviewed its 2013 plan in late 2012. The 2012 results were considered as a part for the following year's work improvement for further development.

(3.2) The Business ethics

PTTEP concentrates on operation with ethics. The business ethics is regarded as its framework of behavior and direction for good business operations for directors, executives and employees. This is for efficient work, ethics, respect of rights, and fair and equal treatment to stakeholders with verification, which will build up confidence and lead to acceptance of PTTEP's efficient and transparent operations. Long-term value will be created for stakeholders with sustainability and fairness.

PTTEP has the written business ethics with annual review. The current one consists of 13 principles and practices, based on the framework of behavior, reflecting organizational value for PTTEP's operations. The followings shall be adhered by executives and employees.

- 1) Respecting the Law and Political neutrality
- 2) Internal control
- 3) Human resource
- 4) Confidentiality
- 5) Disclosure of Information
- 6) Internal information use
- 7) Conflict of interest
- 8) Procurement and contract
- 9) Gift, promise for gift, banqueting and anti-corruption
- 10) Accounting and finance
- 11) Use of Information Technology and Telecommunications
- 12) Safety, Security, occupational health and environment
- 13) Corporate Social Responsibility



(3.3) Policy on conflict of interest

PTTEP has a policy to prevent any conflict of interest in management, as depicted in the good corporate governance and the business ethics. This is to ensure stakeholders that PTTEP's business management is efficient and transparent with the following principles.

- Directors, executives and staff shall not participate in review or voting in a matter they have stakes in.

- Directors, executives and staff shall decide on business operations for the optimal benefits of PTTEP without personal need or any other related person demand.

- Directors, executives and staff shall review and disclose their transactions involving in the conflict of interest for PTTEP's acknowledgement.

PTTEP establishes the following preventive measures for the conflict of interest.

- Directors, executives and staff shall adhere to and abide by laws and regulations as required by the SET, particularly for connected transactions.

- Directors, executives, staff and related persons avoid involvement with financial issues and/or relations with outsiders, which will cost PTTEP with loss of benefit or bring conflict of interest or obstruct efficient work implementation.

- Directors, executives and staff, when involves in the processes of employment, selection, decision or approval of transactions that may have conflict of PTTEP's interest, must report their supervisor or those who take part in the approval through a PTTEP form on disclosure of conflict of interest transaction. They shall cease participation in such process or transactions with PTTEP.

- Directors, executives and staff shall review and evaluate themselves for conflict of interest transactions, as specified in the Self Appraisal Form.

- If there is a suspicion or uncertainty that their work or their participation or related persons' participation or shareholding in any business and such business involves in a transaction with PTTEP and may lead to conflict of interest, directors, executives and staff shall notify the Company at once.



(3.4) Internal Control system

PTTEP consistently places significance on internal control system for the Company's operations to ensure they are sufficient and appropriate, monitoring and verifying internal control measures to assess and improve control measures to ensure that they are appropriate to the situation, environment and materializing risks. PTTEP conducted an internal control assessment as stipulated by rules of the Office of the Auditor-General governing the formulation of internal control standards, B.E. 2544(2001). The Internal Audit Department regularly reviews internal control practices to ensure suitable control measures are commensurate with current circumstances, environment, and risks.

The Board, the Management, and all employees have collectively determined business procedures as follows to ensure the certain achievement of corporate objectives:

- 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 procedure is based on the regulations of The Committee of Sponsoring Organizations of the Treadway Commission (COSO) and that of the Committee of the Auditor General of Thailand, consisting of five components as follows:

(i) Control Environment: PTTEP has a proper and sufficient control environment, which promotes awareness among personnel to conduct business with honesty, integrity, and outlined in a code of conduct. It covers the formulation of business directions and policies, business expansion, organization, and entails clear definition and delegation of roles and responsibilities. (See details under Personnel Development). Moreover PTTEP places emphasis on sustainable development under which it developed the PTTEP Sustainable Development Guideline to define clear objectives and development guidelines for operations with emphasis on 3 important parts i.e. business, social and environment.

PTTEP has established a PTTEP CG course for all management and employees including during the year communication and education of CG and the Code of Conduct from Corporate Governance and Stakeholder's' right function. In 2012, PTTEP launched



CG E-Learning for employees to review and refresh CG and conducted 4 corporate governance workshops in order to stimulate increased understanding of CG and the Code of Conduct in their operations. Moreover, there were reports which raised issues and problems to the CG Committee in order to get further advice.

In terms of Organization structure, PTTEP has assigned a Risk Management function responsible for Risk Management, Business Continuity Management and Internal Control roadmap and framework including monitoring and building internal control awareness through Control Self-assessment (CSA) process to ensure the achievement of PTTEP objectives i.e. effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations.

(ii) Risk Assessment: PTTEP places importance on Risk Management, towards this a Risk Management function responsible for the management of PTTEP's enterprise risk. Which analyses types of risk, together with their probability and impacts, and also ensure responsible departments manage those risks to be at the acceptable levels. PTTEP classifies risk management at the corporate level, linking to its corporate directions and strategies, and the operating level, to be managed by departments. All risks come under the oversight of the Risk Management Committee. PTTEP has established a Risk Management Policy that sets out PTTEP's commitment to effective risk management which is vital to the achievement of objectives. Strong risk management practice ensures the sustainability of our business, the safeguards of all persons, and the protection for the environment and communities we operate in. It also improves stakeholders' confidence and trust through effective control, management and transparent reporting of all material risks.(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 resources management; finance and accounting; budgeting; and procurement regulations; also in addition the company operates under the charters of the five subcommittees. These regulations frame PTTEP's management and operation control. The Company has also devised a Delegation of Authority and Signatures (DAS) table for the President and Chief Executive Officer to clearly delegate authority to the Company's functional management, resulting in practical and easily-verified courses of action.



PTTEP has developed the Corporate Governance Framework (CGF) to define principle and framework to manage and oversee activities between PTTEP Corporate and Assets including managing the framework within an Asset to clearly define roles, duties and responsibilities. This year, CGF has implemented in PTTEP International Assets e.g. Canada Oil Sands KKD Project, Algeria Project, Oman Project, Myanmar Project, Indonesia Project continuing on from CGF implementation in PTTEP Australasia Project in 2011.

PTTEP assigned the Compliance function to ensure all PTTEP activities are in compliance with all laws and regulations. In 2012, PTTEP conducted Compliance Health Check to ensure that operations complied with all related laws and regulations to reduce non-compliance from day to day activities of staff. Moreover, PTTEP has conducted training session on regulations from the “Office of National Anti-Corruption Commission in Procurement law” to build an understanding and update new laws for relevant functions.

(iv) Information and Communication: The Company executes this aspect by instituting efficient and effective communication procedures to disseminate information both internally and externally for complete, accurate, and timely decision-making. The systems contain both financial and non-financial information. Internally, through the Intranet (via Internal Communication channel), PTTEP provides employees with sufficient and timely information needed to conduct their work, as well as communication between the Management and employees to improve job coordination and allow the 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, to develop increased understanding and relationship with relevant stakeholders

PTTEP has an information control system to manage the transmission and receipt of information through this system the Company has classified levels for access to confidential information that protects confidential information in all departments and allows access to authorized personnel only.

(v) Monitoring and Evaluation: PTTEP has a system for clear control and assessment of operating performance, as well as that of risk management performance. PTTEP



has developed Control Self-assessment (CSA) as a tool for employees to improve their internal control processes.

In addition to this PTTEP has a risk assessment monitoring procedure which reports its findings regularly 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. In addition, the Office of the Internal Audit monitors and assesses internal control outcome, and then reports its findings to the Audit Committee.

(3.5) Risk Management

The Board sets the risk management policy, which is extended throughout the company. In 2005, it set up Charter for the Risk Management Committee to determine its duties and responsibility according to the risk management policy.

The Risk Management Department is responsible for taking care of sufficiency of the risk management system and risk management effectiveness across the organization. Its duties are to examine and specify risks and irregularities that may prevent operations from achievement of strategic goals and implementation goals, to have execution to lessen impact and lower chance of risks that may rise in the system with effectiveness, to monitor the results and report them to the management, the Risk Management Committee and the Board intermittently, and to build culture and awareness of risk management in operations for all work units.

(3.6) The Board's Meeting

The Board, each year, schedules the date of meeting in advance with monthly agenda. In 2012, the Board set the fourth Thursday of a month for a meeting. Off-site meetings were held for strategic plans. The Company spent time and put focus on the strategic plan. Additional meeting were held as appropriate. The Board convened 16 times. The Board regularly receives the invitation letter, drafted minutes of meeting and meeting document for consideration in advance.

In general, Chairman, President and Chief Executive Officer consider agenda to be proposed in the Board's meeting. Directors are able to propose an agenda in a non-management meeting and a meeting of independent directors. In 2012, 99 agenda were proposed in the meetings. Important agenda included direction and policy for strategic operations and annual budget, financial statements, capital increase for strategic expansion,



rent of PTTEP head office at Energy Complex, crude trade contract for Montara field, project investment, election of directors for replacement, appointment of sub-committees, amendment or issuance of the Company's regulations on budget, finance and accounting in 2012. About 151 agenda were for acknowledgement, most of which were reporting of performance and project progress, procedures and equipment for new business expansion, return of concession areas, PTTEP share investment, good corporate governance of Thai capital markets according to CG Watch 2012, changes of the Board's members during the year, appointment of executives, CSR activities, risk management on oil prices and reports of sub-committees. The Board's meeting usually lasts three hours. The corporate secretary attended every meeting, overseeing the meetings, providing advice to the Board about related rules and regulations for proper practices, taking minutes of meeting and gathering information or meeting document.

The Board's resolution is based on majority vote. One director is eligible for one vote. A director at stake will not attend the meeting and/or not exercise a vote in that issue. If the voting is tie, Chairman in the meeting will have the casting vote.

The following cases are required to gain approval from a shareholders' meeting with three-fourths of total shareholders in attendance with voting eligibility.

- (1) Sale or transfer of the whole or important part of business of PTTEP.
- (2) Purchase or acceptance of transfer of business of other companies or private company by PTTEP.
- (3) making, amending or terminate of contracts with respect to the granting of a hire of the whole or important parts of the business of the company, the entrustment of the management of the business of the company to any other persons or the amalgamation of the business with other persons with the purpose of profit and loss sharing.
- (4) Amendment of the Memorandum of Association and the Articles of Association.
- (5) Capital increase, capital decrease, issuance of debentures, M&A and company dissolution.
- (6) In case where PTTEP or its subsidiaries agrees to enter connected transactions or sales or acquisition of the Company or its subsidiaries' assets, as determined by the Stock Exchange of Thailand's announcement on connected of listed companies, as the case may be



The Board's minutes of meeting covers the substantive matters accurately and completely. The company considers and has final decision with unanimous votes. There is the record for attendants, name of persons who give opinion, questions, answers or clarification clearly and collect the report and supplementary document systematically with the high safety. Generally, all directors of the Board will attend the meeting everytime unless there is an urgent and necessary excuse. They shall inform the meeting for the absent of the meeting if they have such informative grounds in advance.

(3.7) Executive Session Meeting

The Board convened once without management prior to a regular meeting in July 2012. The non-management meeting in order to discuss key management issues without the management and informed the President and Chief Executive Officer the meeting results.

(3.8) Self Appraisal of the Board

PTTEP sets the self appraisal of the Board in PTTEP Good Corporate Governance and Business Ethics. The self appraisal follows the annual Performance Agreement and is made for Chairman and sub-committees on a yearly basis. The appraisal forms are designed by the Nominating Committee.

The Board's appraisal comprises self appraisal and cross appraisal by others, appraisal for the whole Board, appraisal for standing committees and appraisal for Chairman. PTTEP will forward the score results to the Board for acknowledgement before disclosing them in the annual report. Recommendations from the appraisal of the Board will be used for efficiency improvement of the Board and PTTEP.

The 2012 appraisal form set weight of each topic like the 2011 appraisal. The rating is given from 5 to 1. 1 = urgent improvement, 2 = improvement needed, 3 = fair, 4 = good, 5 = very good. The result of each topic is as follows;

- Self appraisal score averaged at 4.74 while it was 4.66 in 2011 and it was close to 5, the highest score.
- Cross appraisal averaged at 4.83 while it was 4.89 in 2011 and it was close to 5, the highest score.
- The appraisal of the whole Board consisted of two following parts.



(1) Performance, based on annual Performance Agreement as set the weight at 50%. In 2012, the score was 4.06.

(2) Self appraisal of the whole Board with the 50% weight. The average score was 4.83, compared to 4.74 in 2011. The 2012 score was close to the very good score, the highest.

Therefore, in the overall picture, the whole Board appraisal score was 4.45, compared to 4.33 in 2011.

- The Audit Committee's appraisal score was 4.77 in 2012, the same in 2011, and it was close to 5, the highest score.

- The Remuneration Committee's appraisal score was 4.91 in 2012, compared to 4.83 in 2011, and it was close to 5, the highest score.

- The Nominating Committee's appraisal score was 4.66 in 2012, compared to 4.57 in 2011, and it was close to 5, the highest score.

- The Corporate Governance Committee's appraisal score was 4.89 in 2012, compared to 5.00 in 2011, the highest score.

- The Risk Management Committee's appraisal score was 4.90 in 2012, compared to 4.87 in 2011, and it was close to 5, the highest score.

- Chairman's appraisal score, by the whole Board, was 4.88 in 2012, compared to 4.94 in 2011, and it was close to 5, the highest score.

Based on the 2012 Board appraisal results, the Company will make improvement with implementation in 2013.

(3.9) Performance appraisal of President and Chief Executive Officer

The Board assigns the Remuneration Committee to make appraisal on President and Chief Executive Officer's performance through a form, specified by the Nominating Committee, with President and Chief Executive Officer's Performance Agreement measured by the Company's KPIs in that year. Such is approved by the Board for check and balance with verification of President and Chief Executive Officer's performance as targeted in the short and long term. This assists in consideration of President and Chief Executive Officer's remuneration package with clarity, transparency and appropriateness, promote PTTEP's good corporate governance, and brings the appraisal results for work efficiency improvement.



(3.10) Director and executive's remuneration

(3.10.1) Remuneration for the Board's directors and sub-committees' directors

PTTEP has a policy of remuneration for the Board's directors and sub-committees' directors clearly and transparently. The Remuneration Committee reviews the remuneration rates in regard to comparable remuneration of listed companies in the same industry at the same size, performance, corporate performance, duty and responsibility, the overall economic situation and shareholders' meeting approval. The 2012 AGM approved the following remuneration rates for the Board's directors and sub-committees' directors, as proposed by the Remuneration Committee.

(i) New remuneration rates for the Board's directors

(i.i) Monthly allowance of 40,000 baht per person per month in full month payment.

(i.ii) Meeting allowance of 40,000 baht per person per meeting in a case of meeting attendance.

(i.iii) Bonus for the whole Board if dividend payment is made for shareholders in that year. The Board earns bonus of 0.1% of that year's net profit, based on the Company's consolidated financial statements, but no more than 50 million baht per year. Bonus payment is made in proportion of the period a director assumes the position.

(i.iv) 25% more in all items for Chairman.

(ii) New remuneration rates for five standing sub-committees: Corporate Governance Committee; Audit Committee; Remuneration Committee; Nominating Committee; and Risk Management Committee.

(ii.i) Meeting allowance of 40,000 baht per person per meeting in a case of meeting attendance.

(ii.ii) 25% more for a sub-committee's Chairman.

(ii.iii) No remuneration in a case of circulation.

(ii.iv) The Board's member, who is the management from the top executive do not earn remuneration.



PTTE discloses details of remuneration for members of the Board and sub-committees on an individual basis for the part of monthly allowance, meeting allowance, bonus and 2012 remuneration in 8.3.1.

(3.10.2) Remuneration for directors of subsidiaries and associated companies

PTTEP's subsidiaries remain a mechanism of petroleum operations or related businesses for its optimal benefits, following business conditions. Such subsidiaries become places for assets, which are in line with investment conditions. Some of them may have full business operation. These subsidiaries have the least number of directors, including Executive Vice President and/or Vice President and/or senior managers directly responsible for projects as directors with PTTEP work practices. This is asset management for optimal benefits of PTTEP.

Executives assigned to act as directors of subsidiaries and associated companies, which explore and produce petroleum or related businesses such as PTTEP Services Co., Ltd., on behalf of PTTEP will not have additional remuneration, given PTTEP's direct business and a part of executives' duties. However, if executives are assigned to perform other duties on behalf of PTTEP, they are able to receive returns from such duties, provided that such duties are additional assignment. Examples include PTT ICT Solutions Co., Ltd. and Energy Complex Co., Ltd., as clearly defined in PTTEP's good corporate governance.

(3.10.3) Remuneration for President and Chief Executive Officer

Remuneration for President and Chief Executive Officer is properly defined under transparent and clear principles. The Remuneration Committee reviews President and Chief Executive Officer's remuneration package, based on performance, PTTEP's performance, practices of other listed companies in the same industry at the same size, duty and responsibility and the overall economic situation, and propose it to the Board for approval.

Remuneration for President and Chief Executive Officer is considered in regard to duty and responsibility, and annual performance with fair and reasonable principles or procedures and structure.



(3.10.4) Remuneration for senior executives

The Remuneration Committee defines principles or the procedure to define fair and reasonable salary structure and reflect PTTEP operations and forward them to the Board meeting for approval. Senior executives' salary structure is compared with the principles, procedures, rates and a survey result of leading companies in petroleum business/industry. Their duties and responsibilities are also compared.

President and Chief Executive Officer considers appropriateness of remuneration of each high-level executive. Annual salary increase is based on individual performance and PTTEP performance. Performance of each unit as targeted earlier is also considered.

To enhance remuneration competitiveness against leading companies in the same business, PTTEP conducts a survey on remuneration of leading companies in the same business on a yearly basis. This is for sufficient information for the Board, which sets policy to compete on remuneration package with other companies and make improvement if market remuneration rates and payment methods are much different.

PTTEP regularly discloses high-level remuneration in the annual report. Shareholding is also revealed on an individual basis for transparency and promotion of good corporate governance.

The Board Meeting No. 16/2012/359, dated December 19, 2012, had approved the Employee Joint Investment Program (EJIP). This project is a form of welfare for employees (including all executives but excluding the Board's members) to support voluntary employees to attend the savings project through purchase of PTTEP common shares through the Stock Exchange of Thailand's trading system. The project will create work motivation, build up relations during payment of remuneration and returns to employees, executives and shareholders, and establish organizational ownership in the long term. The project lasts five years, starting from February 1, 2013 to January 31, 2018.



(3.11) Director and the executive development

(3.11.1) Director development

(i) Orientation of new directors

PTTEP has provided the orientation to the new director composing of;

(1) A lecture briefed by the President and Chief Executive Officer and top executives is provided. The briefing involves the nature of business and the business operation guideline, knowledge and technique regarding to petroleum exploration and production, relevant rules and regulations, PTTEP's good governance and the business ethics, and necessary and useful information for directors' tasks.

(2) A director manual comprises essential information, including strategic plan, relevant rules and regulations, the company's good governance and the business ethics for benefits of directors' work implementation. This manual will be reviewed regularly for timeliness and it is referred for directors' execution.

New director who attends an orientation shall evaluate effectiveness of orientation for further improvement. Moreover, the director who is elected as Chairman shall join additional lecture on his/her duty with efficiency and procedures of committee and shareholder's meeting.

(ii) Director's training

PTTEP has the knowledgeable directors who seek to learn the director's duty and business regularly. PTTEP supports every director study or have training in order to enhance their performance. Six directors who attend the training during 2012 are as follows;

Director	Course
1. Mrs. Varanuj Hongsaprapas	1. Monitoring Fraud Risk Management (MFM 8/2012) of IOD 2. Monitoring the System of Internal Control and Risk Management (MIR 13/2012) of IOD 3. The Board's Role in Mergers and Acquisition (M&A 2/2012) of IOD 4. Board Performance Review Course (BPR 1/2012) of IOD 5. IOD National Director Conference 2012 of IOD
2. Mr. Pailin Chuchottaworn	1. High-level executive for energy field, no. 1.2012 of the Thai Energy Academy
3. Mr. Prajya Pinyawat	1. High-level executive for energy field, no. 1.2012 of the Thai Energy Academy



Director	Course
4. General Lertrat Ratanavanich	1. DCP 161/2012 of IOD 2. IOD National Director Conference 2012 of IOD
5. General Pornchai Kranlert	1. DCP 161/2012 of IOD 2. Anti-Corruption Seminar 1/2012 of IOD 3. Role of the Nomination and Governance Committee (RNG 3/2012) of IOD
6. Mr. Manas Jamveha	1. IOD National Director Conference 2012 of IOD 2. Audit Committee Program (ACP 41/2012) of IOD 3. Seminar on “ New Change in Board Responsibility Practices: A Step Forward to Value and Sustainability,” the Stock Exchange of Thailand, the Office of State Enterprise Policy Committee of Finance Ministry and TRIS Corporation Limited

Nowadays, out of total 15 directors, 13 directors received training in Director Certification Program (DCP) of Institute of Directors and one director received training in Director Accreditation Program (DAP) of the same institute. PTTEP applied membership for all of its directors for additional information and knowledge. Every time PTTP receives document for training schedules or training document related to the Board, the Company will deliver such information to directors for further study. Details of main training courses of the Board are described in Attachment 1.

In addition, PTTEP invites outside speaker to share ideas and give three times of lecture to enhance directors' knowledge and understanding. In 2012, PTTEP invited Mr. Yuth Vorachattarn, sub-committee for the center for supervision development of listed companies, to lecture on roles and duty of independent director, special professor Kitipong Urapeepatanapong, chairman for Baker & McKenzie's Bangkok Office for directors' role on the Company's supervision: a case study, and Mr. Pliu Mangkornkanok, chairman for TISCO Financial Group Plc for the good Board of Directors with excellent duty. To express efficient implementation as directors and independent directors with responsibility, prudence and integrity, PTTEP regularly informs information relevant to directors' responsibility according to laws and best practices of the good corporate governance to enlarge their knowledge and understanding.

**(3.11.2) Executive development and succession plan**

PTTEP evaluates its executives through the Assessment Center. Assessment results will be compared to PTTEP Management Success Profile, consisting of Competency, Personal Attribute, Organization Knowledge and Experience. Each executive will be informed with the assessment results and take part in the development plan with his/her superior for enhancement of management capability and leadership.

Furthermore, PTTEP prepares the succession plan in replacement of vacant positions due to retirement. The succession planning will be included in the new organization structure according to PTTEP's expansion plan in the country and overseas. Candidates will be selected by the Career Review Board, based on qualification, knowledge, capacity and experience required for certain positions. Once the Career Review Board finalizes the selection, the Company will establish the short- and long-term individual development plan so that the successor will be well-equipped and assume the position at the time required.

(3.11.3) Succession Plan of President and Chief Executive Officer

PTTEP determines its succession planning for President and Chief Executive Officer. This is to allow the Company to be well-equipped if President and Chief Executive Officer are not able to perform their duties or end their terms. With this, risks are mitigated or discontinuity impacts can be reduced for the corporate management with the following procedures.

1. PTTEP joins hand with PTT Group Management Committee (PTTGMC) to hold Group Leadership Development Program (GLDP), focusing on a group of high-capability executives from Vice President level and above. This is to improve their capability and prepare them for selection of the PTT Group's President and Chief Executive Officer in the succession process. PTTEP's President and Chief Executive Officer act as director for PTTGMC.

2. PTT Group Management Committee, as PTT Plc being PTTEP's major shareholder, will nominate candidates among high-capability executives from Vice President (those as mentioned in 1) and propose them to the PTT Board of Directors to select the most appropriate one for President and Chief Executive Officer of PTTEP.

3. PTTEP's Nominating Committee considers candidates from executives with proper qualifications, and receives comments from PTT Plc, the former's



major shareholder as described in No. 2., for consideration. The Nominating Committee will make selection, based on knowledge, capability, useful experience for PTTEP, conflict of interest and vision that leads the Company to grow as drawn out in PTTEP's strategic plan.

4. The Nominating Committee proposes names of the most proper candidates for President and Chief Executive Officer to the Board for election.

8.5 Reports of Sub-committees

8.5.1 Report of the Corporate Governance Committee in 2012

Valuing compliance with the PTTEP Good Corporate Governance and Business Ethics, PTTEP has made its continuous improvement on the corporate governance. Its Board of Directors has assigned the Corporate Governance Committee, consisting of at least three independent directors, to supervise and promote the compliance with the corporate governance and codes of business conduct across the company. In 2012, there were successive parts of the Corporate Governance Committee were addressed for its task. The first held its position until 25th April 2012. For the first Corporate Governance Committee, Mr. Weerapol Chirapraditkul acted as Chairman while Mr. Chakkrit Parapuntakul and Mr. Krairit Euchukanonchai served as members. The present Corporate Governance Committee, with its term from 25th April 2012 onward, is chaired by General Pornchai Kranlert. Its current members are Mrs. Varanuj Hongsaprabhas and Mr. Vorapak Tanyawong (Mr. Vorapak took the position on 1st May 2012 and resigned with the effective date on 6th November 2012.). During the year 2012, the Corporate Governance Committee convened four times. All members then attended every meeting. The following main issues can be summarized below.

(1) Assessed and reviewed PTTEP' Good Corporate Governance and Business Ethics to be in compliance with the laws, international practices, leading companies' practices, and recommendations of other institutions. All results were forwarded to the Board of Directors for approval.

(2) Promoted corporate operations, and work implementation of committees, executives and employees to be in line with PTTEP' Good Corporate Governance and Business Ethics. Monitoring was done and recommendations were made for activities to enhance knowledge and understanding of PTTEP' Good Corporate Governance and Business Ethics.



PTTEP execution was made for complaints from the CG Hotline on a quarterly basis. Meeting with group executives was organized as the CG Visit to follow up CG promotion and CG Leader of executives. Furthermore, the Corporate Governance Committee participated in and stressed on the significance of corporate governance by organizing one CG training course for new executives and six training courses for new employees throughout 2012.

(3) Established CG reporting guidelines to be in accordance with the Stock Exchange of Thailand's principles. This was to have CG report as a part of the annual report for all stakeholders.

(4) Reviewed Charter for the Corporate Governance Committee and report of the Corporate Governance Committee in 2012. The Charter for the Corporate Governance Committee was amended in the part of the meeting. The amendment was made to update the Corporate Governance Committee's duty and responsibility with at least four meetings per year. This was to have the committee to monitor its tasks as designated in the Charter for the Corporate Governance Committee and as assigned from the Board of Directors.

(5) Monitored and made recommendations on any implementation of being a member for network of the Thai private sector against corruption, and reported the results to the Board of Directors for acknowledgment or consideration (as the case may be).

(6) Provided recommendations and monitored PTTEP's corporate social responsibility (CSR) performance. This was to help PTTEP continue its proper CSR plan with sustainability.

The Corporate Governance Committee reported minutes of all meetings to the Board of Directors on a regular basis. In the year 2012, the Corporate Governance Committee abided by its assigned tasks, according to the Charter for the Corporate Governance Committee, B.E. 2548 and its amendment with prudence, competence and independent. It properly provided straightforward opinions for optimal benefits of PTTEP, all shareholders and other stakeholders.

General

(Pornchai Kranlert)

Chairman for the Corporate Governance Committee

19th December 2012



8.5.2 Report of the Audit Committee in 2012

The Audit Committee consists of three independent directors, who possess knowledge, expertise and experience in finance and accounting, laws, and technical issues. Mr. Ampon Kittiampon acts as Chairman for the Audit Committee. Mr. Chaikasem Nitisiri and General Lertrat Ratanavanich are members of the Audit Committee. All three audit directors have knowledge and experience in financial statement review.

The Audit Committee adheres to the following approach.

- Ensure the efficient implementation of PTTEP's audit system.
- Emphasize on the compliance audit, particularly for the subsidiaries to have them abide by rules and regulations accurately and consistently.
- Promote a preventive system to ensure a warning system exist in all work processes if any irregularity is found.

In the year 2012, the Audit Committee performed its duties, as assigned by the Board of Directors following PTTEP regulations and the Stock Exchange of Thailand requirements. The Audit Committee convened 16 times for the year with discussions with the Management, internal audit and relevant auditors. Its performance is summarized in the following issues.

(1) Review of financial statements on quarterly and yearly bases together with the Management and auditors. The Office of the Auditor General questioned the Audit Committee and made recommendations and comments as to ensure accuracy and accountability of PTTEP's financial statements. Sufficient, complete and updated information was disclosed in compliance with related rules, regulations and accounting standards.

(2) Review of the Management Discussion and Analysis (MD&A). Discussion was made with the Management on a quarterly basis. If any issue affecting PTTEP's business operation was found, the Management would be requested to set control measures for such issue and deliver a report for the Audit Committee's acknowledgment.

(3) Review of PTTEP performance to ensure its compliance with the securities and stock market laws, the Stock Exchange of Thailand regulations and any law related to PTTEP businesses.



(4) Review of inter-related transactions or transactions that may have conflict of interests to ensure their accuracy, rationality and optimal benefit to the company and its small shareholders. Review of disclosure of such information to be complete and accurate.

(5) Review of PTTEP to have internal control system with sufficiency, appropriateness and effectiveness. The Audit Committee paid attention on supervision of PTTEP's overseas projects by promoting them to have evaluation of internal control in internet units of overseas projects and monitoring progress of work improvement after evaluation. This was to ensure that the internal control be sufficient for the company's business expansion.

(6) Consideration and nomination of the Office of the Auditor General to serve as PTTEP's auditors, and offer of remuneration for the year 2012.

(7) Participation in meetings with the auditor and the Audit Department in the absence of the Management to acknowledge the auditor's direction and plan, and auditing problems or obstacles. This was to give suggestion for improvement. There were two joint meetings in 2012.

(8) Approval of amendment of the Audit Charter for 2012.

(9) Review and amendment of regulations of the Audit Committee for 2012.

(10) Performance appraisal of head for the audit unit on a yearly basis.

(11) Approval of the annual audit plan of the audit unit and review of a report of auditing results. The Audit Committee focused on compliance of audit planning and direction with the company's major risks.

(12) Approval of proposed budget, structure, audit unit's workforce before the Management forwards them to the Board of Directors.

(13) Self evaluation of 2012 performance. Based on this, and evaluation of the Board of Directors and related units, the Audit Committee was graded "Very Good" for its performance.

The Audit Committee reported the Board of Directors all of its minutes of meetings regularly and consistently.

Based on its duties in 2012 as mentioned above, the Audit Committee gives the following opinion.



(1) PTTEP's financial statements and accounting system were accurate and accountable with complete, sufficient and updated information disclosure

(2) The company's internal control system was sufficient and appropriate. Arrangement and improvement of the internal control system were done consistently to suit the company's businesses at the present and in the future, and related regulations and laws.

(3) PTTEP's auditor, the Office of the Auditor General was independent and experienced in auditing PTTEP's financial statements with accuracy and accountability. With this, complete, sufficient and updated information was disclosed.

(4) Based on review of connected party transactions or transactions that any conflict of interests may arise, the Audit Committee opined that PTTEP has disclosed complete and accurate information. Such transactions had proper conditions with fair prices, which were approved from the Management or the Board of Directors prior to the transactions.

(Mr. Ampon Kittiampon)

Chairman for the Audit Committee

8.5.3 Report of the Nominating Committee in 2012

PTTEP's corporate governance requires the Nominating Committee to consist of at least three directors. Chairman and most of the directors must be independent directors with their responsibility according the Charter for the Nominating Committee and three-year term.

The current Nominating Committee's term extends from 23rd June 2012- 22nd June 2015. Mr. Chaikasem Nitisiri (Independent Director) acts as Chairman, while General Pornchai Kranlert (Independent Director) and Mr. Pailin Chuchottaworn serve as directors. From 25th April 2012, Mr. Chaikasem Nitisiri replaced Mr. Sommai Khowkachaporn as Chairman, while General Pornchai Kranlert replaced Mr. Sommai Khowkachaporn as the director.

In the period of 2012, the Nominating Committee performed its duties, as assigned by the Board of Directors in the Charter for the Nominating Committee with prudence, full competence and independence. Its duties involved the preparation of a candidate list for a directors, President and Chief Executive Officer, nomination of a qualified person for a director or President and Chief Executive Officer when there was a vacancy or expired term,



consideration a qualified director to be Chairman or a member of a sub-committee. Other duties included review of performance agreement and performance evaluation of the Board of Directors, Chairman, a sub-committee, President and Chief Executive Officer, and proper updates of the Charter for the Nominating Committee.

In the year 2012, the Nominating Committee convened seven times and its members were absent in the relevant agenda. All minutes of the meetings were forwarded to the Board of Directors for acknowledgment.

PTTEP disclosed its detailed principles and procedures for nomination of directors, President and Chief Executive Officer in the annual report.

(Mr. Chaikasem Nitisiri)

Chairman for the Nominating Committee

8.5.4 Report of the Remuneration Committee in 2012

PTTEP's Board of Directors appointed the Remuneration Committee, which mainly consisted of independent directors. The Remuneration Committee shall be chaired by an independent director. Its responsibility is to consider appropriateness of remuneration for the Board, sub-committees, President and Chief Executive Officer, the salary structure of senior management. The underlying principles or procedures and structure were fair and reasonable.

In 2012, the Remuneration Committee convened two times to perform its duty and achieve its role and responsibility with prudence, carefulness and independence, as designated by the Board of Directors in the Charter for the Remuneration Committee. All members of the Remuneration Committee attended the meetings. The minutes of the meetings were forwarded to the Board of Directors with the following issues.

- Review of remuneration for the Board of Directors and sub-committees. The remuneration was based on their performance. Overall evaluation was made for the Board as a whole with its achievement against the key performance indicators, defined by the Nominating Committee from the beginning of the year. (Each weighted 50 percent of total score.) Others taken into consideration included corporate performance, conformity with remuneration at other listed companies, at the similar size, in the same industry, duty and responsibility, and the



overall economic situation. Fair and reasonable principles or procedures and structure were taken.

- Review of remuneration for President and Chief Executive Officer. The remuneration was based on fair and reasonable principles or procedures and structure with regard to their duty and responsibility, and annual performance.

- Review and screening of long-term benefit allocation to the employees including President and Chief Executive Officer. Employee Joint Investment Program (EJIP) was taken with prudence and carefulness in order to achieve the project goal. The project aimed at creating work motivation, and organizational royalty and ownership in the long term. This was to have long-term stability of the share price through consistent investment of the employees. It was in accordance with the direction the shareholders, funds and institutions needed to see PTTEP with motivation among the executives and shareholders.

The Remuneration Committee performed its role in a fair, transparent and reasonable manner. To build up all stakeholders' confidence, the Remuneration Committee disclosed its remuneration in the annual report.

General

(Lertrat Ratanavanich)

Chairman for the Remuneration Committee

8.5.5 Report of Risk Management Committee in 2012

The Risk Management Committee is recently made up of Mr.Prajya Phinyawat as Chairman with Mr.Viraphol Jirapraditkul, Mrs.Varanuj Hongsaprabhas and Mr. Tevin Vongvanich as members. During the year 2012, Mr. Pichai Chunhavajira, Mr. Sommai Khowkachaporn and Mr. Anon Sirisaengtaksin ended their terms as directors. Mr.Prajya Phinyawat, Mrs. Varanuj Hongsaprabhas and Mr. Tevin Vongvanich were appointed as the Risk Management Committee's members, effective from 1 May 2012.

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 2012, the Committee held 11 meetings which can be summarized as follows:

- (1) Improved and promoted the risk management policy across the organization.



(2) Supported corporate strategy and objective, 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 measures taken to mitigate those risks. Key Risk Indicator (KRI) was established to provide early warning for corporate risks that could prevent the organization from achieving its goal with quarterly monitoring.

(3) Evaluated and authorized appropriate measures to manage and mitigate critical risks to PTTEP at the strategic level and provided oversight over new investments, extension of concession, enter into new phases, divestment, financial risk management and oil price hedging policy, prior to board approval.

(4) Considered the corporate strategic plan, key performance indicators, five-year investment plan (2013-2017), 2013 annual budget, and relevant risks prior to board approval.

The Risk Management 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 2012 prudently, competently and independently with knowledge and capability while providing candid views to all parties for the benefit of PTTEP, all shareholders, and stakeholders.

(Mr. Prajya Pinyawat)

Chairman for the Risk Management Committee.

8.6 Internal Information Control

Please see details in 8.4.2 (6).

8.7 Personnel

8.7.1 As of December 31, 2012, PTTEP and its subsidiaries (PTTEP S, PTTEP Services and PTTEP AA) had total workforce of 3,157. Total workforce consisted of employees, permanent workers and seconded workers, which were grouped as follows:

The Number of Permanent Workers, Contracted Workers, Local Workers and Temporary Workers

Type	Total
Permanent Workers	1,866
Contracted Thai Workers	969
Contracted Foreign Workers	69
Local Workers	244
Seconded Workers	9
Grand Total	3,157

Number of Workforce by Work Group

Group	Permanent Employee	Contracted Thai Workers	Contracted Foreign Workers	Local Workers	Seconded Workers
CEO	126	35	3		1
Domestic Asset	545	483	10		6
Development and Engineering	266	126	9	1	
Finance and Accounting	138	52			
Geosciences and Exploration	147	31	11		
Human Resources and Business Services	152	83	2		
International Asset	175	22	6	234	
Operation Supply Chain & Technology	250	131	25		2
Strategy and Business Development	67	6	3	9	
	1866	969	69	244	9

Changes in Workforce

	Entry	Leave
Permanent Workers	196	32
Contracted Thai Workers	97	93
Contracted Foreign Workers	15	9
Local Workers	71	39
Seconded Workers	4	13

8.7.2 PTTEP had no significant change in the number of employees and no major disputes about labor in the past three years.

8.7.3 In 2012, compensation (salary, bonus, and contribution to the provident fund) of PTTEP and its subsidiaries (PTTEP Siam)' employees and wages of seconded workers totaled 3,291,102,103 baht (only PTTEP and PTTEP Siam and bonus paid in January 2013).

8.7.4 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 for employee.

The company provided scholarships to employees to help them pursue master's degree studies at world-class top universities in:

- (1) Petroleum Geosciences
- (2) Petroleum Engineering
- (3) Engineering relevant to business
- (4) Business administration

Moreover, the company also provided master's degree scholarships 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 sufficient internal control system 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. The Audit Committee reviewed the internal control assessment, based on 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.
- Corporate Governance and Business Ethics (CG&BE) as follows:
 - Written policy is formulated with annual review for possible amendment, and assessment of conformance to the policy;
 - The Corporate Governance Committee devises a CG&BE policy and monitors its implementation.
 - PTTEP has a written CG Hotline and Whistle Blowers Policy. This is to promote employees and outsiders to report or make complaints about violation of CG&BE or other rules and regulations.



- In place is the CG&BE training for all of new executives and employees. Communication is also conveyed and knowledge is provided about PTTEP CG&BE consistently. Examples are CG Visit and BE E-Learning.
- The Company pays attention on sustainable development through an establishment of the Sustainable Development Guideline, which defines targets and directions for the sustainable development. The organization shall concentrate on three parts of the operations: business; the society; and the environment.

2) Risk Assessment

- The Risk Management Committee devises the corporate risk management policy and a related framework, apart from ensuring successful corporate and project risk management and reporting the results to the Board. In 2012, the Risk Management Committee convened 11 times.
- The Operation Risk Committee manages technical aspects and supports project operations for greater efficiency. In 2012, the Operation Risk Committee convened 5 times.
- Annual and long-term plans are in place with due regard for external risks, including oil prices and exchange rates, and internal risks, including risks of exploration, new investment and safety.
- Key Risk Indicators (KRI) was used to give warning for organizational risks, which prevented the organization from goal achievement. This allowed work units to manage risks with prompt response, as planned.
- In place is a Risk Management Policy for all management, employee, as well as all suppliers, contractors, and sub-contractors associated with PTTEP to follow. Strong risk management practice ensures the sustainability of our



business, the safeguards of all persons, and the protection for the environment and communities we operate in.

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 PTTEP's corporate unit and various projects in order to clarify the roles and responsibilities among them.
- In place is a compliance unit responsible for inspecting and supervising business for strict compliance with all relevant laws and regulations to minimize risks of non-compliance, and ensuring PTTEP directors, executives and employees of such compliance. Measures or process for non-compliance is set up. Examples are collection and arrangement of database of unit-level compliance, development of compliance management, warning for compliance schedules, training and advice for compliance, and review and report of compliance.

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 and the Board on a monthly basis.
- In place are an Internal Control Assessment at a corporate level be accordance with the Stock Exchange of Thailand regulations and Internal Control Assessment at a unit level be accordance with regulations of the Office of Auditor General of Thailand, with annual submission.
- The Audit Committee and Internal Audit review business processes and give an advice to ensure that its governance and internal control are adequate and effective.

At the Board Meeting No. 2/2013/361 on February 28, 2013, in which the Audit Committee attended, the Board endorsed the Audit Committee's opinion on the adequacy of internal controls, that was, 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 who reviewed and assessed PTTEP internal control's effectiveness as guided by the accounting standard and the Office of the Audit General's requirement on determination of internal control standard, B.E. 2544 , were found with the internal control system designed, implemented and maintained for business risks, and followed the good internal control objectives.



10. Connected Transactions

11.1 Connected transactions between Related Companies

The summary of connected transactions of PTTEP and/or its subsidiaries with persons that may have conflicts of interest in the fiscal year ending December 31, 2012 are as follows:

Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
PTT Plc. (PTT)	<ul style="list-style-type: none">PTT, PTTEP's major shareholder, holds 65.29% of PTTEP's registered and paid-up capital.Co-directors are:<ul style="list-style-type: none">(1) Mr. Norkun Sitthiphong(2) Mr. Pailin Chuchottaworn	<p>Petroleum product sales: crude oil; natural gas; LPG; and condensate.</p> <ul style="list-style-type: none">Total incomeAccount receivables	<p>5,331.68</p> <p>834.17</p>	<ul style="list-style-type: none">Condition/price setting follows normal business operations at the arm's length conditions for non-related persons or operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
		<p>Other income includes:</p> <ul style="list-style-type: none">▪ Income from design, equipment procurement, construction, and natural gas pipeline test from central processing platform of South Bongkot field to PTT's third gas transmission pipeline for PTT.▪ Income from infrastructure services to support the petroleum development such as warehouse, helicopter, and accommodation for PTT personnel at Arthit Platform.▪ Income from maintenance of natural gas meters.▪ Income from training▪ Income from procurement of drivers for executives under agreements between PTT and PTTEP Services Co., Ltd. (The Company's subsidiary). <p>- Total income</p> <p>- Account receivable</p>	<p>6.21</p> <p>1.98</p>	<ul style="list-style-type: none">▪ The condition/price setting for these specified other income follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
		Account receivable from construction of gas transmission pipelines	36.07	<ul style="list-style-type: none"> Such amount arises mostly from additional scope of work on gas-pipeline construction. The actual cost of the additional work is under negotiation with PTT. The condition/price setting for construction of gas transmission pipelines follows normal business operations at the arm's length conditions for non-related persons and operations.
		Petroleum product purchase, other related expenses, and expenses for PTT personnel seconded to PTTEP. - Expenses for the purchase of petroleum products, related equipment, related services and others - Personnel expenses - Account payable	53.43 2.57 0.44	<ul style="list-style-type: none"> The condition/price setting for the purchase of petroleum product, related equipment, related services, and others follows normal business operations at the arm's length conditions for non-related persons and operations Personnel expense rates follow the actual rates PTT pays for employees seconded to the Company.
		The deferred payment is the Company's obligation according to the Arthit Project's natural gas purchase/sale contract.	1.76	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
Energy Complex Co., Ltd. (Energy Complex)	<ul style="list-style-type: none"> PTTEP, Energy Complex's major shareholder, holds 50% of Energy complex's registered and paid-up capital. PTT, the major shareholder of both PTTEP and Energy Complex, holds 50% of Energy Complex's registered and paid-up capital. The Company's executives who serves as Energy Complex's directors are (1) Ms. Penchun Jarikasem; (2) Mr. Asadakorn Limpiti (3) Mr. Thiti Mekavichai 	<p>The Company signed a three-year lease with Energy Complex to rent the 47,000 square meters building for office, storage and multipurpose areas at the Energy Complex Center (Enco). The Company is eligible to extend its lease period for another three years.</p> <ul style="list-style-type: none"> Total lease and service paying amount Account payable 	<p>13.51</p> <p>-</p>	<ul style="list-style-type: none"> The leasing rate is referred to the rate appraised by independent evaluators, based on the market rate of office building lease.
		<p>The Company signed a loan contract with Energy Complex under the following conditions:</p> <ul style="list-style-type: none"> Contract period of 13 years and six months Expiration date on 2 October 2022 Reference interest rate follows a loan contract between Energy Complex and Krung Thai Bank Plc. dated 2 April 2009 and its amendment. The interest rate is FDR+2% per year for the year 2012. Accrued loan Interest receivable 	<p>18.93</p> <p>0.85</p>	<ul style="list-style-type: none"> The mentioned contract follows the conditions of the loan contract signed by Energy Complex and Krung Thai Bank Plc., dated 2 April 2009 (Contract amendment is included.) with the financial support of all Energy Complex's shareholders proportionately.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
		Income from the Company's personnel seconded to Energy Complex - Total income - Account receivable	- 0.01	Salary rates based on the actual rates the Company pays for its employees seconded to Energy Complex.
PTT ICT Solutions Co., Ltd. (PTT ICT)	PTT, the major shareholder of the Company, holds 20% of PTT ICT's registered and paid-up capital.	The Company signed a contract with PTT ICT for IT services and communications. - Total expenses - Account payable	21.37 0.88	Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
	PTT Global Chemical Plc. and Thai Oil Plc., and PTTEP Plc., in which PTT is their major shareholder, hold 40%, 20% and 20% of PTT ICT shares, respectively. Ms. Penchun Jarikasem, the Company's executive, serves as PTT ICT's director.	Income from the Company's personnel seconded to PTT ICT. - Total income - Account receivable	- 1.28	Salary rates based on the actual rates the Company pays for its employees seconded to PTT ICT.
Star Petroleum Refining Plc. (SPRC)	PTT, the Company's and SPRC's major shareholder, holds 36% of SPRC's registered and paid-up capital.	Crude oil sales - Total income - Account receivable	87.94 2.26	Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
Krung Thai Bank Plc. (KTB)	<ul style="list-style-type: none"> The Company's ex-director in 2012, Mr. Vorapak Tanyawong, is KTB's director. 	<p>The Company assigned loan agreement with KTB under the following conditions.</p> <p><u>Loan agreement for 2011</u></p> <ul style="list-style-type: none"> 1-year contract period Expiration date on 31 March 2012 Interest rate: THBFIX+0.9% per annum Amount: 20,000 million baht <p><u>Loan agreement for 2012</u></p> <ul style="list-style-type: none"> 10-year contract period Expiration date on 30 March 2022 Interest rate: THBFIX+1.1% per annum for year 1-5 Interest rate: upon agreement for year 6-10 Amount: 20,000 million baht <ul style="list-style-type: none"> - Accrued loan - Fee and interest expenses 	<p>-</p> <p>12.28</p>	<ul style="list-style-type: none"> Interest rate/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
PTT International Co., Ltd. (PTT Inter)	<ul style="list-style-type: none"> PTT, the Company's and PTT Inter's major shareholder, holds 100% of PTT Inter's registered and paid-up capital. Mr. Chatchawal Eimsiri, the Company's executive, is PTT Inter's director. 	<p>Income from procurement of drivers for executives based on contracts between PTT Inter and PTTEP Services Co., Ltd. (The Company's subsidiary).</p> <ul style="list-style-type: none"> - Total income - Account receivable 	<p>0.04</p> <p>0.01</p>	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
IRPC Plc. (IRPC)	<ul style="list-style-type: none"> PTT, the Company's and IRPC's major shareholder, holds 38.51% of IRPC's registered and paid-up capital. Co-directors are: <ol style="list-style-type: none"> Mr. Pailin Chuchottaworn Mr. Wichai Pornkeratiwat. 	Expenses for IT services from IRPC for real time analyst meetings. <ul style="list-style-type: none"> Total expenses Account payable 	0.01 -	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
Thai Airways International Plc. (THAI)	<ul style="list-style-type: none"> Co-director is: Mr. Ampon Kittiampon. 	Expenses for air ticket purchase <ul style="list-style-type: none"> Total expenses Account payable 	0.09 0.01	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
Bangchak Petroleum Plc. (BCP)	<ul style="list-style-type: none"> PTT, the Company's and BCP's major shareholder, holds 27.22% of BCP's registered and paid-up capital. Co-director is: Mr. Pichai Chunhavajira. 	Expenses for public utility, equipment, tools and operating rooms in the area of Bangchak refinery. <ul style="list-style-type: none"> Total expenses Account payable 	0.003 -	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
PTT Global Chemical Plc. (PTTGC)	<ul style="list-style-type: none"> PTT, the Company's and PTTGC's major shareholder, holds 48.90% of PTTGC's registered and paid-up capital. Co-director is: Mr. Prajya Phinyawat. The Company's ex-director in 2012, Mr. Anon Sirisaengtaksin, is PTTGC's director. 	Income from procurement of drivers for executives based on contract between PTTGC and PTTEP Services Co., Ltd (The Company's subsidiary). <ul style="list-style-type: none"> Total income Account receivable 	0.01 0.01	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
PTT Maintenance and Engineering Co., Ltd. (PTT Maintenance)	<ul style="list-style-type: none">PTT, the Company's and PTT Maintenance's major shareholder, holds 40% of PTT Maintenance's registered and paid-up capital.PTTGC, in which PTT is its major shareholder, holds 60% of PTT Maintenance's shares.	<ul style="list-style-type: none">Income from training services<ul style="list-style-type: none">Total incomeAccount receivable	<div>0.001</div> <div>-</div>	<ul style="list-style-type: none">The condition/price setting for training services follows normal business operations at the arm's length conditions for non-related persons and operations.
		<p>The Company and its subsidiaries signed contracts with PTT Maintenance as follows:</p> <ul style="list-style-type: none">Rail Tank Wagons Maintenance and repairGeneral maintenance, equipment inspection and other servicesMESC training (Implementation for Stock Inventory)<ul style="list-style-type: none">Total expensesAccount payable	<div>2.79</div> <div>-</div>	<ul style="list-style-type: none">Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
PTT Energy Solutions Co., Ltd. (PTT Energy)	<ul style="list-style-type: none">▪ PTT, the Company's and PTT Energy's major shareholder, holds 40% of PTT Energy's registered and paid-up capital.▪ PTTGC, TOP, and IRPC, in which PTT is their major shareholder, hold 20% each in PTT Energy.	Expenses for meeting and seminar arrangement, consultant fee for personnel training and work system. - Total expenses - Account payable	 0.25 0.03	<ul style="list-style-type: none">▪ Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
Sport Services Alliance Co., Ltd. (Sport Services)	<ul style="list-style-type: none">▪ Business Services Alliance Co., Ltd., in which PTT is its major shareholder, is Sport Services' major shareholder holding 100%.▪ The Company's ex-director in 2012, Mr. Sommai Khowkachaporn, is Sport Services' director.	Expenses for sponsoring PTT Rayong Football Club - Total expenses - Account payable	 0.16 -	<ul style="list-style-type: none">▪ Sport Services is the owner and sponsor of PTT Rayong Football Club. It is the football-activity support for youth and people in Rayong.
Dhipaya Insurance Plc. (TIP)	<ul style="list-style-type: none">▪ PTT, the Company's and TIP's major shareholder, holds 13.33% of TIP's registered and paid-up capital.	Expenses for Company's assets and its employees' health and life insurance - Total expenses - Account payable	 20.92 -	<ul style="list-style-type: none">▪ Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
Business Services Alliance Co., Ltd. (Business Services)	<ul style="list-style-type: none">▪ PTT, the Company's and Business Services' major shareholder, holds 25% of Business Services' registered and paid-up capital.▪ PTTGC, PTT ICT and PTT Utility Co., Ltd., in which PTT is their major shareholder, hold 25% each in Business Services.	Expense for the change of carton packaging and the re-arrangement of the damaged rocks samples at the Company's warehouse in Phra Nakhon Si Ayutthaya after the flood, based on the Company's rock sample collection standard. - Total expenses - Account payable	 0.02 0.0003	<ul style="list-style-type: none">▪ Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



Connected Company	Relationship	Transaction	2012 Value (Unit: Million USD)	Pricing policy and/or Reason
Linde (Thailand) Plc. (Linde)	<ul style="list-style-type: none"> The Company's ex-director in 2012, Mr. Sommai Khowkachaporn, is Linde's director. 	Expenses for purchase of Nitrogen and lease of Nitrogen-related equipment. <ul style="list-style-type: none"> Total expenses Account payable 	0.04 -	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
Top Maritime Service Co., Ltd. (Top Maritime)	<ul style="list-style-type: none"> Co-director is: Mr. Pichai Chunhavajira. 	Ship lease for transporting personnel to and from Bongkot Field <ul style="list-style-type: none"> Total expenses Account payable 	0.53 -	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.
PTT International Trading Pte. Ltd. (PTT Inter Trading)	<ul style="list-style-type: none"> PTT, the Company's and PTT Inter Trading's major shareholder, holds 100% of PTT Inter Trading's registered and paid-up capital. 	Expenses for purchase of fuel filled in Singapore. <ul style="list-style-type: none"> Total expenses Account payable 	0.52 -	<ul style="list-style-type: none"> The condition/price setting of fuel purchase follows normal business operations at the arm's length conditions for non-related persons and operations.
		Expense for hedging contracts for oil prices <ul style="list-style-type: none"> Total expenses Account payable 	4.25 1.15	<ul style="list-style-type: none"> The condition/price setting of oil-price hedging contract follows normal business operations at the arm's length conditions for non-related persons and operations.
Thai Oil Plc. (TOP)	<ul style="list-style-type: none"> PTT, the Company's and TOP's major shareholder, holds 49.10% of TOP's registered and paid-up capital. Co-directors are: <ol style="list-style-type: none"> Mr. Norkun Sitthipong Mr. Chaikasem Nitisiri. 	Crude oil sales <ul style="list-style-type: none"> Total income Account receivable 	23.86 8.17	<ul style="list-style-type: none"> Condition/price setting follows normal business operations at the arm's length conditions for non-related persons and operations.



11.2 Necessity and Reasons for Connected Transactions

Having audited the connected transactions that arose and were recorded for the fiscal year ending December 31, 2012 as detailed above, the Audit Committee agreed that such connected transactions were necessary with fair and/or equal conditions and prices at the arm's length basis, and gained approval from the management or the Board according to the Company's policy prior to the transactions.

11.3 Approval Measures and Procedure for Connected Transactions

The Board properly reviewed the transactions that may have conflicts of interest or related transactions or connected transactions based on the ethical framework after the Audit Committee's screening and considering, as determined by regulations of the Stock Exchange of Thailand, the Capital Market Supervisory Board, the Securities and Exchange Commission, and had such transactions' information disclosure with accuracy and completeness.

The Company set its policy and reporting procedures on conflicts of interest clearly for directors and employees to follow. Two types of approval procedures for connected transactions are described below.

(1) Transactions that require the Board approval before execution e.g. purchase /sale contracts of gas, crude oil and condensate, and trade finance.

(2) Transactions that are permitted to be executed by following procurement regulations with the management approval under the limited amount approved by the Board e.g. procurement of fuel and petroleum products, lease of office buildings, and helicopter services.

In a case that directors, employee or related persons have conflict of interest on the Company transactions, they are not eligible for decision-making or approval of such transactions. Such transactions will have fair conditions and prices at the arm's length basis.



11.4 Policy and Future Trend for Connected Transactions

11.4.1 Policy for Connected Transactions

Future connected transactions will follow the Company's normal business operations without any transfer of benefits between the Company and related companies or persons. The Company will strictly adhere to and abide by the securities and exchange laws, the Capital Market Supervisory Board's notifications and the Stock Exchange of Thailand's regulations or other supervisory agencies for connected transactions with reasons and appropriate condition at reference market prices in order for all shareholders and stakeholders to be taken care of benefits with fairness and equality under the Company's good corporate governance policy.

11.4.2 Trend for Connected Transactions with Persons that may have Conflicts of Interest.

The Company continues to have connected transactions with related persons in the future. Such transactions include normal business transactions, lease of office buildings, and support transactions for normal business described below.

(1) Sales of petroleum product and purchase of fuel: As such transactions are the Company's normal business operations and follow conditions and requirements agreed in contracts, the Company still continues executing these transactions due to their necessity to the Company's business operations.

(2) Lease of office buildings: As the lease of office buildings is the reasonable and necessary for the Company's business operations, the Company continues such transactions.

(3) Employment of information and technology services: As the employment of information and technology services is the reasonable and necessary for the Company's business operations, the Company continues such transactions.



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 2010-2012 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 and 2012 have been prepared in US Dollars compared with the financial statements for 2010 restated.



11.1 Summary of Financial Information

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION

AS AT DECEMBER 31,

	2010		2011		2012	
	Thousand (US Dollar)	%	Thousand (US Dollar)	%	Thousand (US Dollar)	%
Assets						
Current Assets						
Cash and cash equivalents	1,979,478	18.5	1,350,530	9.6	2,291,919	11.7
Account receivable - parent company	328,153	3.1	484,200	3.4	870,244	4.4
Trade accounts receivable	61,342	0.6	150,155	1.1	170,372	0.9
Other accounts receivable	58,669	0.5	201,897	1.4	166,799	0.8
Inventories	18,456	0.2	17,360	0.1	19,311	0.1
Materials and supplies, net	239,295	2.2	271,130	1.9	304,395	1.6
Other current assets	122,737	1.1	262,527	1.9	208,205	1.1
Total Current Assets	2,808,130	26.3	2,737,799	19.4	4,031,245	20.5
Non-current Assets						
Investments in available-for-sales securities	-	-	-	-	1,248	-
Investments in associates	24,601	0.2	26,923	0.2	31,198	0.2
Long-term loans to related parties	19,695	0.2	18,485	0.1	18,935	0.1
Property, plant and equipment, net	6,794,617	63.5	9,300,912	65.8	10,970,970	55.9
Goodwill	7,314	0.1	329,695	2.3	901,240	4.6
Intangible assets, net	183,187	1.7	1,136,555	8.0	3,238,674	16.5
Deferred income tax assets	469,797	4.4	510,603	3.6	380,983	1.9
Other non-current assets	386,404	3.6	70,460	0.5	62,525	0.3
Total Non-current Assets	7,885,615	73.7	11,393,633	80.6	15,605,773	79.5
Total Assets	10,693,745	100.0	14,131,432	100.0	19,637,018	100.0
Liabilities and Shareholders' Equity						
Current Liabilities						
Short-term loans from financial institution	263,502	2.5	315,545	2.2	-	-
Trade accounts payable	67,420	0.6	72,996	0.5	114,198	0.6
Current portion of long-term debts	-	-	687,772	4.9	163,547	0.8
Working capital to co-venturers	33,418	0.3	35,665	0.3	13,719	0.1
Accrued expenses	603,161	5.6	995,314	7.0	946,553	4.8
Accrued interests payable	18,312	0.2	29,583	0.2	35,633	0.2
Income tax payable	738,359	6.9	802,476	5.7	921,173	4.7
Financial derivative liabilities	976	0	46,419	0.3	2,446	0.0
Short-term provision	130,449	1.2	75,772	0.5	32,999	0.2
Other current liabilities	68,467	0.6	78,255	0.6	144,708	0.7
Total Current Liabilities	1,924,064	18.0	3,139,797	22.2	2,374,976	12.1
Non-current Liabilities						
Debentures	2,319,410	21.7	2,251,987	15.9	2,517,710	12.8
Long-term loans from financial institution	-	-	617,861	4.4	1,091,705	5.6
Deferred income tax liabilities	199,034	1.9	918,666	6.5	1,512,784	7.7
Provision for employee benefits	51,744	0.5	62,463	0.4	78,836	0.4
Provision for decommissioning costs	725,804	7	703,998	5	1,070,744	5.5
Provision for remuneration for the renewal of petroleum production	-	-	-	-	167,450	0.9
Derivative financial instruments	-	-	46,832	0.3	44,810	0.2
Deferred income	47,722	0.4	36,371	0.3	35,636	0.2
Other non-current liabilities	17,930	0.2	41,795	0.3	31,067	0.2
Total Non-current Liabilities	3,361,644	31.4	4,679,973	33.1	6,550,742	33.4
Total Liabilities	5,285,708	49.4	7,819,770	55.3	8,925,718	45.5
Shareholders' Equity						
Share capital						
Issued and paid-up share capital	129,391	1.2	129,475	0.9	150,684	0.8
Share premium	462,090	4.3	469,655	3.3	3,438,921	17.5
Subordinated capital debentures	-	-	-	-	156,570	0.8
Retained earnings						
Appropriated						
Legal reserve	12,964	0.1	12,964	0.1	15,048	0.1
Reserve for expansion	431,231	4.0	431,231	3.1	431,231	2.2
Unappropriated	4,345,041	40.6	5,254,384	37.2	6,503,764	33.1
Other components of Shareholders' Equity	27,320	0.3	13,953	0.1	15,082	0.1
Total Shareholders' Equity	5,408,037	50.6	6,311,662	44.7	10,711,300	54.5
Total Liabilities and Shareholders' Equity	10,693,745	100.0	14,131,432	100.0	19,637,018	100.0
Book value per share (US Dollar)	1.63		1.90		2.70	
Issued and fully paid-up capital at the end of year (Thousand share)	3,317,448		3,319,985		3,969,985	



PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED

AND SUBSIDIARIES

STATEMENTS OF INCOME

FOR THE YEARS ENDED DECEMBER 31,

	2010		2011		2012	
	Thousand (US Dollar)	%	Thousand (US Dollar)	%	Thousand (US Dollar)	%
Revenues						
Sales	4,329,635	95.5	5,439,722	95.7	6,689,555	95.3
Revenue from pipeline transportation	110,836	2.4	124,071	2.2	150,684	2.1
Interest income	11,795	0.3	16,239	0.3	15,874	0.2
Other revenues	79,505	1.8	105,061	1.8	164,557	2.3
Total Revenues	4,531,771	100	5,685,093	100	7,020,670	100.0
Expenses						
Operating expenses	458,390	10.1	625,396	11.0	705,654	10.1
Exploration expenses	86,924	1.9	216,890	3.8	213,036	3.0
Administrative expenses	192,465	4.2	257,409	4.5	312,223	4.4
Petroleum royalties and remuneration	525,329	11.6	645,468	11.4	788,219	11.2
Depreciation, depletion and amortization	1,017,342	22.4	1,117,346	19.7	1,373,836	19.6
Loss on foreign exchange	85,854	1.9	64,886	1.1	23,964	0.3
Loss from Montara incident	14,410	0.3	5,331	0.1	538	-
Loss on financial derivative	3,468	0.1	11,057	0.2	12,257	0.2
Management's remuneration	5,915	0.1	4,571	0.1	4,714	0.1
Impairment loss on assets	-	-	-	-	204,167	2.9
Other expenses	47,740	1.1	-	-	-	-
Finance costs	104,546	2.3	123,557	2.2	187,010	2.7
Total Expenses	2,542,383	56.1	3,071,911	54.0	3,825,619	54.5
Share of gain (loss) from associates	(1,347)	-	2,430	-	4,657	0.1
Income before income taxes	1,988,041	43.9	2,615,612	46.0	3,199,708	45.5
Income taxes expenses	(607,563)	(13.4)	(1,147,365)	(20.2)	(1,354,189)	(19.3)
Income for the year	1,380,478	30.5	1,468,247	25.8	1,845,519	26.2
Basic earnings per share (US Dollar)	0.42		0.44		0.55	
Diluted earnings per share (US Dollar)	0.42		0.44		0.55	
Weighted average number of outstanding ordinary shares (Thousand share)	3,314,906		3,319,078		3,346,624	



PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY
AND SUBSIDIARIES
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31,

	2010	2011	2012
	Thousand (US Dollar)	Thousand (US Dollar)	Thousand (US Dollar)
Cash flows from operating activities			
Income before income taxes	1,988,041	2,615,612	3,199,709
Adjustment to reconcile income before income tax to net cash provided by (used in) operating activities			
Share of gain from associates	1,347	(2,430)	(4,657)
Depreciation, depletion and amortization	1,017,342	1,117,346	1,373,836
Provision for impairment losses	-	-	204,167
Amortization of prepaid expenses	4,564	5,714	15,538
Amortization of exploration expenses	46,056	150,450	94,680
Loss (Gain) on disposal of assets	(11,266)	1,726	2,324
Income recognized from deferred income	(15,443)	(11,455)	(735)
Loss on financial derivatives	3,468	11,057	12,257
Provision for employee benefits	13,068	15,264	15,619
Loss (Gain) on foreign exchange	188,333	(62,284)	6,096
Interest income less than interest expenses	90,590	103,957	156,458
	3,326,100	3,944,957	5,075,291
Changes in operating assets (increase) decrease	(666,048)	(1,036,853)	(1,620,485)
Net cash provided by operating activities	2,660,052	2,908,104	3,454,805
Cash flows from investing activities			
(Increase) decrease in loans to related parties	(2,530)	274	184
Cash payment from purchase of business	(342,000)	(1,889,560)	(1,883,985)
Loss from investments in related parties	-	-	(141)
Dividends received from associates	-	-	523
Interest received from loans	606	2,158	853
Increase in property, plant and equipment	(1,944,320)	(2,206,095)	(2,805,793)
Increase in intangible assets	(43,563)	(114,199)	(47,119)
Net cash used in investing activities	(2,331,807)	(4,207,422)	(4,735,478)
Cash flows from financing activities			
(Decrease) increase in short-term loans	205,269	-	-
Decrease in short-term loans with maturity date within 3 months from financial institution	-	(266,053)	(5,337)
Proceeds from short-term loans with maturity date within 1 year from financial institution	-	329,760	1,502,770
Payments of short-term loans with maturity date within 1 year from financial institution	-	-	(1,849,946)
Proceeds from issuance of debentures	700,000	700,000	500,000
Payments of debentures	(285,393)	-	(779,225)
Proceeds from long-term loans from financial institution	-	625,000	478,118
Interest paid for loans	(63,191)	(123,106)	(173,185)
Cash payments for financial costs	(6,317)	(10,677)	(20,709)
Proceeds from issuance of subordinated capital debentures	-	-	157,138
Interest paid for subordinated capital debentures	-	-	(4,758)
Cash payments for financial costs from issuance of subordinated capital debentures	-	-	(567)
Proceeds from issuance of common stock	12,645	7,649	3,011,635
Cash payments for transaction cost of capital	-	-	(21,161)
Dividends paid	(379,986)	(560,133)	(587,634)
Net cash provided by financing activities	183,027	702,440	2,207,139
Net increase (decrease) in cash and cash equivalents	511,272	(596,878)	926,466
Cash and cash equivalents at the beginning of the year	1,462,399	1,979,478	1,350,530
	1,973,671	1,382,600	2,276,996
Adjustment for the effect of exchange rate changes on cash and cash equivalents	5,807	(32,070)	14,923
Cash and cash equivalents at the end of the year	1,979,478	1,350,530	2,291,919



Summary significant financial ratio table

		Financial Ratios		
		2010	2011	2012
Liquidity ratio				
Current Ratio	(Times)	1.46	0.87	1.70
Quick Ratio	(Times)	1.23	0.63	1.40
Cash Flow from Operations to Current Liabilities Ratio	(Times)	1.46	1.15	1.25
Account Receivable Turnover	(Times)	10.86	10.87	8.17
Collection Period	(Days)	34	34	45
Profitability Ratio				
Net Profit Margin	(%)	30.46	25.83	26.29
Return on Equity	(%)	28.17	25.06	21.68
Efficiency Ratio				
Return on Assets	(%)	14.05	11.83	10.93
Return on Fixed Assets	(%)	34.36	29.69	26.12
Assets Turnover	(Times)	0.46	0.46	0.42
Financial Policy Ratio				
Debt to Equity Ratio	(Times)	0.48	0.61	0.35
Times Interest Earned	(Times)	41.56	42.39	30.49
Dividend Ratio	(%)	40	40	38
Data per Share				
Book Value per Share	(USD)	1.63	1.90	2.70
Net Profit per Share	(USD)	0.42	0.44	0.55
Dividend per Share	(THB)	5.03	5.40	5.80
Growth Rate				
Total Asset	(%)	19.45	32.15	38.96
Total Liabilities	(%)	15.93	47.94	14.14
Sales	(%)	28.47	25.30	22.94
Net Profit	(%)	113.65	6.36	25.70



11.2 Management Discussion and Analysis of Operation Results in 2012

11.2.1 PTTEP Performance

The global economy has continuously slowed down in 2012 as the International Monetary Fund (IMF) estimated its growth rate at 3.3% while it was 4% in 2011. Key behind this slowdown was the European debt crisis. Despite carrying out various stimulus measures, such as the establishment of the European Stability Mechanism (ESM) to diminish financial difficulties of participating countries and, additionally, government bond purchases by the European Central Bank to ease the debt burden of troubled European nations, the European economy has continued to struggle and has yet to show clear signs of recovery. The United States economy also faced high volatility throughout 2012. Of major concern was the overhanging situation of the fiscal cliff, which involved expiration of tax reduction policies and government spending cuts as a result of the public debt ceiling. Concerns over the economic growth of the United States, along with the economic slowdown in China stemming from lower demand both domestically and internationally, suppressed global market sentiments. Given all these circumstances, the situation will, therefore, be monitored closely.

As for the Thai economy, 2012 proved to be another year of successive growth. The Office of the National Economic and Social Development Board (NESDB) had estimated that Thai economic growth in 2012 was approximately 5.9%, which is higher than that of 2011. Main drivers pushing this growth included the recovery of the manufacturing sector and increases in private sector demand, consumption and investment as the Thailand flood crisis recovery accelerated. The services industry, most notably tourism, also grew considerably as evidenced by step-up in inbound foreign visitors. Moreover, the government legislation, such as increases in minimum wages and officials salaries, rice pledging, first-car and first-house schemes, as well as progressive reduction in personal income tax rate, encouraged domestic spending. Also, overall economic growth in Asia, especially in ASEAN nations in the wake of economic unification for the ASEAN Economics Community (AEC) by 2015, is clearly one of the factors that have attracted more substantial investments because of the accompanying infrastructural development and preparation activities that will go hand-in-hand within each nation in AEC.



Both the global economy and oil prices in 2013 continue to remain relatively fragile and highly uncertain, which will impact the Thai economy. For instance, the economy slowdown in both China and India and various monetary policies by leading developed countries, such as the United States and Japan, which are in the process of recovering their economies. These will strengthen the Thai Baht currency from the inflow of foreign funds.

In 2012, PTTEP has continuously monitored the economics closely and periodically revised its operation and investment plans accordingly to align with its strategic directions. PTTEP also strives to increase its efficiency and develop its capabilities for sustainable growth. The results can be summarized as follows.

Exploration and Appraisal: PTTEP carries on exploration activities domestically and internationally to assess field potential and estimate petroleum reserves. In 2012, the company conducted exploration and appraisal activities in several projects.

PTTEP Australasia Project: The project has completed 3-D seismic testing and drilling of appraisal well, Maple-2, Cash-Maple field, located in Timor Sea, Australia, in July 2012 with the discovery of natural gas. This discovery, in addition to that of Cash-2 well drilled at end of 2011, yielded a flow rate of natural gas of approximately 30 million square cubic feet per day (MMSCFD) and a condensate flow rate of 696 barrels per day (BPD). Currently, the company is assessing the commercial viability of the project.

Myanmar M3 and M11 Projects: The projects are located in the Gulf of Martaban, south of Yangon, Republic of the Union of Myanmar. Currently, the exploration period is being extended to 7 years in order to prove the project's commerciality. Preparation for appraisal well drilling program in M3 block is ongoing. The M11 deep water block is also in the process of preparation for an exploration well.

Indonesia Semai II Project: The project is conducting a geological study to assess petroleum potential and to define the location of the second exploration well, which is planned for a shallow water drilling site in 2013.

Algeria Hassi Bir Rekaiz Project: The project's first exploration phase consists of drilling 9 exploration wells, 7 of which have been completed with successful



discovery of crude oil in 6 of the completed wells. Currently, the project is progressing to complete the drilling of the remaining exploration wells by early 2013 to confirm their petroleum potential.

Canada Oil Sands KKD Project: The project completed the Winter Evaluation Program (WEP) for 2011-2012, which covered the drilling of 161 appraisal wells and 3-D and 4-D seismic studies in Leismer, Thornbury and Hangingstone. Program results are used to evaluate the production of Leismer and assess the potential of Thornbury and Hangingstone.

In Q4 of 2012, the project is preparing for the 2012-2013 WEP and identifying positions and locations for appraisal wells and seismic testing with the purpose of further development in Leismer, Corner and Thornbury. The program is expected to cover drilling of approximately 92 wells and 3-D and 4-D seismic coverage of approximately 134 square kilometers.

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

PTTEP Australasia Project: The project completed the drilling of 3 production wells and a gas injection well in July 2012. The floating production and storage offloading (FPSO) vessel arrived at the Montara field in November 2012. Currently underway are the hook-up and commissioning process and preparation for production.

Regarding the compensation claim, PTTEP has received, from the start of the Montara incident to the end of fourth quarter in 2012, a total compensation claim of USD 212 million. The remaining claims are in progress.

Regarding the claim that was submitted by the Government of Indonesia for compensation due to oil leaks from the Montara incident, PTTEP is continuously assessing the case with the government through scientific evidences to determine the impact (if any).

Myanmar Zawtika Project: In early 2012, PTTEP International Limited (PTTEPI) signed a joint operating agreement with Myanmar Oil and Gas Enterprise (MOGE).



MOGE then held 20 percent participating interest in the Myanmar Zawtika Project, in accordance with the Production Sharing Contract. As a result, PTTEPI held 80 percent participating interest and remained the operator in this project. To date, the project is now in the process of constructing the Zawtika processing platform & bridge, wellhead platforms and intra-field sealines, offshore gas export pipeline, and onshore gas export pipeline and facilities. More than 63 percent of construction work has been completed. The project is expected to deliver natural gas in early 2014.

Algeria 433a & 416b Project: The project targets to complete the drilling of 4 production wells in 2012, of which 3 have already been completed. The flow rate of crude oil stood approximately at 4,000 BPD. The project continues to progress with the drilling of the fourth well and the construction of processing and pipeline facilities (EPC1), as well as the construction of the living quarters and utility facilities (EPC2) in the development area. The project is expected to begin production within 2014.

Canada Oil Sands KKD Project: The Corner Field study period has been extended for more detailed evaluation of the development plan and overall budget with the aim of maximizing investment value and efficient construction process. A Final Investment Decision (FID) is expected in 2013 and startup of production by 2016.

Mozambique Rovuma Offshore Area 1 Project: In August 2012, PTTEP Africa Investment Limited (PTTEP AI), a subsidiary of PTTEP, successfully completed the acquisition of Cove Energy. As a result, PTTEP AI currently holds 8.5% interest in the Mozambique Rovuma Offshore Area 1 project, the operator of which is Anadarko.

Located in Mozambique, the Mozambique Rovuma Offshore Area 1 is an area with substantial natural gas resources. Exploration activities have taken place and discoveries of natural gas have been made in the project with expected resources of over 65 trillion cubic feet (TCF). Significantly, potential exists to develop the area into liquefied natural gas (LNG) project. After PTTEP AI became a project partner, a key milestone for development activities was reached when the Front End Engineering Design (FEED) for both onshore LNG construction and offshore installation were awarded.



Moreover, Anadarko, as the operator of Mozambique Offshore Area 1, reached Heads of Agreement (HOA) with Eni, as the operator of Mozambique Offshore Area 4. The two operators will conduct separate, yet coordinated offshore development activities, while jointly planning and constructing common onshore liquefaction facilities at Cape Afungi, in Cabo Delgado Province of northern Mozambique.

Production: PTTEP is continuously striving to maintain current production levels and increase production levels from new projects.

Bongkot Project: On June 16th, 2012, Greater Bongkot South, Bongkot Project reached a stable gas production rate of 320 MMSCFD, as required by the Gas Sales Agreement with PTT, and a condensate production rate of 9,000 BPD. On July 15, 2012, Greater Bongkot North field achieved a record production level for condensate at 25,019 BPD. Consequently, on August 5, 2012, the field reached a total production of condensate of 100 million barrels. As for natural gas production, the field reached an average production level of 596 MMSCFD during 2012.

Overall, at Bongkot Project, which consists of both Greater Bongkot North and Greater Bongkot South fields, natural gas production capacity increased to more than 900 MMSCFD, which signifies about 20% of Thailand natural gas demand.

S1 Project: The project reached the highest production level of crude oil at 35,176 BPD in December 2012. This achievement stands out as the highest ever record of production level since the inception of the project. Average production of crude oil in 2012 stood at approximately 28,000 BPD.

Canada Oil Sands KKD Project: Average bitumen production for the Leismer area in the fourth quarter of 2012 was approximately 15,700 BPD, which came from 22 pairs of steam-assisted gravity drainages and production wells from 4 well pads. Total production in the Leismer area, since its initial production, stood at approximately 9 million barrels as of November 2012. Well Pad 5 is expected to be ready for production by the fourth quarter of 2013.

As for the plans to increase production capacity (Leismer Expansion) to 40,000 BPD, the Company is determining the well pad location, conducting detailed studies of



the requirements of additional facilities and preparing to seek approval details from the Energy Resources Conservation Board (ERCB).

Oman 44 Project: The Company increased crude oil production rate from approximately 1,500 BPD to 4,600 BPD with the discovery of crude oil from the drilling of development and appraisal wells in the Munhamir field and the new field, Shams-E South. In 2012, average production of crude oil and condensate stood at approximately 2,960 BPD and that of natural gas stood at 42 MMSCFD. Progress is being made with construction and testing, in compliance with engineering standards, of the pipeline from Shams-9ST production well to the main processing unit of the Shams field. Production of natural gas and condensate started from Shams-9ST on December 30th, 2012.

Vietnam 16-1 Project: On July 6, 2012, production from the second wellhead platform (WHP-H4) of Te Giac Trang field successfully began. As a result, the project increased its production of crude oil from 41,000 BPD to approximately 55,000 BPD.

Portfolio Management: PTTEP has operated continuously in the area of Portfolio Management. This aims for appropriate investment both in value added projects and risk management. To keep pace with changing social, economic and political conditions, the company studies and analyzes the factors and the impact of its investment on a regular basis to derive and manage its investment considerations and decisions. In addition, the company reviews its target for expansion (Focused Countries) by grouping the countries based on the opportunities, appropriateness and consistency with the company's direction and goals. The analyses are based on numerous factors such as petroleum potential, geography, government share, political and business risks, and competitive advantage(s).

Total and JX NOEX participation in Myanmar M11 Block: PTTEP International Limited (PTTEPI), a wholly owned subsidiary of PTTEP, has selected Total E&P Myanmar (Total) and JX Nippon Oil & Gas Exploration (Myanmar) Limited (JX Myanmar), a wholly owned subsidiary of JX Nippon Oil & Gas Exploration Corporation (JX NOEX), to become partners in Block M11 with 40% and 15% participation interests, respectively. PTTEPI will remain the operator, holding a 45% participation interest. The transaction is subject to official approval from the government of the Republic of the Union of Myanmar. Introduction of partners into



Block M11 constitutes an integral component of PTTEP's strategy in its portfolio management, aiming to both add value to the project and risk management.

Offer for Cove Energy Plc: On July 23, 2012, PTTEP, through its subsidiary PTTEP AI, made an offer to acquire the entire amount issued and to be issued share capital of Cove Energy Plc at 240 pence (GBP Pound Sterling currency) per share, or at approximately 1,221.4 million Pounds Sterling. The major assets of Cove Energy consist of an 8.5% interest in the Rovuma Offshore Area 1 concession block in the Republic of Mozambique. Cove also held 10% interest in the Rovuma Onshore concession block in the Republic of Mozambique, as well as interests of 10-25% in 7 deep water concession blocks in Kenya.

On August 17, 2012, PTTEP AI successfully acquired Cove by fulfilling all conditions in the offer for Cove shares. From August 23, 2012, PTTEP AI began the process of compulsory acquisition of the remaining Cove shares from Cove shareholders who had not yet accepted the offer. As of October 5, 2012, which was the last date for the compulsory acquisition, PTTEP AI held 100% interest in Cove Energy.

On September 18, 2012, the London Stock Exchange announced the cancellation of admission to trading of Cove's shares on the Alternative Investment Market (AIM).

11.2.2 Results of Operations

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

The Company has determined the USD to be its functional currency in accordance with Thai Accounting Standard No.21 (revised 2009) "The Effects of Changes in Foreign Exchange Rates". However, in submission of its financial statements to the Stock Exchange of Thailand and the Department of Business Development, the Company is also



required to convert the financial statements from USD to the presentation currency, which is Thai Baht.

Detailed discussion of financial results for the two years ending 31 December is below:

Results of Operations – Full Year Comparison

Earnings summary	Millions of USD		Millions of Baht	
	2012	2011	2012	2011
Total Revenues	7,021	5,685	218,137	173,375
Total Expenses	(3,826)	(3,072)	(118,846)	(93,657)
Operating Income	3,195	2,613	99,291	79,718
Share of gain from associates	5	2	145	75
Income before income taxes	3,200	2,615	99,436	79,793
Income tax expenses	(1,354)	(1,147)	(42,120)	(35,045)
Net income	1,846	1,468	57,316	44,748
Diluted earnings per share	0.55	0.44	17.08	13.48

Income from normal operations	1,999	1,659
Gain (Loss) from non-recurring items	(153)	(191)
Net income	1,846	1,468

Regarding the results of operations (Unaudited) for the year 2012, PTTEP and its subsidiaries' totaled a net profit of USD 1,846 million (equivalent to 57,316 million baht) or USD 0.55 per share-diluted (equivalent to 17.08 baht per share-diluted), an increase of USD 378 million or 26% compared with 2011's 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). Return on shareholder's equity for 2012 was 21.68%.

PTTEP and subsidiaries' net profit of USD 1,846 million for 2012 comprised the recurring net profit for this year, which amounted to USD 1,999 million, and the loss from non-recurring items, which amounted to USD 153 million.



For the results of recurring operations in 2012, PTTEP and subsidiaries' recurring net profit was USD 1,999 million, an increase of USD 340 million or 20% against last year which was USD 1,659 million. PTTEP and subsidiaries' Return from normal operation on shareholder's equity for 2012 was 23.49%.

For 2012, total revenues for PTTEP and its subsidiaries amounted to USD 7,021 million (equivalent to 218,137 million baht), an increase of USD 1,336 million or 24% against last year which was USD 5,685 million (equivalent to 173,375 million baht). The increase was mainly due to an increase of sales revenue of USD 1,249 million, caused by the following:

- (1) The higher average petroleum sales price for 2012, which rose to USD 64.86 per barrel of oil equivalent (BOE) against last year, which was USD 55.49 per BOE.
- (2) There was a higher average sales volume for 2012, which increased to 275,923 barrels of oil equivalent per day (BOED) against last year, which was 265,047 BOED. This average sales volume increased from the net effect of the following;
 - Bongkot project: Sales volume of natural gas and condensate increased because Greater Bongkot South started its production as required by the Gas Sales Agreement in June 2012. However, Sales volume of natural gas of Greater Bongkot North decreased, resulting from a production shutdown of 34 days.
 - Vietnam 16-1 project: Crude oil sales volume increased because of higher production volume produced from 8 new wells in 2012, while the first production started in the third quarter of 2011.



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

However, in

- Arthit North project: Sales volume of natural gas and condensate decreased due to the production stoppage in November 2011.
- Arthit project: Sales volume of natural gas and condensate decreased in line with the newly instituted daily contract quantity.

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

This year, PTTEP and subsidiaries' other revenues increased by USD 60 million, principally because of the recognition of other income from the insurance claim from the Montara incident amounting USD 92 million in 2012; whereas, this insurance claim was recognized, amounting USD 36 million in 2011.

PTTEP and its subsidiaries incurred expenses for 2012 amounting to USD 3,826 million (equivalent to 118,846 million baht), an increase of USD 754 million or 25%, compared with USD 3,072 million (equivalent to 93,657 million baht) for 2011. This increase is attributed to the following:

- (1) Depreciation, depletion and amortization expenses escalated, amounting to USD 257 million, mainly from increases in the value of completed assets of the Bongkot and S1 projects. In addition, they also increased from higher production volume of the Vietnam 16-1 project since it started full production in 2012 and from increases in the value of completed assets.



- (2) The recognition of impairment loss of Montara assets of the PTTEP Australasia project amounted to USD 204 million in 2012 due to the increase in project costs, the delay of the first oil production, and change in production profile.
- (3) Petroleum royalties and remuneration increased, amounting to USD 143 million, in line with higher sales revenue.
- (4) Operating expenses increased amounting to USD 81 million, mainly from increased cost of diluent of the Canada Oil Sands KKD project, in line with higher Diluted Bitumen sales volume.
- (5) Finance costs increased, amounting to USD 63 million, mainly due to an increase of
 - 1. Interest expenses of PTTEP Canada International Finance Limited (PTTEP CIF) which issued a debenture for a total amount of USD 500 million and a drawdown of CAD loans totaling of CAD 475 million from financial institutions during the second and third quarters of 2012.
 - 2. Interest expenses of PTTEP Offshore Investment Company Limited (PTTEPO) from a loan amounting to GBP 950 million for share acquisition of Cove Energy Plc.

In 2012, PTTEP and subsidiaries incurred income tax expenses of USD 1,354 million (equivalent to 42,120 million baht), an increase of USD 207 million or 18%, against those of 2011 of USD 1,147 million (equivalent to 35,045 million baht). The increase was mainly due to increases in overseas income taxes and petroleum income tax. However, income tax expenses affected by the functional currency, which are non-recurring items, decreased.



In 2012, PTTEP and subsidiaries recognized a loss from non-recurring items of USD 153 million, a decrease loss of USD 38 million or 20%, against those of 2011 of USD 191 million, mainly resulted from the net effect of:

- (1) In 2012, income tax expenses affected by the functional currency decreased, amounting to USD 173 million against that of 2011. The decrease was mainly due to lower deferred income tax liabilities, amounting to USD 35 million, because of an increase in net assets after they were translated into USD on 31 December 2012, compared with net assets after they were translated into USD on 31 December 2011, given the Baht appreciation against the USD. The increase of net assets resulted in an increase of depreciation expenses in USD and a decrease of future income tax, accordingly.

However, income tax expenses affected by the functional currency of 2011 caused an increase of income tax expenses in the future of USD 138 million.

- (2) An increase in net impact from Montara incident amounted to USD 61 million, principally because of the recognition of the insurance claim from the Montara incident amounting USD 92 million in 2012; whereas, this insurance claim was recognized, amounting USD 36 million in 2011.
- (3) Lower losses on foreign exchange amounted to USD 41 million. In 2012, PTTEP and subsidiaries recognized a loss on foreign exchange in the amount of USD 24 million, while they recognized a loss on foreign exchange amounting to USD 65 million in 2011, mainly derived from the USD loans of PTTEP Canada Limited.

However,



- (4) There was a recognition of impairment loss of Montara assets of the PTTEP Australasia project amounting USD 204 million in 2012 due to the increase in project costs, the delay of the first oil production, and change in production profile
- (5) Tax benefits from augmentation decreased, amounting to USD 50 million, in which the Australian Commonwealth Government enabled the tax payer to deduct more expenditure from the taxable income with the percentage based on investment (Augmentation). In 2012, there was no recognition of those benefits due to the recognition of impairment loss of Montara assets; whereas, in 2011, this tax benefit was recognized, amounting USD 50 million.

11.2.3 Financial position

	Unit : Millions of USD		Unit : Millions of Baht	
	Dec 31, 2012	Dec 31, 2011	Dec 31, 2012	Dec 31, 2011
Total Assets	19,637	14,131	601,513	447,842
Current Assets	4,031	2,737	123,483	86,764
Non-current Assets	15,606	11,394	478,030	361,078
Total Liabilities	8,926	7,819	273,409	247,818
Current Liabilities	2,375	3,139	72,749	99,504
Non-current Liabilities	6,551	4,680	200,660	148,314
Shareholders' Equity	10,711	6,312	328,104	200,024
Total Liabilities and Shareholders' Equity	19,637	14,131	601,513	447,842

As of December 31, 2012, PTTEP and subsidiaries commanded total assets of USD 19,637 million (equivalent to 601,513 million baht), an increase of USD 5,506 million higher than the total on hand at the end of 2011 at which point total assets were USD 14,131 million (equivalent to 447,842 million baht). This increase was mainly due to



(1) An increase of USD 2,673 million in intangible assets chiefly from the increase of intangible assets and goodwill amounting to USD 2,609 million from the acquisition of the Cove Energy Plc.

(2) An increase of USD 1,670 million in exploration and production assets, mostly from the PTTEP Australasia Project, Bongkot Project, Arthit Project and Zawtika Project.

(3) An increase of USD 1,294 million in current assets mainly from cash and cash equivalents. An increase of USD 941 million of cash and cash equivalents mainly from cash inflow of operating activities, share capital increase, bond issuing and a loan from financial institutions offset with cash outflow in the exploration and production assets and the acquisition of the Cove Energy Plc., repayment of a bond and loan from financial institutions and from dividend payments for the second half of 2011 and the first half of 2012. Moreover, the current assets also increased from the increasing of the parent company accounts receivable amount of USD 386 million.

Most current assets as of December 31, 2012 were cash and cash equivalents; parent company accounts receivable; trade accounts receivable; and materials and supplies. A large proportion of the non-current assets as of December 31, 2012 were assets used in joint-venture exploration and production, presented under Property, Plant, and Equipment; intangible assets; and deferred income tax assets. PTTEP and subsidiaries Current Ratio as of December 31, 2012, was 1.7 times.

PTTEP and subsidiaries had total liabilities of USD 8,926 million (equivalent to 273,409 million baht), an increase of USD 1,107 million higher than the total liabilities at the end of 2011, when total liabilities were USD 7,819 million (equivalent to 247,818 million baht), principally due to

(1) An increase of USD 595 million in deferred income tax liabilities mainly from the acquisition of the Cove Energy Plc.,

(2) An increase in long-term loans from financial institution of USD 474 million mainly from the CAD loan of PTTEP Canada International Finance Ltd. amounting to USD 475 million.



(3) An increase in provision for decommissioning costs amounting to USD 367 million mainly from Bongkot Project, Arthit Project and Contract 4 Project.

(4) An increase in bonds of USD 266 million mainly from the USD 500 million bonds issuing of PTTEP Canada International Finance Ltd. net effect with Thai baht bonds repayment in 2012.

However,

(5) A current liabilities decrease of USD 764 million, primarily from the decrease of current portion of long-term debts of USD 524 million due to repayment of Thai baht bond. Moreover, short-term loans from financial institution decrease amounting to USD 316 million due to repayment in 2012

Capital Structure

Bill of Exchange

PTTEP maintains the Short-term Financing Program (“PF”) which involves the issuance of Bills of Exchange (B/Es) via Public Offerings to institutional and high net-worth investors in Thailand. B/Es are issued on a revolving basis with the total revolving credit of up to Baht 50,000 million. The B/Es facility was approved by the Resolution of the Board of Directors’ meeting in February 2009 and in November 2010.

As of December 31, 2012, there is no outstanding B/Es.

Short-term loans from financial institutions

■ In February 2012, PTTEP entered into an unsecured, unsubordinated revolving credit facility agreement Baht 20,000 million. During the availability period of 5 years, the loan has a floating interest rate of THBFIX + 1.1%. The outstanding principal of the loan as of the end of the availability period and interest rate may, subject to negotiation between the parties, be converted into a term loan to be repaid within 5 years after the end of the availability period. This revolving credit facility will be used for general corporate purposes. The Board of Directors’ meetings in year 2010 and 2011 approved the Company’s entering into loan



agreements, whose approved amount remaining was Baht 68,250 million. As of December 31, 2012, there is no outstanding loan.

■ In May 2012, PTTEP Offshore Investment Company Limited (PTTEPO) entered into a GBP 950 million unsecured, unsubordinated loan facility agreement fully guaranteed by PTTEP which the proceeds were used for the acquisition of Cove Energy Plc. The loan is repayable within 1 year from the signing date and has a floating interest rate of the London Interbank Offered Rate ("LIBOR") plus margin of 0.85% for the first six months of the loan period, LIBOR plus margin of 1.25% for the next three months and LIBOR plus margin of 1.85% thereafter. The Board of Directors' meetings in the year 2012 approved the Company's entering into loan agreements. The entire loan amount was drawn down in August 2012 and was repaid in December 2012.

Long-term loans from financial institutions

■ In March 2012, PTTEP Canada International Finance Limited (PTTEP CIF) entered into a CAD 300 million unsecured, unsubordinated loan agreement fully guaranteed by PTTEP. The loan has a floating interest rate of CDOR + 1.7% per annum and is repayable within 5 years of the first drawdown. The entire loan amount was drawn down in May 2012. The proceeds from the loan were utilized for debt refinancing, capital expenditure and/or general corporate purposes. The Board of Directors' meeting in the year 2011 approved the Company's entering into loan agreements, whose approved amount remaining was Baht 48,250 million. The total outstanding loan as of December 31, 2012 is CAD 300 million.

In April 2012, PTTEP Canada International Finance Limited (PTTEP CIF) entered into a CAD 75 million unsecured, unsubordinated loan agreement fully guaranteed by PTTEP. The loan has a floating interest rate of CDOR + 1.9% per annum and is repayable within 5 years of the first drawdown. The entire loan amount was drawn down in May 2012. The proceeds from the loan were utilized for debt refinancing, capital expenditure and/or general corporate purposes. The Board of Directors' meeting in the year 2011 approved the Company's entering into loan



agreements, whose approved amount remaining was Baht 38,950 million. The total outstanding loan as of December 31, 2012 is CAD 75 million.

In August 2012, PTTEP Canada International Finance Limited (PTTEP CIF) entered into a CAD 100 million unsecured, unsubordinated loan agreement fully guaranteed by PTTEP. The loan has a floating interest rate of CDOR + 2.1% per annum and is repayable within 7 years of the first drawdown. The entire loan amount was drawn down in September 2012. The proceeds from the loan agreement were utilized for general corporate purposes. The Board of Directors' meeting in the year 2011 approved the Company's entering into loan agreements, whose approved amount remaining was Baht 36,625 million. The total outstanding loan as of December 31, 2012 is CAD 100 million.

Bonds

On June 12, 2012, PTTEP Canada International Finance Limited (PTTEP CIF) issued 30 years unsecured and unsubordinated debentures to foreign institutional investors for the total amount of US Dollar 500 million with a coupon rate of 6.35% per annum. The debentures are fully guaranteed by PTTEP and have been rated BBB+ by Standard and Poor's and Baa1 by Moody's. Citigroup, Deutsche Bank, HSBC and UBS were the Joint lead Managers and Joint Bookrunners for the issuance.

The proceeds from the debentures were utilized for general corporate purposes.

The Board of Directors and the general Shareholders' meeting in year 2010 approved the Company's issuing and offering of debentures, whose approved amount remaining was Baht 103,400 million.

Hybrid Bonds

Subordinated Capital Debentures

On June 15, 2012, PTTEP issued 5 million units of registered, unsecured, unconvertible, callable, subordinated debentures with single redemption upon liquidation and with a debentureholders' representative each with a face value of Baht 1,000 per unit, totaling Baht 5,000 million. These subordinated capital debentures bear a step-up fixed interest based on the life of the debentures with the interest rate of 5.85% p.a. for the first 10 years, 6.10% p.a. for Year 11 to 30, 6.85% p.a. from Year 31 to 60 and 7.85% p.a. from Year 61 onwards. The hybrid bonds have no final maturity date (perpetual) and single bullet payment upon liquidation or early



redemption by PTTEP on the 10th anniversary (15 June 2022) and every coupon payment date afterwards.

PTTEP can defer the coupon payment at its sole discretion; all deferred coupons are cumulative and carry no interest. However, while the coupon payment is being deferred, PTTEP shall not (a) declare or make any dividend payment; (b) make any payment of interest or distribution of any sort on any instrument or security issued by PTTEP which ranks pari passu or junior to the hybrid bonds; and (c) redeem, reduce, cancel, buy-back or acquire for any consideration on any instrument or security issued by PTTEP which ranks pari passu or junior to the hybrid bonds. The hybrid bonds are rated “AA” by TRIS Rating Co., Ltd.

Krung Thai Bank, Kasikorn Bank and Siam Commercial Bank were Joint Lead Managers for the issuance.

The proceeds from the bonds were utilized for general corporate purposes.

The Board of Directors and the general Shareholders' meeting in the year 2010 approved the Company's issuing and offering of debentures, whose approved amount remaining was Baht 88,400 million.

Commitment and Guarantee

Commitment from loans agreements

PTTEP has a subordinated loan agreement with Energy Complex Company Limited (EnCo), with the loan limit of Baht 1,250 million. The agreement shall continue for 13 years and 6 months effective from April 2, 2009. As of December 31, 2012, the outstanding loan to EnCo was Baht 580 million.

Loan guarantee

PTTEP has guaranteed the unsecured and unsubordinated loan agreements of PTTEP Offshore Investment Company Limited (PTTEPO) with the total amount of US Dollar 575 million.

PTTEP has guaranteed the unsecured and unsubordinated loan agreements of PTTEP Canada International Finance Limited (PTTEP CIF) with the total amount of Canadian Dollar 475 million.

Bond guarantee

PTTEP has guaranteed the unsecured and unsubordinated bonds of PTTEP Australia International Finance Pty Ltd (PTTEP AIF) with total amount of US Dollar 700 million.



PTTEP has guaranteed the unsecured and unsubordinated bonds of PTTEP Canada International Finance Limited (PTTEP CIF) with total amount of US Dollar 1,200 million.

Equity

On July 20, 2012, the Board of Directors of the Company at the meeting No. 10/2555/353 passed a resolution to approve the share capital increase plan for the amount not exceeding 98,000,000,000 Baht or equivalent to 3,150,000,000 US Dollars by issuing ordinary shares of up to 650,000,000 shares through Preferential Public Offering (PPO). The allocation of up to 650,000,000 newly issued ordinary shares to be offered to the public is as follows:

1. To allocate up to 403,395,000 newly issued ordinary shares to PTT Public Company Limited;
2. To allocate up to 214,443,000 newly issued ordinary shares to the public; and
3. To allocate up to 32,162,000 newly issued ordinary shares to the Over Allotment Agent via Greenshoe Option

On August 23, 2012, the Board of Directors of the Company at the meeting No. 12/2555/355 passed a resolution to approve the cancelation the Company's Extraordinary General Meeting of the Shareholders No. 1/2012 scheduled for August 24, 2012. Nevertheless, PTTEP still maintains its capital increase plan.

On September 27, 2012, the Board of Directors of the Company at the meeting No. 13/2555/356 passed a resolution to approve the share capital increase plan for the amount not exceeding 98,000,000,000 Baht or equivalent to 3,150,000,000 US Dollars by issuing ordinary shares of up to 650,000,000 shares. The newly issued ordinary shares will be offered through the Preferential Public Offering (PPO) to all eligible existing shareholders. In the event there are remaining ordinary shares from allocation to eligible existing shareholders, the Company may offer such ordinary shares to limited institutional investors, excluding PTT. The final offering price will be derived from a price discovery process in which demand indications are collected from institutional investors (Book Building). The share capital increase plan is subject to the approval by the Company's Extraordinary General Meeting of the shareholders scheduled for October 29, 2012.

On October 29, 2012, the Company's Extraordinary General Meeting of the shareholders No.1/2555 passed a resolution to approve the capital increase plan.



On November 30, 2012, the Company has determined the final offering price per share, the final number of newly issued ordinary shares being offered and the entitlement ratio of the existing ordinary shares to the newly issued ordinary shares as follow;

The final offering price per share:	142 Baht per share
The newly issued ordinary shares being offered:	650,000,000 shares
The entitlement ratio of the existing ordinary shares to the newly issued ordinary shares:	1 : 0.195783

On December 17, 2012, the Company received the proceeds from the share capital increase and had registered the paid up capital.

On December 19, 2012, the newly issued ordinary shares were traded in the stock exchange market for the first time.

Cash Flows

For the year ended 31 December 2012, PTTEP and subsidiaries had a net cash flow from operating activities of USD 3,469 million, chiefly due to the higher sales revenue resulting from the higher average petroleum sales prices and sales volumes during the year.

PTTEP and subsidiaries experienced a net cash flow employed in its investing activities of USD 4,735 million, mainly resulting from:

- (1) Additional investment in exploration and production assets as well as intangible assets, amounting to USD 2,853 million, principally from the PTTEP Australasia, Bongkot, Arthit, and Zawtika projects.
- (2) Acquisition of the entire issued and to be issued share capital of Cove Energy Plc., amounting to USD 1,884 million

PTTEP and subsidiaries featured a net cash flow from financing activities of USD 2,207 million, resulting from the net effect of:

Cash receipts from:

The share capital increase (net of transaction cost) amounting to USD 2,991 million.

Short-term loans from financial institution (Bridging loan) amounting to USD 1,503 million

Bond issuance amounting to USD 500 million.

Long-term loans from financial institution amounting to USD 478 million.

Issuance of subordinated capital debentures (Hybrid Bond) amounting to USD 157 million.



Cash payments of:

Short-term loans from financial institution (Bridging loan) and other short-term loans amounting to 1,856 million

Bond payments amounting to USD 779 million

Dividend payments amounting to USD 588 million

Interest and finance costs payments amounting to USD 199 million

As of December 31, 2012, PTTEP and subsidiaries held a total cash and cash equivalents of USD 2,292 million, an increase of USD 941 million from that of December 31, 2011 at which point cash and cash equivalents totaled USD 1,351 million.

11.2.4 Impact on Operating Results

Oil prices have been highly volatile throughout 2012, during which the crude oil price averaged at USD 109 per barrel, slightly higher than the 2011 average of USD 106 per barrel. Crude oil prices significantly varied during the first half of 2012, during which the Eurozone debt crisis, growing tension between the western nations and Iran over the nuclear program, and other geopolitical conflicts in the Middle East and North Africa tightened the demand for crude oil. During the second half of 2012, crude oil prices slightly increased after the Eurozone and IMF's agreement to Greece's second debt restructuring plan. In addition, the establishment of ESM in Europe to allow the European Central Bank to purchase unlimited sovereign bonds of the troubling nations, or the Outright Monetary Transactions (OMT), combined with the United States Federal Reserves' enactment of further quantitative easings (QE3 and QE4) to purchase debentures and government bonds to keep interest rates at low levels until the unemployment situation improves, alleviated concerns over the global economy. Despite the recent climb supported by the rising tension between Israel and Palestinian militants, oil prices remained considerably volatile towards the end of the year as concerns over the United States fiscal cliff, which may raise tax rates and cut government spending effective on January 1st, 2013, and technological development in the production of shale oil and tight oil created additional supply in the United States' energy market. This is notwithstanding the climate factor, where winter in the western parts of the world was not as cold as it used to be, that suppressed the oil prices by the end of the year.



As the global economy and oil prices 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- In the fourth quarter of 2012, PTTEP production increased by 2 percent compared with the third quarter during which the production level was at 332,526 barrels of oil equivalent per day (BOED). This also brought the average production level from January to December 2012 to 313,972 BOED. PTTEP has reviewed its supply plan and improved production in order to meet the rise in energy demand. PTTEP has been cooperating with the related government agencies to collectively outline the optimal supply plan and to forecast future energy demand from both domestic and neighboring countries, in both the short term and long term. PTTEP has constantly been reviewing and adjusting its production plan as well as project development plans, including developing various technologies in exploration and production. Additionally, PTTEP is constantly seeking investment opportunities to increase its reserves with the purpose of meeting the nation's growing demand.

Improving the efficiency and cost optimization PTTEP, together with its parent company, PTT Public Company Limited (PTT), and other companies under the PTT Group, embarked on its innovative PTT Group Operational Excellence Transformation Project to initiate the PTT Group Operational Excellence Management System (OEMS). Its focused objective centers on driving the Group into becoming a Leading Enterprise in the energy industry. The project team consists of representatives from PTT, PTTEP and other companies under the PTT Group. Our standard operations manuals were successfully established and adopted by PTT Group and will become the template for future operational excellence and process improvement initiatives. Each company in the PTT Group will jointly develop the framework of the project to help achieve its objective.

Moreover, as the outlook for operating costs indicate an increasing trend, including the unconventional project and the higher liquid production in PTTEP's portfolio, the company manages its operating costs to maintain costs and returns at suitable levels. As a representative example, Supply Chain Plus is an initiative to assist in management of procurement costs, and helped PTTEP reduce costs at 22% more than its targeted savings of USD 90 million.



Managing Risks on oil price volatility PTTEP aims to consistently conduct oil price hedging programs for petroleum products from the PTTEP group, using the Ice Brent Crude price as a reference. PTTEP also closely follows the changing economy and events that may have impacted oil prices. Moreover, PTTEP has considered a variety of scenarios with varying market oil prices and formulated plans in the event of a variety of situations.

Capability Development PTTEP acknowledges the importance of capability improvement by focusing on the potential of people, technology and processes to prepare for business growth and meet challenges in different countries around the world. In 2012, PTTEP continued this focus with establishment of its Center of Excellence, or COE. The COE aims to create a clear-cut plan to study, research, and collect data, including in-depth knowledge and technology in four dimensions: Exploration, Deep Water Exploration and Production, Unconventional Oil and Gas Development, and Mergers and Acquisitions. Additionally, the initiative of a Technology Center, which centralizes the latest technological developments and also serves as a knowledge warehouse to further develop the capacities of employees and the organization, has been brought forward and is expected to begin from 2013 onwards.

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

PTTEP aims to become a Loss Time Injury free organization in 2013 through compulsory management of safety, security, health and environment in all parts of the organization as measured by a series of performance indicators. In 2012, PTTEP achieved its best safety performance ever with the record for Lost Time Injury Frequency (LTIF) and Total Recordable Injury Rate (TRIR) at the ratios of 0.19 and 1.87 respectively. LTIF is lowered by 45% compared with 2011, which placed the company in a good position to be ranked in the top quartile amongst the International Association of Oil and Gas Producers (OGP).

Furthermore, PTTEP introduced its Life Saving Program, which encourages its employees and contractors to strictly follow the rules and policies on safety through use of 18 Life Saving Icons, derived from OGP studies of major accidents that resulted in serious losses or injuries in the exploration and production business.

PTTEP has the strategy to deliver long-term sustainable development and meet its 900,000 BOED production target by 2020 through investment opportunities that yield sustainable growth



as well as achieve economic, social and environmental sustainability. In 2011, PTTEP proudly established its Sustainable Development Committee, comprising representatives from operational and executive levels, to provide governance and support to different organizations in the company with aligned objectives. PTTEP targets listing on the Dow Jones World Sustainability Index (DJSI World) by 2014.

Corporate Social Responsibility (CSR) PTTEP recognizes the importance of natural preservation, along with sustainable development in communities surrounding the areas of operation. In 2012, PTTEP engaged in environmental conservation activities, especially in the area of restoration and conservation of natural resources, together with sustainable development activities in communities surrounding the areas of operation. Examples of such activities include submerging of the Royal Thai Navy Battleship for Underwater Learning Center, one of the CSR programs to restore aquatic resources and the ecosystem in the coastal area, the mangrove plantation project, jointly with Chulalongkorn University, both of which took place in Chumporn province, as well as the mangrove conservation project with the local community, the Conserve Songkhla Lake with PTTEP project, and the water bank program, all three of which took place in Songkhla province. PTTEP has also continuously planned for further CSR programs for 2013.



11.3 Audit fee and Significant Accounting Policies

11.3.1 Remuneration of Auditor

(1) Audit fee

For the year 2012, 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 1 million.

(2) Non-Audit fee

In addition, for the year 2012, PTTEP paid a non-audit services fee to The Office of The Auditor General totaling USD 1.1 million. This fee is charged for the preparation of Letters of Comfort for the Offering Memorandums for international bond issuance and newly issued ordinary shares.

11.3.2 Summary of the Auditors' Report for the past 3 years (2010-2012)

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 -



Attachment 1: Information of the Management and Controller of the Company

1. PTTEP's Board of Directors

As of 1 January 2013, PTTEP's Board of Directors consists of 15 directors. Details of 15 current directors and 4 directors retiring from the office during the year 2012 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 - Director with Authorized Signature	59	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Ph.D. (Mechanical Engineering), Oregon State University, U.S.A. M.Sc. (Mechanical Engineering), Oregon State University, U.S.A. B. Eng. (Mechanical Engineering), Chulalongkorn University 			Feb.2012–Present	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> Thaioil Plc.
					2011–Feb.2012	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thaioil Plc.
					2011–Present	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> PTT Plc.
					2010–2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Plc.
					2008–2010	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> PTT Plc.
					2009 - 2011	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> IRPC Plc.
		Training of Thai Institute of Directors Association			2009 – 2011	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> PTT Aromatics and Refining Plc.
		<ul style="list-style-type: none"> Role of the Chairman Program (RCP) 21/2009 			Other companies		
					None		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> The National Defense Course (Class 47), The National Defense College Capital Market Academy Leadership Program (Class 4), Capital Market Academy 			2010 – Present	<ul style="list-style-type: none"> Permanent Secretary 	<ul style="list-style-type: none"> Ministry of Energy
					2008 – Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Nuclear Power Program Development Office
					2003 - 2010	<ul style="list-style-type: none"> Deputy Permanent Secretary 	<ul style="list-style-type: none"> 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. Ampon Kittiampon - Independent Director - Chairman of the Audit Committee	57	Education	None	None	Other listed companies		
		● Ph.D. (Applied Economics), Clemson University, South Carolina, U.S.A.			2009 - Present	● Chairman	● Thai Airways International Plc.
		● M.S. (Economics), Northeastern University, Boston, U.S.A.			2005 - 2011	● Director	● PTT Aromatics and Refining Plc.
		● Bachelor of Arts (Social Sciences), Kasetsart University			2005 - 2011	● Director	● PTT Plc.
		Training of Thai Institute of Directors Association			Other companies		
		● Director Certification Program (DCP) 80/2006			None		
		Other Training			Other organizations		
		● Chief Information Officer (CIO) (Class 3), The Office of the Civil Service Commission (OCSC) and National Science and Technology Development Agency			2010 - Present	● Secretary General to the Cabinet	● The Secretariat of the Cabinet
		● The National Defence Course (Class 45), The National Defence College			2006 - Present	● Member	● Council of State
					2004 - Present	● Member	● Bank of Thailand
					2004 - Present	● Member	● Monetary Policy Committee
					2011 - Present	● Honorary Committee	● The Council of Walailak University
					2011 - Present	● The Expert Judicial Administration Commissioner	● The Office of Judiciary
					2004-2010 and 2011-Present	● Civil Service Commissioner	● The Office of the Civil Service Commission



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">● Innovation for Economic Development (IFED), Harvard Kennedy School, U.S.A.			2004 - 2010 2004 – 2010 2006 - 2008	<ul style="list-style-type: none">● Secretary General● Committee● Member	<ul style="list-style-type: none">● The Office of National Economic and Social Development Board● The Board of Investment● The National Legislative Assembly



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. Chaikasem Nitisiri - Independent Director - Chairman of the Nominating Committee - Member of the Audit Committee	64	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Honorary Doctorate Degree of Laws, Ramkhamhaeng University Honorary Doctorate Degree of Laws, North-Chiang Mai University LL.M. Columbia University, U.S.A. Thai Barrister-at-Law LL.B. (Honours) Chulalongkorn University 			2008 - Present:	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thaioil Plc.
					2008 - 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Plc.
					2007 - 2010	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thai Airways International Plc.
					Other companies		
					None		
					Other organizations		
		Training of Thai Institute of Directors Association			2012 - Present	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> The Securities and Exchange Commission
		<ul style="list-style-type: none"> Directors Certification Program (DCP) Class 8/2001 The Role of the Chairman Program (RCP) Class 16/2007 Financial Statements for Directors (FSD) Class 5/2009 			2012 - Present	<ul style="list-style-type: none"> Chairman of the Executive Board 	<ul style="list-style-type: none"> Thailand Institute of Justice (Public Organization)
					2009 - Present	<ul style="list-style-type: none"> Senior Public Prosecutor (Advisor to the Attorney General) 	<ul style="list-style-type: none"> Office of the Attorney General



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			2008 - Present	● Director, Executive Board Chairman	● Government Housing Bank
		● Certificate in International Procurement, Georgetown University, U.S.A.			2007 - Present	● Member	● Nation University Board
		● The National Defence Course Class 38, The National Defence College			2006 - Present	● Member	● Saint John University Board
		● Certificate, Politics and Governance in Democratic Systems for Executives Course Class 9/2006, King Prajadhipok's Institute			2003 - Present	● Member	● Council of State Committee
		● Capital Market Academy Leader Program Class 5/2007, Capital Market Academy			2007 - 2009	● Attorney General	● Office of the Attorney General
		● Public Director Certification Program, Class 6, Public Director Institute (PDI)			2003 - 2007	● Deputy Attorney General	● Office of the Attorney General



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) General Pornchai Kranlert - Vice Chairman of the Independent Director - Chairman of the Corporate Governance Committee - Member of the Nominating Committee - Member of the Remuneration Committee	61	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Public Administration, National Institute of Development Administration Bachelor of Political Science, Ramkhamhaeng University 			2005 – 2006	● Director	● IRPC Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Director Certification Program (DCP) 161/2012 Role of the Nomination and Governance Committee (RNG) 3/2012 			2012 - Present	● Director	● Mah Boon Krong 888, Co., Ltd.
		Other Training			2012 - Present	● Director	● Mah Boon Krong Dairy Goats, Co., Ltd.
		<ul style="list-style-type: none"> The National Defence Course (Class 44), The National Defence College Capital Market Academy (Class 8) Thai Intelligent Investors (Class 1) 			2012 - Present	● Director	● Mah Boon Krong Food Co., Ltd.
					2011 - Present	● Director	● APT Bearing Parking Co., Ltd.
					2011 - Present	● Director	● APT Bearing Place Co., Ltd.
					2011 - Present	● Director	● APT Bearing Mall Co., Ltd.
					Other organizations		
					2007 – 2011	● Special Advisor	● Office of the Permanent Secretary for Defence
					2006 – 2007	● Deputy of Chief of Staff	● Royal Thai Armed Forces Headquarters



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. Prajya Phinyawat - Director with Authorized Signature - Chairman of the Risk Management Committee	61	Education	15,000 Shares (0.0004%)	None	Other listed companies		
		<ul style="list-style-type: none"> Ph.D. (Civil Engineering), University of Texas at Austin, U.S.A. M.S. (Civil Engineering), Stanford University, U.S.A. B.E. (Civil Engineering), Chulalongkorn University 			2011 - Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Global Chemical Plc.
					2008 – 2011	<ul style="list-style-type: none"> Chief Operating Officer, Downstream Petroleum Business Group 	<ul style="list-style-type: none"> PTT Plc.
					2008 - 2011	<ul style="list-style-type: none"> Senior Executive Vice President, Oil Business Unit 	<ul style="list-style-type: none"> PTT Plc.
		Training of Thai Institute of Directors Association			2004 - 2007	<ul style="list-style-type: none"> Senior Executive Vice President, Petrochemicals & Refining Business Group 	<ul style="list-style-type: none"> PTT Plc.
		<ul style="list-style-type: none"> Director Certification Program (DCP) 14/2002 			2007 - 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Aromatics and Refining Plc.
		Other Training			2006 - 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> IRPC Plc.
		<ul style="list-style-type: none"> The Joint State - Private Sector Course, National Defense College, (Class 15) Certificate of Leadership Program (Class 7), Capital Market Academy 			2005 - 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Chemical Plc.
					2009 - 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thaioil Plc.
					Other companies		
					2011 - Present	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> PTT Asahi Chemical Co., Ltd
					2005 - Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Bangkok Polyethylene Plc.
					2004 - Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thai Lube Base Plc.



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationshi p among Executives	Working experiences in the 5 preceding years		
					Period	Position	Function/Company/Type of Business
		<ul style="list-style-type: none">● Certificate of Energy Literacy for a Sustainable Future Program, Class 1/2012, Thailand Energy Academy			2006 - 2012 2004 - 2012	<ul style="list-style-type: none">● Director● Chairman	<ul style="list-style-type: none">● Thai Paraxylene Co., Ltd.● PTT Polyethylene 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
(6) General Lertrat Ratanavanich - Independent Director - Chairman of the Independent Director Committee - Chairman of the Remuneration Committee - Member of the Audit Committee	65	Education	None	None	Other listed companies		
		<ul style="list-style-type: none">● MSSM, University of Southern California, USA.● SMCE, Massachusetts Institute of Technology, USA.● BSCE, The Citadel, USA.			None		
					Other companies		
					None		
					Other organizations		
					2012 - Present	● Chairman	● Thailand Professional Qualification Institute (Public Organization)
		2005 - Present			● Justice	● The highest judicial court-martial member	
		2009 - 2011			● Vice Chairman (2)	● The Senate Affairs Committee	
		2009 - 2011			● Director and Chairman	● Subcommittee Study on Constitution Amendments and Other Related Laws, in Solidarity Committee for Political Reform and Study of the Constitution Amendments, the National Assembly	
		2008 - 2011			● Senator, Chairman	● The Senate Committee on Energy	
	<ul style="list-style-type: none">● Director Certification Program● The Role of Chairman Program● Finance for Non-Finance Director● Financial Statements for Directors (FSD) 13/2011● Directors Forum 1/2011● Role of the Compensation Committee (RCC) 13/2011						



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
		Other Training			2008 - 2011	● Member	● King Prajadhipok's Institute Council
		<ul style="list-style-type: none">● Top Executive Program for Commerce and Trade (TEPCOT 4), University of Thai Chamber of Commerce● Training Course on Administrative Justice for Executives● Executive Program (Class 4), Capital Market Academy● National Defense College, Class 5● National Security and International Security, Harvard University, USA● Senior Managers in Government, Harvard University, USA			2007 - 2008	● Director	● Industrial Estate 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
(7) Mr. Pichai Chunhavajira - Independent Director	63	Education	None	None	Other listed companies		
		<ul style="list-style-type: none">● Doctor of Philosophy (Honorable Financial Management), Mahasarakham University● Honorary Degree Doctor of Philosophy (Accounting), Thammasat University● Master of Business Administration in Finance, Indiana University of Pennsylvania, U.S.A.● Bachelor of Accounting, Thammasat University			May 2012 - Present	● Chairman	● Bangchak Petroleum Plc.
					Feb. – Apr. 2012	● Vice Chairman	● Thailoil Plc.
					2010 - Feb. 2012	● Chairman	● Thailoil Plc.
					2009 - 2011	● Director	● PTT Plc.
					1998 - 2011	● Director	● Bangchak Petroleum Plc.
					2005 - 2011	● Director	● Thai Airways International Plc.
					2009 - 2011	● Director	● IRPC Plc.
					2006 - 2010	● Director	● Thailoil Plc.
					2005 - 2009	● Director	● PTT Chemical Plc.
					1996 - 2009	● Director	● Dhipaya Insurance Plc.
		Training of Thai Institute of Directors Association					
		<ul style="list-style-type: none">● Director Accreditation Program (DAP) 49/2005● Director Certification Program (DCP) 143/2011			2007 - 2009	● Director	● PTT Aromatics and Refining Plc.
					2003 - 2008	● Director	● Siam Commercial Bank Plc.
					Other companies		
					2011 - Present	● Chairman	● Thailoil Marine Co., Ltd.
2011 - Present	● Chairman		● TOP Maritime Service Co., Ltd.				
2004 - Present	● Director		● Thai Lube Base Plc.				
2008 - 2012	● Chairman	● Thailoil Ethanol Co.,Ltd.					
2000 - 2011	● Director	● Thailoil Power Co.,Ltd.					
2000 - 2009	● Chairman	● Thai Petroleum Pipeline 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
		Other Training			Other organizations		
		<ul style="list-style-type: none"> Capital Market Academy Leadership Program (Class 5), Capital Market Academy The Joint State-Private Sector Regular Course, The National Defense College (Class 13) 			2011 – Present	<ul style="list-style-type: none"> President, Committee of Investment 	<ul style="list-style-type: none"> Social Security Fund
					2011 – Present	<ul style="list-style-type: none"> Director and Chairman of the Board of Executive Director 	<ul style="list-style-type: none"> Small and Medium Enterprise Development Bank of Thailand
					2011 - Present	<ul style="list-style-type: none"> President 	<ul style="list-style-type: none"> Thammasat Association
					June 2011 - Present	<ul style="list-style-type: none"> President 	<ul style="list-style-type: none"> Federation of Accounting Professions
					2011 - Present	<ul style="list-style-type: none"> University Council Member 	<ul style="list-style-type: none"> Thammasat University
					2008 - Present	<ul style="list-style-type: none"> University Council Member 	<ul style="list-style-type: none"> Assumption University Council
					2005 – June 2011	<ul style="list-style-type: none"> Vice President and Chairman 	<ul style="list-style-type: none"> The Managerial Accounting Committee, Federation of Accounting Professions
					2003 - 2009	<ul style="list-style-type: none"> President, Committee of Investment 	<ul style="list-style-type: none"> 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
(8) Mr. Viraphol Jirapraditkul - Director with Authorized Signature - Member of the Risk Management Committee	57	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Economics in Energy Economics, University of Calgary, Canada 			None		
		<ul style="list-style-type: none"> Master of Economics in Development Economics, National Institute of Development Administration 			Other companies		
		<ul style="list-style-type: none"> Bachelor of Economics, Thammasat University 			May 2012 - Present	<ul style="list-style-type: none"> Board Member 	<ul style="list-style-type: none"> National Power Supply Plc.
		Training of Thai Institute of Directors Association			Other organizations		
		<ul style="list-style-type: none"> Director Certification Program (DCP) 116 /2009 			2011 - present	<ul style="list-style-type: none"> Director General 	<ul style="list-style-type: none"> Department of Energy Business
		<ul style="list-style-type: none"> Role of the Nomination and Governance Committee (RNG) 1/2011 			2008 - Present	<ul style="list-style-type: none"> Board Member 	<ul style="list-style-type: none"> Ramkhamhaeng University Council
		Other Training			2006 – Mar. 2011	<ul style="list-style-type: none"> Director General 	<ul style="list-style-type: none"> Energy Policy and Planning Office, Ministry of Energy
		<ul style="list-style-type: none"> Senior Executive Service Program (Class 1), Office of the Civil Service Commission 			2007 – 2011	<ul style="list-style-type: none"> Board Member 	<ul style="list-style-type: none"> Electrical and Electronics Institute
					2007 – 2011	<ul style="list-style-type: none"> Board Member 	<ul style="list-style-type: none"> The Energy Fund Administration Institute



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">● Program for Chief Information Officer, Office of the Civil Service Commission and National Electronics and Computer Technology Center● National Defense College 2007● Senior Executive Justice Governing Officer Course, Class 3					



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. Tevin Vongvanich - President and Chief Executive Officer - Director with Authorized Signature - Member of the Risk Management Committee	54	Education	90,280 Shares (0.0023%)	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Sciences (Petroleum Engineering), University of Houston, U.S.A. Master of Sciences (Chemical Engineering), Rice University, U.S.A. Bachelor of Engineering (Chemical Engineering), Chulalongkorn University 			2009–Apr. 2012	● CFO	● PTT Plc.
					2010– Apr. 2012	● Director	● Thaioil Plc.
					2009 - 2011	● Director	● PTT Chemical Plc.
					2009 - 2011	● Director	● PTT Aromatics and Refining Plc.
					2009 - 2010	● Director	● Bangkok Aviation Fuel Services Plc.
					2007 - 2010	● Director	● Bangchak Petroleum Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Director Certification Program (DCP) 21/2002 Financial Statements for Directors (FSD) 6/2009 Role of the Compensation Committee (RCC) 12/2011 Role of the Nomination and Governance Committee (RNG) 3/2011 			2009 - 2011	● Chairman	● PTT ICT Solutions Co., Ltd.
					2008 - 2011	● Director	● PTT International Co., Ltd.
		Other Training			Other organizations		
		<ul style="list-style-type: none"> Senior Executive Program (S.E.P. 7), Sasin Graduate Institution of Business Administration of Chulalongkorn University 			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
(10) Mr. Chakkrit Parapuntakul - Director with Authorized Signature	53	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Business Administration, Angelo State University, Texas, U.S.A. Bachelor of Accounting, Thammasat University 			2012 – Present	<ul style="list-style-type: none"> Chairman of the Board of Directors 	<ul style="list-style-type: none"> ASEAN Potash Mining Plc.
					2008 – Present	<ul style="list-style-type: none"> Advisor to the Audit Committee 	<ul style="list-style-type: none"> Eastern Water Resources Development and Management Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Director Accreditation Program (DAP), 8/2004 Audit Committee Program (ACP), 5/2005 			2010 - 2011	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> Thailand Post Co., Ltd.
		Other Training			Other organizations		
		<ul style="list-style-type: none"> Capital Market Academy Leadership Program (Class 11), Capital Market Academy National Defense College (Class 52) Program for Chief Information Officer (Class 46), Office of the Civil Service Commission Executive Development Program (EDP) Class 66, Kellogg School of Management, Chicago, U.S.A. 			Oct. 2012 - Present	<ul style="list-style-type: none"> Deputy Permanent Secretary 	<ul style="list-style-type: none"> The Ministry of Finance
					2009 – Oct. 2012	<ul style="list-style-type: none"> Director General 	<ul style="list-style-type: none"> Public Debt Management Office
					2008 - 2009	<ul style="list-style-type: none"> Deputy Director-General 	<ul style="list-style-type: none"> Public Debt Management Office
					2002 - 2008	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> International Finance Bureau, Public Debt Management Office



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 with Authorized Signature - Member of the Nominating Committee	57	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Doctor of Philosophy (Sustainable Energy and Environment), Rattanakosin College for Sustainable Energy and Environment, Rajamangala University of Technology Rattanakosin 			2011 - Present	<ul style="list-style-type: none"> ● President and Chief Executive Officer 	<ul style="list-style-type: none"> ● PTT Plc.
		<ul style="list-style-type: none"> ● Ph.D. of Engineering (Chemical Engineering), Tokyo Institution of Technology, Japan 			2009 - Present	<ul style="list-style-type: none"> ● Director and Secretary to the Board 	<ul style="list-style-type: none"> ● IRPC Plc.
		<ul style="list-style-type: none"> ● Master of Engineering (Chemical Engineering), Tokyo Institution of Technology, Japan 			June - Sep. 2011	<ul style="list-style-type: none"> ● Chief Operations Officer, Upstream Petroleum and Gas Business Group, Acting Chief Executive Officer 	<ul style="list-style-type: none"> ● IRPC Plc.
		<ul style="list-style-type: none"> ● Bachelor of Engineering (Chemical Engineering) (Hons.), Chulalongkorn University 			2009 – May 2011	<ul style="list-style-type: none"> ● Senior Executive Vice President, PTT, working as Chief Executive Officer 	<ul style="list-style-type: none"> ● IRPC 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
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Director Certification Program (DCP) 51/2004 Director Accreditation Program (DAP) 24/2004 Finance for Non-Finance Director (FND) 14/2004 			May - Sep. 2011	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> PTT Asahi Chemical Co., Ltd.
					2006 – May 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Asahi Chemical Co., Ltd.
					2008 - 2009	<ul style="list-style-type: none"> Senior Executive Vice President, Petrochemicals & Refining Business Unit, PTT, working as President 	<ul style="list-style-type: none"> PTT Asahi Chemical Co., Ltd.
		Other Training					
		<ul style="list-style-type: none"> PTT Executive Leadership Program, GE Crotonville, U.S.A. NIDA Executive Leadership Program 2007, Wharton University of Pennsylvania, U.S.A. Industrial Liaison Program (ILP) 2005, Massachusetts Institute of Technology, U.S.A. Top Executive Program in Commerce and Trade (TEPCOT) Year 1, University of the Thai Chamber of Commerce 			2006 - 2008	<ul style="list-style-type: none"> Executive Vice President, Petrochemicals & Refining Business Unit, PTT, working as President 	<ul style="list-style-type: none"> PTT Asahi Chemical Co., Ltd.
					June–Sep. 2011	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> PTT Polymer Marketing 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
		Other Training			2009 – June 2011	● Director,	● PTT Polymer Marketing Co., Ltd.
		<ul style="list-style-type: none">● Capital Market Academy Leadership Program (Class 8), Capital Market Academy● The Joint State - Private Sector Course, National Defense College, (Class 22)● The 7th “Corporate Governance for Directors and Top Executives of State Enterprises and Public Organizations”, Year 2011 King Prajadhipok's Institute● Energy Literacy for a Sustainable Future, Class 1/2012, Thailand Energy Academy			2008 - 2009	● Senior Executive Vice President, Petrochemicals & Refining Business Unit, PTT, working as President	● PTT Polymer Marketing Co., Ltd.
		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 - Member of the Corporate Governance Committee - Member of the Risk Management Committee	64	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> M.S. (Financial Management), North Carolina State University, U.S.A. B.A. (Economics), North Carolina State University, U.S.A. 			2010 - 2011	● Director	● TOT Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Director Certification Program (DCP) 84/2007 The Role of Chairman (RCP) 23/2010 Audit Committee Program (ACP) 22/2008 Role of the Nomination and Governance Committee (RNG) 2/2011 Monitoring Fraud Risk Management (MFM) 8/2012 Monitoring the System of Internal Control and Risk Management (MIR) 13/2012 The Board's Role in Mergers and Acquisitions (M&A) 2/2012 Board Performance Review Course (BPR) 1/2012 IOD National Director Conference 2012 			2009 - 2010	● Director	● ACT Mobile Co., Ltd.
					Other organizations		
					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) Mr. Manas Jamveha - Director with Authorized Signature	56	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Business Administration, Sukhothai Thammathirat Open University Master of Political Science, Thammasat University Bachelor of Law, Thammasat University 			None		
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Directors Certification Program (DCP) 71/2008 Audit Committee Program (ACP 41/2012) 			None		
		Other Training			Other organizations		
		<ul style="list-style-type: none"> Certificate on National Defense (Class 50) Certificate from Public Director Institute (PDI 1) Certificate on Top Executive Political Top Executive Program Executive Development Program, Kellogg School of Management, Northwestern University, U.S.A. Middle Management Professional, Revenue, Canada 			Oct. 2012 - Present	<ul style="list-style-type: none"> Comptroller General 	<ul style="list-style-type: none"> Comptroller General's Department
					2011- Oct. 2012	<ul style="list-style-type: none"> Deputy Permanent Secretary 	<ul style="list-style-type: none"> Ministry of Finance
					2010 - 2011	<ul style="list-style-type: none"> Inspector General 	<ul style="list-style-type: none"> Ministry of Finance
					2008 - 2010	<ul style="list-style-type: none"> Advisor on Fiscal System Development 	<ul style="list-style-type: none"> Comptroller General's Department
					2005 - 2008	<ul style="list-style-type: none"> Deputy Comptroller General 	<ul style="list-style-type: none"> Comptroller General's Department



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. Wichai Pornkeratiwat - Director with Authorized Signature - Member of the Remuneration Committee	59	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master's in Public Administration, National Institute Development Administration (NIDA) Bachelor's in Engineering (Electrical Engineering), Khon Kaen University 			2011 - Present	<ul style="list-style-type: none"> Chief Operating Officer, Upstream Petroleum and Gas Business Group 	<ul style="list-style-type: none"> PTT Plc.
		Training of Thai Institute of Directors Association			2011 - Present	<ul style="list-style-type: none"> Director, Executive Director, Member of the Corporate Governance Committee and Member of the Nomination and Remuneration Committee 	<ul style="list-style-type: none"> IRPC Plc.
		<ul style="list-style-type: none"> Asean Executive Program (AEP), GE Management Development Institute Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration NIDA Wharton Executive Leaders Program, The Wharton School, University of Pennsylvania 			Mar.-Nov. 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT Exploration and Production Plc.
					2010 - 2011	<ul style="list-style-type: none"> Senior Executive Vice President, Gas Business Unit 	<ul style="list-style-type: none"> PTT 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 listed companies		
					2009 – 2010	● Executive Vice President, Natural Gas Vehicle	● PTT Plc.
					2002 - 2008	● Executive Vice President, Project Management, Exploration, Production and Gas Business Group	● PTT Plc.
					Other companies		
					2011 - 2012	● Chairman	● PTTLNG Co., Ltd.
					2010 - 2012	● Director	● PTTLNG Co., Ltd.
					2008 - 2009	● Acting Managing Director	● PTTLNG Co., Ltd.
					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
(15) Mr. Achporn Charuchinda - Independent Director - Member of the Corporate Governance Committee	59	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> L.L.B. Faculty of Law, Thammasat University Thai Barrister-at-Law 			2012 – Present	<ul style="list-style-type: none"> Member of the Legal Committee 	<ul style="list-style-type: none"> Thai Airways International Plc.
		Training of Thai Institute of Directors Association			Other companies		
		None			2001 – 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Sukhumvit Asset Management Co., Ltd.
		Other Training			2012	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thailand Post Co., Ltd.
		<ul style="list-style-type: none"> Law Drafting Certificate, India Certificate, National Defense College of Thailand (Class 46) 			Other organizations		
					2010 – Present	<ul style="list-style-type: none"> Secretary-General of the Office of the Council of state 	<ul style="list-style-type: none"> The Office of the Council of State
					2003 – Present	<ul style="list-style-type: none"> Member of the Council of State 	<ul style="list-style-type: none"> The Office of the Council of State
					2007 – Present	<ul style="list-style-type: none"> Chairman of the Audit Committee for the Financial Institutions Development Fund 	<ul style="list-style-type: none"> The Bank 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
					2007 – Present	● Member of the Financial Institutions Development Fund	● The Bank of Thailand
					2011 – Present	● Member of the Institutions Policy Committee	● The Bank of Thailand
					2012 – Present	● Member of the Board of Directors	● The Metropolitan Waterworks Authority
					2011 – Present	● Member of the National Energy Policy Council	● Energy Policy and Planning Office, Ministry of Energy
					2010 – Present	● Member	● The Government Pension Fund
					2011 – Present	● Member of the National Water and Flood Management Committee	● The Office of the National Water and Flood Management Policy



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
					2010 – Present	● Member of the Administrative Courts Officials Commission	● The Office of the Administrative Courts
					2011 – Present	● Member of the Office of the Civil Service and Educational Personnel Commission	● The Office of the Civil Service and Educational Personnel Commission, Ministry of Education
					2010 – Present	● Member of the Decentralization to Local Government Organization Committee	● The Office of the Permanent Secretary, The Prime Minister's Office
					2000 – 2011	● Director	● Bank for Agriculture and Agricultural Cooperatives



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
					2010 – Present	● Board Member	● The Energy Conservation Promotion Fund
					2008 – 2010	● Executive Director	● Siam City Bank
					2008 – 2010	● Director	● Siam City Bank



Director who retired in year 2012

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. Krairit Euchukanonchai	57	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> MBA (Banking and Finance), North Texas State University, U.S.A. Bachelor of Science, Chulalongkorn University 			2011 - Apr. 2012	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT P Plc.
					2001 - 2011	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Siam Commercial New York Life Insurance Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> Director Certification Program (DCP) 59/2005 			2006 - Present	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> Krung Thai Asset Management Plc.
					2000 - Present	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> V.Group Honda Cars Co., Ltd.
					Other organizations		
					2009 – 2011	<ul style="list-style-type: none"> Chairman 	<ul style="list-style-type: none"> Wastewater Management Authority, Ministry of Natural Resources and Environment



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. Anon Sirisaengtaksin	60	Education	126,752 Shares (0.0032%)	None	Other listed companies		
		<ul style="list-style-type: none"> The Honorary Degree of Doctor of Public Administration, Bangkokthonburi University Master of Business Administration, Thammasat University Bachelor of Sciences, (Geology) Chulalongkorn University 			May 2012 - Present	<ul style="list-style-type: none"> Director and Secretary to the Board of Directors Chief Executive Officer 	<ul style="list-style-type: none"> PTT Global Chemical Plc.
		Training of Thai Institute of Directors Association			2008 - May 2012	<ul style="list-style-type: none"> Senior Executive Vice President seconded to PTTEP 	<ul style="list-style-type: none"> PTT Plc.
		<ul style="list-style-type: none"> Director Accreditation Program (DAP) 52/2006 Director Certification Program (DCP) 73/2006 			2004 - 2009	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Bangkok Polyethylene Plc.
		Other Training			2004 - 2009	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thai Lube Base Plc.
		<ul style="list-style-type: none"> Certificates in Project Investment Appraisal and Management, Global Leadership, Harvard University, U.S.A. 			2002 - 2008	<ul style="list-style-type: none"> Senior Executive Vice President Corporate Strategy and Development 	<ul style="list-style-type: none"> PTT Plc.
					Other companies		
					2010 - Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTTEP FLNG Holding Co., Ltd.
					2010 - Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> PTT FLNG Ltd.
					2009 - Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Bangkok Commercial Asset Management 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
		<ul style="list-style-type: none"> Capital Market Academy Leadership Program, Class 1, Capital Market Academy 			2006 - 2009	● Chairman	● PTT ICT Solutions Co., Ltd.
					2006 - 2009	● Director	● HMC Polymers Co., Ltd.
					2006 - 2009	● Director	● Thai Paraxylene Co. ,Ltd.
					2005 - 2009	● Director	● Independent Power (Thailand) Co., Ltd.
					Other organizations		
					2008 – Present	● Council Committee	● King Mongkut's Institute of Technology Ladkrabang



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	64	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Business Administration, Long Island University, New York, U.S.A. Bachelor of Business Administration, University of the East, Philippines 			Feb. – Nov. 2011	● Director	● PTT Plc.
					2004 - Present	● Director,	● Thai Lube Base Plc.
					2008 - 2011	● Director	● PTT Aromatics and Refining Plc.
					2008 - 2011	● Director	● IRPC Plc.
					Other companies		
					None		
		Training of Thai Institute of Directors Association			Other organizations		
		<ul style="list-style-type: none"> Audit Committee Program (ACP) 4/2005 Director Certification Program (DCP) 27/2003 Finance for Non-Finance Director (FND) 5/2003 DCP Refresher 1/2005 			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	Period	Period
(4) Mr. Vorapak Tanyawong	48	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> Master of Finance, University of Missouri, Kansas City Bachelor of Management Science And Computer System, Oklahoma State University, Stillwater 			Nov. 2012 - Present	<ul style="list-style-type: none"> President, Executive Director and Member of Risk Management Committee 	<ul style="list-style-type: none"> Krungthai Bank Plc.
		Training of Thai Institute of Directors Association			May – Nov. 2012 2010 – 2012 2009 – 2010	<ul style="list-style-type: none"> Director Director Senior Executive Vice President 	<ul style="list-style-type: none"> Padaeng Industry Pcl. Finansa Pcl. Siam Commercial Bank Pcl.
		<ul style="list-style-type: none"> Director Certification Program (DCP) 152/2011 			Other companies		
					Mar. – Nov. 2012 2010 - 2012 2010 - 2012 2004 - 2009	<ul style="list-style-type: none"> Chairman and Chief Executive Officer Director Chairman and Chief Executive Officer Senior Country Officer and Head of Investment Banking 	<ul style="list-style-type: none"> Finansa Capital Ltd. Finansa Capital Ltd. Finansa Securities Ltd. JPMorgan Chase Thailand



Name/Position	Age (year)	Education/Training	% of Share holding	Family Relationship among Executives	Working experiences in the 5 preceding years		
					Period	Period	Period
					Other Organizations		
					2011 - 2012	● Director	● Energy Fund Administration Institute (Public Organization)

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 from 1 June 2012: Mr. Norkun Sittiphong, Mr. Viraphol Jirapraditkul, Mr. Chakkrit Parapuntakul, Mr. Manas Jamveha, Mr. Pailin Chuchottaworn, Mr. Prajya Phinyawat and Mr. Wichai Pornkeratiwat; two of these seven directors can sign jointly and affix the Company's seal, or Mr. Tevin Vongvanich, the Chief Executive Officer, can sign singly.



2. PTTEP Management

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. Tevin Vongvanich President and Chief Executive Officer		Please see attachment 1					
Mr. Somkiet Janmaha Executive Vice President, Geosciences, Reservoir Engineering and Exploration Group	58	M.S. (Geophysics), Stanford University, U.S.A. IOD: DCP 50(2547)	395,100 Shares (0.0100%)	None	2010 - Present 2005-2010	<ul style="list-style-type: none">Executive Vice President, Geosciences Reservoir Engineering and Exploration GroupVice President, Geosciences and Exploration Group	PTTEP PTTEP
Mr. Asdakorn Limpiti Executive Vice President, Strategy and Business Development Group	58	M.S.E. (Chemical Engineering), University of Michigan, U.S.A.	50,000 Shares Spouse: 82,000 Shares Total: 132,000 Shares (0.0033%)	None	2010-Present 2005-2010	<ul style="list-style-type: none">Executive Vice President, Strategy and Business Development GroupVice President, Strategy and Capability Development Division	PTTEP 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 (Seconded to PTT)	52	M.Sc. (Operation Research), London School of Economics and Political Science, University of London, United Kingdom	None	None	2011 – Present	● Executive Vice President, Finance and Accounting Group (Seconded to PTT)	PTTEP
					2000-2011	● Vice President, Finance and Accounting Division	PTTEP
Mr. Somporn Vongvuthipornchai Executive Vice President, International Asset Group	54	Ph.D. (Petroleum Engineering), University of Tulsa, U.S.A.	169,800 Shares	None	2010-Present	● Executive Vice President, International Assets Group	PTTEP
			Spouse: 3,500 Shares Total: 173,300 Shares (0.0044%)		2006-2010	● Vice President, International Assets	PTTEP
Mr. Suraphong Iamchula Executive Vice President, Domestic Assets Group	59	B.Sc. (Geology) Chiangmai University	100,700 Shares (0.0025%)	None	2010-Present	● Executive Vice President, Domestic Assets Group	PTTEP.
					2007-2010	● Vice President, Operations Support Division	PTTEP
Mr. Somchai Manopinives Executive Vice President, Human	58	M.S. (Petroleum Engineering), University of	85,498 Shares (0.0022%)	None	2012-Present	● Executive Vice President, Operations,	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
Operations, Supply Chain and Technology Group		Kansas, U.S.A.			2010 – 2012	Supply Chain and Technology Group ● Senior Vice President, Technology and Operations Division	PTTEP
					2009 – 2010	● Vice President, Joint Venture and Thai Onshore Assets Division	PTTEP
					2008 - 2009	● Vice President, Arthit Asset Division	PTTEP
Mr. Phongsthorn Thavisin Executive Vice President, Development and Engineering Group	53	B.Sc. (Petroleum Engineering) The Pennsylvania State University	None	None	2012-Present	● Executive Vice President, Development and Engineering Group	PTTEP
					2010-2012	● Senior Vice President, Engineering and Construction Division	PTTEP
					2009-2010	● Vice President, Production	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
					2006-2008	Development Division ● Senior Manager, Safety, Security, Health and Environment Department	PTTEP
Mr. Thiti Mekavichai Executive Vice President, Human Resources and Business Services Group	51	B.Sc. (Geography), Srinakarinvirot (Prasarnmitr) University	8,000 Shares (0.0002%)	None	2012-Present	● Executive Vice President, Human Resources and Business Services Group	PTTEP
					2011-2012	● Senior Vice President, Human Resources Division	PTTEP
Ms. Penchun Jarikasem Executive Vice President, Finance and Accounting Group	57	M.Sc.(Business Administration), Thammasart University	6,000 Shares (0.0002%)	None	2011-Present	● Executive Vice President, Finance and Accounting Group	PTTEP
					2006-2011	● Executive Vice President, Corporate Finance	PTT



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. Yongyos Krongphanich Senior Vice President, Finance and Strategic Information Technology Division	52	M.Sc.(Accounting), Thammasart University	69,500 Shares (0.0018%)	None	2013-Present	● Senior Vice President, Finance and Strategic Information Technology Division	PTTEP
					2011-2012	● Senior Vice President, Accounting Division	PTTEP
					2010-2011	● Vice President, Joint Venture Myanmar Asset	PTTEP
					2009-2010	● Senior Manager, Joint Venture Projects	PTTEP
					2005-2009	● Senior Manager, Seconded to Carigali- PTTEPI Operating Company SDN. BHD. (CPOC), Malaysia	PTTEP
Ms. Pornthip Uyakul Senior Vice President, Accounting Division	59	M.Sc. (Accounting), Thammasart University		None	2013-Present	● Senior Vice President, Accounting Division	PTTEP
					2010-2012	● Senior Vice President, Accounting Division, Supply Chain	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
					2006-2010	Management Division ● Senior Manager, Procurement Department	PTTEP
Ms. Chanamas Sasnanand Vice President, Finance Department	43	M.Sc.(Business Administration), University of South Carolina	10,500 Shares (0.0003%)	None	2010-Present	● 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	47	M.Sc.(Financial Accounting), Thammasart University	79,205 Shares (0.0020%)	None	2010-Present	● Vice President, Corporate Accounting Department	PTTEP
					2008-2010	● Manager, Corporate Accounting Department	PTTEP
					2007-2008	● Manager, Project Accounting Department	PTTEP



Attachment 2: Directors of Subsidiaries and Associated Companies

1. Subsidiary: as of 31 December 2012, there are 59 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 Soponpongpiat	/													
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 Soponpongpiat													/	
18.	Mr. Kanok Intharawijitr													/	
19.	Mr. Phongsthor Thavisin														/
20.	Mr. Nobuo Ichii					/									
21.	Mr. Minoru Fukuda					/									

Remarks 1. / : Director X : Chairman /// : Executive Director



No.	Name	Subsidiaries													
		PTTEP OM	PTTEP IH	PTTEP SA	PTTEP ID	PTTEP AI	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. Surachai Tanasomboonkit								/						
14.	Mr. Khajohn Bhasavanija									/	/				
15.	Mr. Chumpol Rojanachan										/				
16.	Mr. Piya Sukhumpanumet											/	/		
17.	Mr. Suraphong Iamchula												/		
18.	Mr. Somporn Vongvuthipornchai													/	
19.	Mr. Asdakorn Limpiti													/	
20.	Mr. Phongsthom Thavisin													/	
21.	Mr. Anun Chonchawalit														/
22.	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											/		

Remarks

1. / : Director

X : Chairman

/// : Executive Director



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. Theerasak Tancharoenlarp	/	/	/	/	/	/	/	/	/	/	/	/	/
4.	Mr. Ken Fitzpatrick	/	/	/	/	/	/	/	/	/	/	/	/	/
5.	Ms. Penchun Jarikasem							x						

No.	Director	Subsidiaries												
		Cove	CEEAL	CEMROL	CEMROF	CEKL	CMTL	CMEL						
1.	Mr. Anun Chonchawalit	/				/	/	/						
2.	Mr. Direk Wangudomsuk	/	/	/	/	/	/							
3.	Mr. Michael Nolan	/												
4.	Ms. Annie Yeap		/	/	/									
5.	Ms. Eleni Theodorou Argyrou		/	/	/									

Remarks

1. / : Director

X : Chairman

/// : Executive Director



2. Associated Company: as of 31 December 2012, there are 17 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. Thiti	Mekavichai	/										
5.	Mr. Suraphong	Iamchula					/						/
6.	Mr. Kanok	Intharawijitr				/							
7.	Ms. Natruedee	Khositaphai				/*							
8.	Mr. Prisdapunt	Pojanapreecha					/						
9.	Mr. Andy	Jacob						/	/				
10.	Mr. Gavin	Ryan						/	/				
11.	Mr. Piya	Sukhumpanumet		/						/**			/
12.	Mr. Anon	Sirisaengtaksin									/		
13.	Mr. Phongsthorn	Thavisin									/		
14.	Mr. Yothin	Tongpenyai										/	
15.	Mr. Piroj	Samutthananont										/	
16.	Mr. Pairoj	Rangponsumrit					/						

* 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 Soponpongpiat as Member, with Mr. Surachai Tanasomboonkit as Alternate Member.

(3) GBRS is governed by MC, of which PTTEP's representative is Mr. Prapat Soponpongpiat as Member, with Mr. Owat 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, 2012

The total Proved Reserves of PTT Exploration and Production Public Company Limited (PTTEP) and its Subsidiaries as of December 31, 2012 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, 2012 of PTTEP and its Subsidiaries are 263 Million Stock Tank Barrels (MMSTB) for crude and condensate¹, and 4,182 Billion Standard Cubic Feet (BSCF) for gas. The total Proved Reserves (Consolidated Companies) in term of oil equivalent are 901 Million Barrels (MMBOE), of which approximately 45 percent of the total Proved Reserves is Proved Developed Reserves. Proved Reserves of crude and condensate are approximately 29% while, for gas, are 71% of the total Proved Reserves in terms of oil equivalent.

The total production in 2012 (Consolidated Companies) was 115.0 MMBOE (36 MMSTB of crude and condensate¹, and 497 BSCF of gas) or the production rate of approximately 313,293 Barrels of Oil Equivalent per Day (BOED). The increase was approximately 11,926 BOED or 3.96% higher than that of last year. The production increase was attributed to the increase in production of Bongkot, Vietnam 16-1, and S1 projects.

¹ Included the proved reserves and production of LPG and Bitumen



	Proved Reserves of Crude and Condensate ^{(1) (2)}			Proved Reserves of Natural Gas ⁽¹⁾			Proved Reserves of Crude, Condensate and Natural Gas ^{(1) (2)} Barrel of Oil Equivalent		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic ⁽²⁾	Foreign	Total
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	6	-	6	27	-	27	11	-	11
3) Extensions and discoveries	5	36	41	128	-	128	26	36	62
4) Purchases/Sales of Petroleum in Place	-	21	21	-	(195)	(195)	-	(10)	(10)
5) Production	(25)	(5)	(30)	(381)	(120)	(501)	(88)	(22)	(110)
Total consolidation companies									
As of December 31, 2011	131	144	275	2,542	1,987	4,529	541	428	969
Company's share of reserves of consolidated companies									
As of December 31, 2011	131	144	275	2,542	1,987	4,529	541	428	969
1) Revision of previous estimates	12	1	13	120	(18)	102	33	(5)	28
2) Improved recovery	7	-	7	11	-	11	9	-	9
3) Extensions and discoveries	2	2	4	35	2	37	7	3	10
4) Purchases/Sales of Petroleum in Place	-	-	-	-	-	-	-	-	-
5) Production	(27)	(9)	(36)	(378)	(119)	(497)	(89)	(26)	(115)
Total consolidation companies									
As of December 31, 2012	125	138	263	2,330	1,852	4,182	501	400	901

(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)	2012	2011
Proved properties	17,220	14,458
Unproved properties	3,180	1,107
Accrued decommissioning costs	1,032	695
Support equipment and facilities	<u>170</u>	<u>153</u>
Gross capitalized costs	21,602	16,413
Accumulated depreciation, depletion, amortization and impairment	<u>(7,548)</u>	<u>(6,089)</u>
Net capitalized costs	<u>14,054</u>	<u>10,324</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)	2012			2011		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	188	-	188	-	1	1
- Unproved	-	2,039	2,039	-	704	704
Exploration costs ⁽¹⁾	182	321	503	144	309	453
Development costs	<u>979</u>	<u>1,352</u>	<u>2,331</u>	<u>989</u>	<u>2,773</u>	<u>3,762</u>
Total	<u>1,349</u>	<u>3,712</u>	<u>5,061</u>	<u>1,133</u>	<u>3,787</u>	<u>4,920</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 2012 and 2011 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)	2012			2011		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Gross revenues :						
Sales – Related parties	4,787	545	5,332	4,185	412	4,597
Sales – Third parties	425	933	1,358	391	452	843
Total Sales	5,212	1,478	6,690	4,576	864	5,440
Expenses :						
Operating expenses	372	333	705	407	216	623
Exploration expenses	60	153	213	30	187	217
General administrative expenses	76	99	175	77	66	143
Petroleum royalties and remuneration	670	118	788	574	72	646
Depreciation, depletion and amortization	1,040	323	1,363	897	210	1,107
Loss from Montara Incident	-	1	1	-	5	5
Other (income)/ expenses	(26)	(128)	(154)	4	(185)	(181)
Total expenses	2,192	899	3,091	1,989	571	2,560



(Unit: Million US Dollar)	2012			2011		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Results before income taxes	3,020	579	3,599	2,587	293	2,880
Income tax expenses (benefit)	<u>1,136</u>	<u>322</u>	<u>1,458</u>	<u>1,058</u>	<u>100</u>	<u>1,158</u>
Net results of operations	<u>1,884</u>	<u>257</u>	<u>2,141</u>	<u>1,529</u>	<u>193</u>	<u>1,722</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	
	2012	2011	2012	2011	2012	2011
Future cash inflows	24,056	23,196	23,258	21,038	47,314	44,234
Future production costs	(2,990)	(2,649)	(6,323)	(4,816)	(9,313)	(7,465)
Future development costs	(5,333)	(6,233)	(2,825)	(3,070)	(8,158)	(9,303)
Future income tax expenses	<u>(4,777)</u>	<u>(4,351)</u>	<u>(2,732)</u>	<u>(2,796)</u>	<u>(7,509)</u>	<u>(7,147)</u>
Future net cash flows	10,956	9,963	11,378	10,356	22,334	20,319
10% annual discount	<u>(2,883)</u>	<u>(2,793)</u>	<u>(5,014)</u>	<u>(4,727)</u>	<u>(7,897)</u>	<u>(7,520)</u>
Standardized measure of discounted future net cash flows (SMDCF)	<u>8,073</u>	<u>7,170</u>	<u>6,364</u>	<u>5,629</u>	<u>14,437</u>	<u>12,799</u>



Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Million US\$)	2012	2011
Present value at beginning of year	12,799	10,381
Sales and transfers of oil and gas produced, net of production costs	(5,331)	(4,100)
Development costs incurred during the period	2,509	1,880
Net changes in prices and production costs	4,628	8,970
Net changes in development costs	(948)	(2,902)
Extensions, discoveries and improved recovery	643	1,474
Revisions of previous quantity estimates	878	(454)
Purchases / sales of petroleum in place	-	(565)
Accretions of discount	(378)	(811)
Net changes in income taxes	<u>(363)</u>	<u>(1,074)</u>
Present value at the year end	14,437	12,799



(F) Other information

Productive Oil/Condensate* and Gas Wells

The numbers of productive wells at December 31, 2012 were as follows:

	Oil/Condensate*		Gas	
	Gross	Net	Gross	Net
Thailand	779	373	1,006	372
Foreign				
Southeast Asia	13	4	97	42
Middle East and Others	22	9	10	10
Total	814	386	1,113	424

* include Bitumen Wells

Drilling in Progress of Oil/Condensate* and Gas Wells

The numbers of wells in progress at December 31, 2012 were as follows:

	Gross	Net
<u>Exploratory</u>		
Thailand	2	0.9
Foreign		
Australia	1	0.3
Middle East and Others	3	0.4
Total	6	1.6

Development

Thailand	39	10.2
Foreign		
Southeast Asia	4	1.8
Middle East and Others	1	0.4
Total	44	12.4

* include Bitumen Wells



Net Oil/Condensate* and Gas Wells Drilled Annually in 2012

	Net Productive wells drilled	Net dry well drilled
<u>Exploratory</u>		
Thailand	15.2	2.5
Foreign		
Southeast Asia	0.6	0.3
Australia	0.9	-
Middle East and Others	34.3	17
Total	<u>51</u>	<u>19.8</u>
 <u>Development</u>		
Thailand	192.9	5.4
Foreign		
Southeast Asia	7.9	-
Australia	3.6	-
Middle East and Others	19.1	2.4
Total	<u>223.5</u>	<u>7.8</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 2012 (Unaudited) and 2011 for the consolidated financial statement are as follows:

	(Unit: US Dollars)			
<u>Year 2012</u>	<u>4thQ</u>	<u>3rdQ</u>	<u>2ndQ</u>	<u>1stQ</u>
Revenues				
Sales	1,842,194,870	1,755,375,712	1,567,268,704	1,524,716,295
Revenue from pipeline transportation	37,136,388	37,634,815	34,611,046	41,301,845
Other revenues				
Gain on foreign exchange	-	-	-	33,765,218
Interest income	5,639,087	1,488,943	5,309,389	3,436,905
Gain from derivative financial instruments	13,975,901	-	-	558,394
Other revenues	55,092,242	25,826,293	60,280,820	23,357,339
Total Revenues	1,954,038,488	1,820,325,763	1,667,469,959	1,627,135,996
Expenses				
Operating expenses	218,118,999	177,560,342	152,769,963	157,204,284
Exploration expenses	68,688,308	44,909,221	57,671,959	41,766,650
Administrative expenses	109,281,667	78,484,807	64,171,259	60,285,634
Petroleum royalties and remuneration	214,158,772	207,679,661	186,063,918	180,316,373
Depreciation, depletion and amortization	359,082,670	371,846,010	318,342,409	324,564,814
Other expenses				
Loss on foreign exchange	1,844,204	12,439,600	43,445,718	-
Loss from Montara incident	537,982	-	-	-
Loss from derivative financial instruments	-	19,239,630	7,552,025	-
Management's remuneration	1,377,158	1,171,880	979,782	1,185,282
Impairment loss on assets	95,000,072	-	109,167,123	-
Finance costs	59,478,572	54,140,501	41,435,113	31,955,829
Total Expenses	1,127,568,404	967,471,652	981,599,269	797,278,866
Share of gain (loss) from associates	501,519	1,300,056	1,336,563	1,518,560
Income before income taxes	826,971,603	854,154,167	687,207,253	831,375,690
Income taxes	(378,455,141)	(296,472,224)	(436,701,445)	(242,560,532)
Income for the year	448,516,462	557,681,943	250,505,808	588,815,158
Earnings per share				
Basic earnings per share	0.13	0.17	0.08	0.18



Diluted earnings per share 0.13 0.17 0.08 0.18

(Unit: US Dollars)

<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
Total Revenues	1,581,539,498	1,422,099,657	1,487,301,422	1,310,177,773
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
Total Expenses	774,537,747	932,409,641	769,294,612	711,694,365
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)
Income for the year	489,132,293	249,588,339	370,038,738	359,487,716
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



Five-year petroleum sales volume and unit price summary

	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Net sales of petroleum (BOED)	275,923	265,047	264,575	233,756	219,314
Average petroleum unit prices					
Average unit prices of crude oil and condensate (USD per BBL)	103.27	102.23	73.77	58.03	91.38
Average unit prices of natural gas (USD per MMBTU)	7.59	6.00	5.52	5.17	5.17
Average unit prices of petroleum (USD per BOE)	64.86	55.49	44.83	39.53	49.69
Lifting cost (USD per BOE)	4.28	4.35	3.75	3.16	2.46