



Opportunity Day

1Q/2014 Operating Result

The Stock Exchange Of Thailand
May 21st, 2014

TOGETHER
WE CAN GROW
STRONGER



This presentation includes forward-looking statements that are subject to risks and uncertainties, including those pertaining to the anticipated benefits to be realized from the proposals described herein. This presentation contains a number of forward-looking statements including, in particular, statements about future events, future financial performance, plans, strategies, expectations, prospects, competitive environment, regulation and supply and demand.

PTTGC has based these forward-looking statements on its views with respect to future events and financial performance. Actual financial performance of the entities described herein could differ materially from that projected in the forward-looking statements due to the inherent uncertainty of estimates, forecasts and projections, and financial performance may be better or worse than anticipated. Given these uncertainties, readers should not put undue reliance on any forward-looking statements.

Forward-looking statements represent estimates and assumptions only as of the date that they were made. The information contained in this presentation is subject to change without notice and PTTGC does not undertake any duty to update the forward-looking statements, and the estimates and assumptions associated with them, except to the extent required by applicable laws and regulations.

1

1Q/14 Operating Results

2

Strategy and Excellence Projects Updates

3

2014 Market Outlook

1

1Q/14 Operating Results

2

Strategy and Excellence Projects Updates

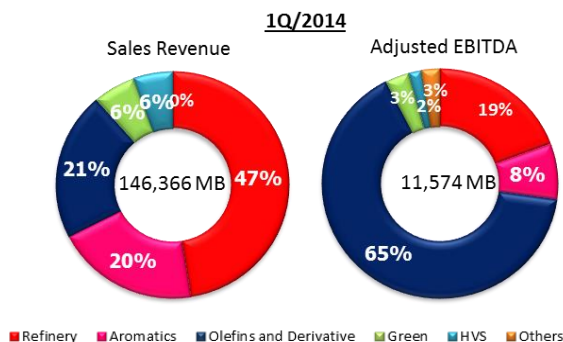
3

2014 Market Outlook

1Q/14 Business Highlights

Performance Soften from Weak Aromatics Market and Key Performance Plant Shutdowns

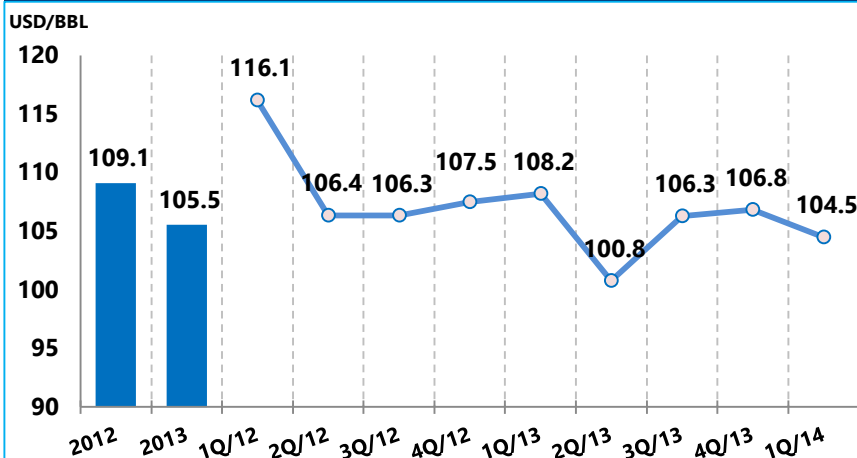
(Unit: Million Baht)	1Q/13	4Q/13	1Q/14	Change YoY	Change QoQ
Sale Revenue	141,309	154,599	146,366	+4%	-5%
EBITDA	16,419	14,089	10,999	-33%	-22%
EBITDA Margin (%)	12%	9%	8%	-35%	-18%
Net Profit	12,075	7,421	6,296	-48%	-15%
Earnings Per Share (Baht/share)	2.68	1.65	1.40	-48%	-15%
Adjusted EBITDA	17,062	12,763	11,574	-32%	-9%
Adjusted EBITDA Margin (%)	12%	8%	8%	-35%	-4%



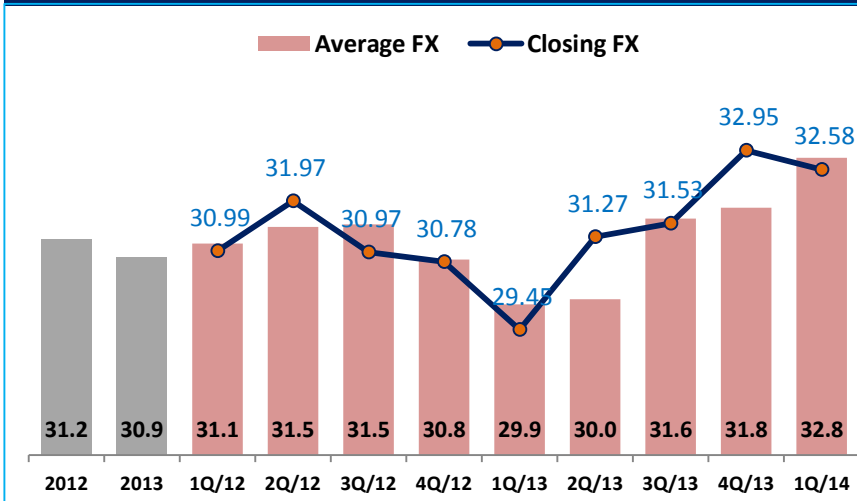
% EBITDA Margin	1Q/2013	4Q/2013	1Q/2014
Business Unit :			
Refinery	3	3	3
Aromatics	14	5	3
Olefins and Derivative	30	24	24
Green	8	10	4
HVS	4	1	3
Average	12	8	8

Business Environment and Operations Recap

Average Dubai Crude Price



Average and Closing FX : THB/USD*



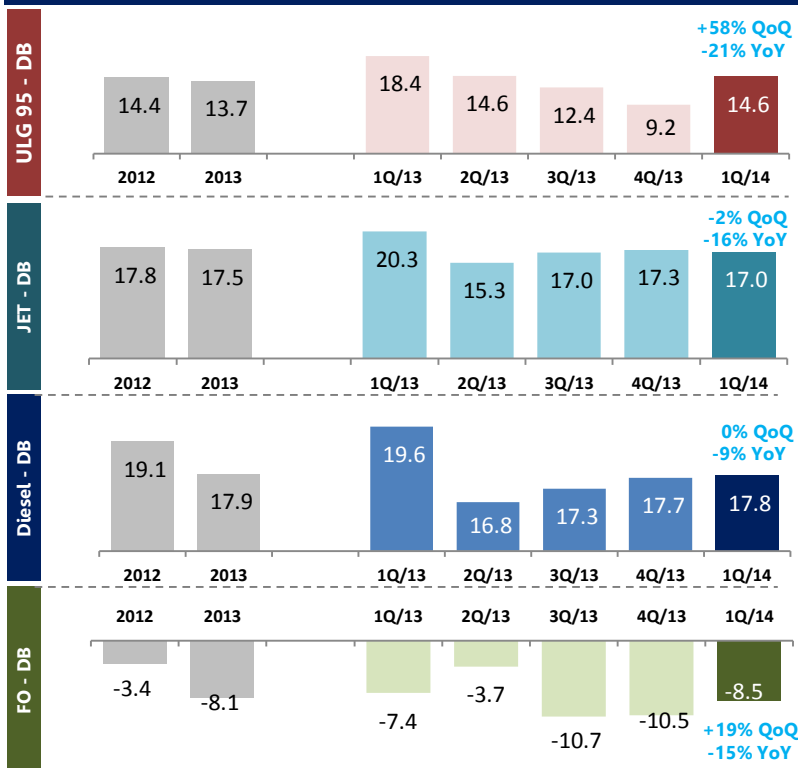
- Dubai crude reduced from average at 106.8 \$/BBL in 4Q/13 to average 104.5 \$/BBL in 1Q/14 from higher non-OPEC supply despite the unrests in oil producing countries. Therefore, contributing to Stock loss (Net NRV) of 575 MB**
- FX Gain amounting to 602 MB, from Baht appreciation from end 4Q/13 at 32.95 Baht/USD to end 1Q/14 at 32.58 Baht/USD**
- Aromatics price dropped while Olefins and Refinery improved**
 - Diesel-Dubai 17.8 USD/BBL -9% YoY 0% QoQ**
 - FO – Dubai -8.5 USD/BBL -15% YoY +19% QoQ**
 - PX-Cond 387 USD/Ton -42% YoY -23% QoQ**
 - BZ-Cond 380 USD/Ton -12% YoY +10% QoQ**
 - HDPE 1,554 USD/Ton +5% YoY +1% QoQ**
 - MEG 1,182 USD/Ton -8% YoY -2% QoQ**
- Overall utilization rate of major businesses**

	1Q/13	4Q/13	1Q/14	YoY % + /(-)	QoQ % + /(-)
Refinery					
CDU Utilization (%)	101	103	101	+0	-2
Aromatics					
BTX Utilization (%)	92	93	91	-1	-2
Olefins					
Utilization (%)	97	93	77	-20	-16
Polymers					
Utilization (%)	109	111	99	-10	-12
EO Based					
MEG Utilization (%)	97	86	65	-32	-21
Green					
ME Utilization (%)	101	137	111	+10	-26
FA Utilization (%)	132	125	113	-19	-12
Phenol					
Phenol Utilization (%)	126	130	78	-48	-52

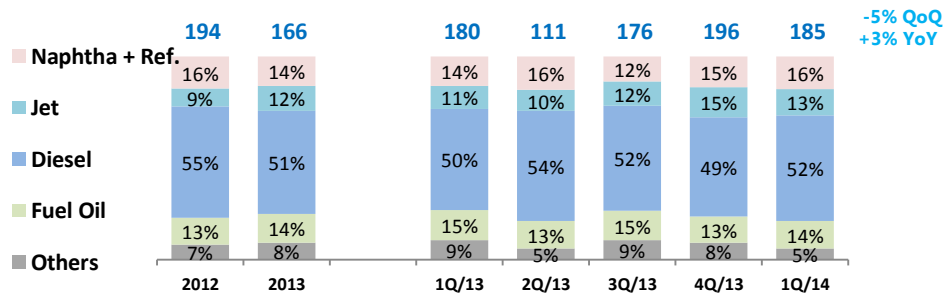
Refinery Performance

Improved Mkt GRM

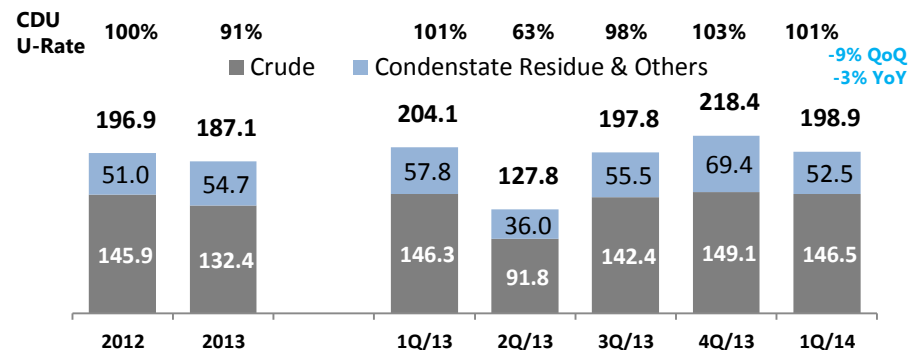
Petroleum Product Spread (USD/BBL)



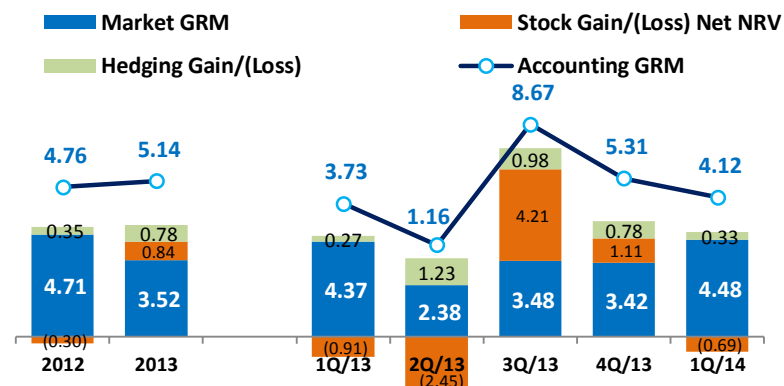
Sales Volume (KBD)



Total Intake (KBD)



Gross Refinery Margin (USD/BBL)

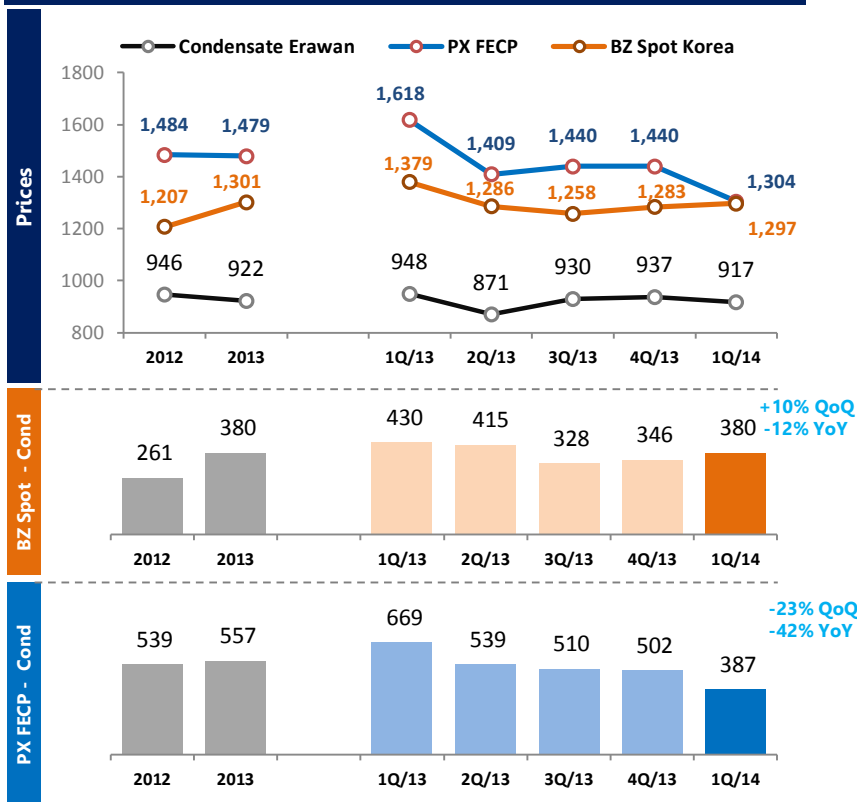


	2012	2013	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Market GRM	4.71	3.52	4.37	2.38	3.48	3.42	4.48
GRM on CRS	2.97	2.87	3.08	2.38	2.90	2.98	2.85
GRM on CDU	5.84	4.37	5.50	2.73	4.31	4.31	5.52

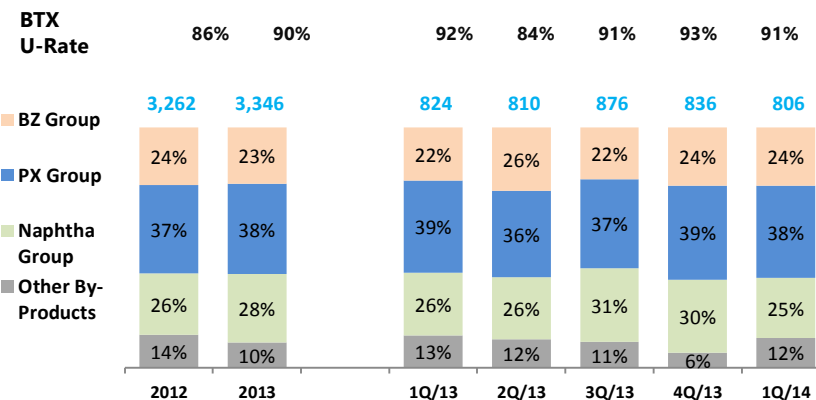
Aromatics Performance

Soften PX hitting hard on Aromatic Business

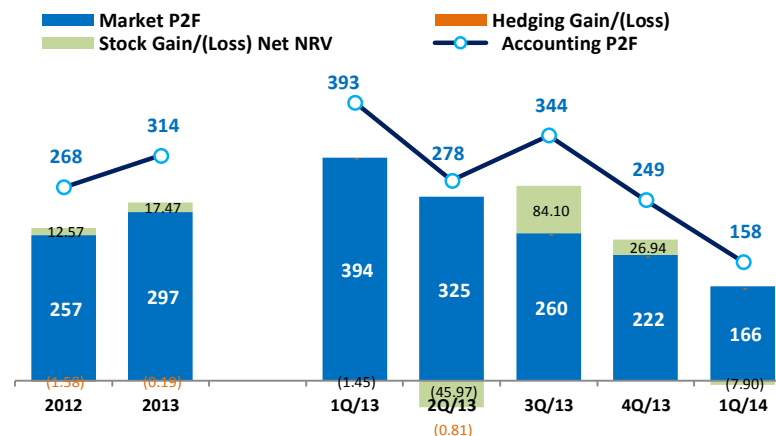
Aromatics Products Prices and Spread (USD/Ton)



BTX U-Rate and Sales Volume (KTons)



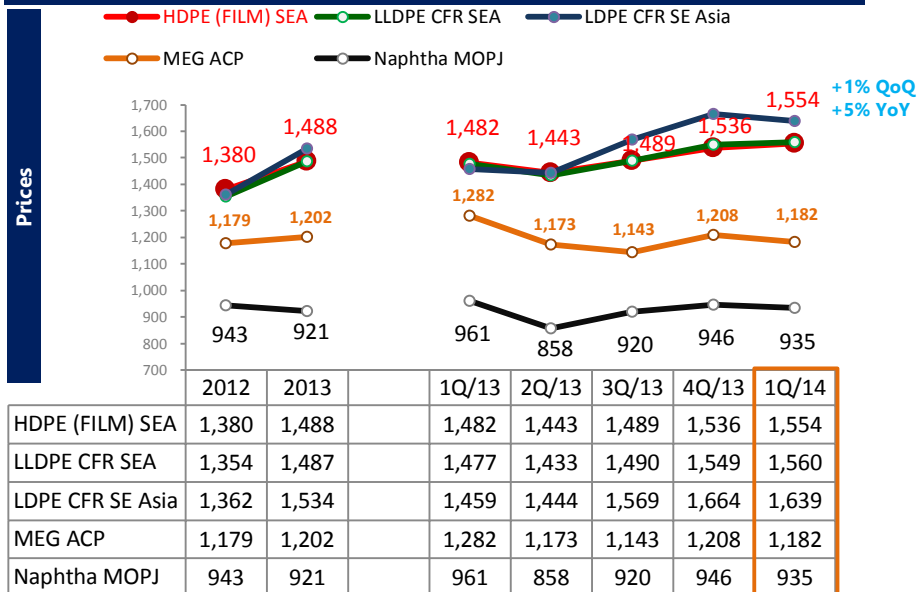
Products to Feed Margin (USD/Ton BTX)



Olefins and Derivatives Performance

Strong HDPE Price but impact from shutdown and soften MEG

Olefins Derivatives Prices and Spread (USD/Ton)



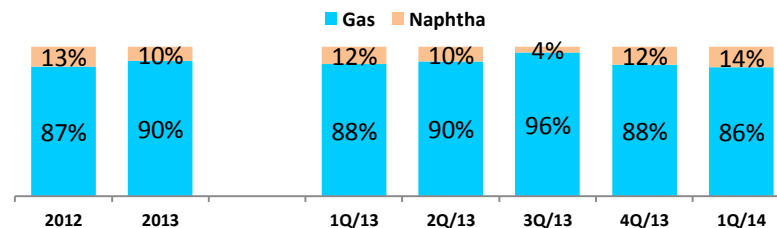
U-Rate (%)

	2012	2013	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Olefins	88%	90%	97%	93%	75%	93%	77%
HDPE	99%	106%	109%	96%	106%	113%	93%
LLDPE	100%	103%	113%	72%	113%	114%	99%
LDPE	88%	76%	101%	99%	5%	101%	115%
MEG	88%	94%	97%	100%	92%	86%	65%

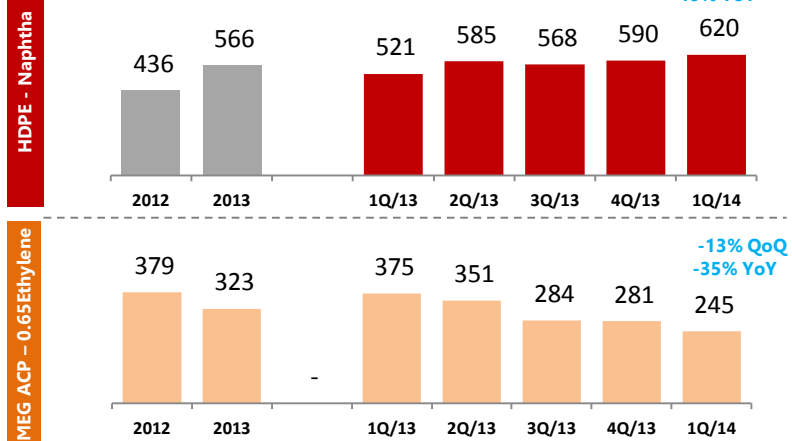
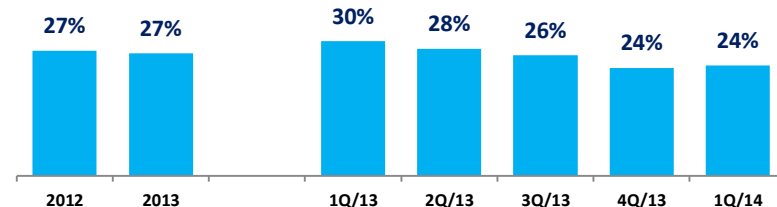
Sales Volume (KTons)

	2012	2013	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Olefins	748	756	200	218	147	190	134
HDPE	778	834	216	193	208	217	202
LLDPE	396	397	102	70	119	107	98
LDPE	273	218	75	71	25	47	72
MEG	249	372	83	104	95	89	71
Total	2,445	2,577	676	657	594	650	578

GAS : NAPHTHA



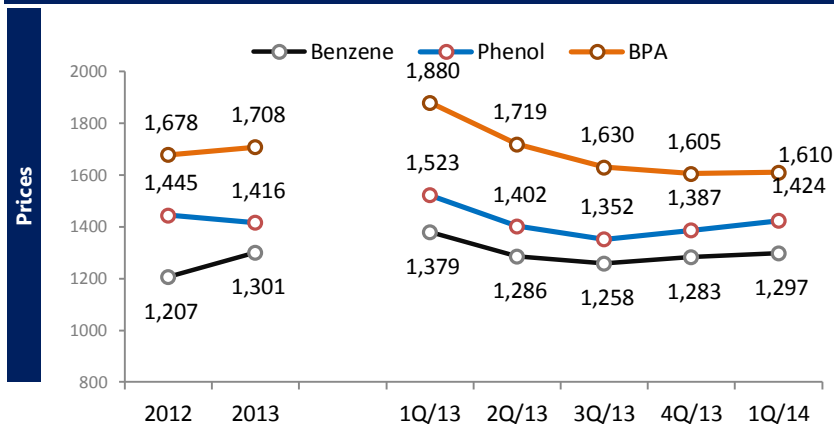
Adjusted EBITDA Margin



Phenol and BPA Performance

U-rate Drop from Planned Shutdown

Phenol/ BPA Prices and Spread (USD/Ton)



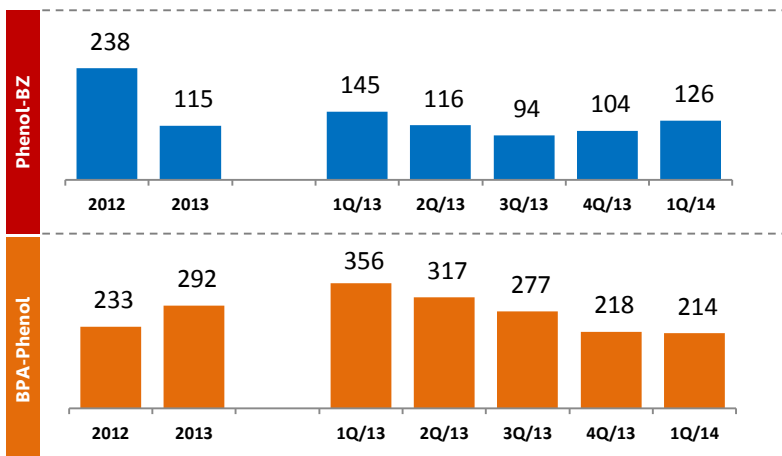
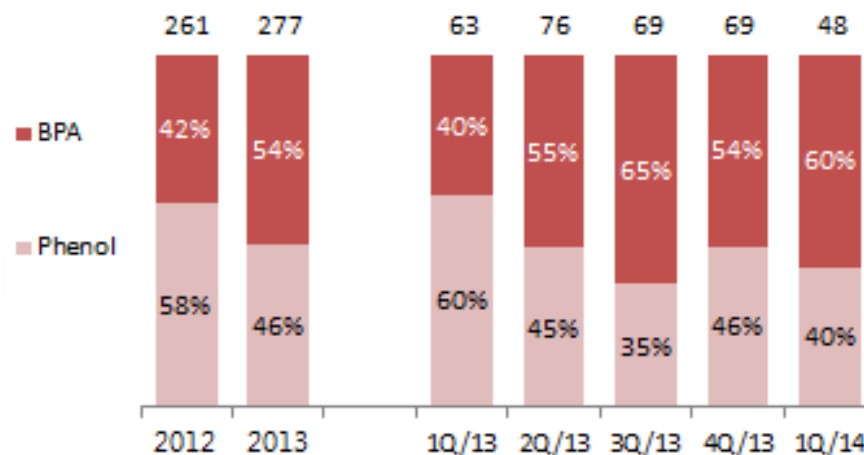
	2012	2013	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Phenol (CMP)	1,445	1,416	1,523	1,402	1,352	1,387	1,424
BPA (CMP)	1,678	1,708	1,880	1,719	1,630	1,605	1,638
Benzene	1,207	1,301	1,379	1,286	1,258	1,283	1,297

U-Rate and Sales Volume (KTons)

U-Rate

Phenol	119%	126%	126%	127%	124%	130%	78%
BPA	74%	100%	64%	116%	116%	104%	70%

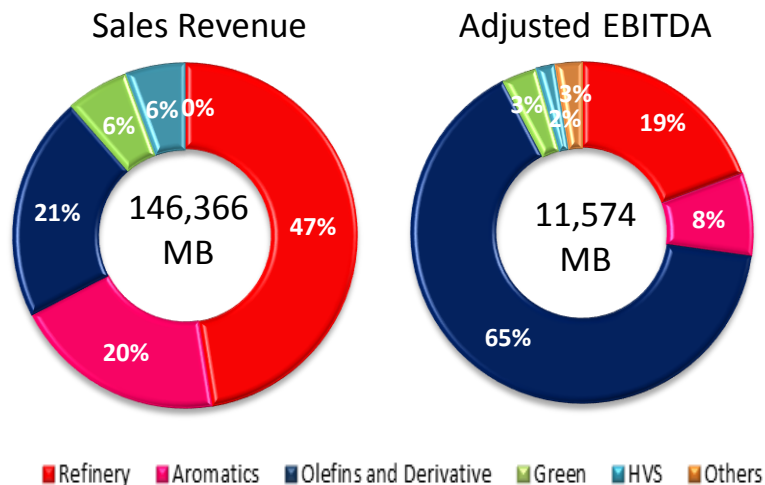
Sales Volume (Kton)



Overview of Business Units' Performance

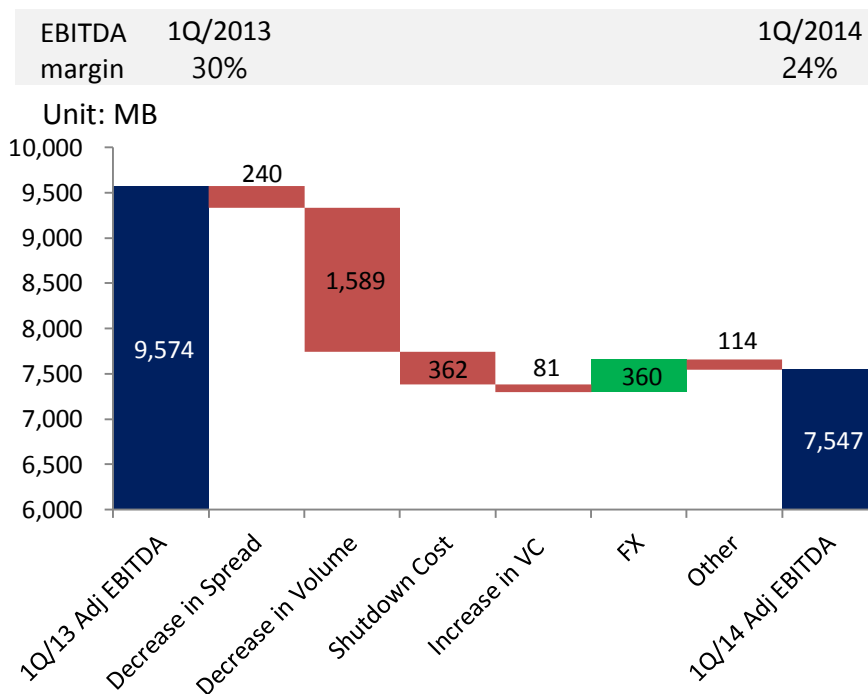
Drop in Olefins and Derivatives' Margin

1Q/2014



% EBITDA Margin	1Q/2013	4Q/2013	1Q/2014
Business Unit :			
Refinery	3	3	3
Aromatics	14	5	3
Olefins and Derivative	30	24	24
Green	8	10	4
HVS	4	1	3
Average	12	8	8

Change in Olefins and Derivatives adj. EBITDA

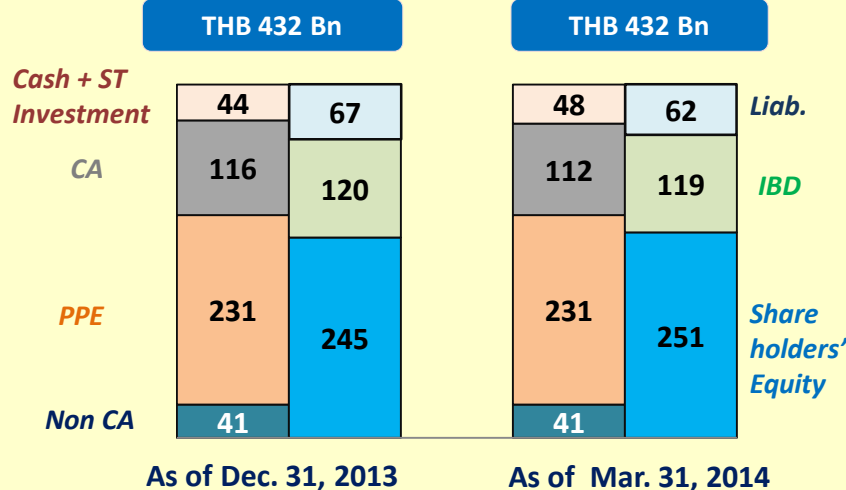


	YOY Price +/- %
Ethylene	3%
HDPE	5%
MEG	-8%

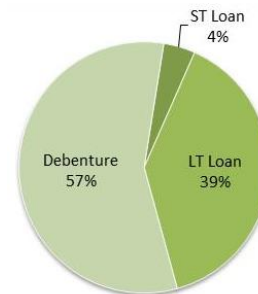
	YOY Volume +/- %
Olefins	-33%
PE	-5%
MEG	-15%

Strong Financial Position

Statements of Financial Position



Loan Type



THB 119 Bn

Interest Rate

64 % Fixed

36 % Float

Currencies

52 % THB

48 % USD & Others

- Cost of long term debts ~ 4.79% (Include W/H Tax)
- Average loan life after refinancing - 4.88 Years

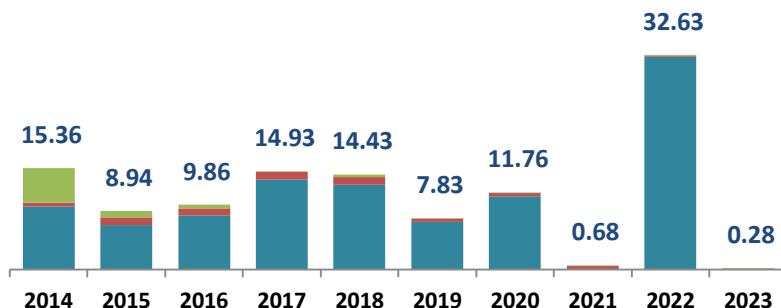
Treasury policy

Net IBD to Equity ratio of $\leq 0.7x$
Net IBD to EBITDA ratio of $\leq 2.4x$

Maturity of Financial Debt* as at Mar. 31, 2014

THB Bn

■ PTTGC ■ PPCL ■ Others

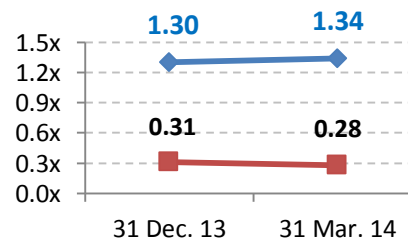


* After Refinance

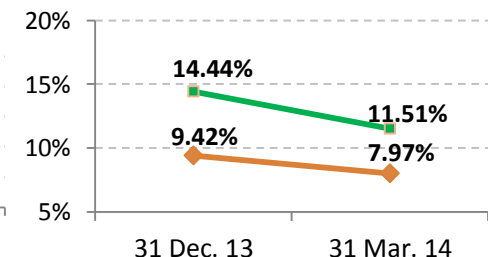
Key Financial Ratios

Key Financial Ratios

◆ Net IBD / EBITDA
■ Net IBD/Equity



◆ ROE ◆ ROA



1

1Q/14 Operating Results

2

Strategy and Excellence Projects Updates

3

2014 Market Outlook

EXCELLENCE EXECUTION

- Excellence program EBITDA uplift as of 1Q/14
- Debottlenecking projects construction progress

- JV plan on schedule
- Business direction for International Businesses

- R&D Center Progress
- Integration of Technology/Knowhow

CORE UPLIFT PROJECTS



Debottlenecking

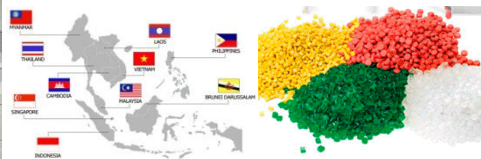
Synergy Excellence

Marketing Excellence

Operational Excellence



1-STEP ADJACENCIES



NEW GEOGRAPHIES

ASEAN: Pertamina
CHINA: Sinochem

NEW PRODUCTS

System House:
Compounding:
PC, PU,
Nylon 6-6



AUTOMOTIVE



E&E



CONSTRUCTION

KNOW
HOW

GREEN
+
R&D
Center

Olechemicals

PLA

Succinic Acid

PLA/PBS Compound

1st Quartile
Performance
ROIC > 14%

Listed in
Globally
Sustainability
Index

EBITDA
Uplift
15-30%
(2012-2017)

Excellence Programs Update

1Q/14 EBITDA UPLIFT

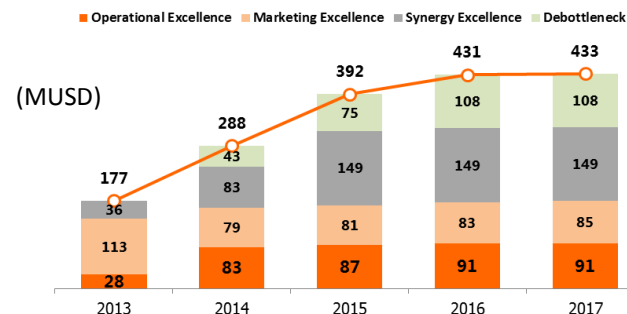
Core Uplift

1-Step Adjacencies

Green Business

Excellence Programs	2014 Target (MUSD)	1Q/14 Actual (MUSD)
Synergy Excellence <ul style="list-style-type: none"> - Heavy Gas (Offgas) - Pure H2 via PSA - C3/C4 Stream - 3 Streams (Heavy Gasoline, LCB, CB) - Heavy Aromatics 	83.0	6.5
Marketing Excellence <ul style="list-style-type: none"> - Customer Portfolio Management - Product Development - Pricing Excellence 	80.0	20.4
Operational Excellence <ul style="list-style-type: none"> - Total 42 projects in 2014 - 29 Energy Saving Projects - 7 Plant Reliability Projects - 6 Cost Reduction/Optimization Projects 	31.0	6.4
Total	194.0	33.3

Original Target

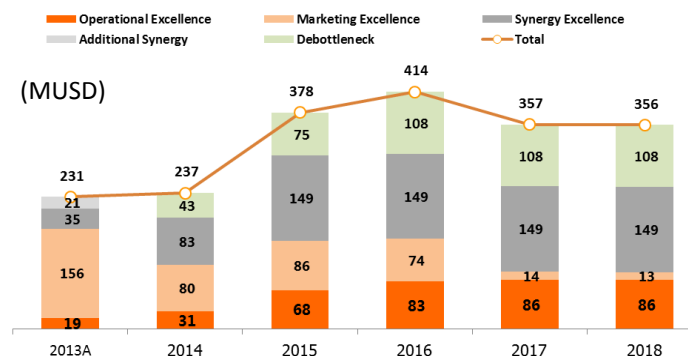


* Debottleneck EBITDA uplift includes
 1Q/14 BV project starts up
 3Q/15 TOCGC Plant Improvement Project
 4Q/15 PX Expansion starts up

Not Including PTTPE Cracker Debottlenecking and LLDPE Expansion

Adjusted Target

- Revised Operational Excellence target
- Include only projects passed stage gates



Excellence Programs Updates

Execution of Core uplift Projects according to Target

Core Uplift

1-Step Adjacencies

Green Business

Synergy

Pure H2 via New PSA

Off Gas upgrading at Olefins

2013

2014

2015 - 2018

Construction
Progress at 97.0%

Target COD:
2Q/14

Construction
Progress at 45.16%

Target COD:
4Q/14

Seek for additional and opportunities Synergy Benefits

Debottlenecking & Expansion

Increase
Capacity

CAPEX
(MUSD)

Expected
EBITDA Uplift
(MUSD)

BV Project

Butadiene +75 KTA
Butiene-1 +25 KTA

262

58

Construction

Target COD:
2Q/14

TOCGC Plant
Improvement Project

EOE +90 KTA

94.2

16

BOD approved EPC
+ Construction

Construction
Progress at 27.6%

Target COD:
3Q/15

PX Expansion

PX +115 KTA
BZ + 35 KTA
OX + 20 KTA

128.8

34

BOD approved EPC
+ Construction

Construction
Progress at 11.94%

Target COD:
4Q/15

Phenol 2 Project

Phenol +250 KTA
Acetone +155 KTA

348

IRR 17%

BOD approved EPC
+ Construction

Construction
Progress at 50%

Target COD:
3Q/15

PTTPE Cracker
Debottlenecking

12% Olefins
Increase

285

Integrated
IRR
17-20%

BOD approved
Project

BEP

BOD approve
EPC

Construction

Target :
2016

LLDPE Expansion

New LLDPE
+300 KTA

272

BOD approved
Project

BEP

BOD approve
EPC

Construction

Target :
2017

Note: Progress as of Mar. 2014

Compounding Strategy

Serving the Customers' Needs

New Products

New Geographies

Core Uplift

1-Step Adjacencies

Green Business

Business Direction

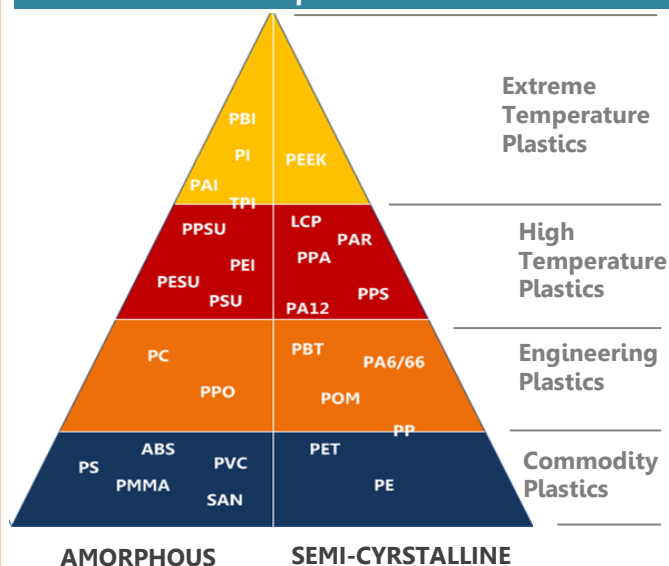
Polymer Producers

Forward Integration

1. Seeking for Business Partner by JV/Acquisition
2. In-house R&D development



Thermoplastic Portfolio



Compounding

New Application Compounding

Blending two or more types of polymers together

Commodity Compounding

Using additives and modifiers to result with a particular color, texture, strength, and etc.

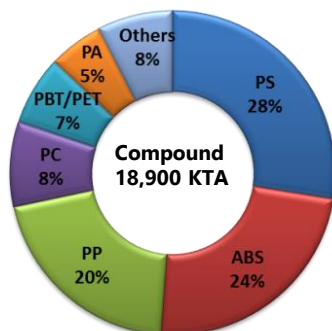
Customers

Backward Integration

1. Seeking Business Partner by JV/Acquisition
2. Market Back Development
3. Compounding
 - PC, ABS, PC/ABS, Nylon 6, Nylon 66, PE, PP, PS, PPE, PPS, PVC, PBT/PET



Global Compounding Market (2012)



Global Compounded Market (Auto + E&E)



Global	Market Size
Automotive	6,100 KTA
E&E	12,800 KTA
Sum	18,900 KTA

Asia	Market Size
Automotive	3,300 KTA
E&E	8,700 KTA
Sum	12,000 KTA

Value Chain

Forward Integration

Backward Integration

Petrochemical Industry

Chemical Industry

Compounders

Converters

Feed stock

Monomer

Polymer

Polymer Compound

Plastic Product

EBITDA Margin

~5-15%

~8-30%

~6-15%

Vencorex Business Directions

Focusing its activities toward specialty Isocyanates

New Products

New Geographies

Core Uplift

1-Step Adjacencies

Green Business

Rationale of Investment



vencorex
chemicals

Transaction:

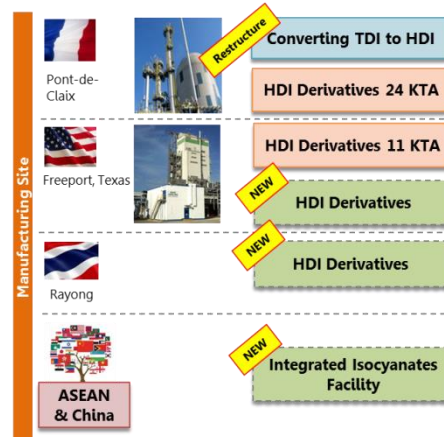
- Investment transaction completed on May 31, 2012
- 51% stake – Investment capital to £121 million

Objective:

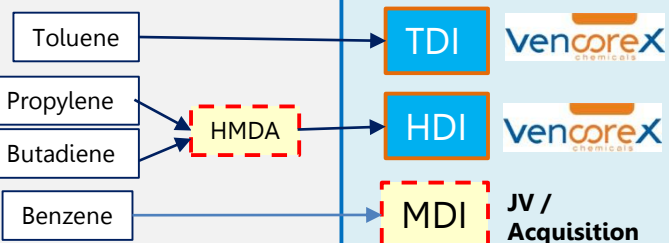
- To step into HVS (PU Chain) by using the technology and knowhow (TDI & HDI) from Vencorex
- Maintain existing business and expand business in Asia
- Forward integration into downstream

Business Directions

- Expand and enhance HDI Business
- Continue R&D for TDI and HDI Process Improvement
- Utilizing TDI technology in Asia where demand is growing
- Stop TDI Production in France from maturing market
- Seek for Business Partner of Isocyanates & PU to expand the Business in Asia



1 Isocyanate



2 Polyols



3 Polyurethane System House



Formulation

Seeking for JV/Acquisition

Polyurethane Flexible & Rigid Foam (69%)



Polyurethane Coating and Paint (16%)



Polyurethane Elastomers and Others (15%)

Transformation of Myriant to PTTGC's Biotechnology R&D Center

Core Uplift

1-Step Adjacencies

Green Business

Transforming into World Class Biotechnology R&D Center



- Located in Boston, Massachusetts which fully equipped with R&D Resources and Facilities

R&D Technology and Knowhow Transfer



From R&D


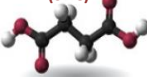
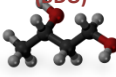

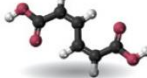










Products
Applications
Market

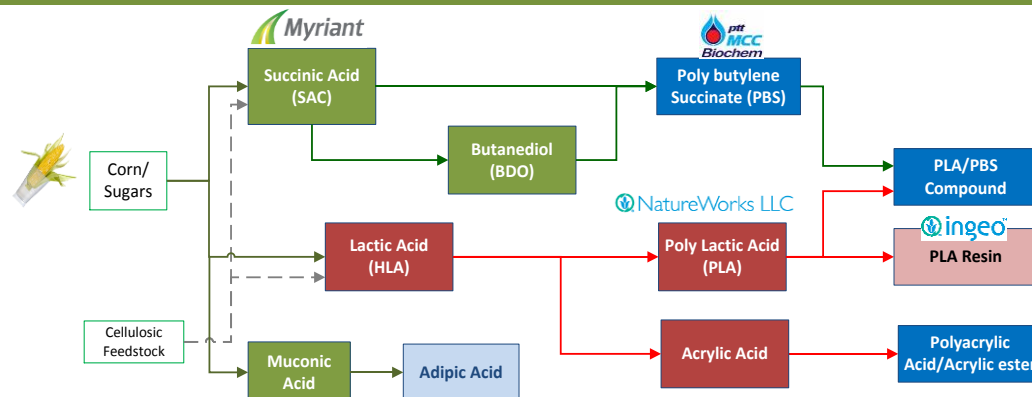
Products in the Pipeline

Progress

Applications

LACTIC ACID 	LACTIC ACID 	Butanediol (BDO) 	ACRYLIC ACID 	MUCONIC ACID 
Licensed to Purac, business partner in Spain, and is producing at commercial scale.			R&D Phase I: Lab-level Economics	
14 KTA Semi-Commercial Plant in operation at Lake Providence, Louisiana			R&D Phase I: Lab-level Economics	
 DURABLE PLASTICS			 PLASTICS	 FIBERS
 DISPOSABLE PLASTICS			 DIAPERS	 COATINGS
			 FIBERS	 PLASTICS

Green Business Roadmap



1

1Q/14 Operating Results

2

Strategy and Excellence Projects Updates

3

2014 Market Outlook

❑ **Crude**

- ❑ IEA forecasted demand of crude increase 1.3 mbd supported by gradual economic recovery led by Europe and the US.
- ❑ Expects Dubai price to maintain around 104.2 USD/bbl for year 2014
- ❑ Increase in supply from US shale gas, while sanction measure in Iran and Libya ease. Net crude supply additional of 1.4 mbd, pressuring crude price.

❑ **Aromatics**

- ❑ BZ spread will maintain from last year despite higher capacity addition.
- ❑ PX spread soften from addition supply while demand laggard.

❑ **Ethylene, Polyethylene, and MEG**

- ❑ Ethylene price should maintain at a high level from short of supply
- ❑ Polyethylene price will remain at high level in 2014 from constant demand for commodity plastics.
- ❑ MEG's margin is expecting to improve in 2H/2014 due to many plants in Asia and ME will shutdown for annual maintenance

Thank You

PTT Global Chemical Public Company Limited
555/1 Energy Complex, Building A, 14th-18th Floor,
Vibhavadi Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900 Thailand.
Tel: +66(0) 2265-8400 Fax: +66(0) 2265-8500
www.pttgcgroup.com

For further information & enquiries, please contact our Investor Relations Team at IR@pttgcgroup.com

1	Thitipong Jurapornsiridee	VP - Corporate Finance & IR	Thitipong.j@pttgcgroup.com	+662-265-8574
2	Puvadol Vasudhara	IR Manager	Puvadol.v@pttgcgroup.com	+662-140-8712
3	Panugorn Puengpradit	IR Analyst	Panugorn.p@pttgcgroup.com	+662-140-8714
4	Prang Chudasring	IR Analyst	Prang.c@pttgcgroup.com	+662-265-8327
5	Supika Charudhanes	IR Analyst	Supika.c@pttgcgroup.com	+662-265-8533
6	Chutima Jarikasem	IR Coordinator	Chutima.j@pttgcgroup.com	+662-140-8713