

MEMBER OF

**Dow Jones  
Sustainability Indices**

In Collaboration with RobecoSAM 



**Industry Leader (Construction Materials)**  
**2015 / 2014 / 2013 / 2012 / 2011**

**Vision: ASEAN Sustainable Business Leader**

**Strategies: 1. ASEAN Expansion**

**2. High Value Added products & services (HVA)**



*Investors Forum 2015  
Hong Kong  
Sep 16-18, 2015*

- ***Strategies & Key Points***
- ***Business Updates***
- ***Sustainability & People***
- ***Financials***
- ***Appendix***

## **Cement and Building Materials:**

Majority of the CAPEX & Investment

- *New cement plants in ASEAN.*
- *Acquire building materials & ceramics assets.*
- *others*

## **Chemicals:**

- *Flexible feedstock cracker (Vietnamese complex).*
- *Debottleneck Chandra Asri (Indonesian cracker).*
- *others*

## **Packaging:**

- *Gear towards packaging solution.*
- *Improve productivity in the fibrous chain.*
- *others*

## Cement – Building Materials:

- **Global House Int'l:** 50% JV with Siam Global House towards regional construction-related retail (200 MB)
- **Mortar:** 2 MT capacity expansion (Lampang and Khon Kaen) - **H1/16 start** (2,800 MB)
- **Woodchip Cement Board:** 55% stake M&A in Panel World, with cap of 2.4 Mill sqm. (550 MB)
- **Cement plants:** 6.3 MT (Laos, Myanmar, Indo, Cambodia) - **Q2/15 - Q2/17 starts.** (39,000 MB - \$1,300 M)
- **Ceramic (Italy):** 33% JV, 5 Mill sqm. - **started Q1/15** (506 MB)
- **Precast concrete:** two precast plants totaling 2.4 Mill sqm. - **started Q1/15** (2,500 MB)
- **MG Stone Slabs:** 400,000 sqm. green-field - **H2/15 start** (1,500 MB)

## Chemicals:

- **Norner Group (Norwegian innovation and technology):** 51% stake M&A (340MB)
- **Debottleneck of Chandra Asri (Indonesia):** Ethylene capacity gained up 43% - **end of 2015 start**
- **LDPE coating grade (HVA)** of 60,000 tons, totaling 152,000 tons per year, by mid-2016 in Thailand

## Packaging:

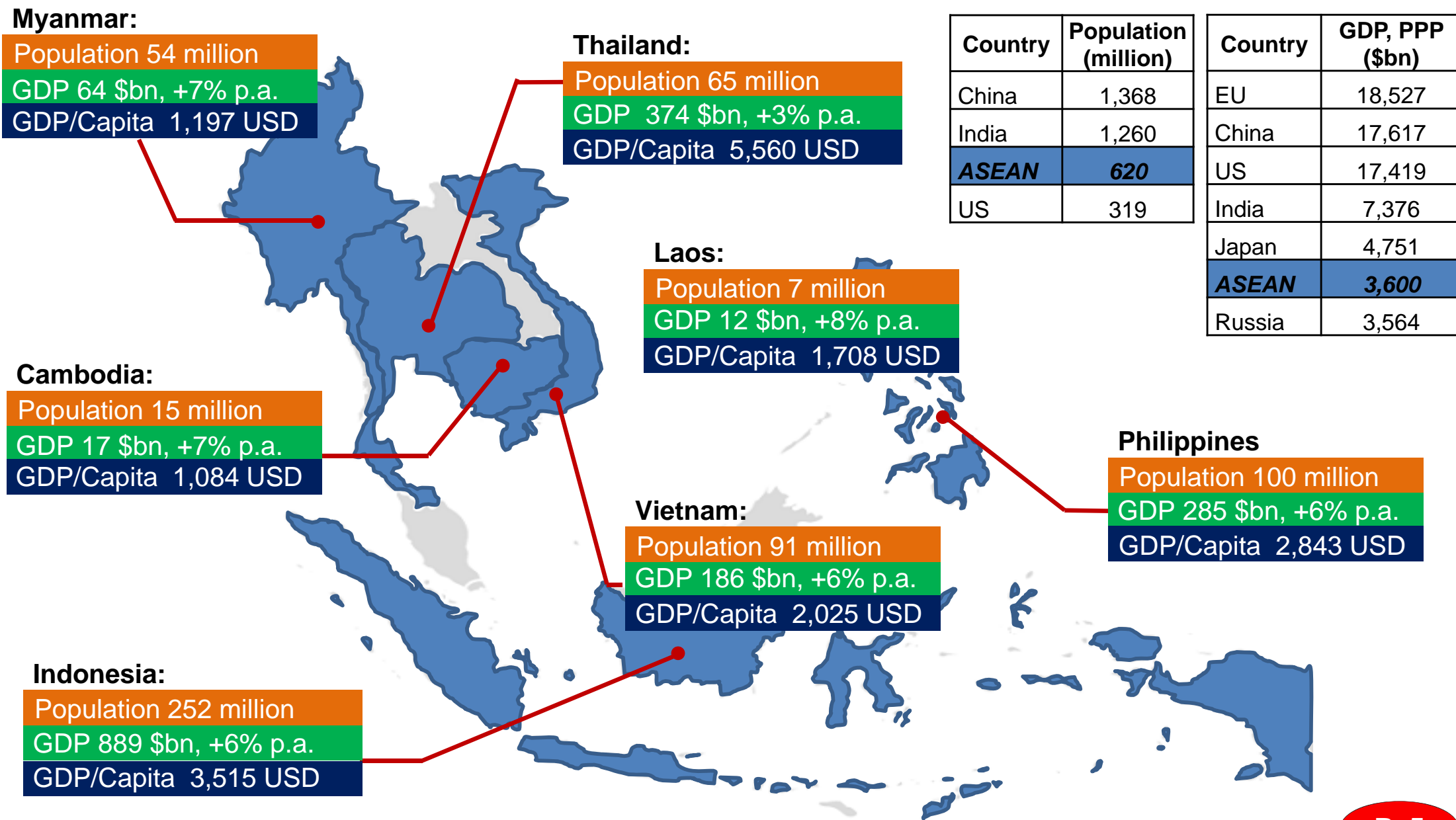
### **Packaging chain:**

- **Packaging paper in Vietnam:** 243,000 tons expansion.- **Q2/17 start** (4,125 MB)
- **Flexible Packaging: BATICO in Vietnam,** Prepack in Thailand, total capacity 520 Mill sqm. (3,000 MB)
- **Box plants: Indoris in Indonesia,** 90% stake M&A, 8,000 tons (290 MB)







### **Fibrous chain:**

- **Glassine paper (HVA):** Upgrade paper machine for 60,000 tons/yr - **Q2/16 start** (1,825 MB)
- **Nippon paper's 30% stake in SCG Paper's Fibrous chain.**

# ASEAN: World's sixth-largest economy

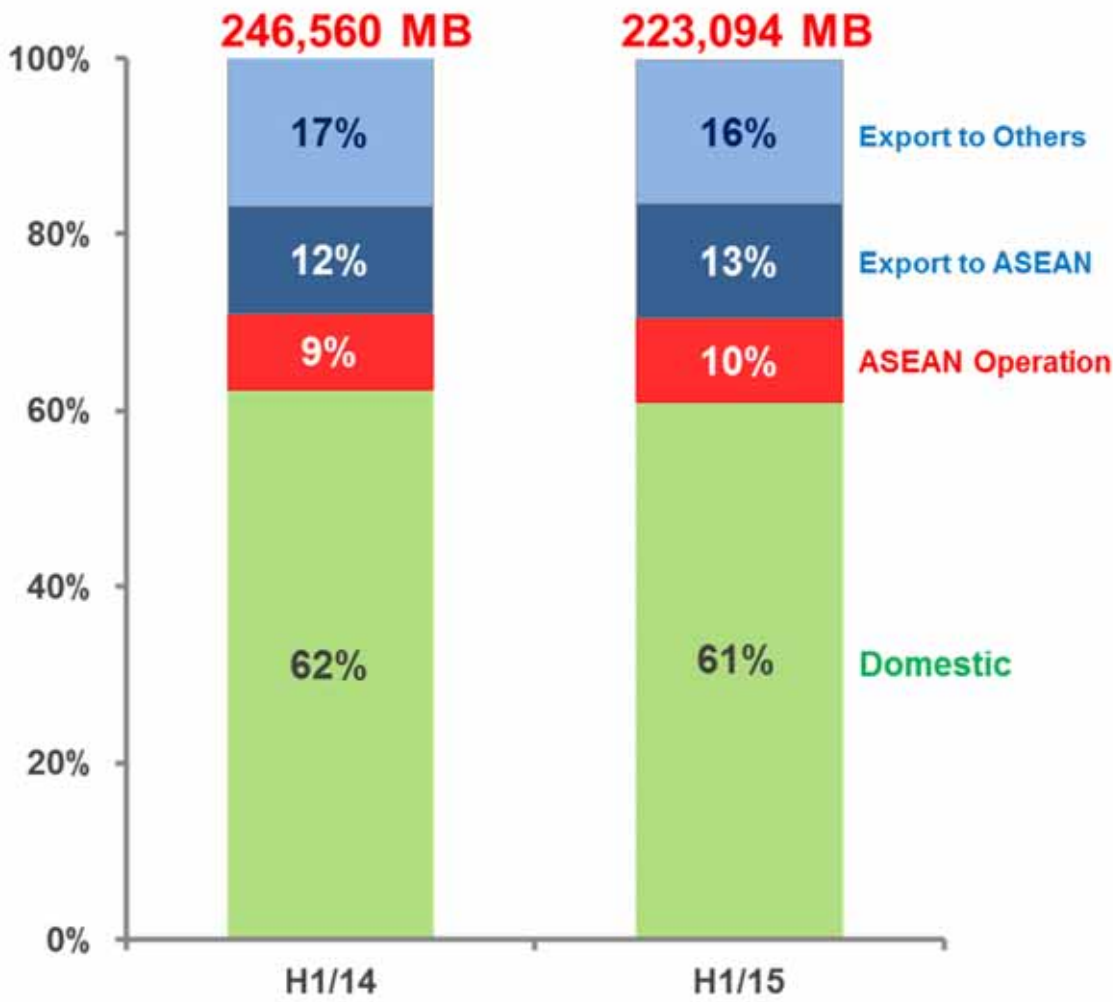


GDP & GDP per Capita = Nominal GDP in USD term (2014) , GDP growth = 5-yr CAGR of Real GDP  
Source: World Bank, IMF, Economy Watch

	 Indonesia	 Vietnam	 Cambodia	 Myanmar	 Laos	 Philippines
<b>Total Sales (MB)*</b>	<b>28,889</b>	<b>28,128</b>	<b>11,140</b>	<b>9,321</b>	<b>2,953</b>	<b>4,873</b>
<b>Total Asset (MB)</b>	<b>41,377</b>	<b>24,178</b>	<b>9,735</b>	<b>9,236</b>	<b>3,563</b>	<b>7,182</b>
<b>Total Staffs</b>	<b>6,862</b>	<b>6,926</b>	<b>556</b>	<b>290</b>	<b>22</b>	<b>1,092</b>
<b>Businesses:</b> <ul style="list-style-type: none"> <li><b>Cement-Building Materials</b></li> <li><b>Chemicals</b></li> <li><b>Packaging</b></li> </ul>	<ul style="list-style-type: none"> <li>- Cement Plant</li> <li>- RMC</li> <li>- Ceramics Tiles</li> <li>- Pipe &amp; precast</li> <li>- ALC</li> <li>- Chandra Asri</li> <li>- PVC</li> <li>- Box Plant</li> </ul>	<ul style="list-style-type: none"> <li>- White Cement</li> <li>- Concrete Roof</li> <li>- Ceramic Tiles</li> <li>- PVC pipe</li> <li>- PVC</li> <li>- Packaging Paper</li> <li>- Box Plant</li> </ul>	<ul style="list-style-type: none"> <li>- Cement Plant</li> <li>- RMC</li> <li>- Concrete Roof</li> </ul>	<ul style="list-style-type: none"> <li>- Cement Plant</li> <li>- RMC</li> </ul>	<ul style="list-style-type: none"> <li>- Cement Plant</li> <li>- RMC</li> </ul>	<ul style="list-style-type: none"> <li>- Ceramics</li> <li>- Packaging Paper</li> </ul>

*\*Note: data as of 2014*

*Sales Destinations*



*Export Destinations*

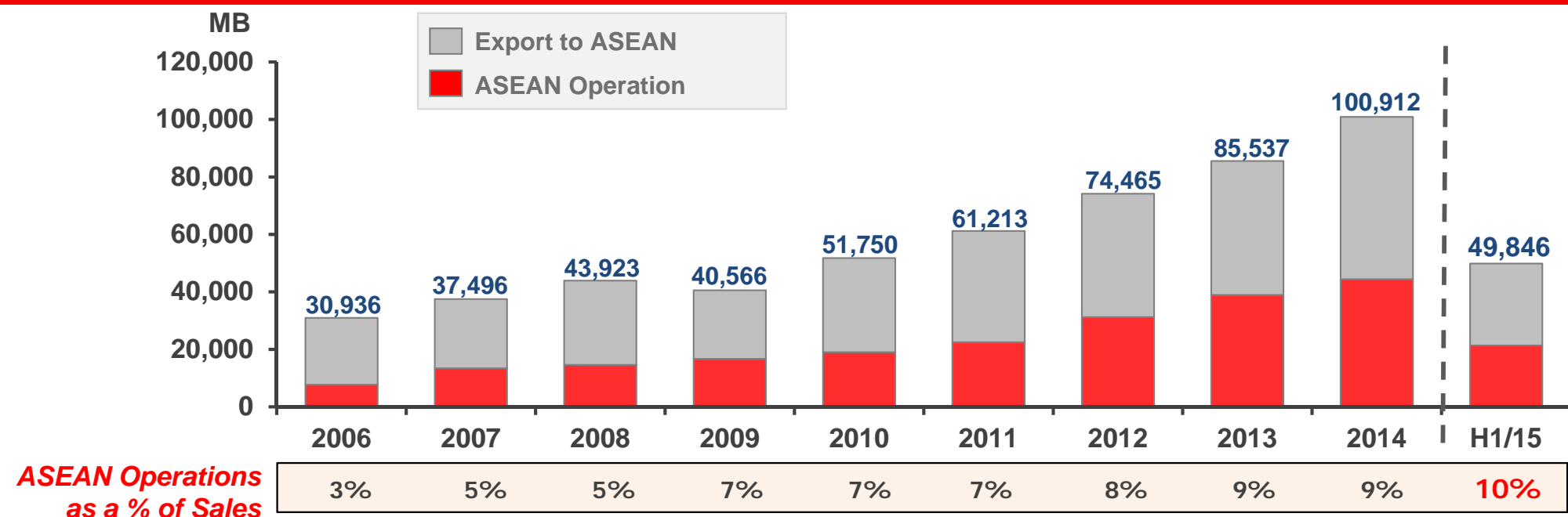


*ASEAN Sales by countries*

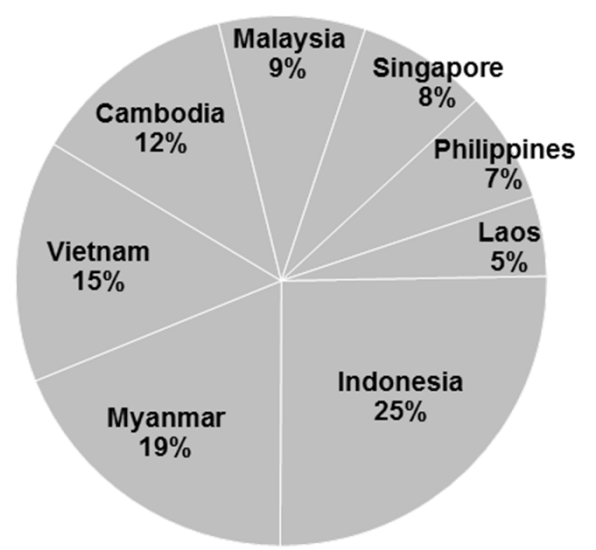




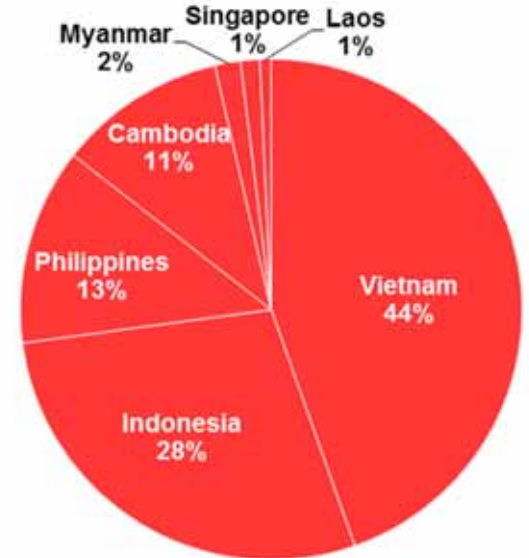
# ASEAN Expansion: ASEAN Sales (exports and localized operations)



Export to ASEAN by countries



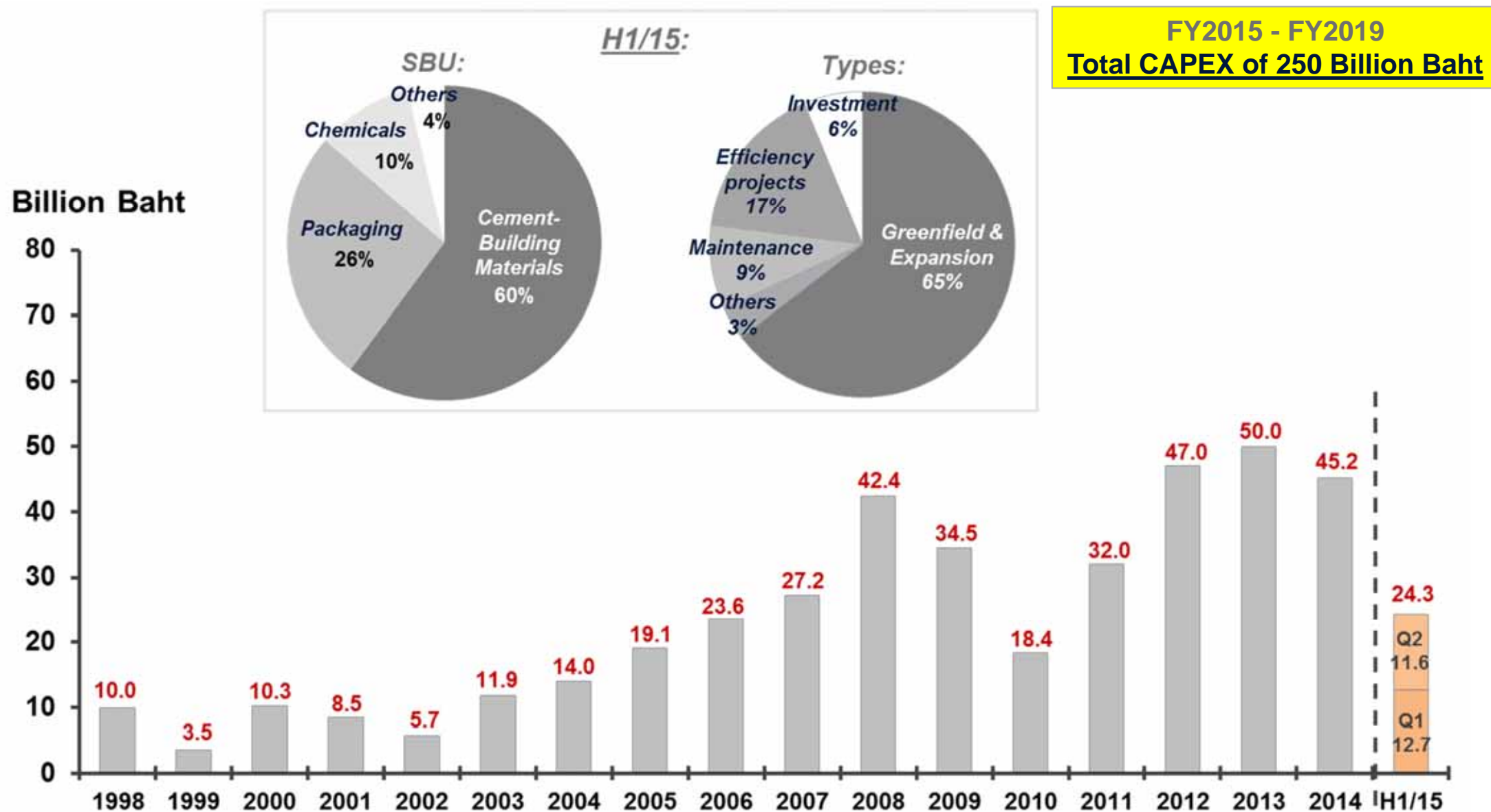
ASEAN Operation by countries





# CAPEX & Investments:

Forecasted FY2015 CAPEX & Investments of 50,000 – 60,000 MB.



- CAPEX includes debottlenecking, expansion projects, and major turnaround.
- Investments are acquisitions and purchase of shares.

# Net debt:

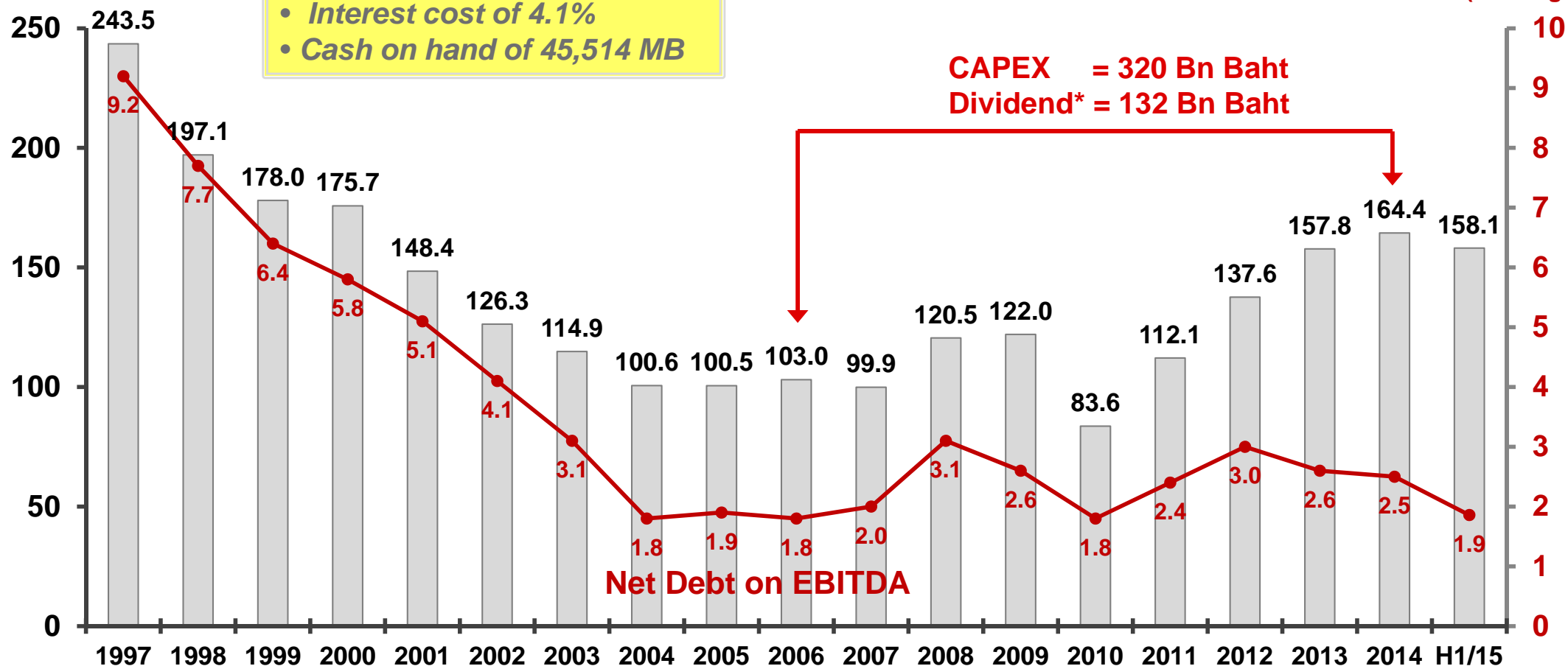
Leverage dropped to 1.9 times (x).

## Debt profile in H1/15:

- Net Debt / EBITDA = 1.9x
- Net Debt / Equity = 0.7x
- 98% are Thai Baht
- 93% are fixed
- Interest cost of 4.1%
- Cash on hand of 45,514 MB

Billion Baht  
(Net Debt)

Times (x)  
(Leverage)



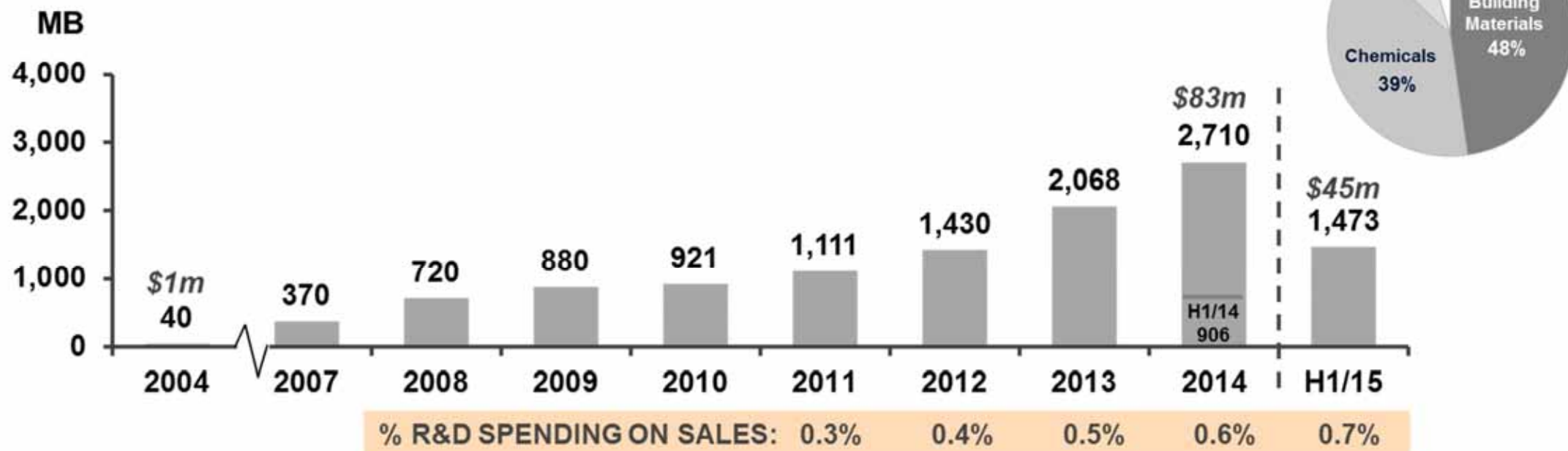
Note: Internal leverage target of 2.5 times (Net debt / EBITDA)

\*annual dividend payout

# R&D and Product Design Team:

Budgeted 4,800 MB in FY2015


## 1. R&D Spending



## 2. R&D and Product Design Team

  
**364** (Ph.D. = 9)  
**2007**



  
**1,629** (Ph.D. = 105)  
**June/15**

**Note:** includes recent acquisition of  
 Norner Group (Norway)  
 50 R&D staffs (10 Ph.D.)

# HVA Strategy:

## (High value added products and services)

### HVA attributes:

5-10% higher margin

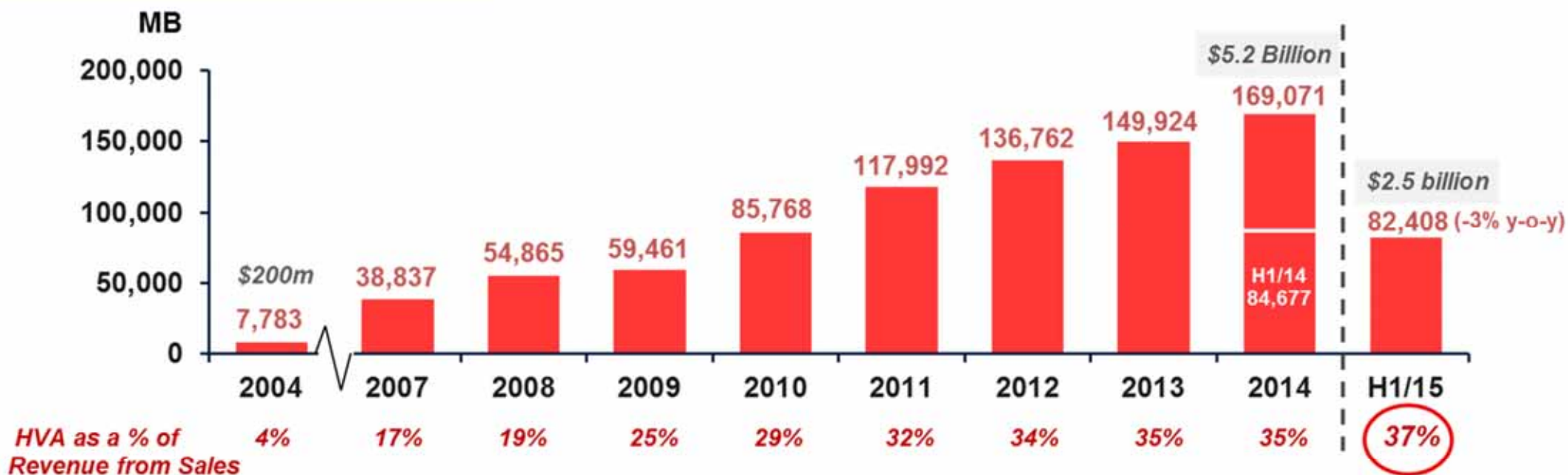
Performance

Solutions provider

Service & Design

Branding

### HVA's Revenue from Sales



Business	2013	2014	H1/15
Cement-Building Materials	41%	42%	42%
Chemicals	27%	27%	30%
Chemicals (Includes associates)	50%	50%	51%
Packaging	38%	39%	39%

## Cement-Building Materials

*“Color rendered mortar”*



*“Roofing solution”*



*“Large format ceramics”*





## ***Chemicals***

***“ Medical grade plastic ”***



***“ EU-certified PE water pipe ”***



***“ Automotive Cluster ”***



***“Wire & Cable”***



***“Roto molding”***



## Packaging

### *“Lightweight packaging solution”*



“Less paper-Same strength”

“Up to 25% lighter”

### *“Flexible Packaging”*



### *“Glassine paper”*



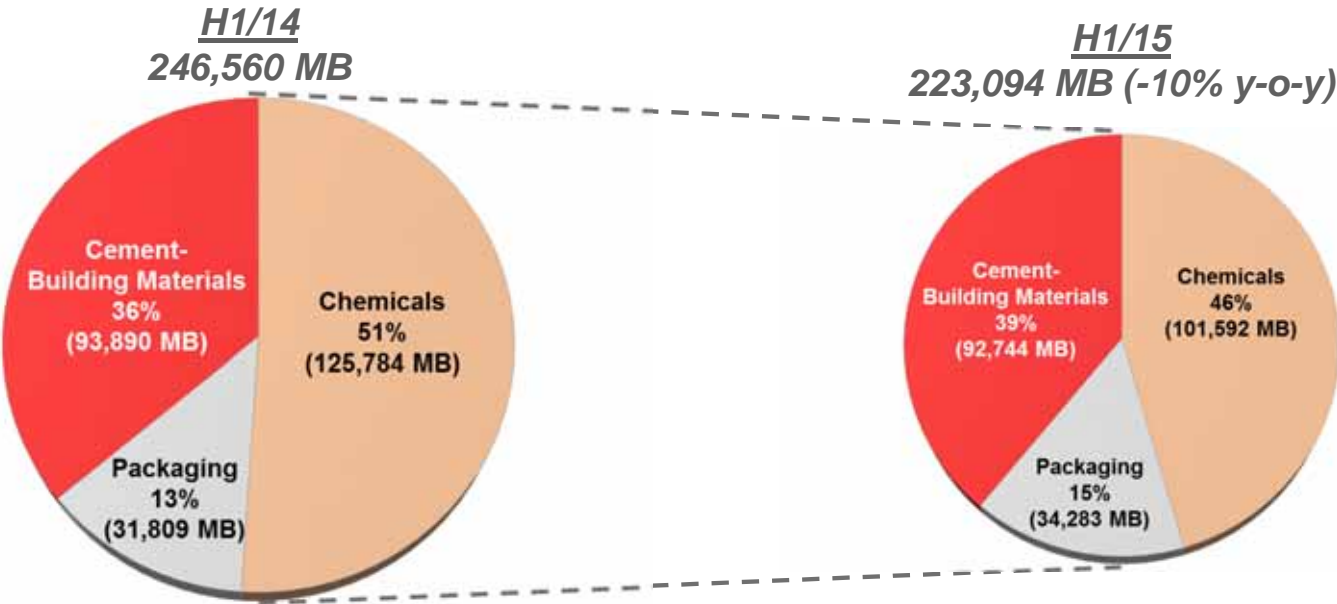
#### Pressure Sensitive Label (PSL)



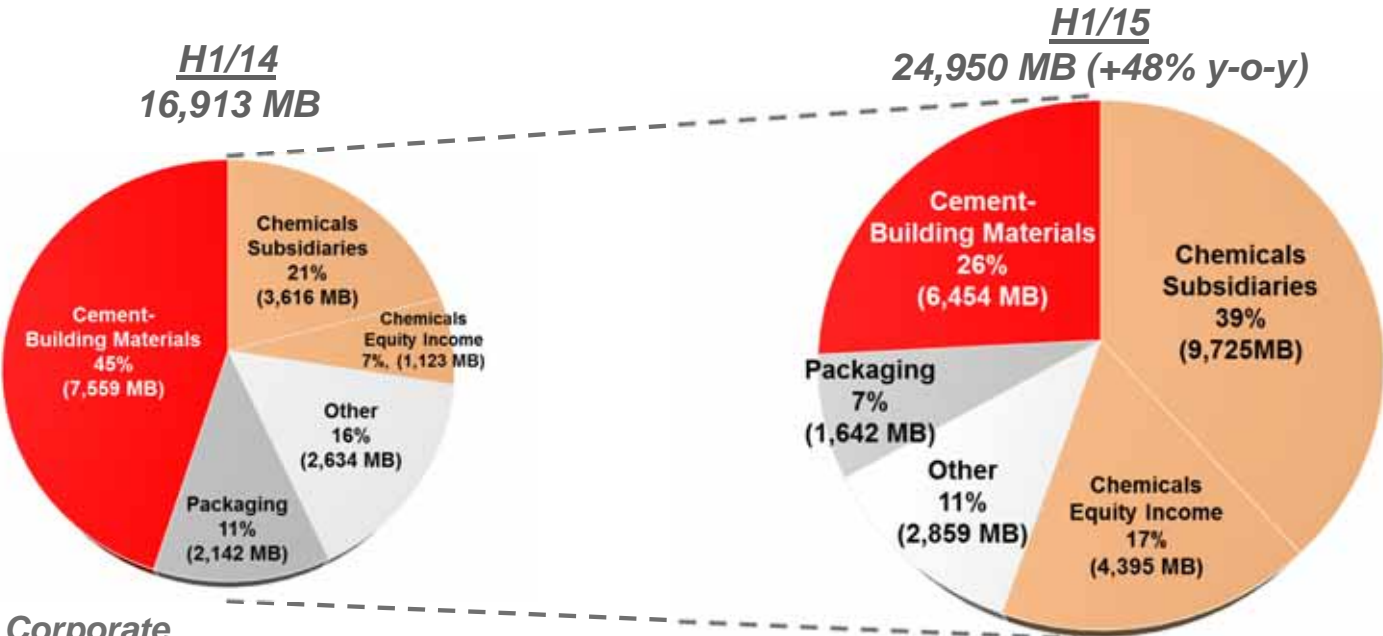


- *Strategies & Key Points*
- *Business Updates*
- *Sustainability & People*
- *Financials*
- *Appendix*

## Revenue from Sales



## Profit for the Period



Other = Mainly SCG Investment and Corporate

## ***“ASEAN Market Facing Platform”***

### ***Structural Products***

- *Cement efficiency*
- *RMC integration*
- *Precast concrete*
- *Lightweight concrete block*
- *Mortar*

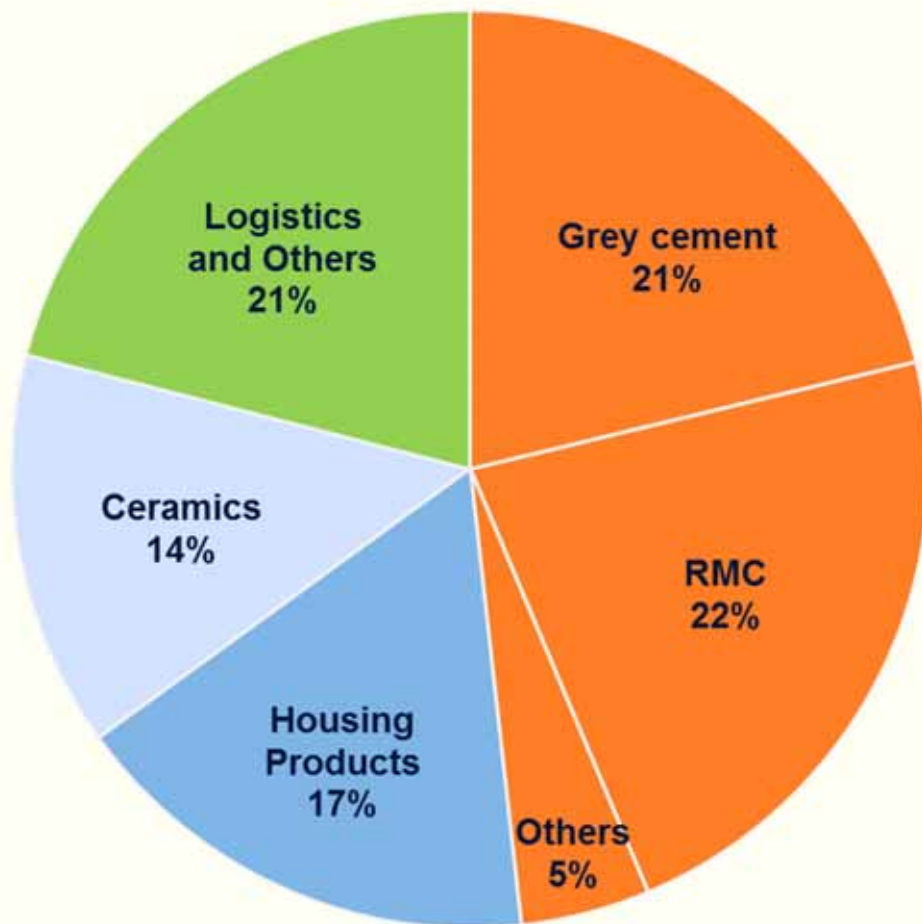
### ***Housing Products + Ceramics***

- *No.1 ceramic tile capacity, globally*
- *Roofing materials*
- *Fiber-cement products*

### ***Distribution***

- *Wholesale*
- *Retail*
- *Home solutions*
- *Logistics*
- *Networks*

## Domestic Portfolio

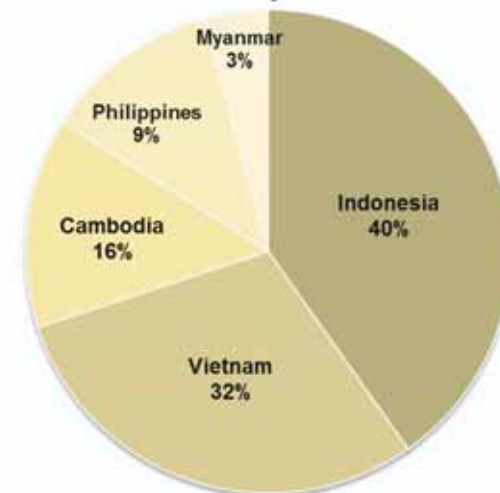


## International Portfolio

### *Export from Thailand*

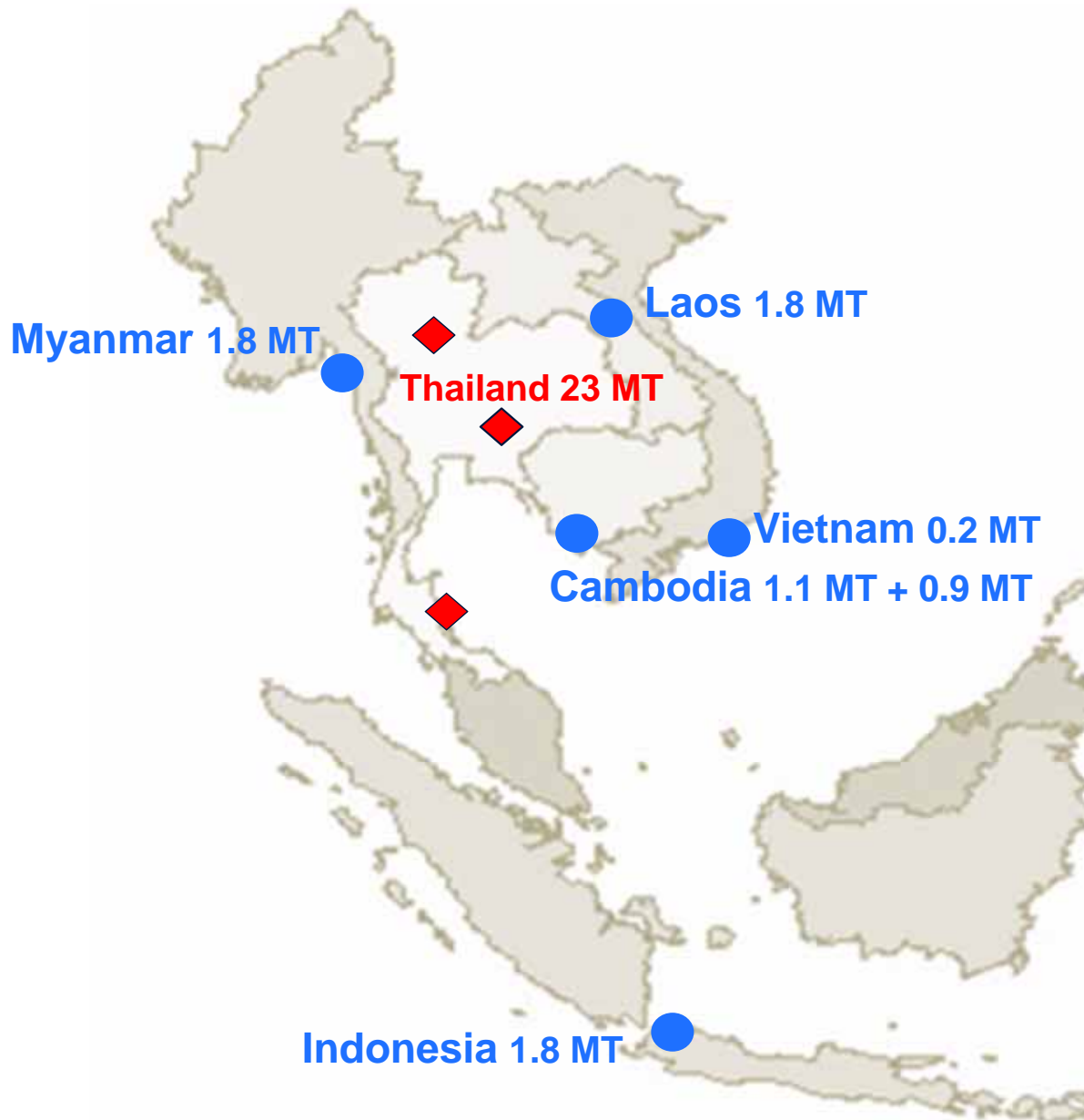


### *ASEAN Operations*



# Cement – ASEAN presence:

Thai domestic market share of 40%



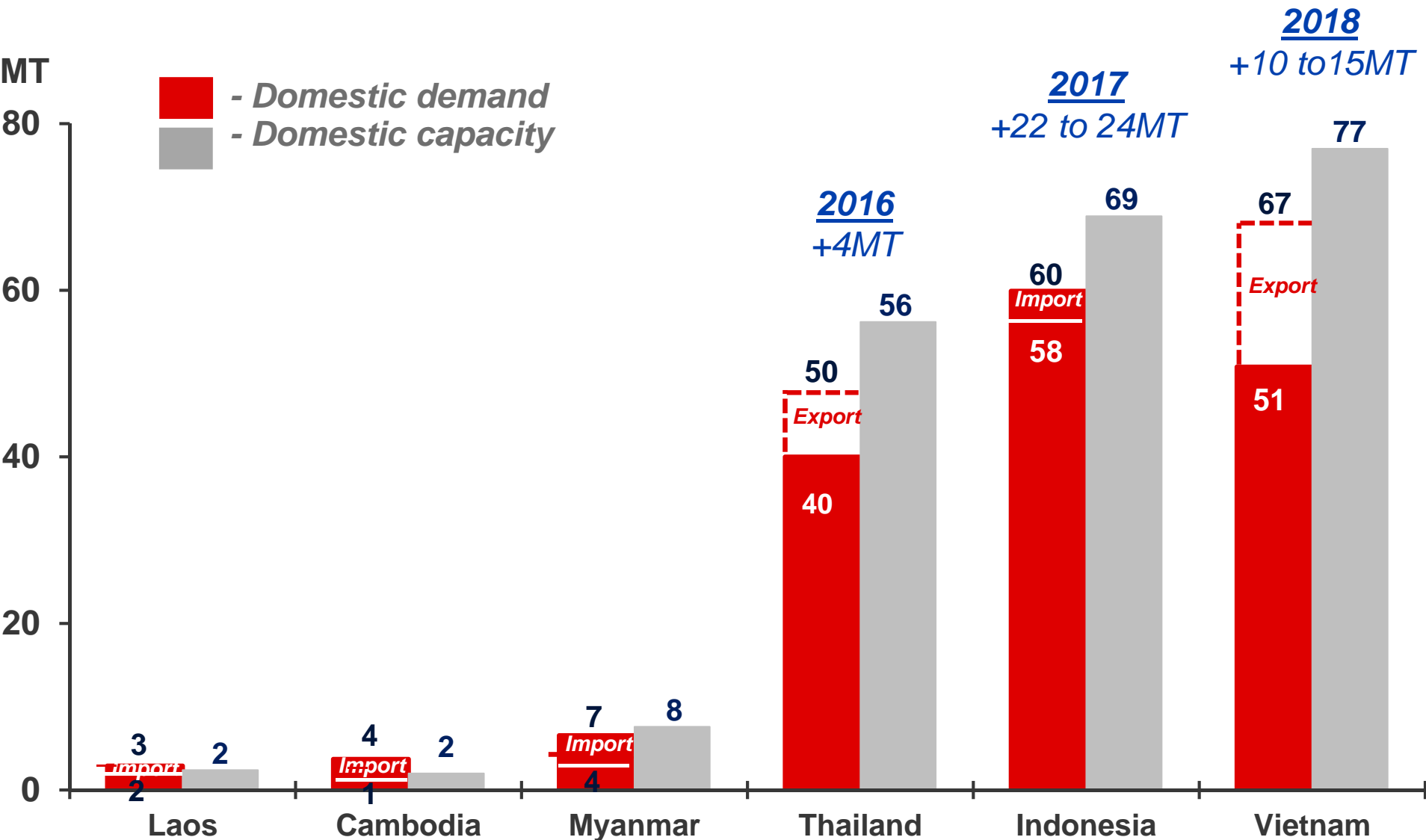
## EXISTING

Thailand	23	MT
Cambodia #1	1.1	MT
Vietnam	0.2	MT

## NEW PLANTS:

### Start up

Cambodia #2	0.9	MT	Q3/15
Indonesia	1.8	MT	Q4/15
Myanmar	1.8	MT	mid-2016
Laos	1.8	MT	mid-2017
	<u>6.3</u>	MT	





Thailand



Cambodia



Indonesia



Myanmar



Laos



Vietnam

## Demand Growth

<b>H1/15</b>	<b>0%</b>	<b>+10%</b>	<b>-4%</b>	<b>+10%</b>	<b>+5% - 7%</b>	<b>+6%</b>
<b>FY2014</b>	<b>-1%</b>	<b>+10%</b>	<b>+3%</b>	<b>+11%</b>	<b>+6%</b>	<b>+11%</b>

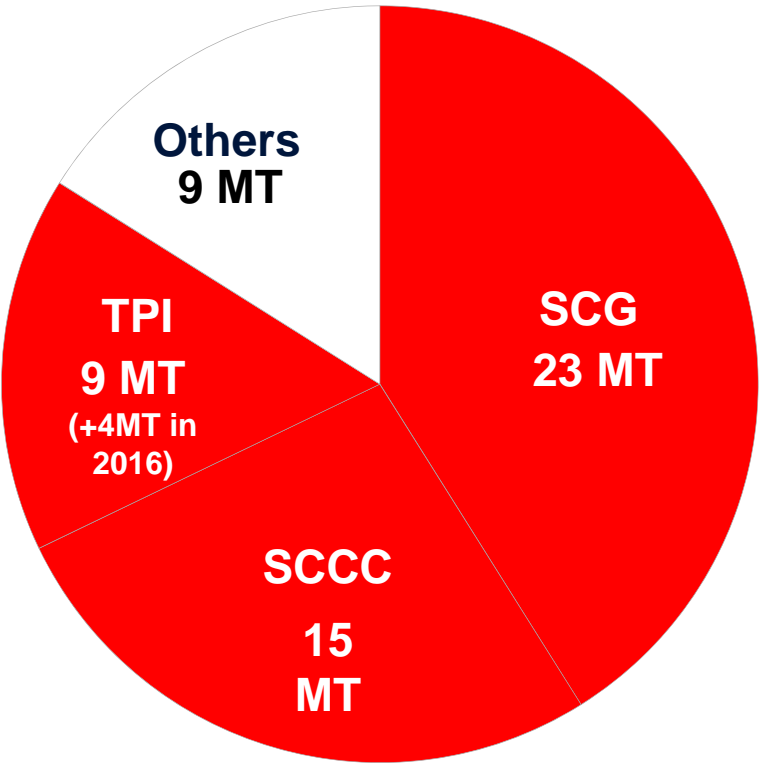
## Price: ex-factory (Q2/15)

<b>US\$ / ton</b>	<b>\$55 - \$57</b>	<b>\$75 - \$80</b>	<b>\$60 - \$65</b>	<b>\$60 - \$65</b>	<b>\$75 - \$80</b>	<b>\$50 - \$55</b>
<b>Local currency / ton</b>	<b>1,850 - 1,900</b>	<b>300,000 - 320,000</b>	<b>880,000 - 900,000</b>	<b>80,000 - 84,000</b>	<b>640,000 - 650,000</b>	<b>1,000,000 - 1,300,000</b>
<b>FX rate</b>	<b>33.3</b>	<b>4,000</b>	<b>13,100</b>	<b>1,100</b>	<b>8,100</b>	<b>21,600</b>

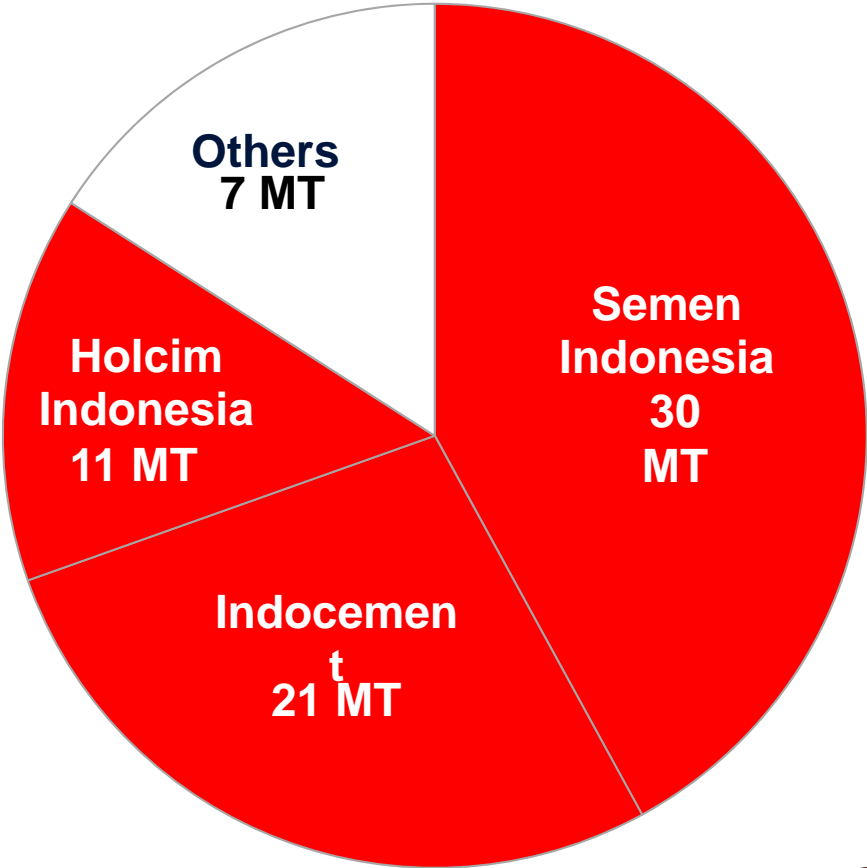


Indonesia's new capacity:  
60-70% existing local  
15-20% new local players  
15-20% foreigners (Thai, Chinese)

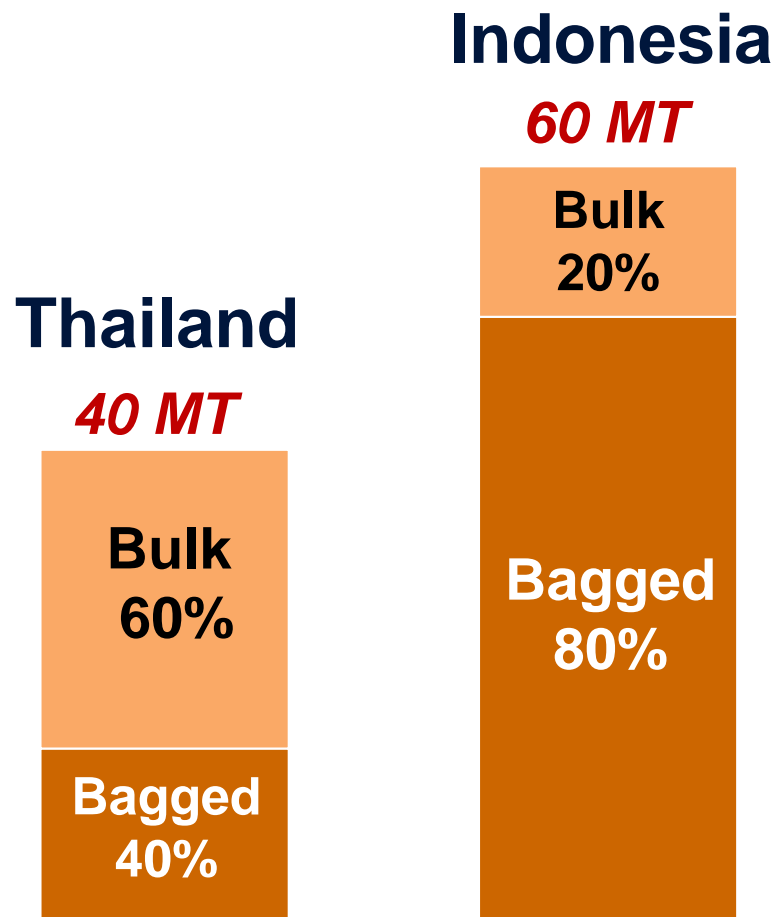
Thailand 56 MT



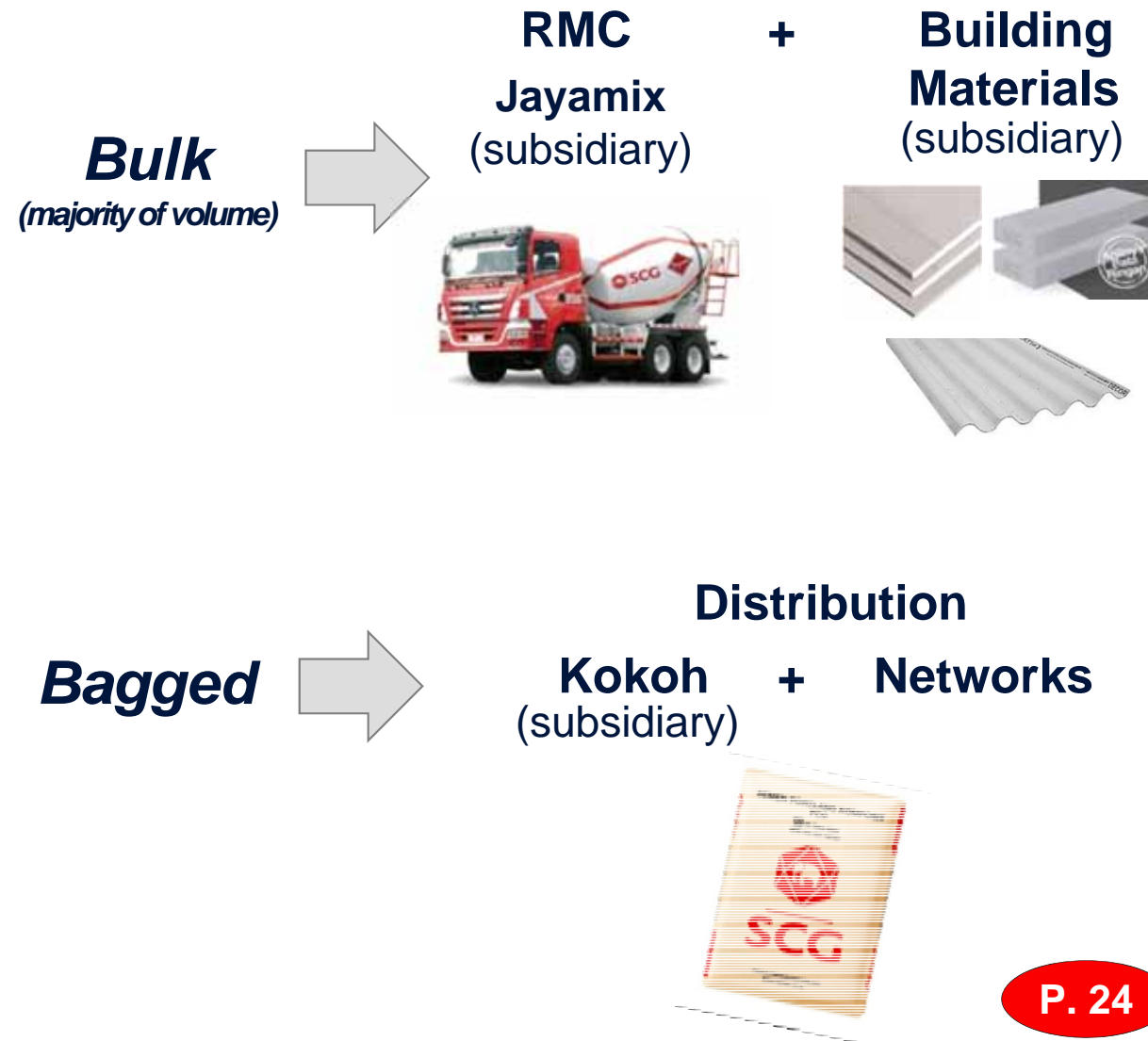
Indonesia 69 MT



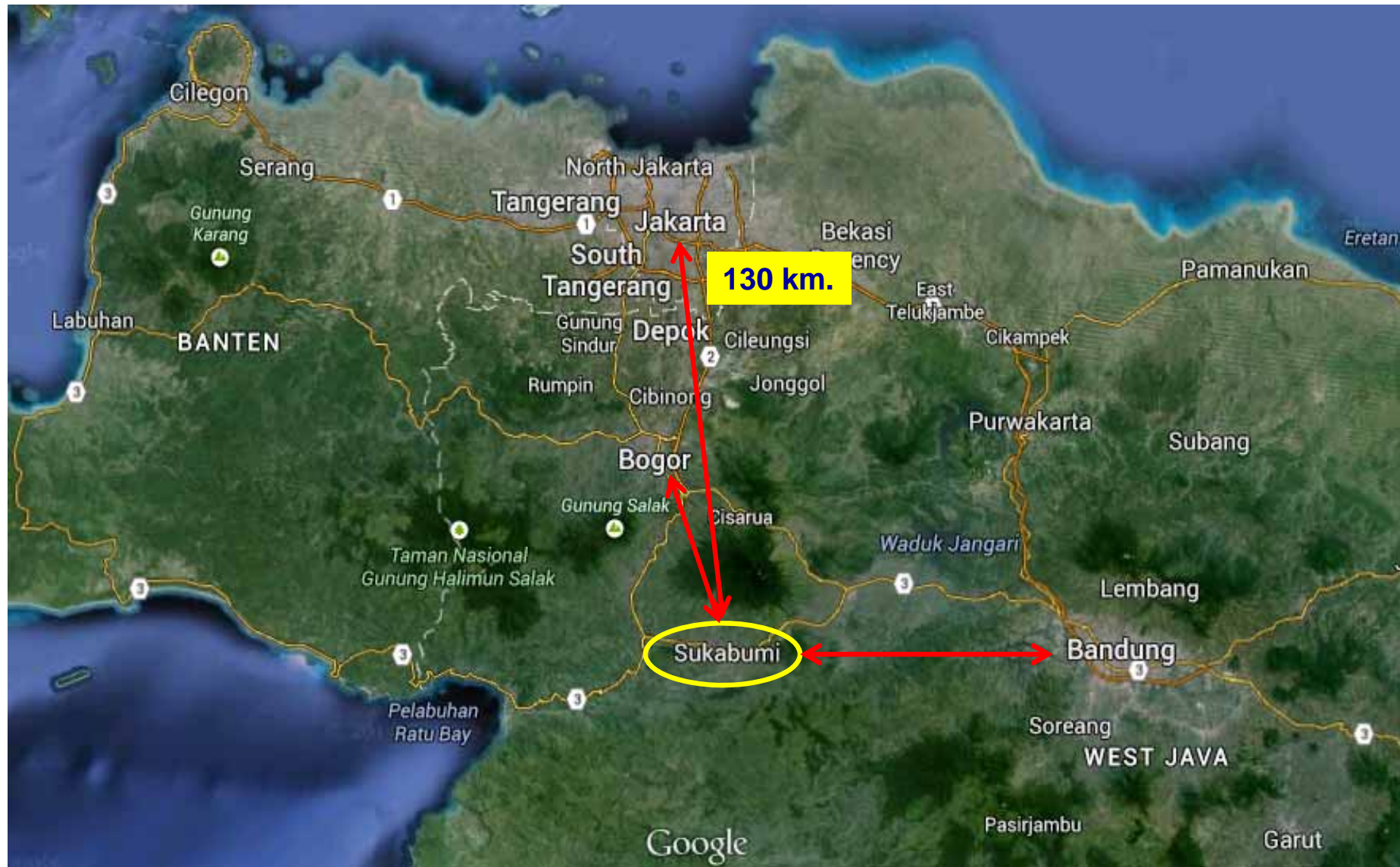
## Market Segments



## Segmented Strategy

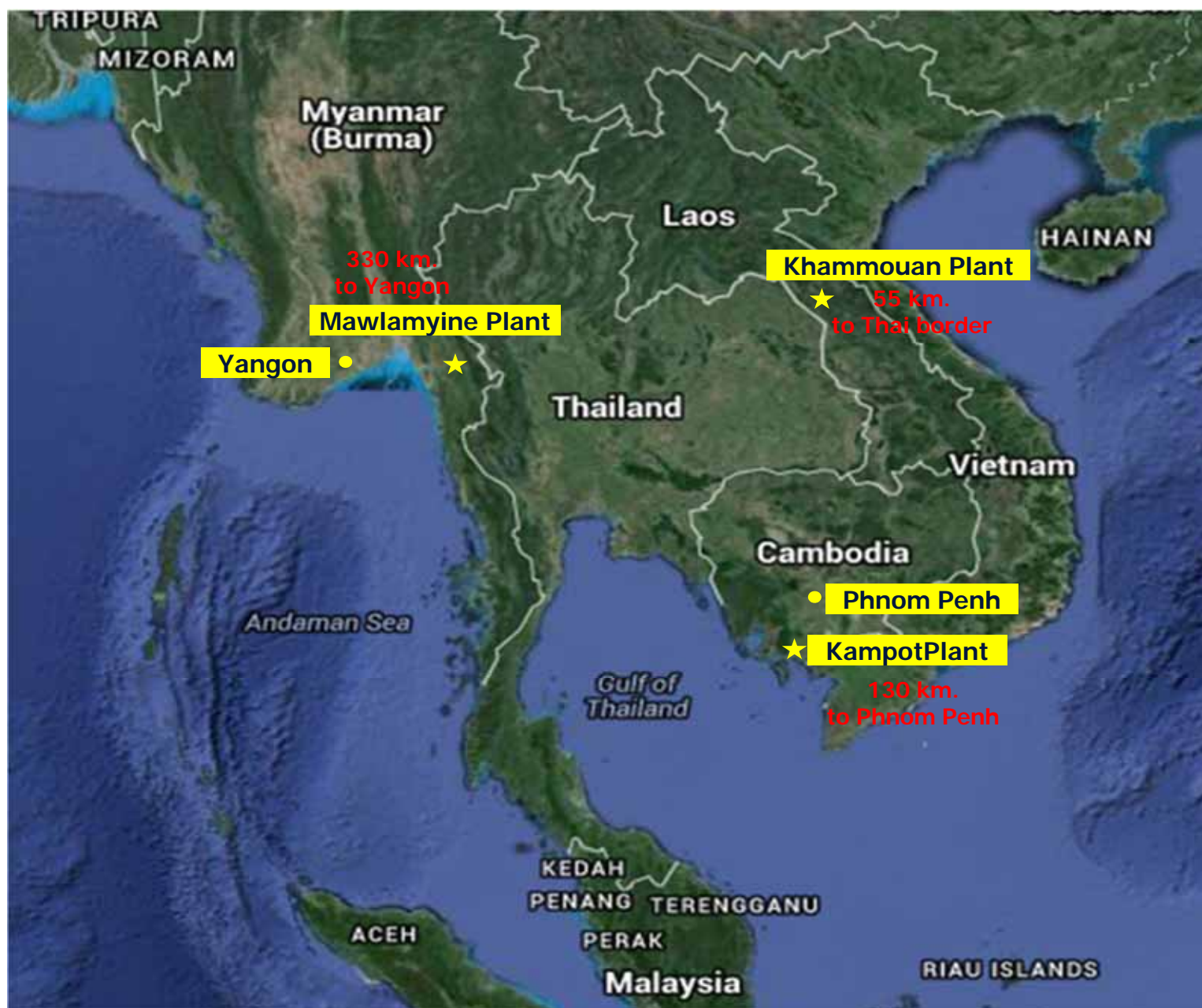


# Indonesia: SCG's cement plant location in West Java





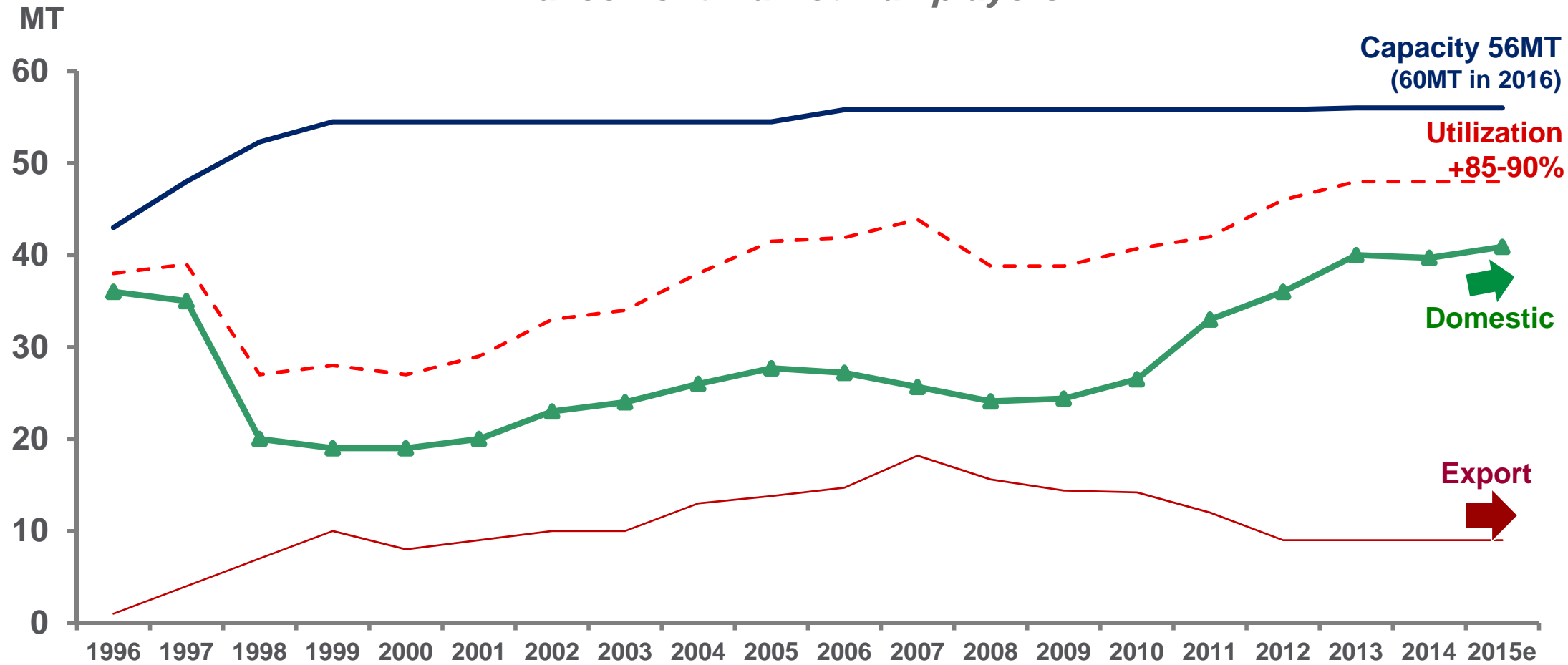
# ASEAN: SCG's cement plants location in ASEAN



**Cement:** Thailand supply and demand  
Thai domestic market share of 40%



Thai cement market – all players



**Total Domestic Growth Rate (% y-o-y)**

- 10% -45% 15% -8% -1% 23% 6% 11% 9% -2% -6% -6% 1% 10% 3% 12% 7% -1% 3%

Avg. 7%

## Total Market Growth (y-o-y)



FY2013	FY2014	Q1/14	Q2/14	Q3/14	Q4/14
7%	-1%	+4%	+0%	-3%	-3%

Q1/15	Q2/15	H1/15
-2%	+2%	0%

### Segment Portions

### Segment Growth (y-o-y)

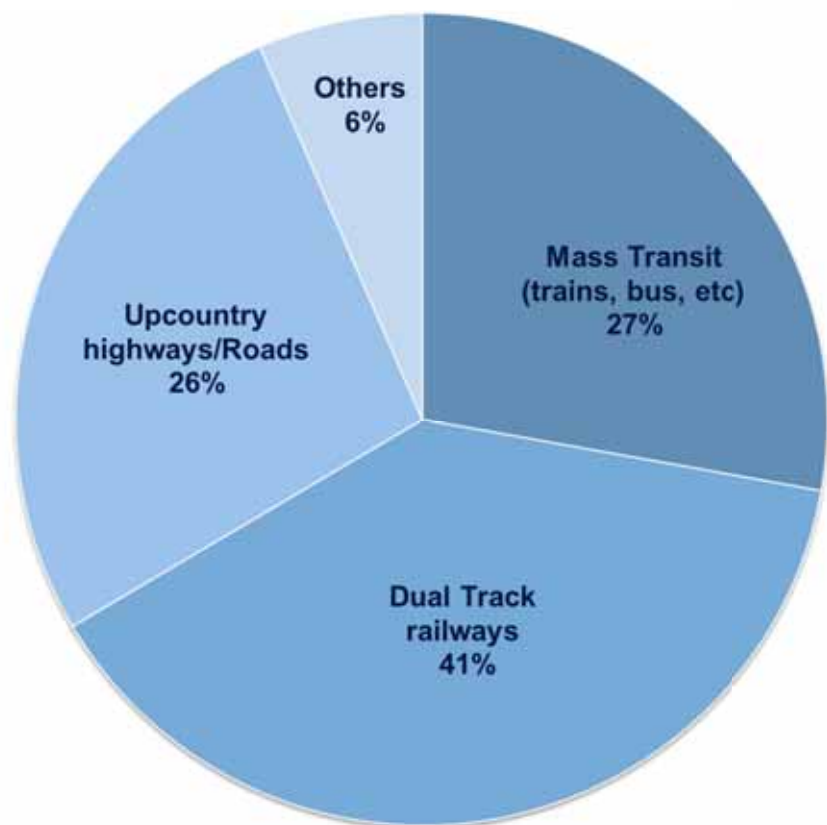
<b>Commercial</b> (approx 20%)
<b>Government</b> (approx 30%)
<b>Residential</b> (approx 50%)

20%	+1%	+14%	+5%	-4%	-8%
3%	-1%	+1%	-2%	-3%	+0%
6%	-1%	+1%	-1%	-2%	-3%

-6%	+1%	-3%
+10%	+11%	+11%
-7%	-3%	-5%

# Thailand: 2.4 trillion Baht infrastructure plan

direct cement demand of <10 MT (8-10 years)



**Upcountry**  
(Intercity railways and roads)  
Total budget 1,618 billion baht

Under construction

0.5%

Bidding in 2015-2016

19%

Rest 80%

**Bangkok and Vicinity**  
(Mass Rail Transit: MRT)  
Total budget 578 billion baht

Under construction

15%

Bidding in 2015-2016

49%

Rest 36%

## Exclude

1. High speed train ~ 400 billion baht
2. Suvarnabhumi airport development ~ 110 billion baht

Updated till July 2015 | MRT exclude purple lines, blue lines, and green lines that are under construction

\* MRT's master plan exclude the budget of under construction lines: purple line, blue line, and red line



## MRT: update progress



### Total project value in 2015-2016 = 590 billion baht

PROJECT	DISTANCE (KM)	BUDGET (Billion Baht)	BIDDING	%Progress*	Complete Project
<b>Under Construction</b>					
Purple Line	23	64	✓	99%	Q4/15
Blue Line	27	83	✓	64%	2019
Green Line (Baring - Samutprakan)	13	25	✓	60%	2018
Red	26	73	✓	30%	2019
Green Line (Mochit - Kukot)	19	59	✓	Beginning	2019
<b>Total</b>		<b>304</b>			
<b>Contractor Bidding in 2016</b>					
Airport Link	22	31	Q1/16		2020
Pink Line	35	57	H1/16		2021
Yellow Line	29	56	H1/16		2020
Orange Line	21	110	H1/16		2021
Purple Line (extension)	24	33	2016		2022
<b>Total</b>		<b>286</b>			

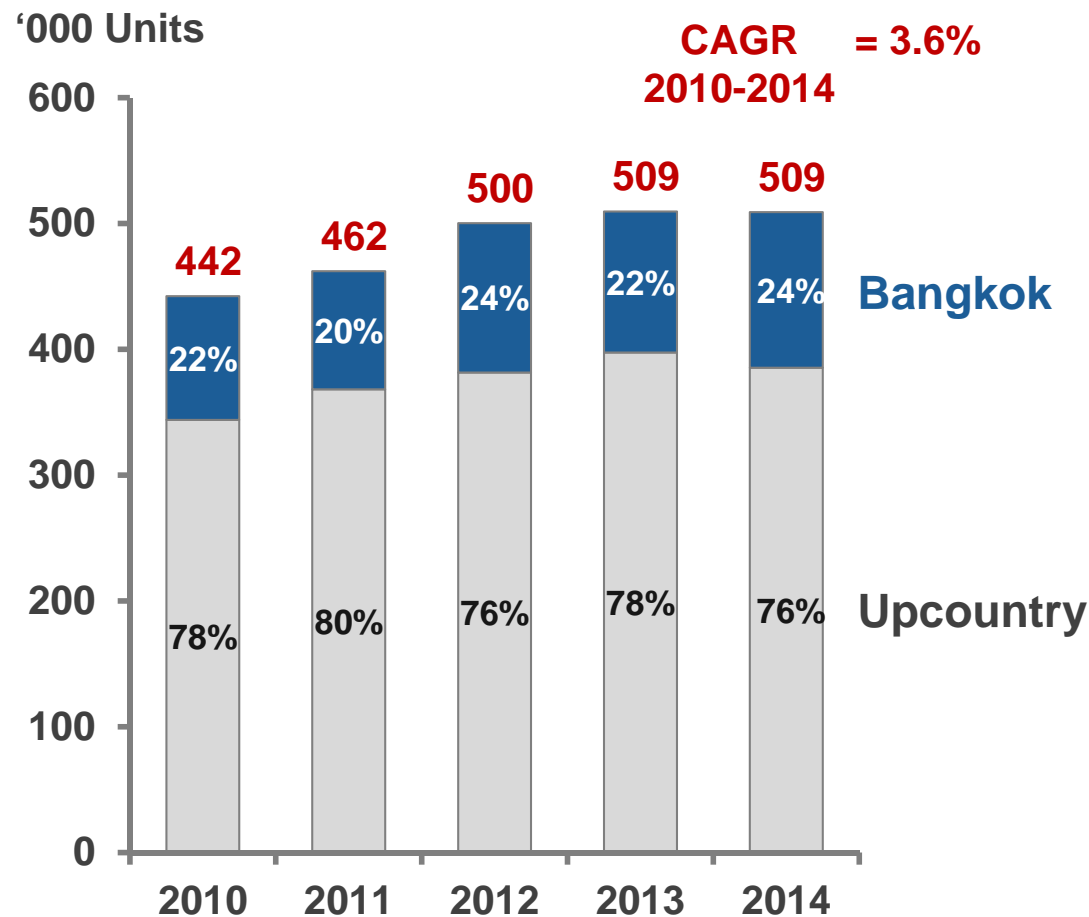


\*Note: % progress updated as of June/15

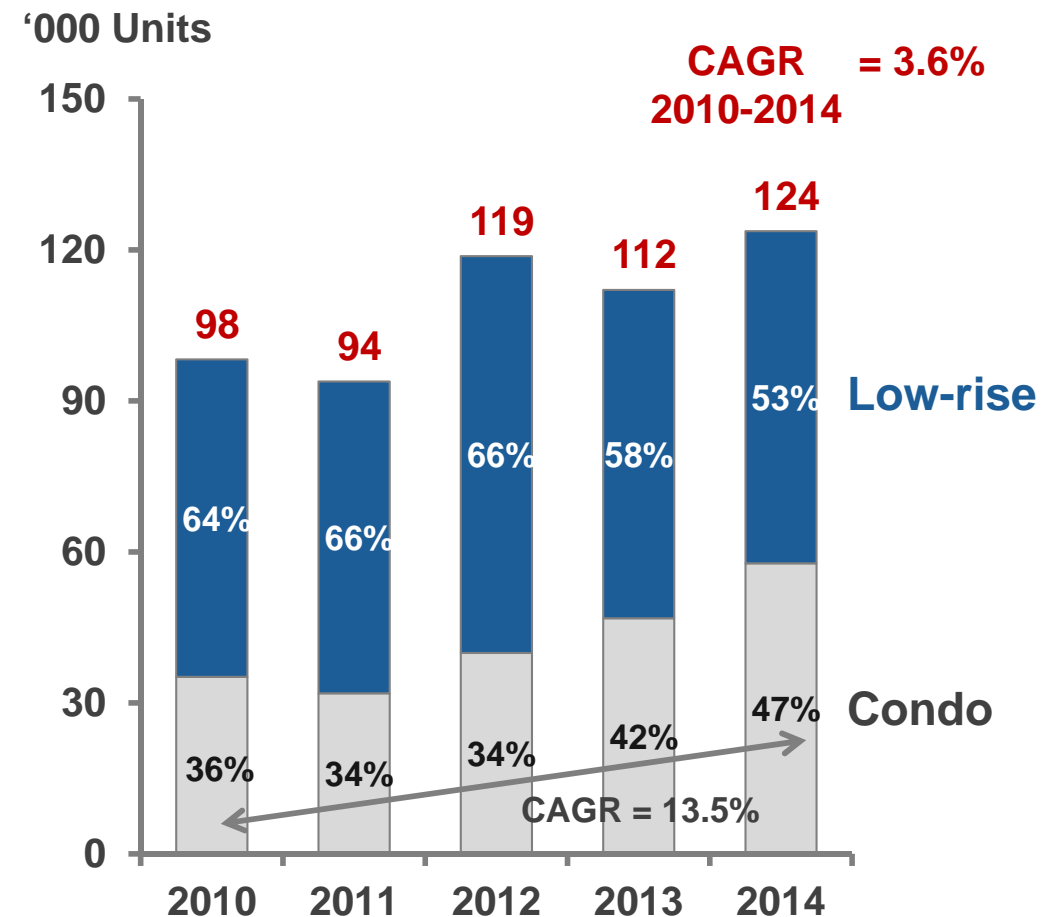


	PROJECT	BUDGET (billion baht)	BIDDING
	<b>Double Tracks – meter gauge: 129 billion baht</b>		
	Jira-Khonkean	26	Q4/15
	Chachengsao - KeangKoi	11	Q4/15
	PrachuapKhiriKhan-Chumporn	17	2016
	Nakornpathom-Huahin	20	2016
	MapKabao-Jira	30	2016
	Lopburi-Paknam	25	2016
	<b>Total</b>	<b>129</b>	
	<b>Double Tracks – standard gauge: 495 billion baht</b>		
	Bangkok – Kangkoi (1 <sup>st</sup> phase)	20	Oct-15
	Nongkhai -Kangkoi - Maptaphut		N/A
	<b>Total</b>	<b>20</b>	
	<b>Motorways: 160 billion baht</b>		
	Pattaya-MapTaPhut	20	Aug-15
	Bangpain-NakonRatchasima	85	2016
	Bangyai-Kanjanaburi	55	2016
	<b>Total</b>	<b>160</b>	
	<b>Other Roads: 8 billion baht</b>		
	International Connection: 4 lines	4	✓
	Extension: 5 lines	4	✓
	<b>Total</b>	<b>8</b>	
	<b>Grand Total</b>	<b>317</b>	
	<b>Potential Future Plan: High Speed Train: 450 billion baht</b>		
	Bangkok-Chiangmai (Thailand-Japan)	200	studying
	BKK-Rayong and BKK-Huahin (PPP)	250	studying
	<b>Total</b>	<b>450</b>	

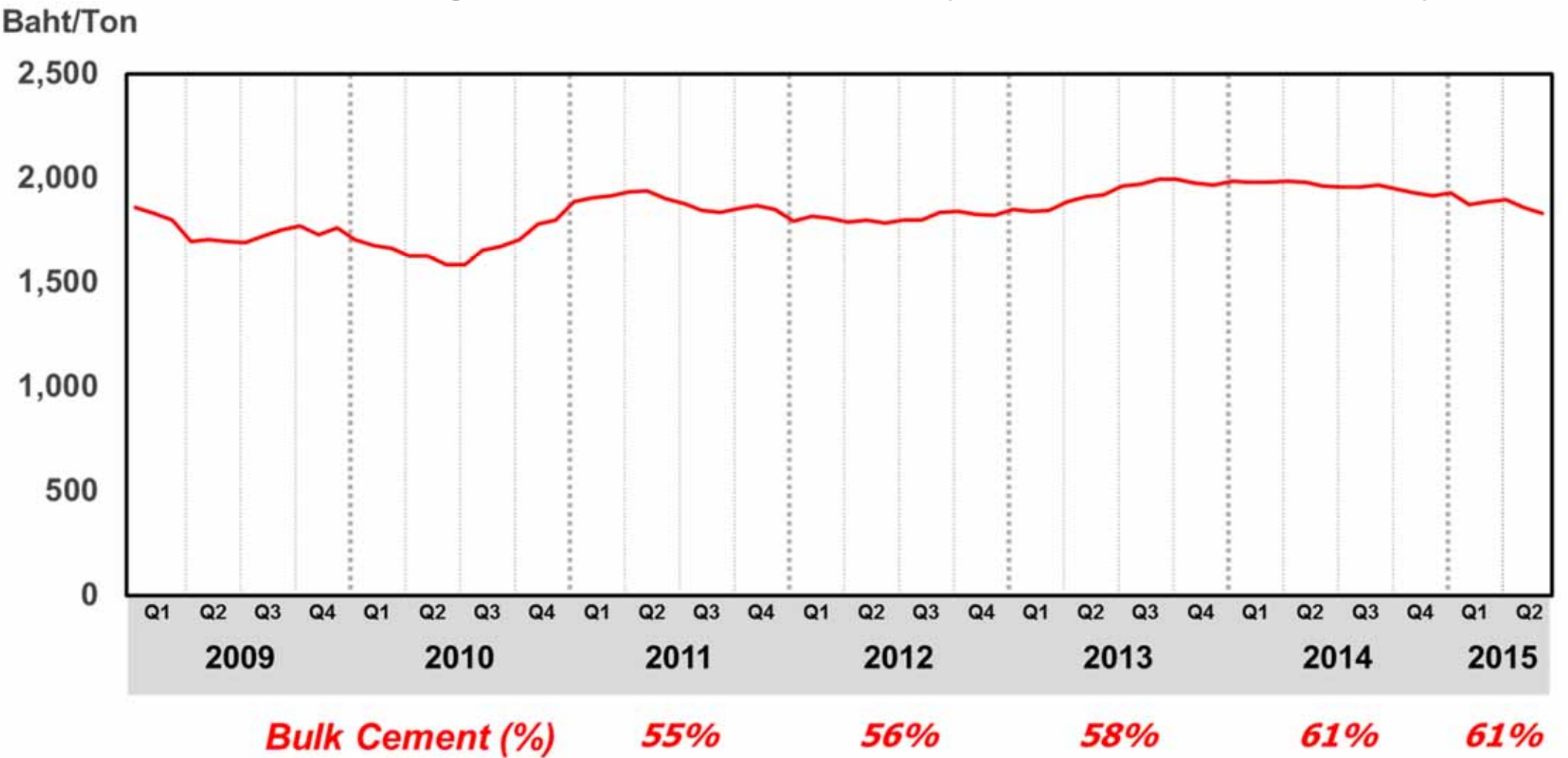
## New Registered Homes ( '000 units all types)



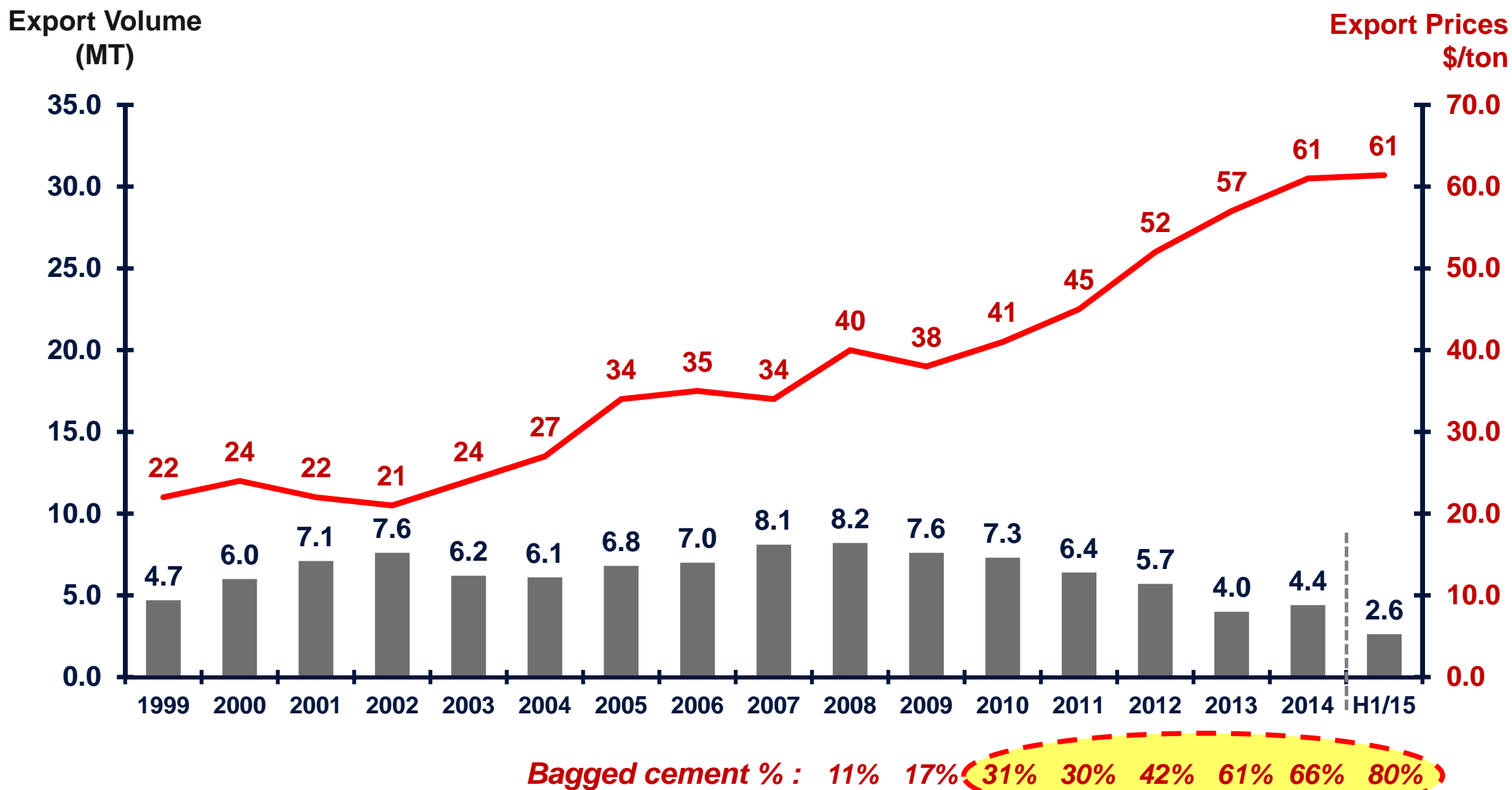
## Bangkok's New Registered Homes ( '000 units all types)



Average Domestic Price of Grey Cement (Net ex-factory)



# Thailand: SCG's cement exports (FOB prices)





## Housing Products

### 1. Roofing Tiles



#### Types of tiles

- Fiber Cement roof tiles
- Concrete roof tiles
- Ceramic roof tiles



### 2. Fiber Cement Products (ceiling and wall)



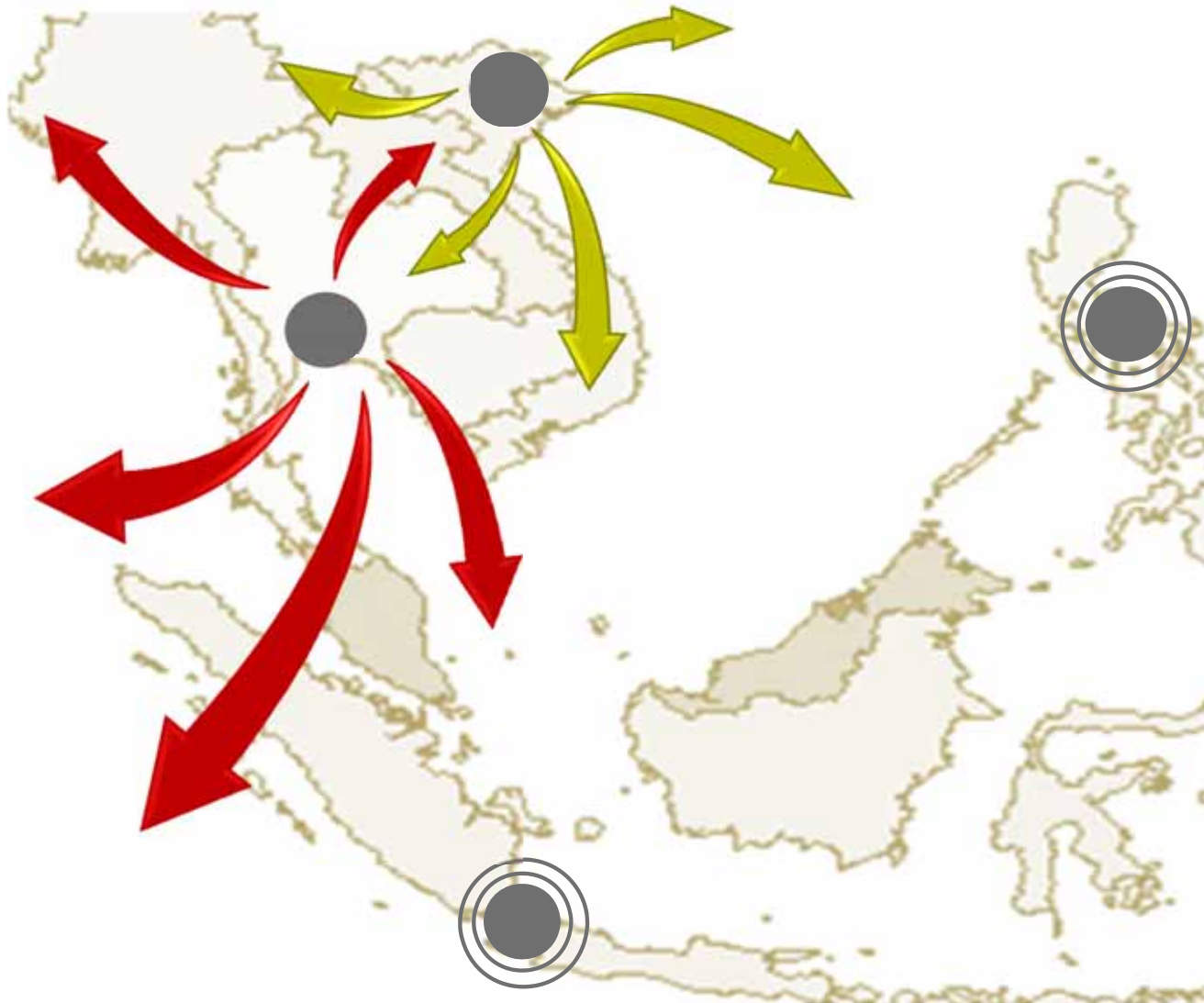
## Ceramics Tiles (floor & wall)



#### Formats:

from mosaics to slabs (1.5 x 3.4 meter)

## *ASEAN production rationalization.*



## **Competitiveness:**

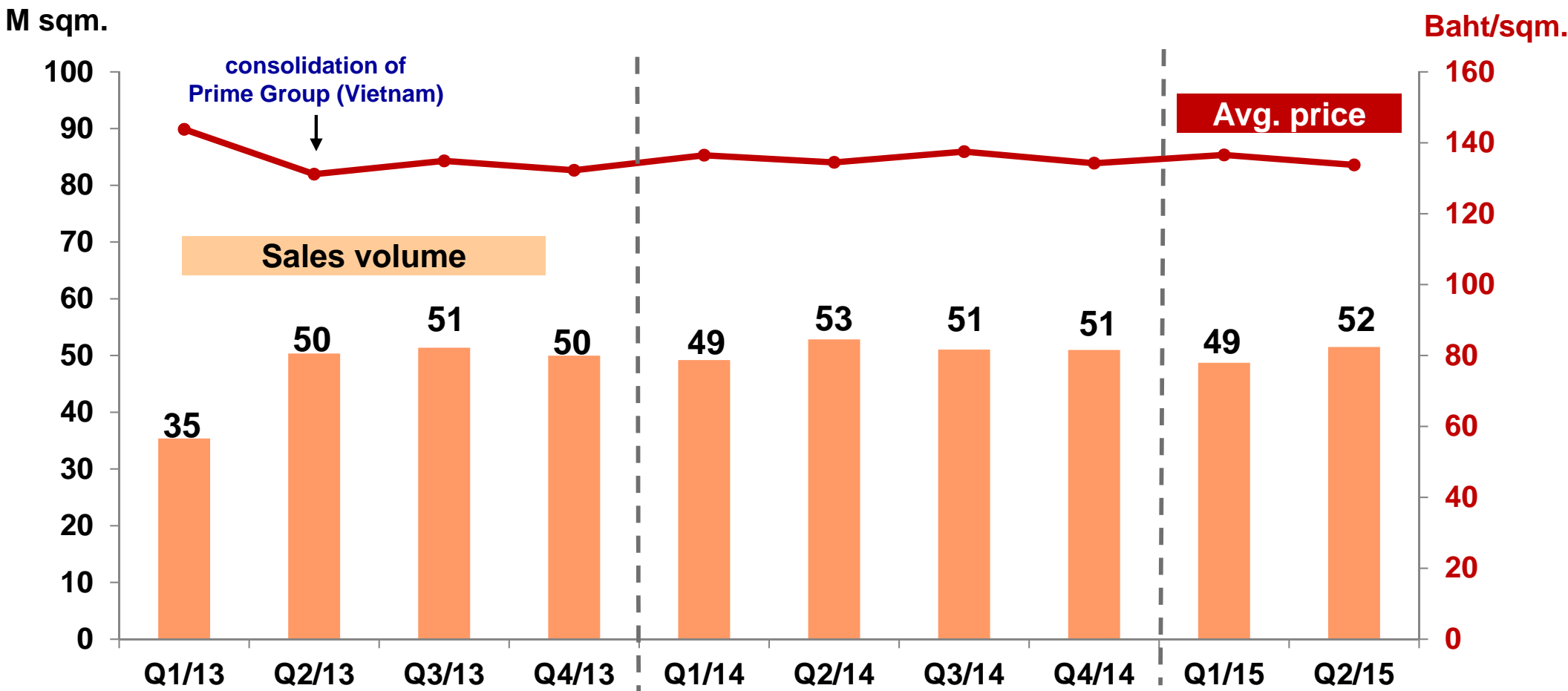
- *Economies of scale*
- *Global branding*
- *Digital printing*
- *Dry grinding process*
- *Gasification system*

## **SCG's Capacity 225 Mill sqm.**

<b>Thailand</b>	<b>106</b>
<b>Vietnam</b>	<b>75</b>
<b>Indonesia</b>	<b>32</b>
<b>Philippines</b>	<b>12</b>



SCG's ASEAN subsidiaries



## Flexible products (metathesis)

### Thailand

#### Crackers (SCG 2/3, DOW 1/3)

**ROC** (1999)  
Rayong Olefins  
1.2 MT C2 + C3

**MOC** (2010)  
Map Ta Phut  
Olefins  
1.7MT C2 + C3

### Indonesia

#### Cracker (SCG 30%)

**CAP** (1995)  
Chandra Asri  
0.9 MT C2 + C3

**De-bottleneck**  
(Late-2015)  
1.3 MT C2 + C3

## Flexible R/M (gas up to 70%)

### Vietnam

#### Cracker (SCG 46%)

**Long Son Petrochemicals  
(LSP) - \$4.5 Billion**

1.4 MT C2 + C3

#### Downstream

##### Subsidiaries

PE  
PP  
PVC  
Others

##### Associates

- Dow
- Mitsui Chemicals
- Mitsubishi Rayon
- JSR

#### Downstream

##### Subsidiaries

PE  
PP  
SM  
BD

##### Associates

Michelin SSBR  
(2017 start)

#### Shareholders

<b>SCG</b>	<b>46%</b>
<b>Petro Vietnam</b>	<b>29%</b>
<b>Qatar Petroleum Int'l</b>	<b>25%</b>

#### Completed

- Long-term feedstock
- Land lease 400 hectare
- Plant Engineering
- On-going loan discussion

<b>PE</b> (C2)	consumer goods
<b>PP</b> (C3)	capital goods
<b>MMA</b> (C4)	consumer / capital goods
<b>PVC</b>	construction related
<b>BD</b> (C4)	rubber substitutes



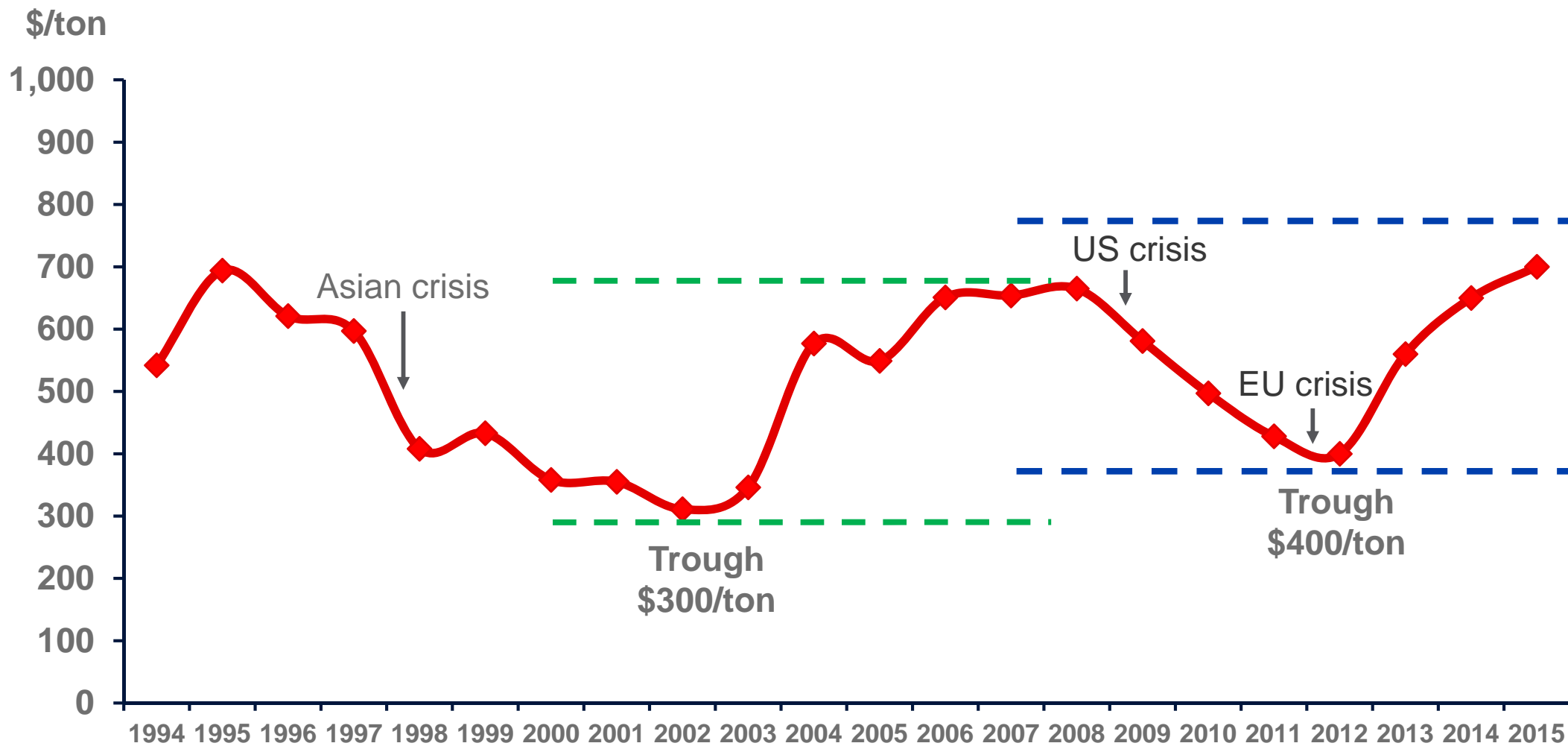
**olefins**

<b>PTA</b>	textiles industry
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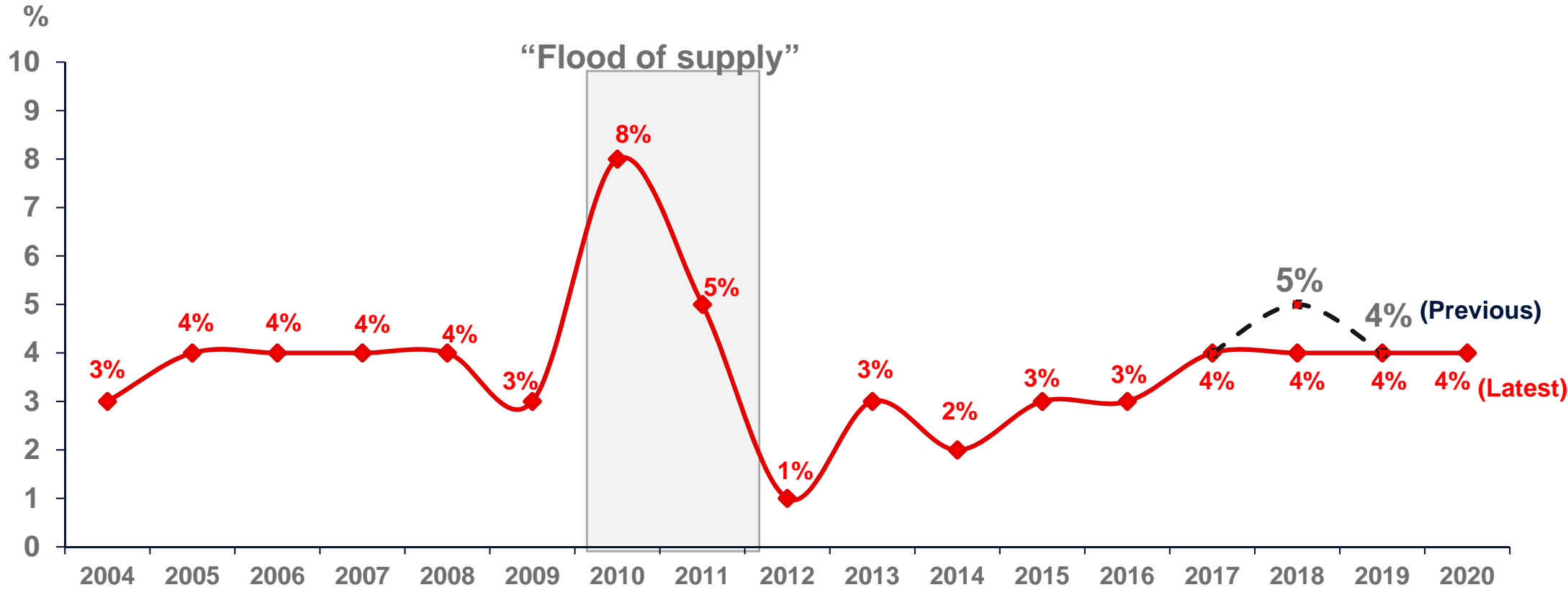


**aromatics**

# Historical margin: HDPE – Naphtha



# Ethylene world supply growth



Incremental supply growth (MT):															
2.8	4.4	4.6	4.7	4.7	3.5	10.5	6.9	2.0	5.0	3.4	5.0	5-6	6-7	6-7	6-7

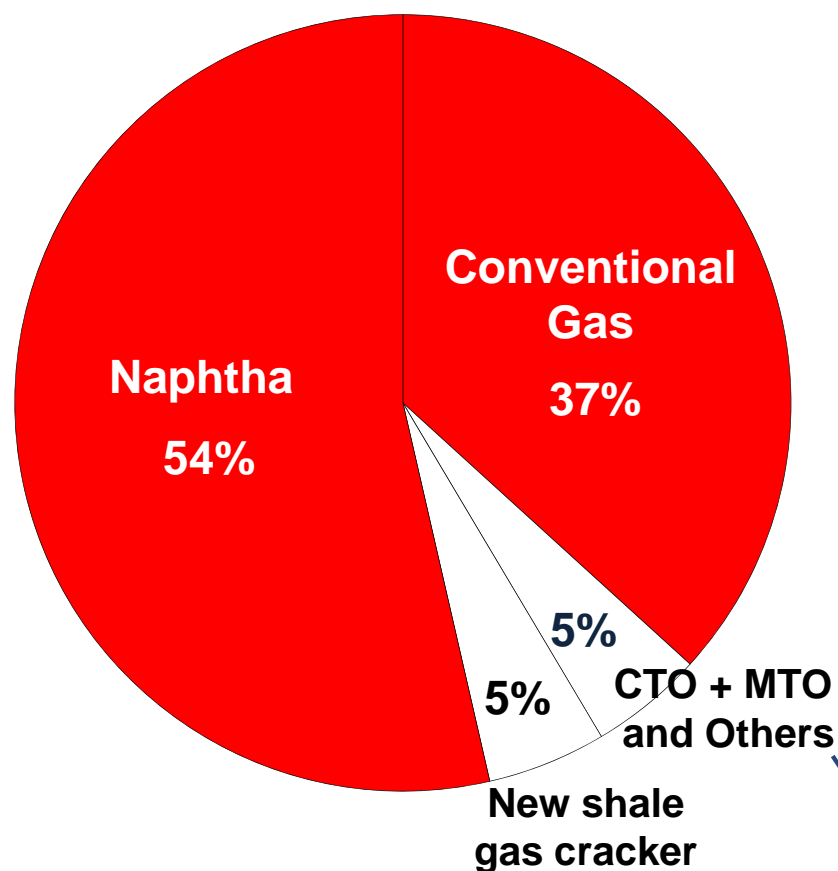
Note: as of June/15



# Ethylene world capacity:

Naphtha and conventional gas = 90% of world's capacity

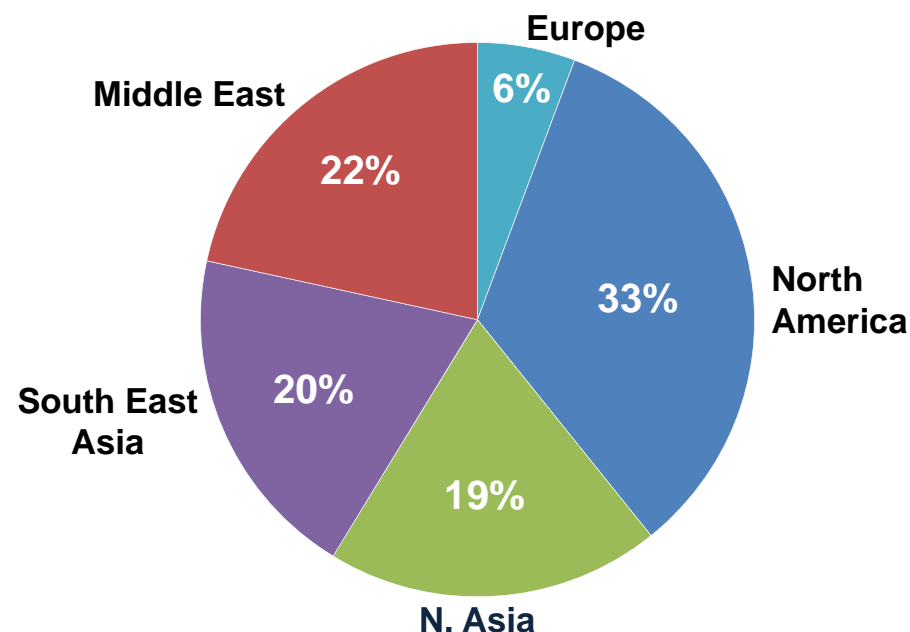
Ethylene world capacity  
(2020)



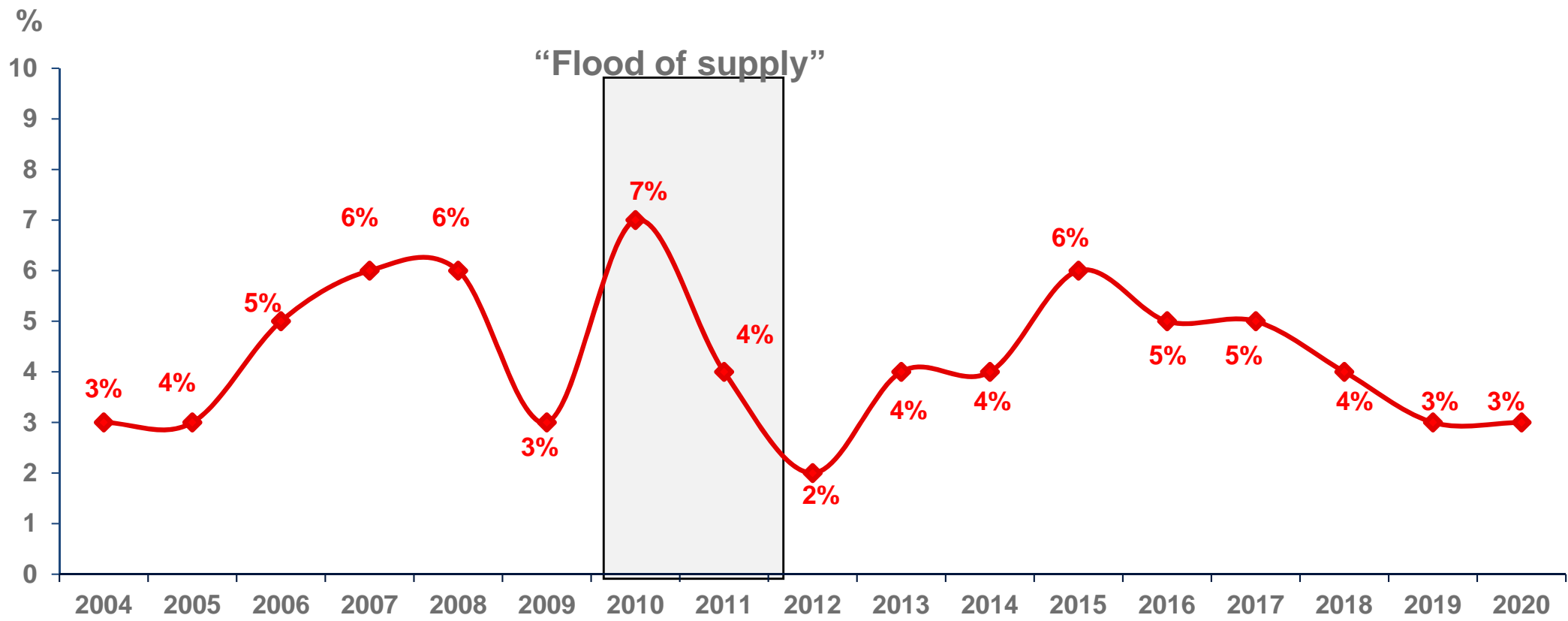
- *near Mongolia (coal reserves) with water scarcity.*
- *5x greater water usage than conventional.*
- *2.5x higher investment cost than conventional.*
- *deleted from China's investment tax promotion.*

- *8 crackers = 5% of the world's capacity.*
- *6 yrs required from planning to startup*

New capacity by region  
(2016 - 2020)



# Propylene world supply growth

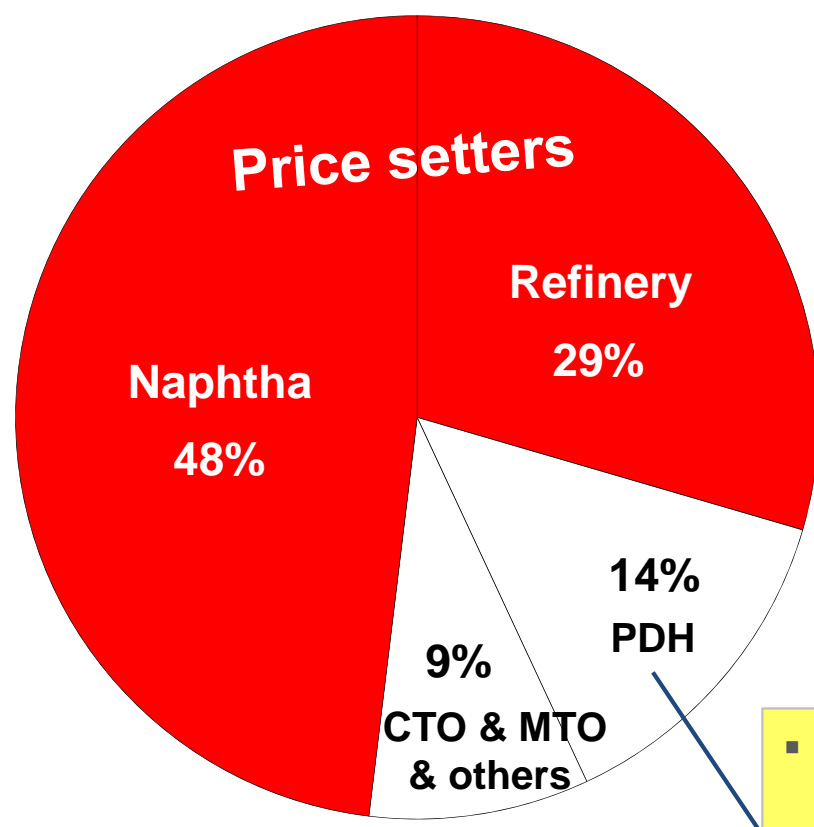


Incremental supply growth (MT):																	
1.8	2.4	3.3	4.1	4.8	2.8	5.9	4.1	2.1	4.4	3.8	6.2	5-6	5-6	4-5	3-7	3-4	

# Propylene world capacity:

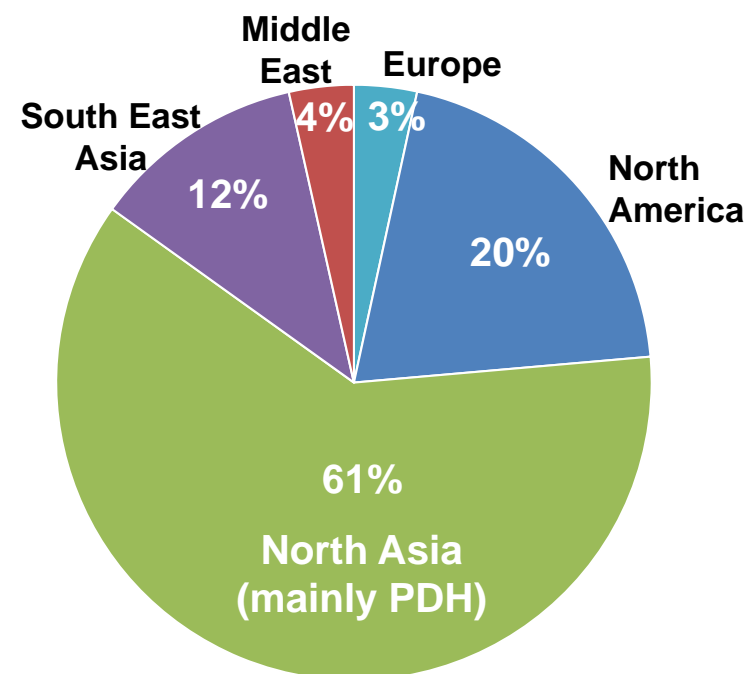
Naphtha and refinery = 77% of world's capacity

## Propylene world capacity (2020)

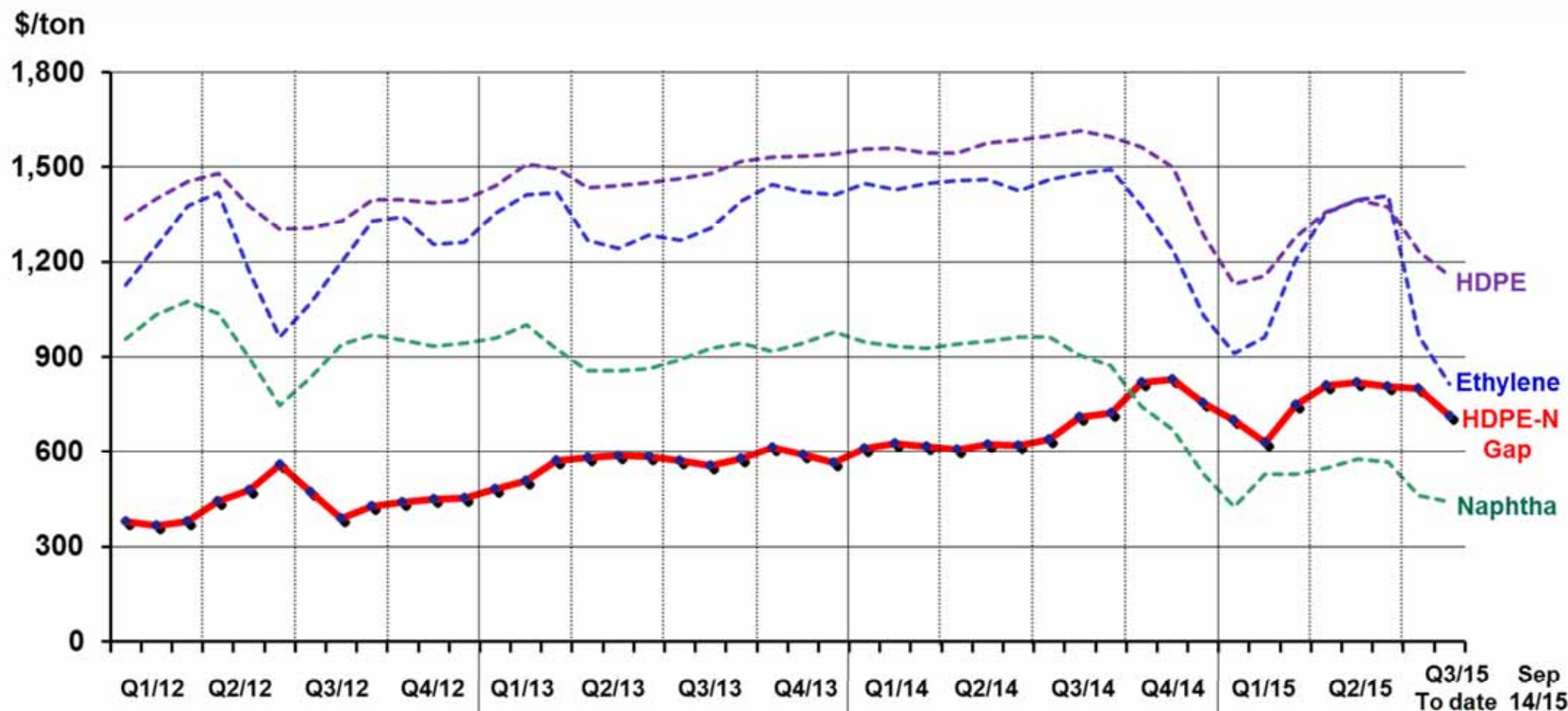


- Liquid based (naphtha & refinery) are 77% of the world's capacity, and are global price setters
- PDH (shale + LPG) amount to 18 MT or 14% of the world's capacity

## New capacity by region (2016 – 2020)



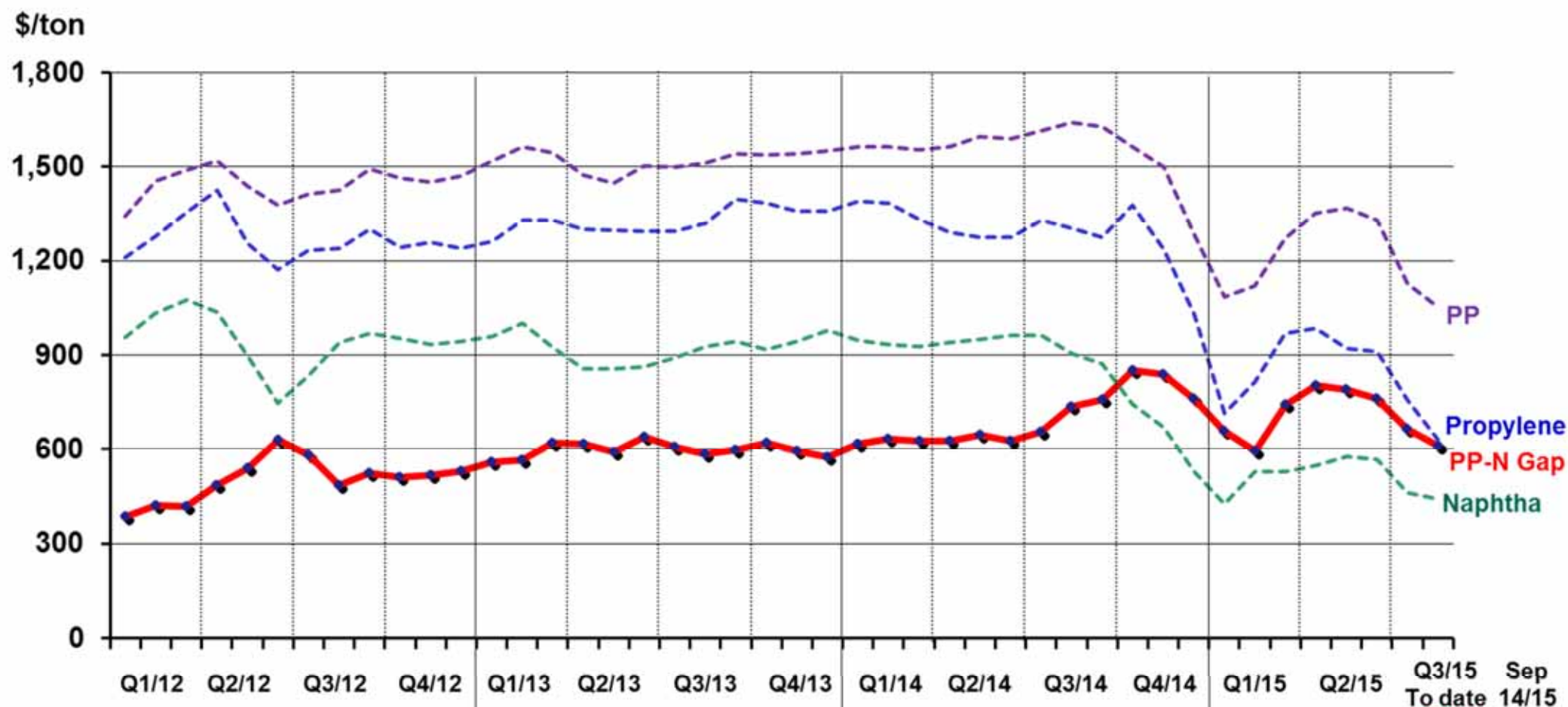
# HDPE – Naphtha Price Gap



HDPE-Naphtha	374	494	428	449	521	585	568	590	620	618	691	802	694	812	800	714
Spread (\$/ton)	437				566				682							
HDPE-C2	144	203	143	107	87	178	166	110	113	121	125	234	161	(11)	268	340
C2-Naphtha	230	291	285	342	434	407	402	480	507	496	565	568	532	823	502	374

Note: Prices refer to SEA regional prices

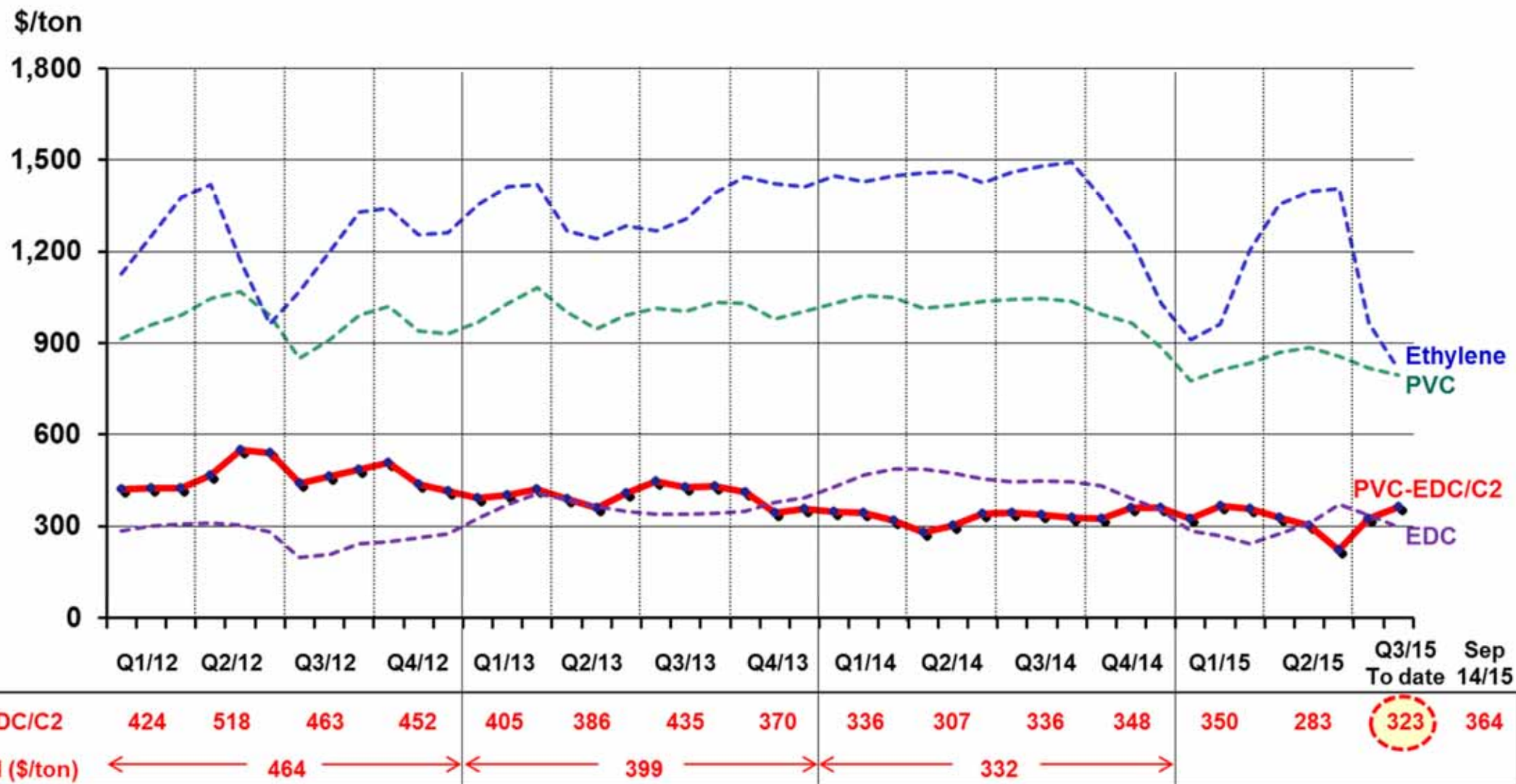
# PP – Naphtha Price Gap



	Q1/12	Q2/12	Q3/12	Q4/12	Q1/13	Q2/13	Q3/13	Q4/13	Q1/14	Q2/14	Q3/14	Q4/14	Q1/15	Q2/15	Q3/15 To date	Sep 14/15
PP-Naphtha	408	551	529	519	581	617	597	597	626	632	716	819	664	785	666	611
Spread (\$/ton)	502				598				698							
PP-C3	147	160	187	216	236	178	182	177	192	304	328	433	325	408	373	423
C3-Naphtha	261	391	342	303	345	439	415	420	434	328	388	385	339	376	293	189

Note: Prices refer to SEA regional prices



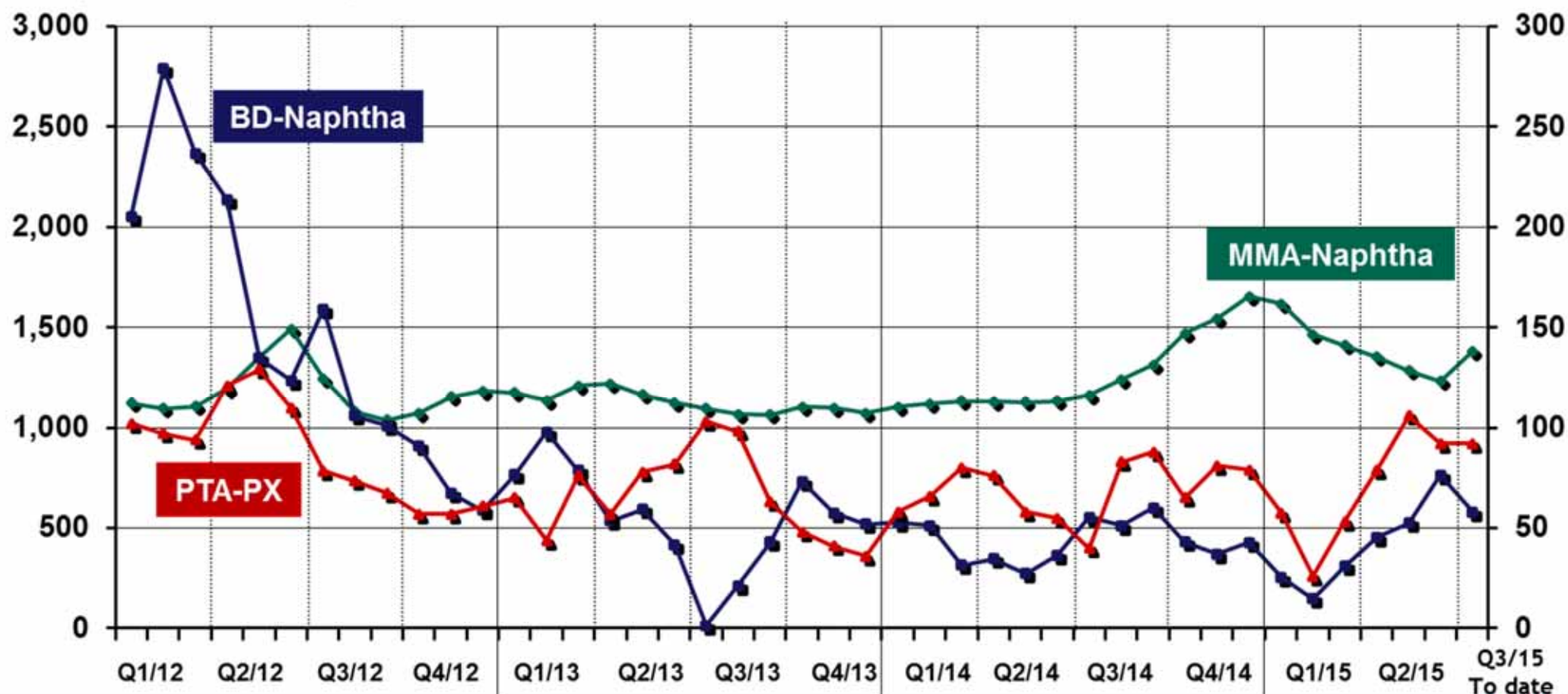


Note: Prices refer to FE regional prices

# Price gaps of associates

MMA-Naphtha \$/ton, BD-Naphtha \$/ton

PTA-PX \$/ton



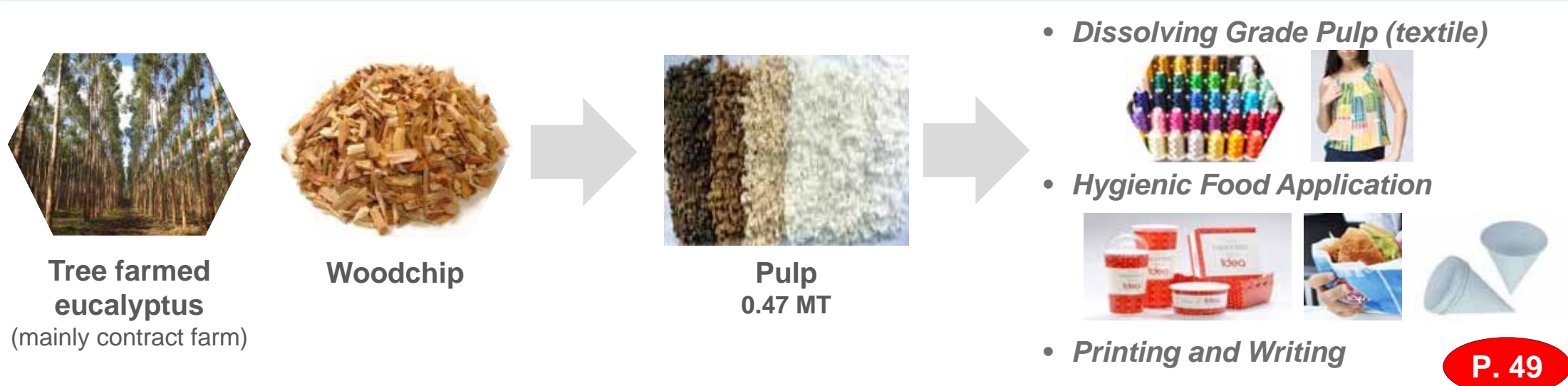
MMA-N	1,104	1,346	1,122	1,136	1,174	1,170	1,077	1,093	1,120	1,131	1,240	1,558	1,499	1,291	1,382
PTA-PX	98	120	73	58	62	72	88	42	68	63	70	75	46	92	76
BD-N	2,405	1,574	1,221	723	844	516	220	609	452	329	556	410	238	581	581

*Note: BD and MMA prices refer to SEA regional prices , PTA prices refer to Asian regional prices*

**Packaging Chain** - Rengo's 30% stake in box businesses and Vietnam's packaging paper plants.

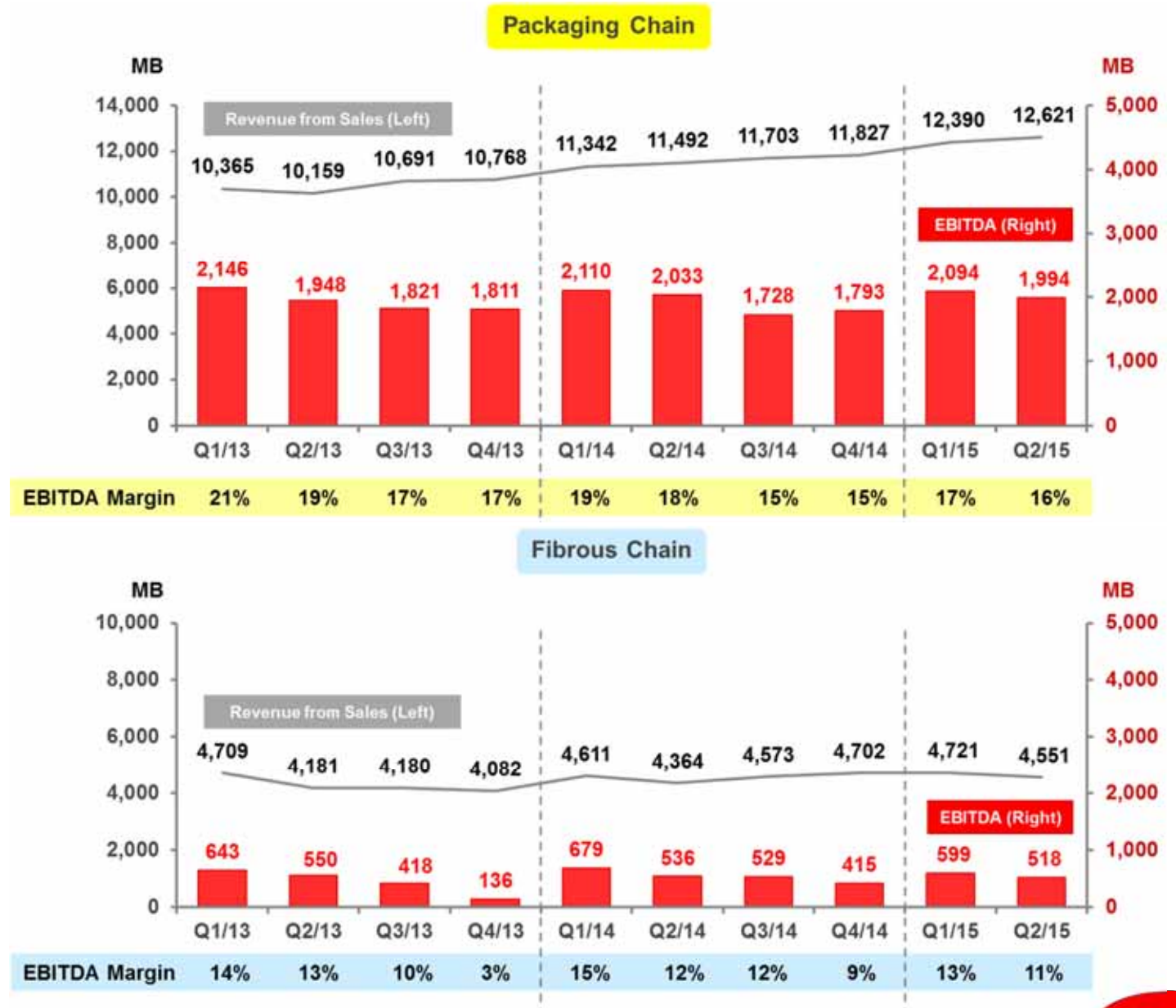
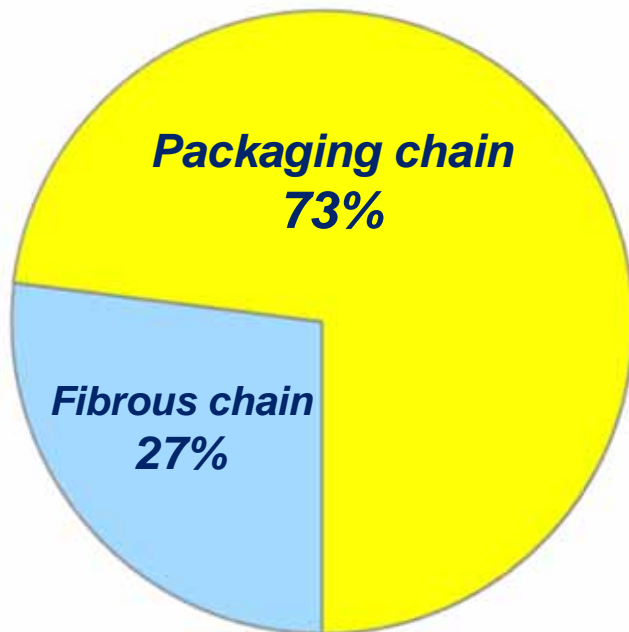


**Fibrous Chain** - Nippon Paper's 30% stake.





**H1/15 EBITDA**  
**(5,205 MB)**



## Packaging Chain

### “Growing Packaging Business in ASEAN”

- Regional / Geographical Growth (Targets: Vietnam and Indonesia)
- Growing thru HVA Products / Services (such as High Performance Paper and Packaging)

#### Primary Packaging

- Product protection
- Marketing tools
- Flexible packaging, rigid, glass, or metal

#### Secondary Packaging

- Marketing tools
- Information
- Mainly paper-based packaging; folding carton

#### Tertiary Packaging

- Logistics / transportation
- Handling / inventory management
- Corrugated container

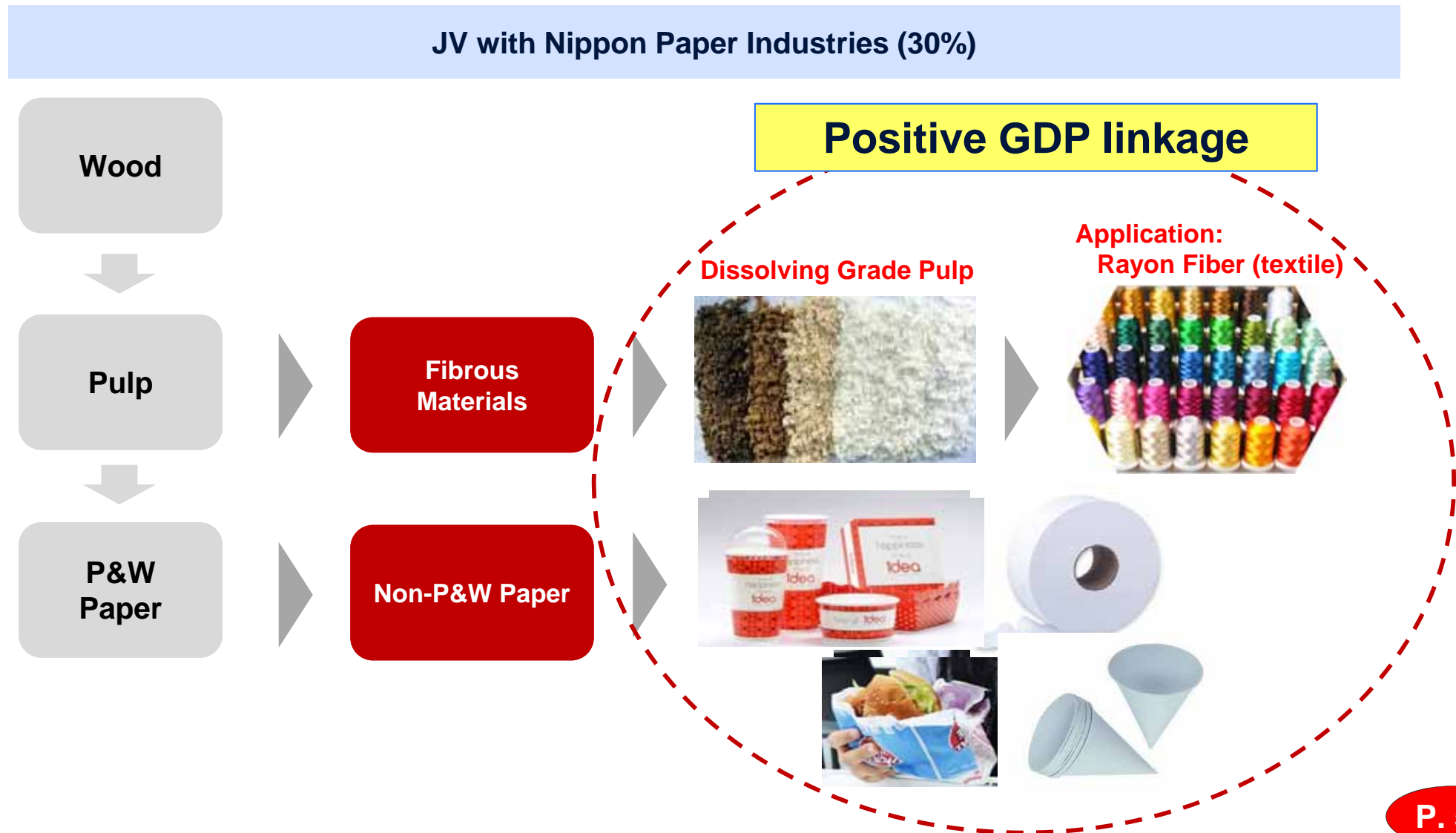
#### Other Packaging

- Logistic support
- Retail packaging

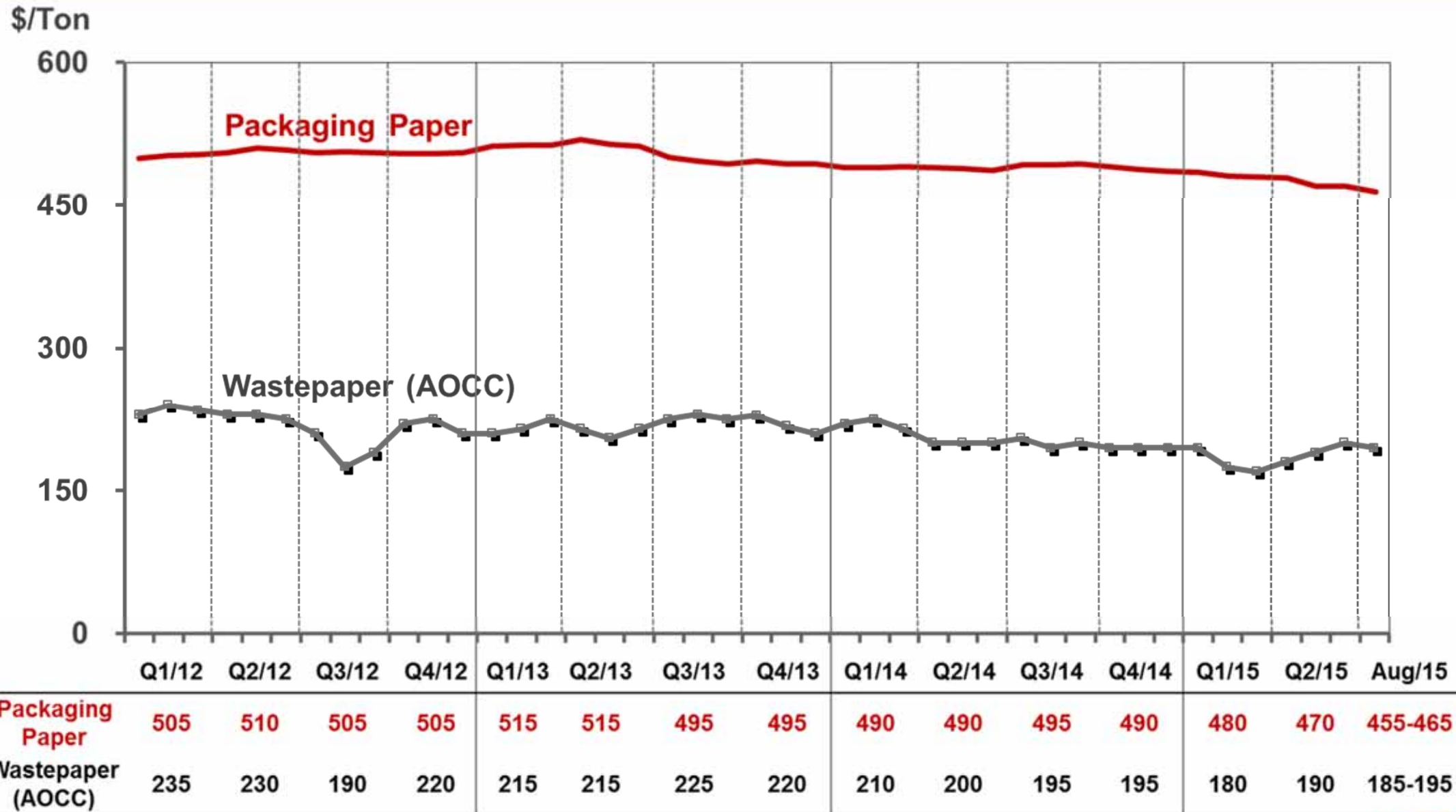




## Fibrous Chain – business transformation

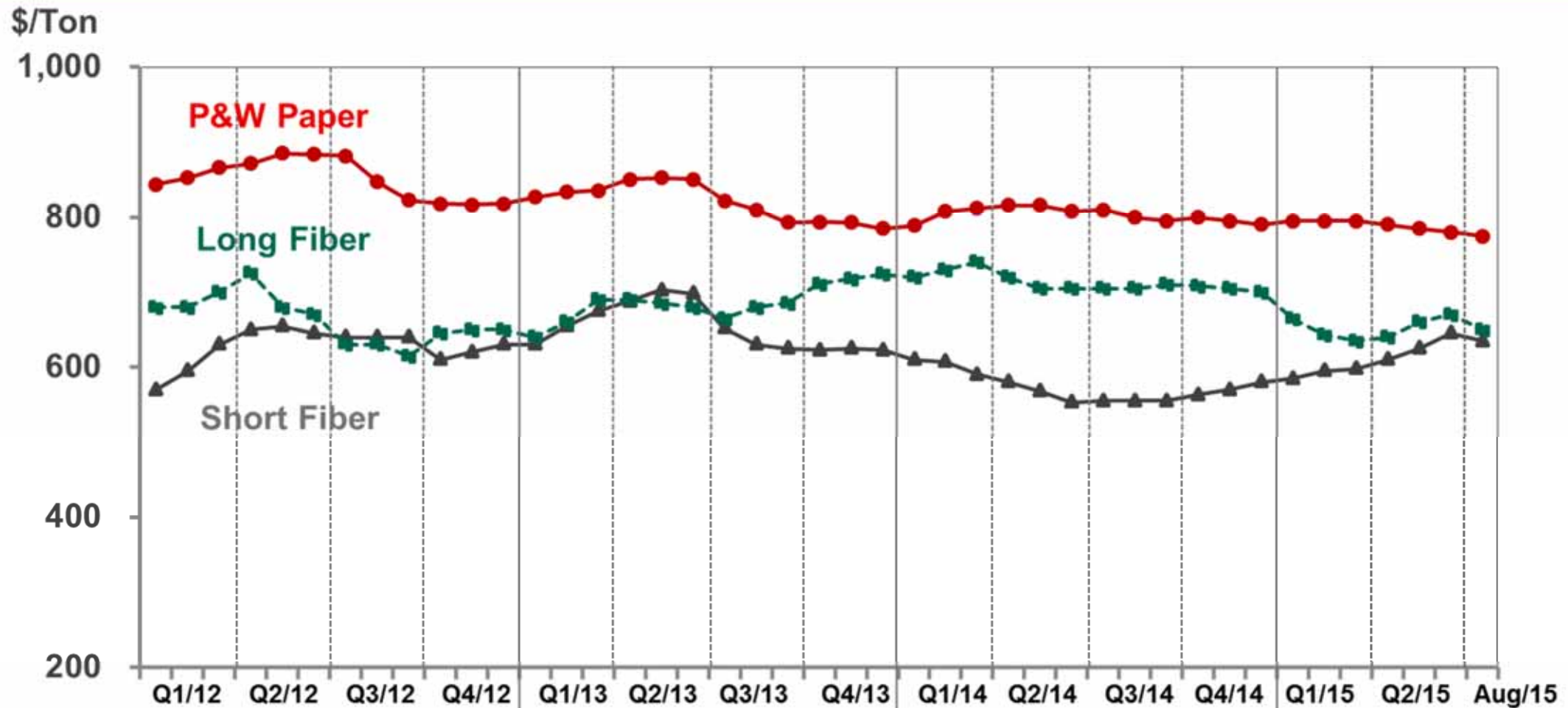


# Packaging chain prices



Note: regional prices

# Fibrous chain prices



Note: regional prices

# SCG Investment:



Contribution in H1/15 was 1,245 MB in equity income, and another 1,456 MB from dividend income.

## SCG Investment

Managed by the CFO

### Agricultural business

Siam Kubota Corp (40%)

Siam Kubota Leasing

Siam Kubota Metal Tech

### Automotive business

Aisin Takaoka Group (30%)

Maxion Wheels (30%)

Musashi Auto Parts (21%)

Siam Toyota Manufacturing (4%)

Toyota Motor Thailand (10%)

### Others

Siam Yamato Steel (10%)

Note: 10% divestment of Michelin(Thailand) in Q1/15

- *Strategies & Key Points*
- *Business Updates*
- *Sustainability & People*
- *Financials*
- *Appendix*



*Acquisition of assets is just the first step...*



**Cross-cultural diversity**  
& to prepare and encourage  
Thai staffs to go overseas

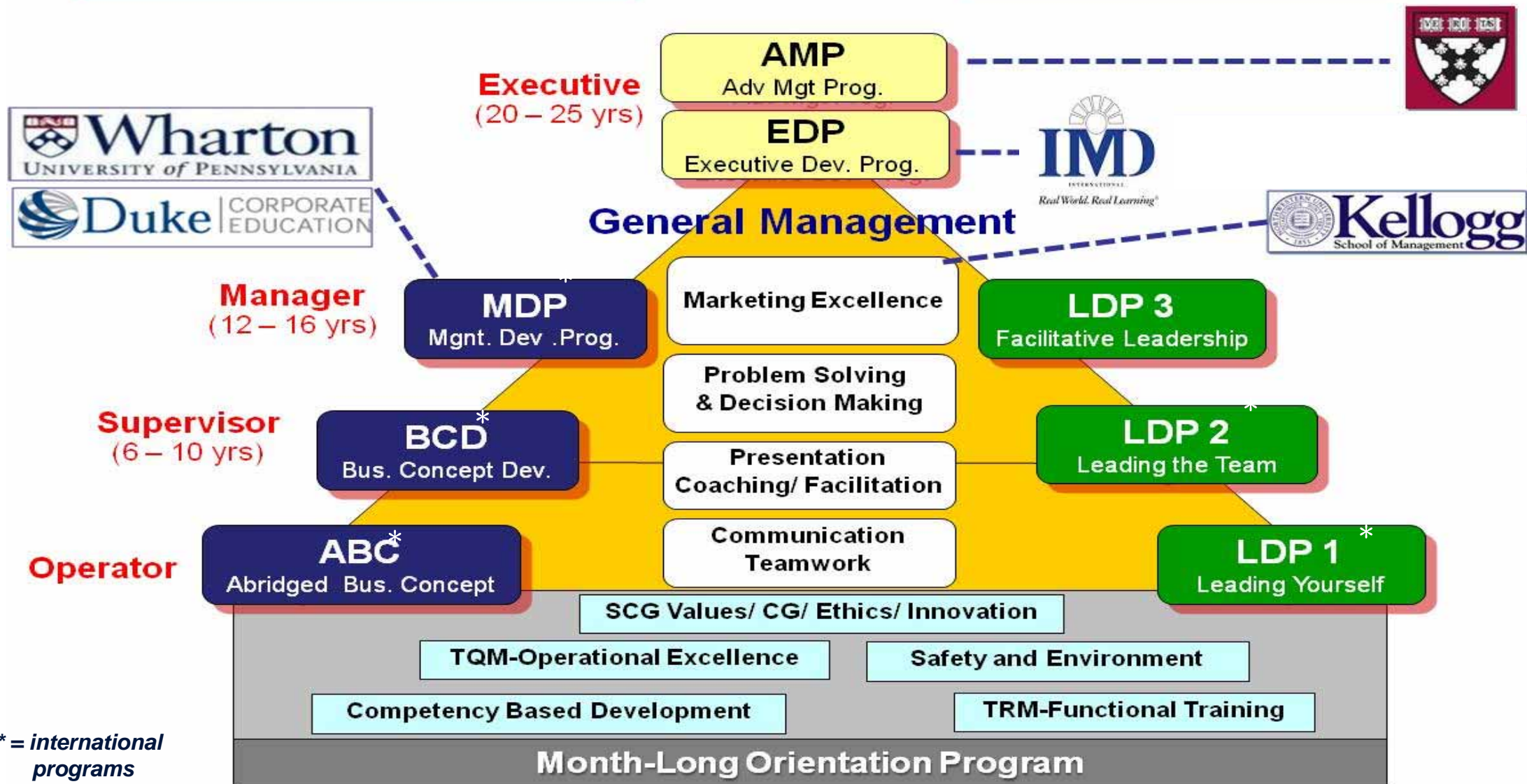
**Local Staff Engagement**

**Local Community Concerns**

# Systematic training roadmap

## Business Knowledge

## Leadership Skills



Program	Current	Since	Classes	Staffs
<b>AMP</b> – Advanced Management Program	Harvard Wharton	1982 2007	32 7	81 14
<b>EDP</b> – Executive Development Program	IMD Columbia	2014 2007	1 4	45 177
<b>MDP</b> – Management Development Program	Wharton Duke	1980 2011	30 4	1,418 225
<b>Marketing Excellence</b> Program	Kellogg	2006	9	615



# Corporate scholarship: 490 scholarships since 1973

## MBA

		'10	'11	'12	'13	'14	'15
US	Harvard	-	-	-	-	1	-
	Chicago	-	-	-	-	-	-
	Stanford	-	-	-	-	-	-
	Wharton	1	-	1	1	-	-
	MIT	2	1	-	1	1	-
	Columbia	-	2	2	1	-	-
	UC Berkeley	-	-	-	-	-	-
	NYU Stern	-	-	-	1	-	-
	Kellogg	3	-	1	-	-	-
	Dartmouth	-	-	-	-	-	-
	Michigan	1	-	2	-	1	-
	Duke	1	1	-	1	-	1
	EU	IMD	-	-	-	1	1
		LBS	-	-	1	-	-
	INSEAD	1	-	1	-	2	-
ASIA	ISB (India)	-	-	-	-	-	-
	Tsinghua	-	-	-	-	-	1
	CEIBS	-	-	-	-	-	-
	HK UST	-	1	-	1	3	1
	Sasin	2	-	-	1	-	-
Total		11	5	8	8	9	3

## Engineering and Specialist

as of Jul/15

		'10	'11	'12	'13	'14	'15
US	MIT	-	-	-	-	-	-
	Stanford	-	-	-	-	-	-
	GWU	-	-	-	-	1	-
	Alfred U	-	-	1	1	-	-
	New Hampshire	-	-	-	-	1	-
	Purdue	-	-	-	-	1	-
	Georgia Tech	1	-	-	-	-	-
	Carnegie Mellon	2	2	-	-	-	-
	Michigan	-	-	-	-	-	-
	NYU	-	1	-	-	-	-
	Northwestern	-	1	-	-	-	-
	Chicago	-	-	-	1	-	1
	Southern Calif	-	-	1	-	-	-
	Penn State	1	-	-	-	1	-
	Texas A&M	-	-	1	-	-	-
	UNC	-	-	-	1	-	-
	Tennessee	-	1	-	-	-	-
	Washington	1	-	-	-	-	-
	W. Michigan	-	-	-	-	-	-
	U Mass Lowell	-	-	-	-	-	-
	Martin-Luther	-	-	-	1	-	-
	Wisconsin-Madison	-	-	-	-	-	-
	Texas Austin	-	-	-	-	1	-
	Minnesota	-	-	-	1	-	-
	Portland State	-	-	-	2	-	-
	Clemson (SC)	-	1	-	-	-	-

		'10	'11	'12	'13	'14	'15
UK	Oxford	-	-	-	-	1	-
	Imperial College	1	1	-	1	-	-
	London School of Economics	-	-	-	-	-	1
	U of Loughborough	-	-	2	-	-	-
	U. of London	1	-	-	-	-	-
	U of Art London	-	-	-	-	-	1
	Cass Business School	-	-	-	-	-	1
	Warwick	1	4	-	1	1	2
	Queen Mary	1	-	-	1	-	-
	Queen's U. Belfast	1	-	-	-	-	-
	U. Of Southampton	1	-	-	1	-	-
	U. Of Stirling	-	-	-	1	2	-
	Brunel U.	-	-	-	-	1	-
	EU	U. Manchester	-	-	1	-	-
		Cranfield	-	1	-	4	2
	EPFL (CHE)	-	-	-	-	1	1
	Swansea	-	-	-	1	-	-
	Aalto (FIN)	-	-	-	-	1	-
	U. Dundee (Scotland)	-	-	-	1	-	-
	IFP School (FR)	1	-	2	1	-	-
	Domus Academy (Italy)	-	-	-	3	-	-
	Royal Institute of Tech (SWE)	-	1	-	-	-	-
	Tech U. Munchen (Ger)	-	-	-	2	-	-
	ASIA	Adelaide (AUS)	-	-	-	1	-
		Tokyo Int. (JPN)	-	-	1	-	2
	Tokyo Tech (JPN)	-	-	-	1	-	-
	UEC (JPN)	-	1	-	-	-	-
	Waseda U. (JPN)	-	1	-	-	-	-
	U. Tsukuba (JPN)	-	1	-	-	-	-
	Ceramics Tech. (JPN)	1	-	-	-	-	-
	Japan Advanced Int.	-	-	1	-	-	-
	Int. Supply Chain Innovation (Malaysia)	-	-	-	1	-	-
	AIT	1	-	-	-	-	-
	Chiang Mai U.	-	-	-	1	-	-
Total		14	16	10	28	14	10

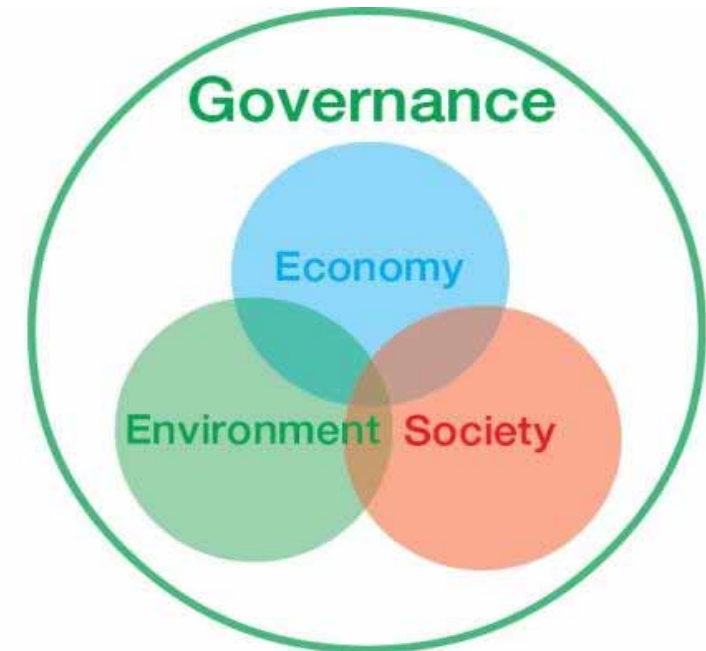
**Note:** 385 scholars are active, others have mostly retired  
Current 48 students: MBA 11, Engineering 32, Specialist 5

**2015 / 2014 / 2013 / 2012 / 2011 : Industry Leader  
(Construction Materials)**

MEMBER OF  
**Dow Jones  
Sustainability Indices**  
In Collaboration with RobecoSAM

**2015-2008** : ranked “Gold Class” which is top group for each sector.  
**2004** : initial year of DJSI membership.

- DJSI was established in 1999 as the first global index to monitor sustainability of listed companies.
- +60 global funds in 16 countries follow the DJSI.
- For further details: [www.sustainability-index.com](http://www.sustainability-index.com)

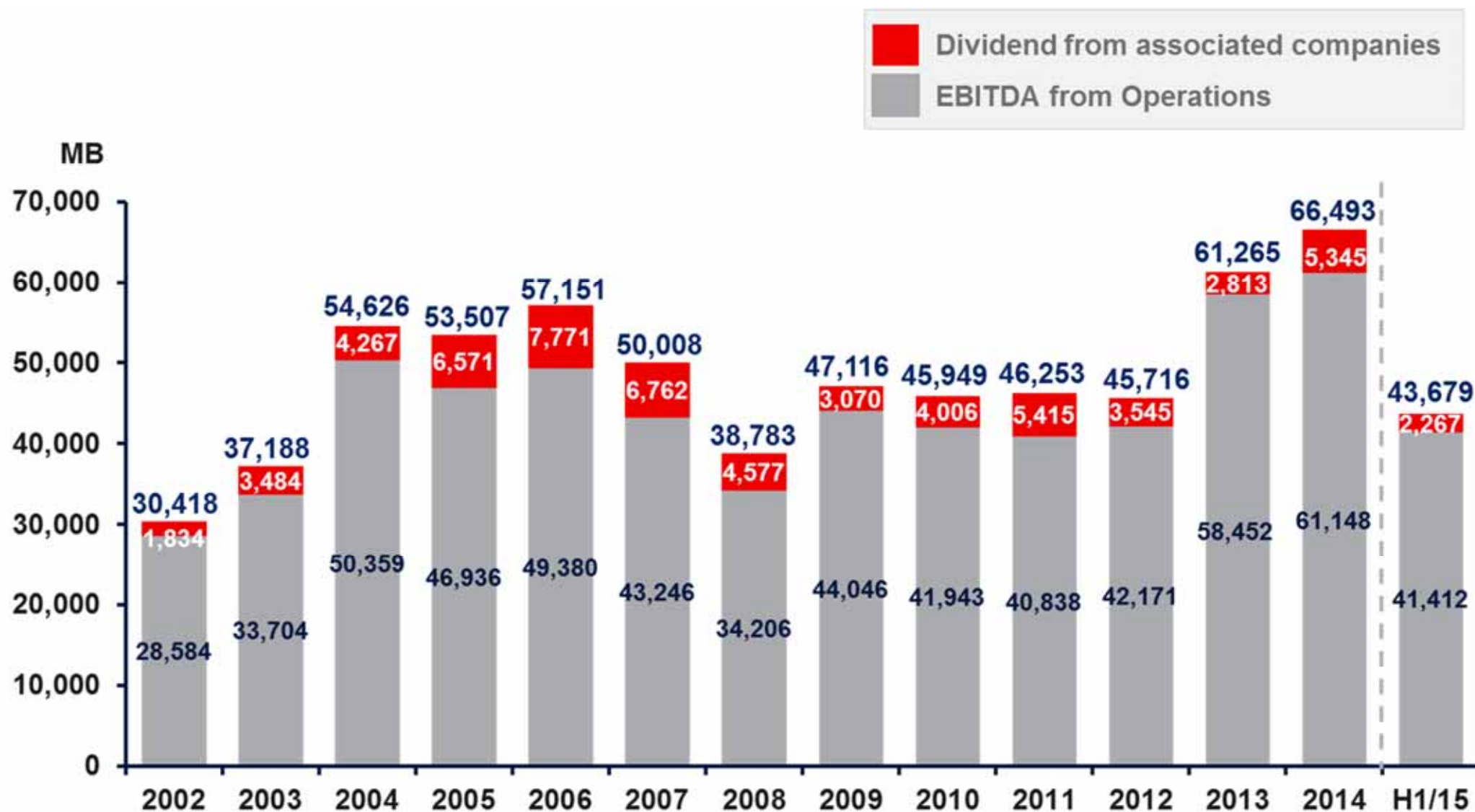


Year	<u>Gold</u>	<u>Silver</u>	<u>Bronze</u>
2014	<b>SCG*</b>	Cementos Argos, Grupo Argos	Holcim
2013	<b>SCG*</b>	Cementos Argos, Grupo Argos, Holcim	Lafarge
2012	<b>SCG*</b>	Duralex, Owens Corning, TOTO	Asahi Glass, CRH, Holcim, Italcementi
2011	<b>SCG*</b>	CRH, Holcim, Owens Corning	Asahi Glass, Italcementi, Lafarge
2010	Panasonic Electric Works*, <b>SCG</b> , Holcim	CRH, Italcementi, Lafarge, Owens Corning	Boral, Geberit, Weyerhaeuser
2009	Panasonic Electric Works*, <b>SCG</b> , Holcim, CRH	Boral, Lafarge	Italcementi
2008	Holcim*, <b>SCG</b> , CRH, Panasonic Electric Works	-	Italcementi, Lafarge
2007	Holcim*	<b>SCG</b> , CRH, Panasonic Electric Works	Italcementi, Asahi Glass

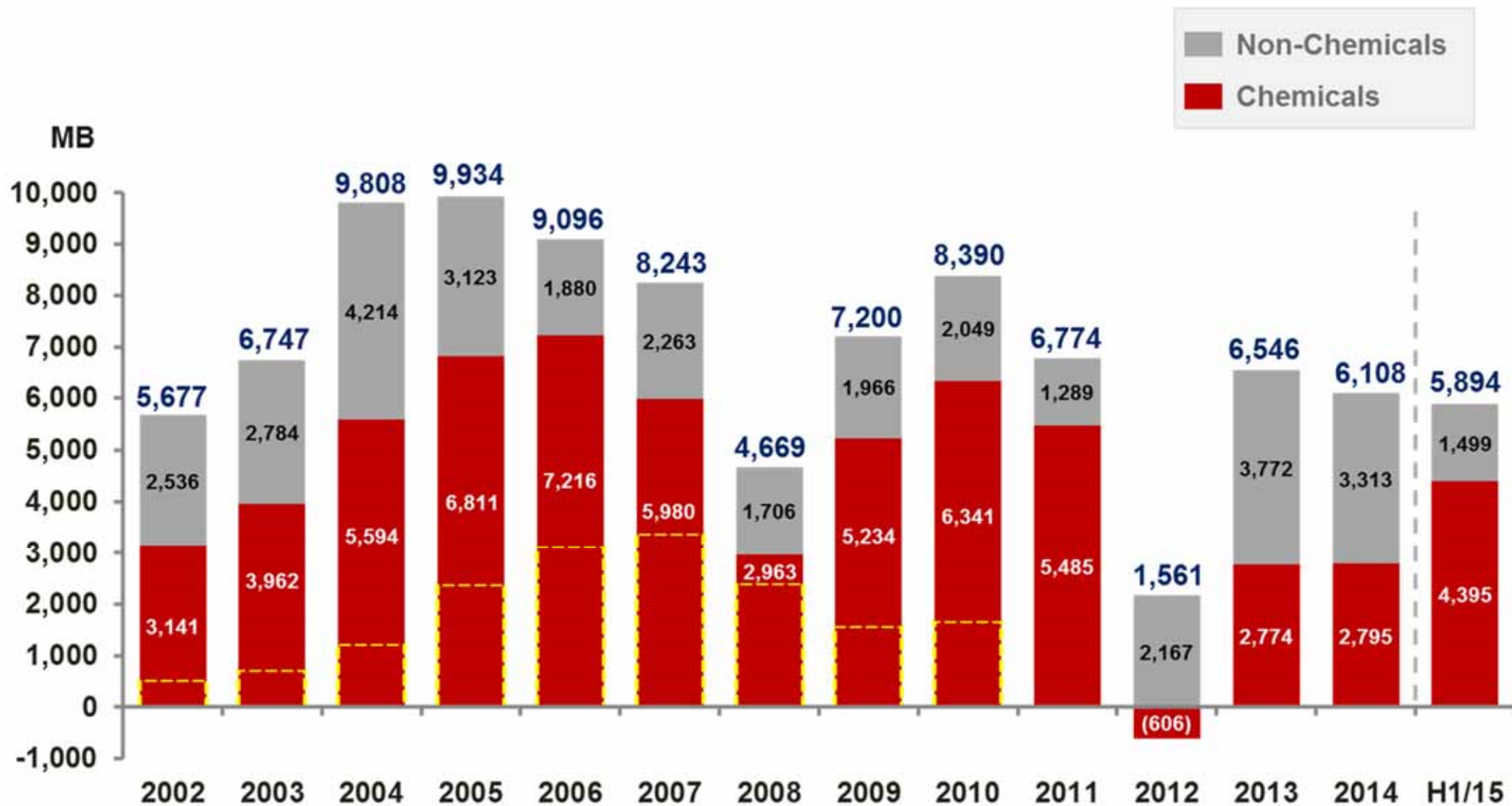
\* industry leader



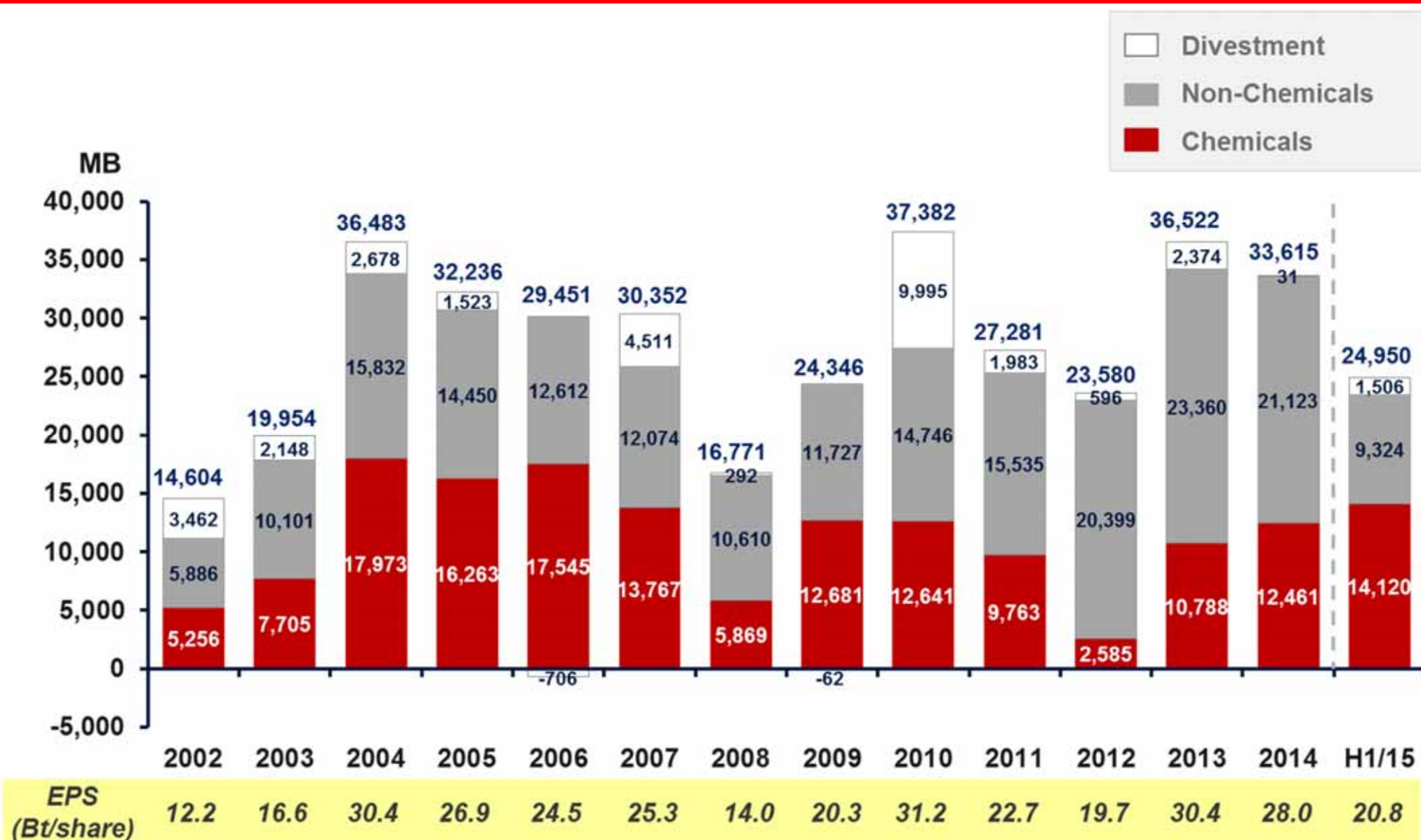
- *Strategies & Key Points*
- *Business Updates*
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- *Appendix*



*Note: EBITDA includes dividend received*



# Profit for the period

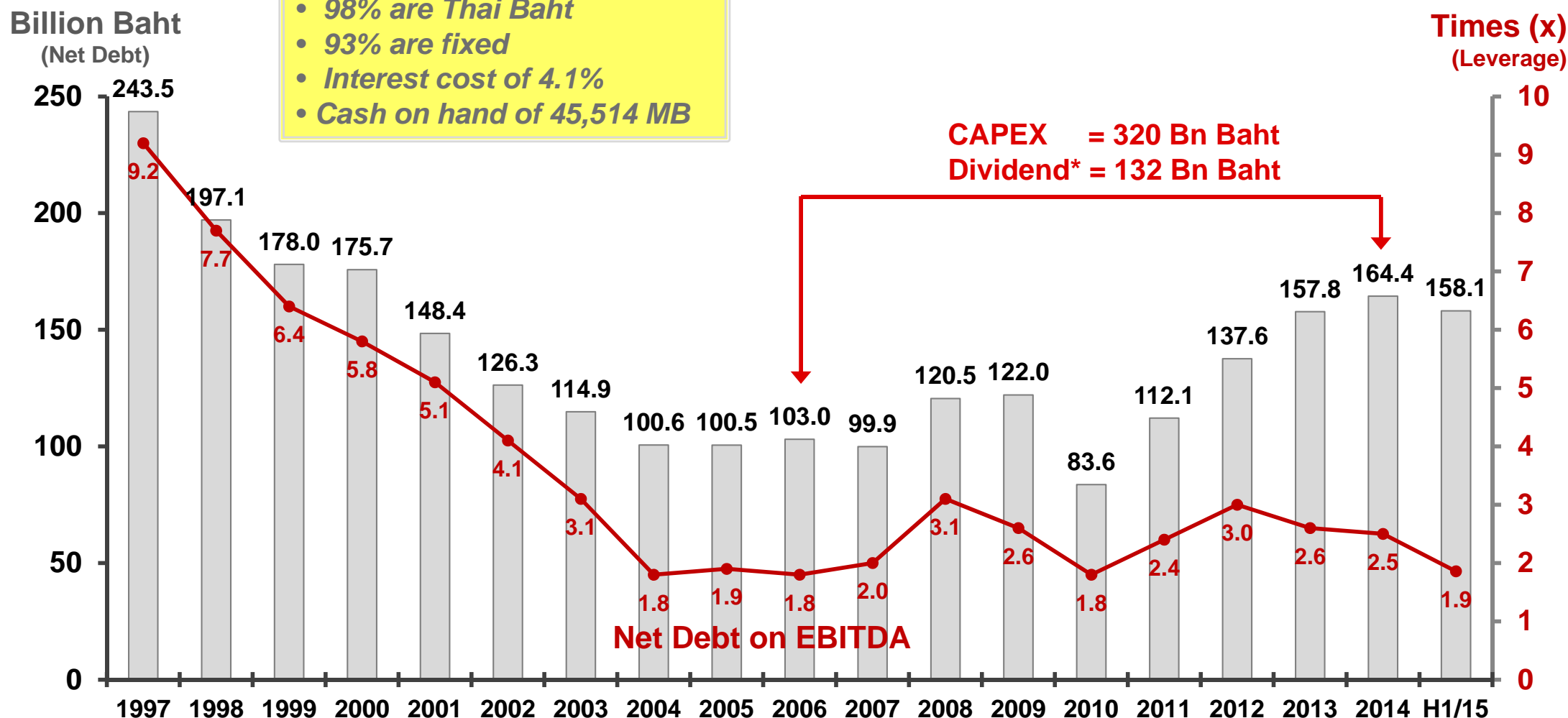


# Net debt:

Internal leverage target of 2.5 times (Net debt / EBITDA)

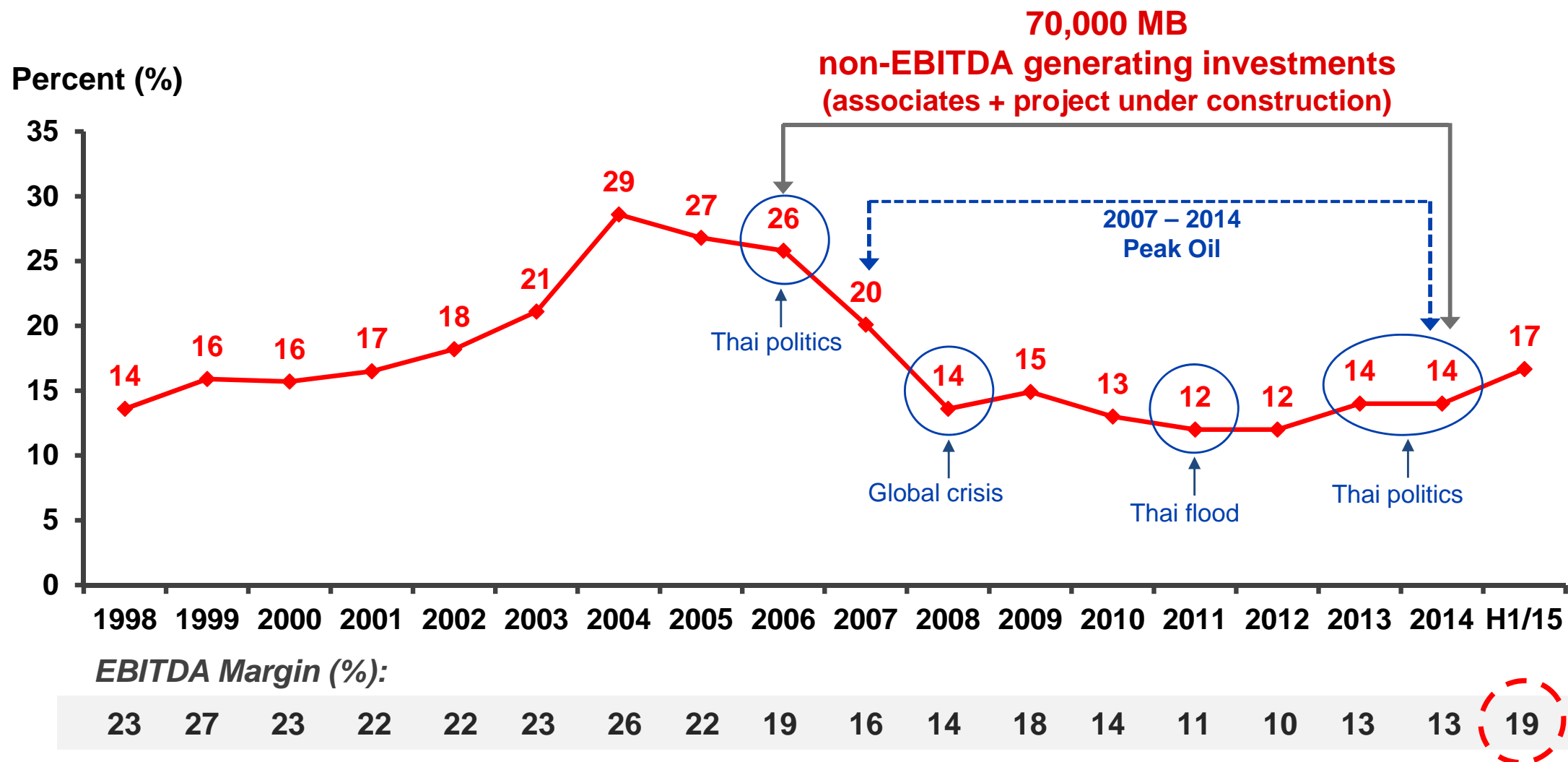
## Debt profile in H1/15:

- Net Debt / EBITDA = 1.9x
- Net Debt / Equity = 0.7x
- 98% are Thai Baht
- 93% are fixed
- Interest cost of 4.1%
- Cash on hand of 45,514 MB



\*Note: annual dividend payout

# EBITDA on Assets and EBITDA Margin



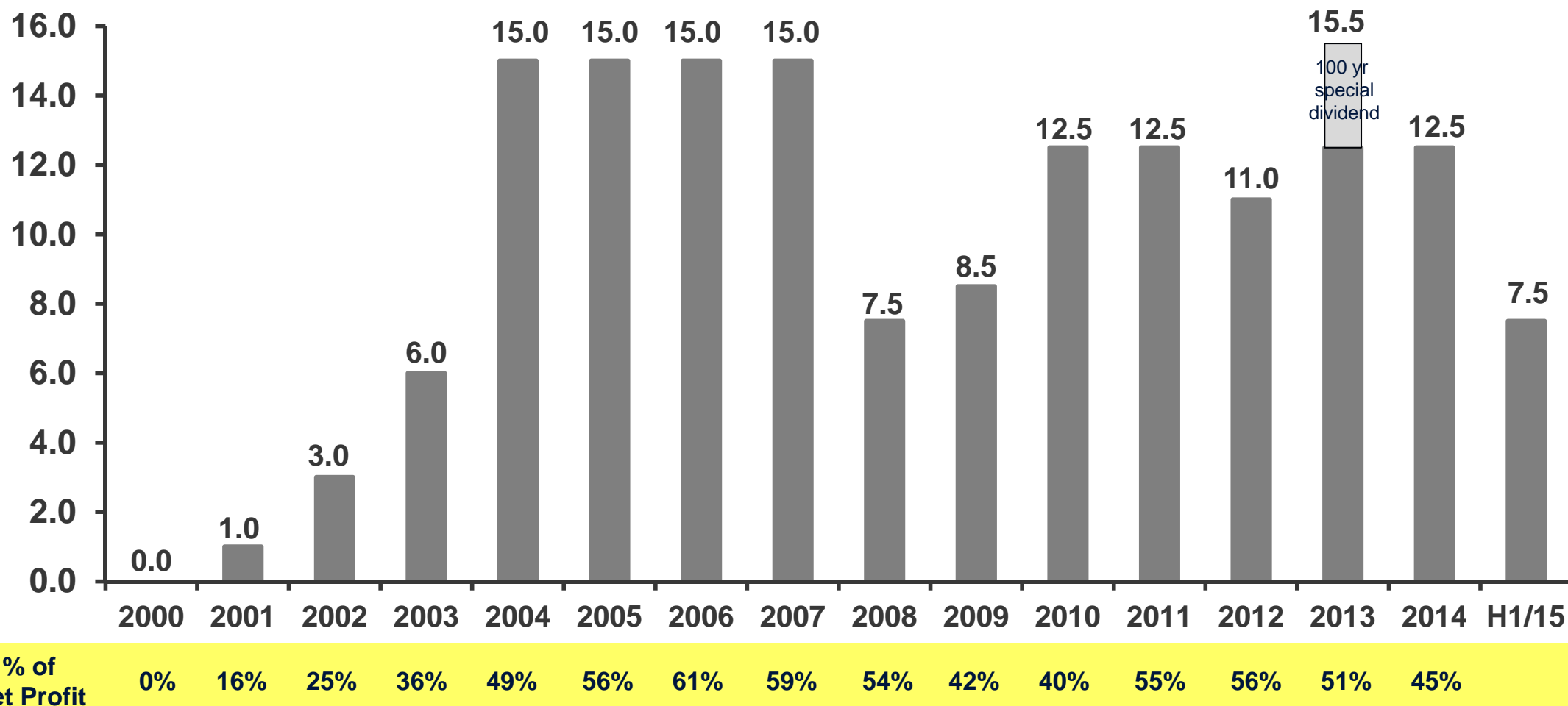
*EBITDA on Assets = EBITDA / Consolidated Assets*

*EBITDA margin = EBITDA from Operations / Consolidated Sales*



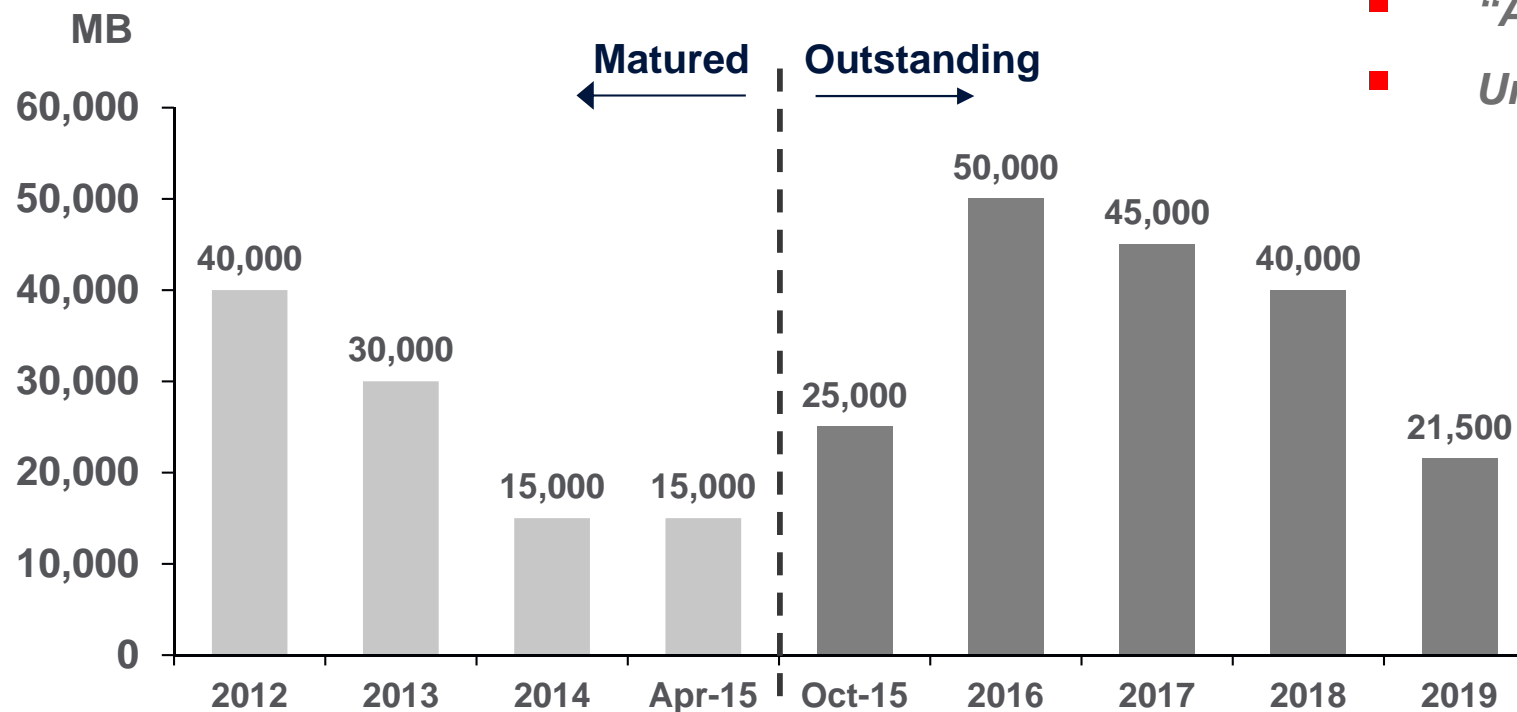
**Payout policy = 40-50%**

Baht / Share



Note: Dividend policy established in 2008

## Debtenture Maturity Table



- *Mainly retail investors.*
- *No debt covenant.*
- *Thai Baht, mainly 4 years fixed.*
- *“A” rating by Fitch.*
- *Unsecured, unsubordinated.*

**NOTE:** - Debtentures amount to 166,500 MB, as of Apr/15.

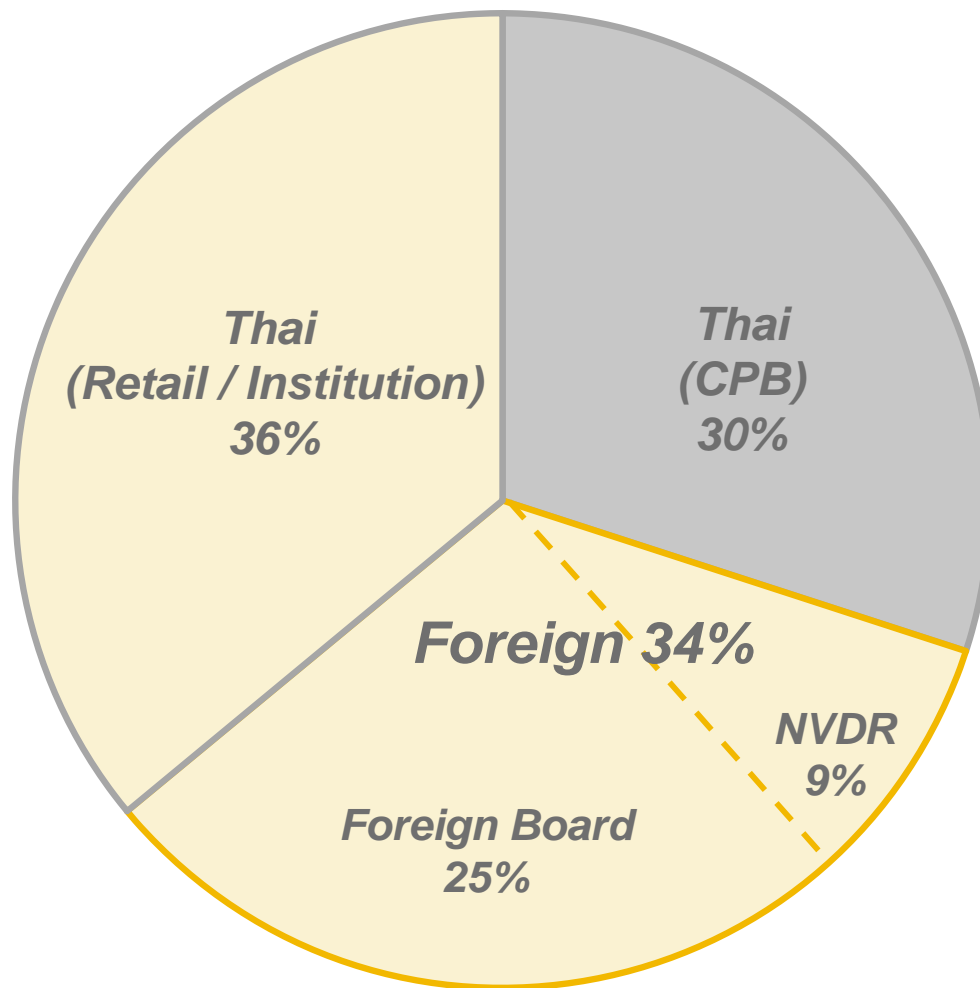
- Full subscription to the Apr 1/15 debtenture issuance of 30 Billion Baht (15 Billion Baht 4-year, 3.90% and 15 Billion Baht 3-year, 3.75%) which replaced the 15 Billion Baht matured debtenture (4-year, 4.00%).

- *Strategies & Key Points*
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- *Founded in 1913.*
- *Listed in 1975 on the SET.*
- *Market cap approximately of \$18.0 Billion (as of Sep/15)*
- *Free float of 70%.*
  
- *Key figures (FY2014):*
  - *Net Sales 487.6 Billion Baht (\$15.0 Billion)*
  - *EBITDA 66.5 Billion Baht (\$ 2.0 Billion)*
  - *Net Profit 33.8 Billion Baht (\$ 1.0 Billion)*
  
- *Key figures (H1/15):*
  - *Assets of 500.8 Billion Baht (\$15.2 Billion)*
  - *51,683 staffs.*

## 70% Free float



## Local 66%

- Institution / Retail 36%
- CPB 30%

## Foreign 34%

- Foreign Board 25%
- NVDR 9%

Jul/15

- CPB (Crown Property Bureau ) = Asset management arm of monarchy



100 Years

1913 - 1974

## *Danish Managements*



1. Oscar Schultz  
(1914- 1925)



2. Erik Thune  
(1925- 1934)



3. Carsten Friis Jespersen  
(1935- 1959)



4. Viggo Fred Hemmingsen  
(1959- 1974)

1975 - 2014

## *Thai Managements*



5. Boonma Wongswan  
(1974- 1976)



6. Sommai Hoontrakool  
(1976- 1980)



7. Charas Xuto  
(1980- 1984)



8. Paron Israsena  
Na Ayudhya (1985- 1992)



9. Chumpol NaLamlieng  
(1993- 2005)



10. Kan Trakulhoon  
(2006- 2015)



**Kan Trakulhoon**  
President & CEO  
SCG



**Roongrote Rangsiyopash**  
EVP - SCG

## SCG Chemicals



**Cholanat Yanaranop**  
**SVP - SCG,**  
President - SCG Chemicals



**Somchai Wangwattanapanich**  
VP - SCG Chemicals

## SCG Cement- Building Materials



**Pichit Maipoom**  
**SVP - SCG,**  
President - SCG CBM



**Aree Chavalitcheewingul**  
VP - Regional Business



**Nithi Patarachoke**  
VP – Domestic Market

## SCG Packaging



**Tanawong Areeratchakul**  
President - SCG Packaging

## SCG Investment



**Chaovalit Ekabut**  
**VP, CFO - SCG**  
President - SCG Investment

## Corporate Administration



**Yuttana Jiamtragan**  
**VP - SCG**

# **Mr. Roongrote Rangsiyopash**

52 years old, and married with a son

## **SCG Work Experience**

<b>07/2014 - 2015</b>	EVP, SCG
<b>2010 - 06/2015</b>	President, SCG Packaging
<b>2005 - 2010</b>	CFO, SCG
<b>2000 - 2005</b>	Director, Corporate Planning, SCG
<b>1998 - 1999</b>	President, TileCera Inc, USA
<b>1991 - 1992</b>	Scholarship Study
<b>1987 - 1991</b>	Engineer, Siam Fibre-Cement

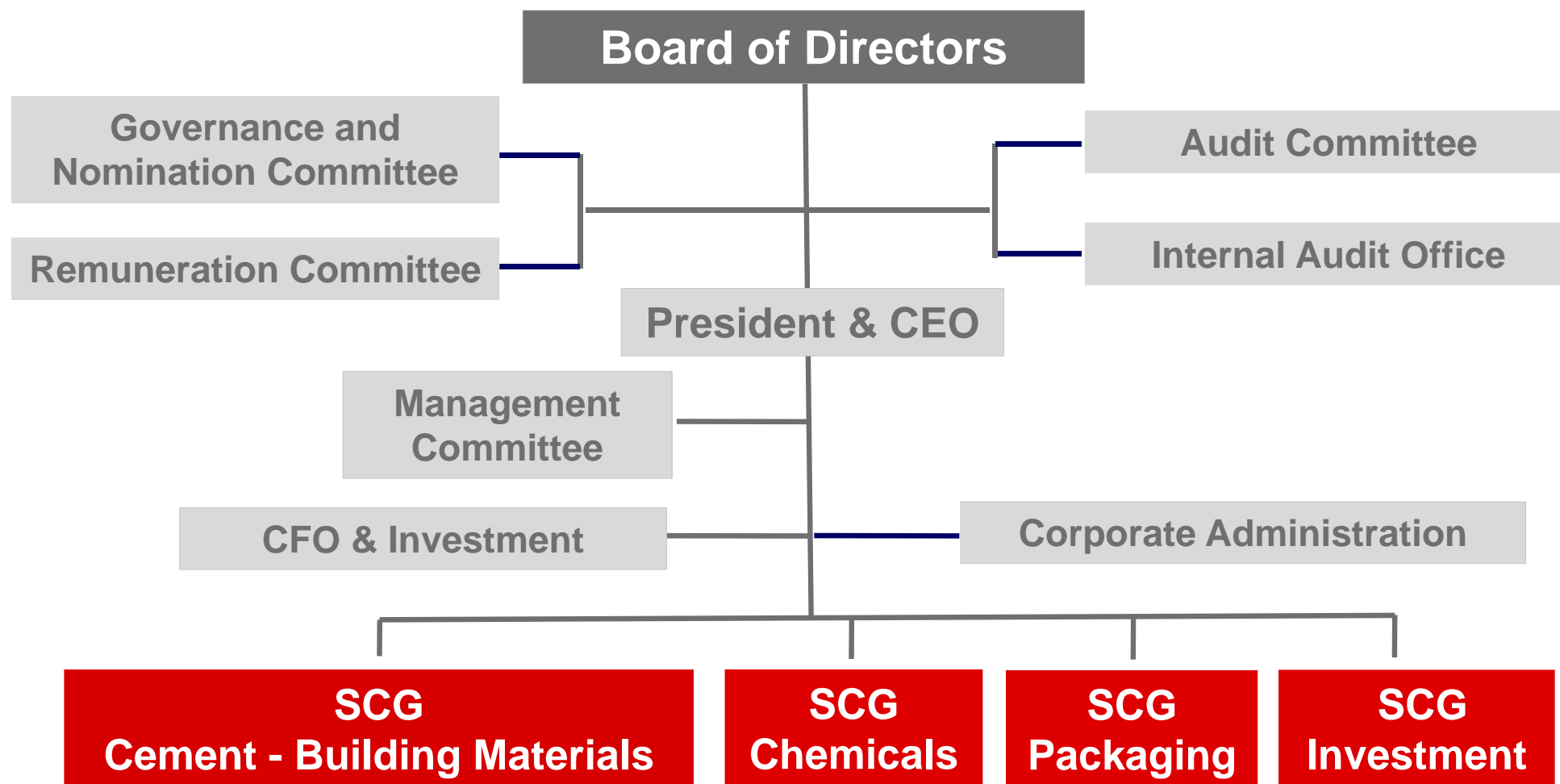


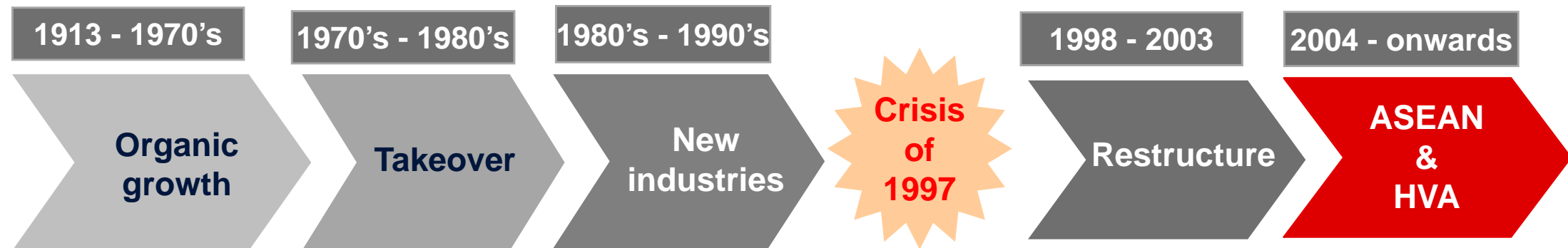
## **Education**

<b>1993</b>	MBA - Harvard Business School, Boston, USA
<b>1987</b>	MS Industrial Engineering - University of Texas at Arlington, USA
<b>1985</b>	B.Eng, Mining Engineering - Chulalongkorn University

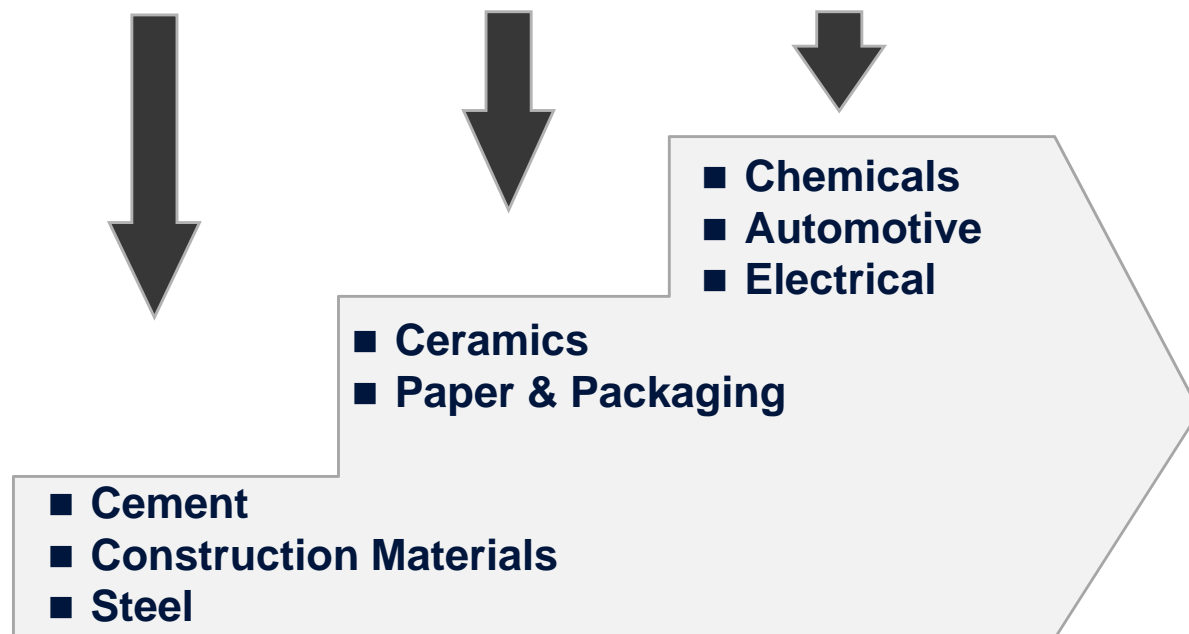
## **Hobby**

Golfing





**“Historic roots” “Opportunistic” “Partner of choice”**



***Today.....***

- ***Cement – Building Materials***
- ***Chemicals***
- ***Packaging***
- ***Investment***



## Live 4 Core Values

- Adherence to **Fairness**
- Dedication to **Excellence**
- Believe in the **Value of the Individual**
- Concern for **Social Responsibility**



### Open:

- *Open-minded & Deep Listening*
- *Eager to learn*
- *Networking & Collaboration*
- *Learning from mistakes*

### Challenge:

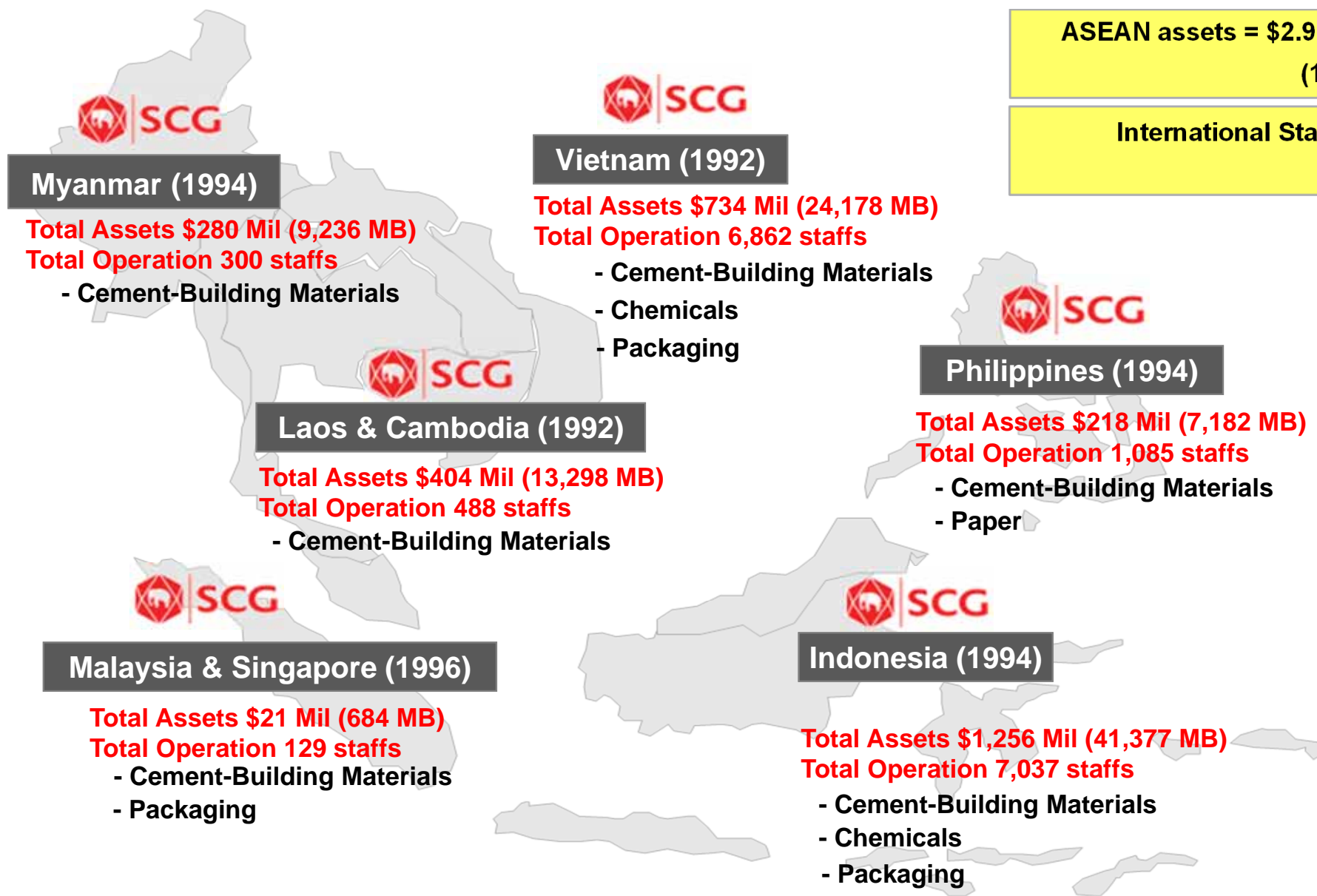
- *Challenge status quo*
- *Think-out-of the box*
- *Assertive*
- *Risk taking*
- *Willing to take initiatives*

## ***Past***

- Mostly green field
- Mostly Thailand
- Cash-flow financed

## ***Current***

- ***Green field & M&A***
- ***Mostly ASEAN***
- Cash-flow financed
- Cash on hand of 45,514 MB



ASEAN assets = \$2.9 billion (95,955 MB)  
(19% of total assets)

International Staff = 16,041 persons  
(32% of total staff)



## Current:

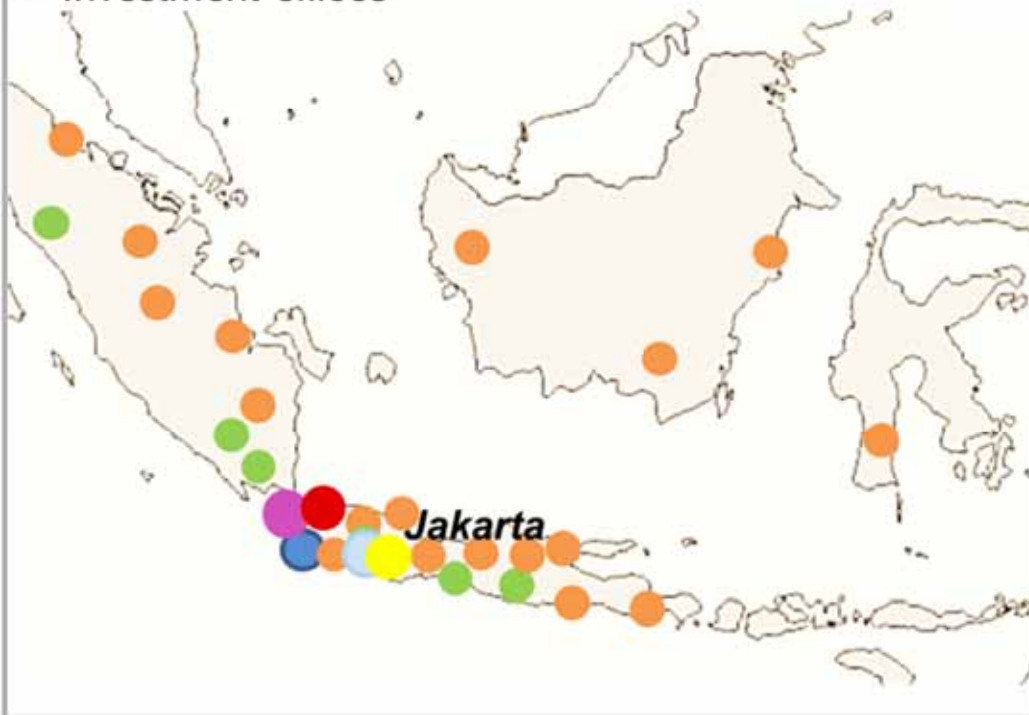
**Assets:** 41,377 MB (\$1,256 Mill)

**Total Sales:** 6,026 MB (H1/15)

**Total Export from Thailand:** 7,204 MB (H1/15)

**Operations:** (7,037 staffs)

- **Chemicals:** PVC, chemicals complex (30%)
- **Cement – Building Materials:** RMC, ceramics, roofing, and trading.
- **Packaging** – box plant
- Investment offices



*Note: as of Jun/15*

## *Investments since Q1/11:*

- **Cement plant - Oct/12 (11,000 MB)**  
Greenfield / majority stake  
1.8 MT/ H2/15 start
- **Ready-mixed concrete (RMC) - Feb/12 (4,300 MB)**  
M&A / 100% stake  
2.2 mill cubic metre of RMC  
concrete pipes, precast concrete, quarries, limestone
- **Distribution: Kokoh**  
M&A / 99% stake  
22 distribution centre,  
+10,000 point of sales.
- **Ceramic tiles: KIA**  
M&A / 94% stake / 28 mill sqm.
- **Lightweight concrete block - May/12 (1,250 MB)**  
Green field / 100% stake  
6 mill sqm / Q1/14 start
- **Chemicals Complex: Chandra Asri – Sep/11 (13,500 MB)**  
M&A / 30% stake / Ethylene 600 KTA,  
Downstream operations, port and pipe facilities.
- **Box plant - Sep/13 (395 MB)**  
M&A / 90% stake / 37,000 tons
- **Box plant – Dec/14 (290 MB)**  
M&A / 90% stake / 8,000 tons

*Jun/11 (3,100 MB)*

## Future plans:

**Debottleneck** - Chandra Asri chemicals complex  
**M&A opportunities** - all existing businesses





## Current:

**Assets:** 24,178 MB (\$734 Mill)

**Total Sales:** 9,505 MB (H1/15)

**Total Export from Thailand:** 4,200 MB (H1/15)



## Operations: (6,862 staffs)

- **Chemicals:** PVC, PP compound
- **Packaging:** packaging paper, box plant
- **Cement – Building Materials:** RMC, ceramic tiles, roofing, trading, and product showroom
- Investment offices



Binh Duong



## *Investments since Q1/11:*

- **Ceramic tiles (Prime Group) - Dec/12 (7,200 MB)**  
M&A / 85% stake / 75 mill sqm.  
clay roofing plant and raw materials reserved.
- **White cement grinding plant (Buu Long) - Jan/12 (200 MB)**  
M&A / 99% stake / 200,000 tons
- **Chemicals (PVC pipe) - Mar/12 (1,200 MB)**  
M&A / 20-30% stake in local pipe makers  
150,000 tons
- **Box plant (Alcamax) – Jan/11 (750 MB)**  
M&A / 69% stake / 53,000 tons
- **Packaging paper (VKPC) – Apr/15 (4,125 MB)**  
Expansion / 243,000 tons
- **Flexible packaging – Jun/15 (1,500 MB)**  
M&A / 80% stake / 230 mill sqm.

## Future plans:

### **Chemicals: Integrated Complex**

- Green-field / \$4.5 Bn
- JV with QPI (Qatar) and Vietnamese partners
- Flex-feed cracker

**M&A opportunities** – all existing businesses



## Myanmar

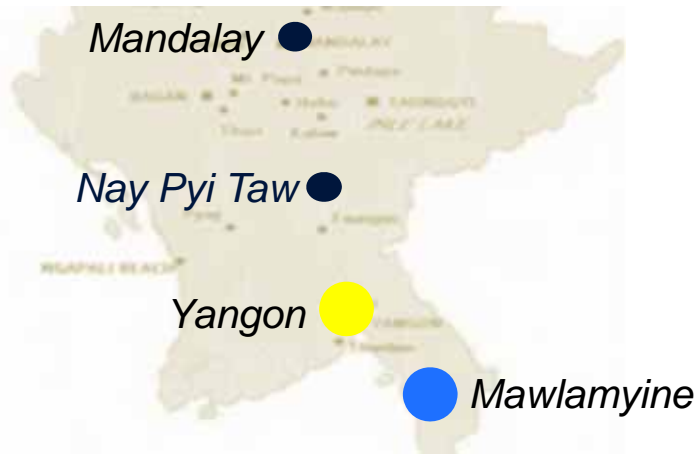
### Current:

**Assets:** 9,236 MB (\$280 Mill)

**Total Export from Thailand:** 5,335 MB (H1/15)

### Operations:

- Cement-Building Materials: RMC and trading office



**Cement plant** – Aug/13 (12,400 MB)

Greenfield / majority stake

1.8 MT/ mid-2016 start

### Future plans:

**Investment opportunities** – logistics and others



## Philippines

**Ceramics: Mariwasa** - Mar/12 (150 MB)

- Increased stake to 83% from 46% / 12 mill sqm.



## Cambodia

**Cement plant** - Oct/12 (5,500 MB)

- Brownfield 0.9 mill tons / June/15 start



## Laos

**Cement plant** - Apr/14 (10,000 MB)

- Greenfield 1.8 mill tons / Q2/17 start



# ASEAN Expansion: Thailand



Mainly HVA.

## Cement – Building Materials:

- **Regional construction-related retail** – 50% JV with Siam Global House
- **Mortar** expansion of 2 MT in Lampang and Khon Kaen
- **Panel World** 55% stake M&A (2.4 Mill sqm. + 2.4 Mill sqm. in Q4/14)
- **Florim Ceramiche (Italy)** – 33% JV (5 mill sqm in Italy, starting in H1/15) (HVA)
- **Precast concrete** – 2 plants by mid-2015.
- Greenfield **MG Stone Slabs** (400,000 tons), start-up in 2015. (HVA)
- Purchase all shares of Monier Group.
- Purchase share of **TOTO** in sanitary ware (to 71.4% from 35.7%) and fitting assets (to 90.6% from 44.8%).
- Logistics (temp-controlled) JV with Nichirei Logistics Group. (HVA)
- **Construction retail trade** - 30% stake M&A in “**Siam Global House PLC.**”
- **Mortar** expansion of capacity by 50% to 3.1 million tons.

Sep/14 (200 MB)  
Sep/16 (2,800 MB)  
Jul/14 (550 MB)  
Apr/14 (506 MB)  
Oct/13 (2,500 MB)  
July/13 (1,500 MB)  
July/13 (650 MB)  
May/13 (2,600 MB)  
Apr/13 (575MB)  
Oct/12 (~10,000 MB)  
July/12 (1,000 MB)

## Packaging

- **Flexible Packaging Business**, with a 72% stake M&A in “**Prepack**” (HVA)
- Upgrade paper machine for 60,000 tons/yr **Glassine paper** (HVA), expected startup in early 2016
- **Nippon paper’s equity injection** for a 30% stake in SCG Paper’s Fibrous chain
- M&A (75%) of two box plants (121,000 tons).
- Greenfield **Packaging Paper** (400,000 tons), start-up within 2014
- Greenfield **Machine Glazed Paper** (43,000 tons), 45% JV with Nippon Paper Group. (HVA)
- Upgrade existing pulp facilities to produce **Dissolving Grade Pulp**. (HVA)
- M&A of box plant (Tawana - 61,000 tons).

Jan/15 (1,500 MB)  
Apr/14 (1,825 MB)  
Aug/13  
May/13 (888 MB)  
Oct/12 (6,700 MB)  
Jun/12 (2,200 MB)  
July/12 (400 MB)  
Mar/12 (410 MB)

## Chemicals

- **Increase stake in BST** from 26% to 49%.
- **LDPE coating grade** of 60,000 tons, totaling 152,000 tons per year.
- Greenfield LLDPE cast sheet film (15,000 tons), 45% JV with Mitsui Chemicals Tohcello. (HVA)
- Increased stake in Thai Plastic and Chemicals to 91% (from 46%).

Nov/13 (8,028 MB)  
Apr/13 (2,475 MB)  
Mar/12 (1,400 MB)  
Mar/12 (11,500 MB)

Chemicals - Naphtha Cracker (consolidated)		Chemicals - Associates (equity accounting)	
Ethylene	1,700,000 tons	<b><u>Dow Chemicals JV (50%)</u></b>	
Propylene	1,200,000 tons	- LLDPE	650,000 tons
<b>Chemicals - Downstream (consolidated)</b>		- Propylene Oxide	390,000 tons
HDPE	920,000 tons	- Specialty Elastomer	220,000 tons
LDPE + LLDPE	220,000 tons	- PS	140,000 tons
PP	720,000 tons	- SM	300,000 tons
PVC (Thai, Indo, Viet)	886,000 tons	- Synthetic Latex	18,000 tons
<b>Cement - Building Materials (consolidated)</b>		<b><u>Mitsui Chemicals JV (20% - 50%)</u></b>	
Grey Cement (TH, KH, ID)	27 million tons	- PTA (50%)	1,440,000 tons
Ready-Mixed Concrete	550 batching plants	- PET (20%)	133,000 tons
(Thai, Cam, Myan, Indo, Laos, Viet)		- PP Compound (46%)	168,000 tons
White Cement (Thai, Viet)	0.4 million tons	- LLDPE Cast Film (45%)	15,000 tons
Ceramic Tiles (Thai, Indo, Phil, Viet)	225 M sqm	<b><u>Mitsubishi Rayon JV (47%)</u></b>	
Roofing Tiles (Thai, Cam, Phil, Viet)	89 M sqm	- MMA	175,000 tons
Ceiling & Wall Products	99 M sqm	- Cast Sheets	20,000 tons
Autoclaved Lightweight Concrete	27 M sqm	<b><u>Chandra Asri JV(30%)</u></b>	
<b>Paper (consolidated)</b>		- Ethylene	600,000 tons
Packaging Paper (Thai, Phil, Viet)	2,306,000 tons	- Propylene	320,000 tons
Box (Thai, Malay, Sing, Viet, Indo)	1,013,000 tons	- HDPE / LLDPE	336,000 tons
Printing & Writing Paper	570,000 tons	- PP	480,000 tons
Short Fibre Pulp	470,000 tons	- SM	340,000 tons
		<b><u>Bangkok Synthetic (49%)</u></b>	
		- Butadiene	140,000 tons
		- SBR	80,000 tons

# Incremental capacity

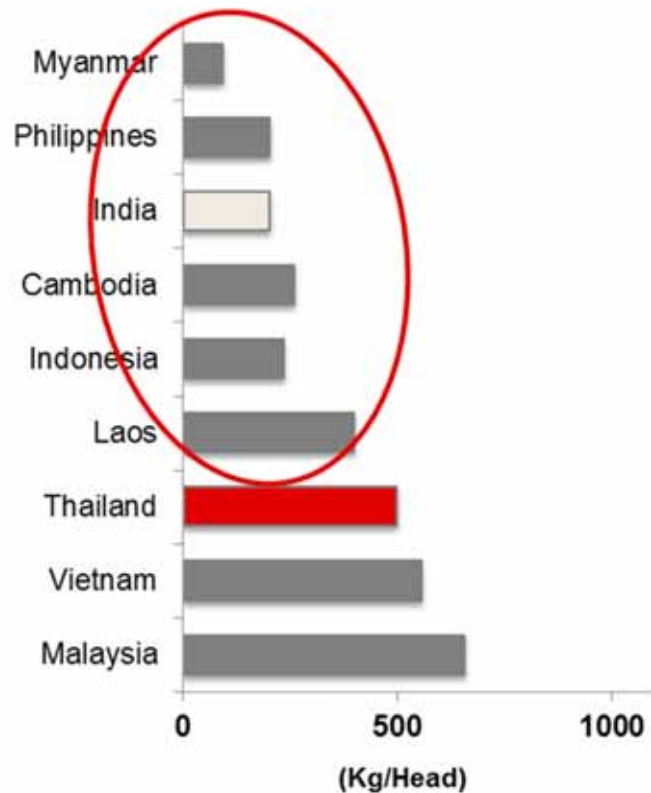


Capacity at year end												Total Capacity											
												2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Chemicals Upstream (Cracker) - ('000 tons)																							
Ethylene (subsidiary)												800	800	800	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	
Propylene (subsidiary)												400	400	400	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	
Chandra Asri (30% stake)																							
Ethylene												-	-	-	-	600	600	600	600	600	860	860	
Propylene												-	-	-	-	320	320	320	320	320	470	470	
Chemicals Downstream - ('000 tons)																							
HDPE (subsidiary)												520	520	520	920	920	920	920	920	920	920	920	
PP (subsidiary)												320	320	320	720	720	720	720	720	720	720	720	
PVC (90% stake in TPC)												858	828	766	886	886	886	886	886	886	886	886	
Chemicals Downstream (JV) - ('000 tons)																							
LLDPE (Dow JV)												300	300	300	650	650	650	650	650	650	650	650	
Specialty Elastomers (Dow JV)												-	-	-	-	220	220	220	220	220	220	220	
Propylene Oxide (Dow JV)												-	-	-	-	390	390	390	390	390	390	390	
SSBR (BST JV)												-	-	-	-	-	-	50	50	50	100	100	
LLDPE cast sheet film (Mitsui Tohcello JV)												-	-	-	-	-	-	-	15	15	15	15	
MMA (Mitsubishi Rayon JV)												85	85	85	175	175	175	175	175	175	175	175	
Cast Sheets (Mitsubishi Rayon JV)												-	-	20	20	20	20	20	20	20	20	20	
HDPE / LLDPE (CAP JV)												-	-	-	-	336	336	336	336	336	336	336	
PP (CAP JV)												-	-	-	-	480	480	480	480	480	480	480	
SM (CAP JV)												-	-	-	-	340	340	340	340	340	340	340	

Capacity at year end												Total Capacity											
												2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Paper - ('000 tons)																							
Printing & Writing Paper												365	570	570	570	570	570	570	570	570	570	570	
Packaging Paper												1,660	1,660	1,880	1,880	1,880	1,880	1,956	2,306	2,306	2,306	2,549	
Box												550	637	692	741	795	855	1,013	1,013	1,013	1,013	1,013	
Machine Glazed Paper (Nippon Paper JV)												-	-	-	-	-	-	-	43	43	43	43	
Flexible Packaging (Thai + Vietnam)												-	-	-	-	-	-	-	17	17	19	19	
Cement - (MT)																							
Grey Cement (TH, KH, MM, ID, LA)												23	24	24	24	24	24	24	24	27	29	30	
White Cement (TH, VN)												0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	
Mortar												0.9	1.3	1.3	1.3	2.1	2.1	2.1	3.2	4.1	6.6	6.6	
Building Products - (M sqm)																							
Ceramic Tiles												95	122	122	122	149	149	225	225	225	225	225	
Ceramic Italian JV												-	-	-	-	-	-	-	-	5	6	6	
Ceiling & Wall product (TH)												37	43	54	58	60	68	86	99	99	100	100	
Lightweight concrete (TH, ID)												15	15	15	15	15	15	21	27	27	30	30	
Modular Home (Sekisui Heim JV)												-	-	-	200	200	200	1,000	1,000	1,000	1,000	1,000	

	<u>Thailand</u>	<u>ASEAN</u>
<b>Downstream Chemicals</b> <i>7.2 million tons</i>	<b>1</b>	<b>1</b>
<b>Packaging Paper</b> <i>2.3 million tons</i>	<b>1</b>	<b>1</b>
<b>Cement</b> <i>27 million tons</i>	<b>1</b>	<b>4</b>
<b>Building Products</b> <i>225 Mill sq.m. of ceramics</i>	<b>1</b>	<b>1</b>

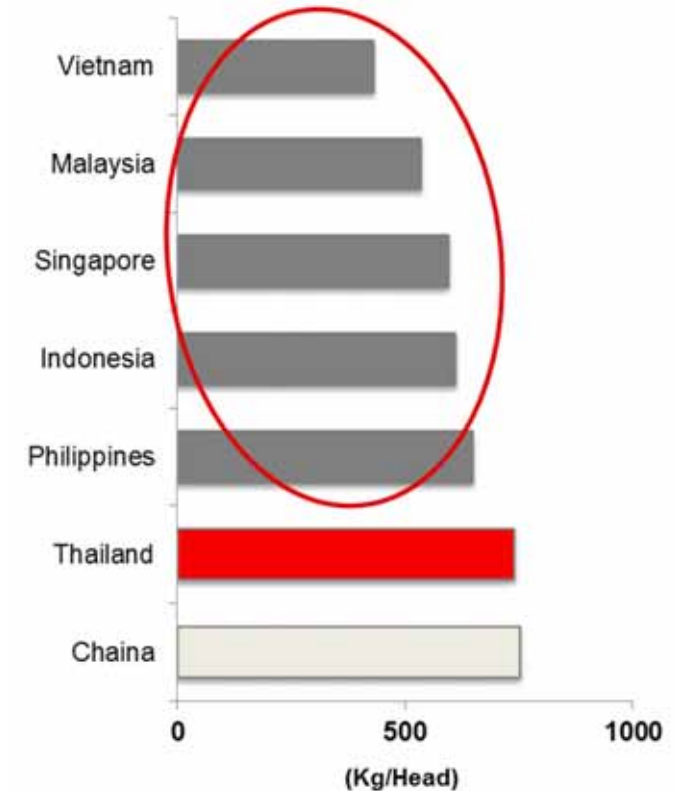
## Cement\*



## Plastic (PE+PP)\*



## Packaging



## Integration and Efficiency

### Upstream

#### **Cement plants**

+ raw materials  
+ energy

#### **Global scale crackers**

+ 25% gas feedstock

#### **Packaging paper**

+ recycling waste paper

#### **Short fibre pulp**

+ internal pulp

### Downstream

- RMC, mortar, ALC,  
precast, roofing,  
ceiling and wall

- PE, PP, PVC,  
C4 chain

- packaging solutions,  
packaging products

- paper & non paper

## value creation

### HVA products

- service-based (mortar spraying)  
- solution-based (speed renovation)  
- differentiated products (sizes, texture)  
- distribution channels (modern trade  
and home solutions)

- compounding (PE & PP)  
- PVC fabrications & construction,  
- C4 synthetic rubber, etc

- customized packaging  
- lightweight/pre-printed box, etc

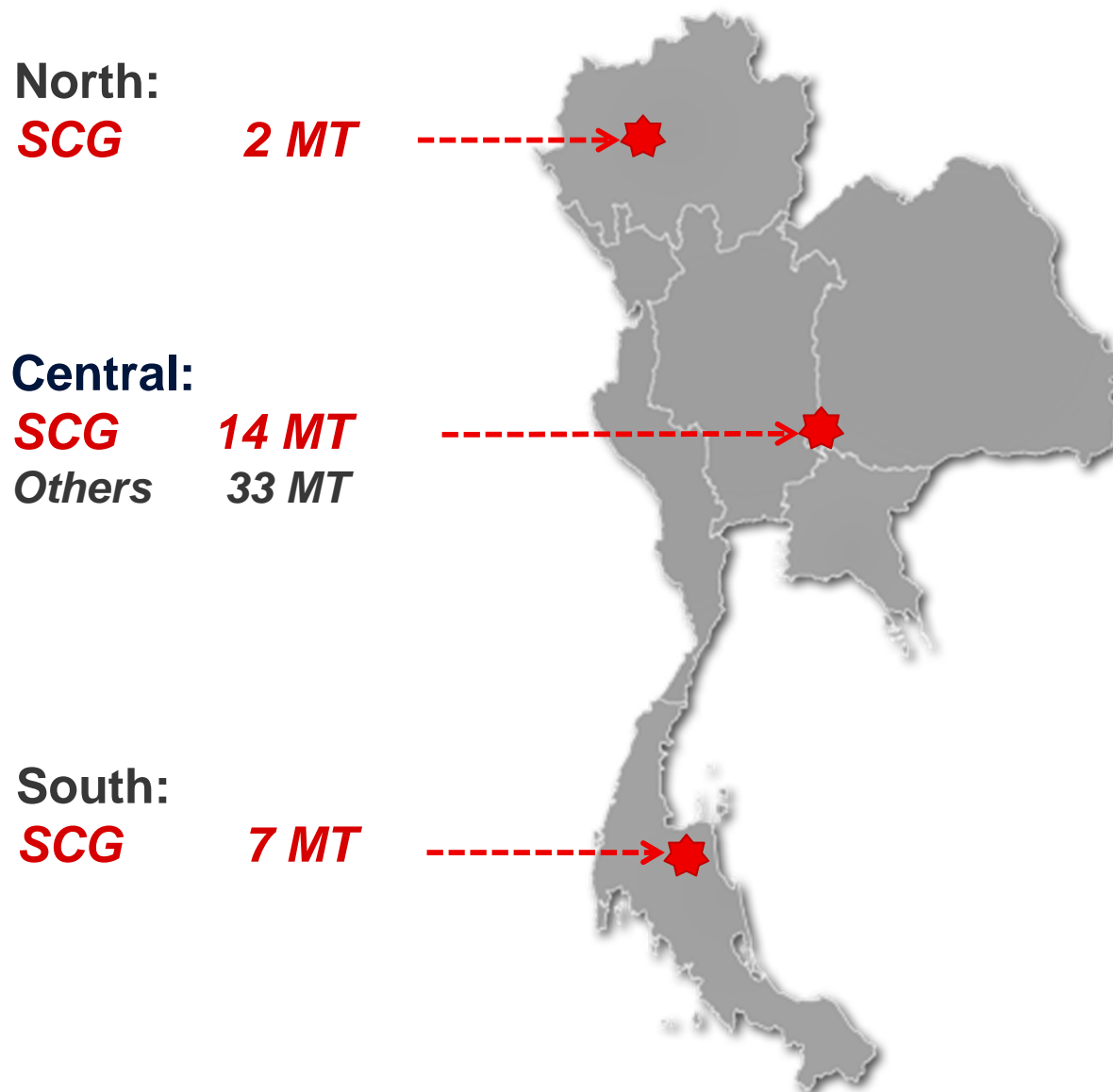
- machine glazed paper, glassine  
eco-friendly paper,  
dissolving-grade pulp



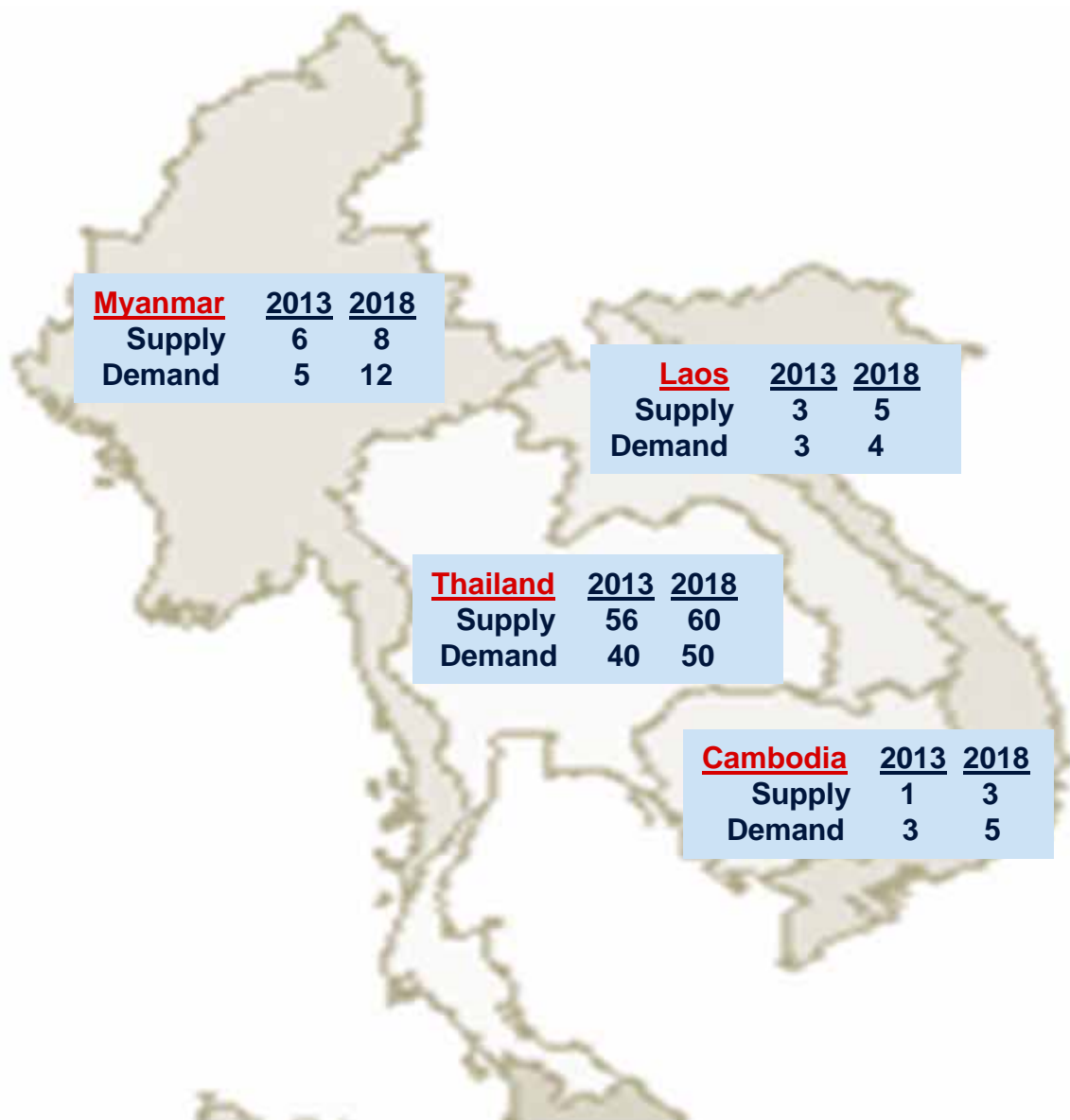
# SCG's cement plants in Thailand are strategically located:



Domestic market share of approx 40%.

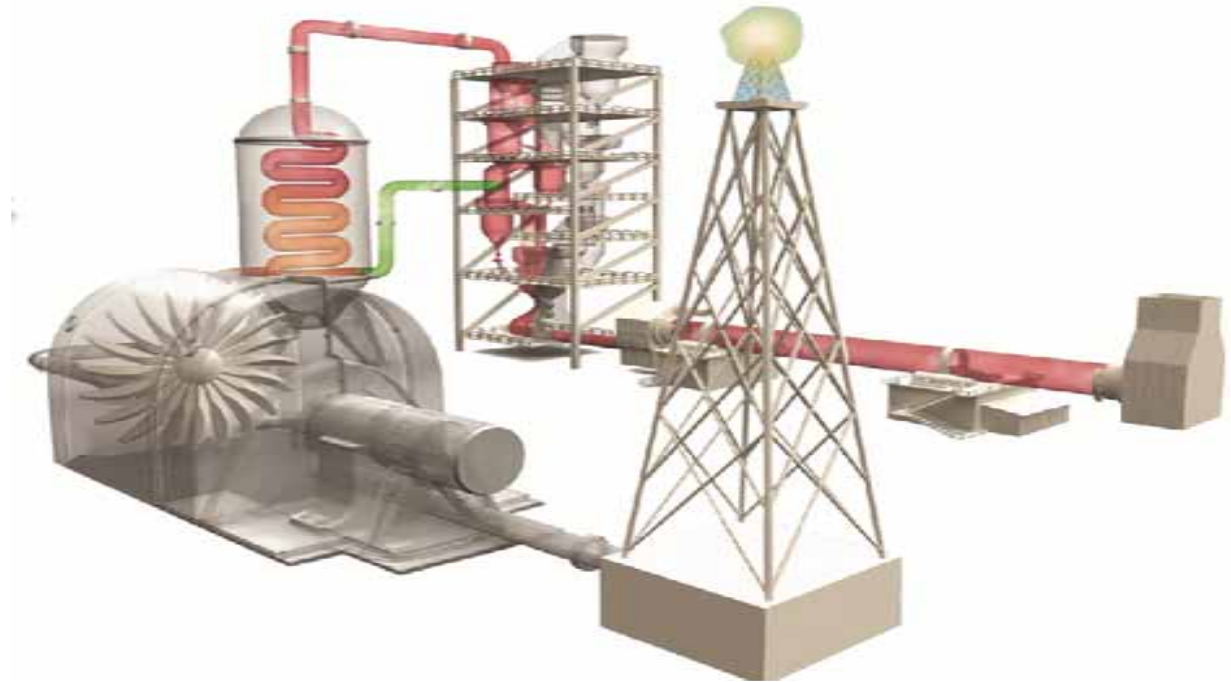


# Cement Balance: Thailand & Neighboring countries



	2013	2018	Growth
Capacity	66	76	3%
Demand	52	71	7%
Demand to Capacity	79%	93%	

*Utilize heat from the production process to generate electricity.*



<b>Phase 1</b>	2,000 MB	Thailand	-started in Q1/08
<b>Phase 2</b>	350 MB	Cambodia	-started in Q2/09
<b>Phase 3</b>	3,400 MB	Thailand	-started in Q4/09
<b>total</b>	<u>5,750 MB</u>		

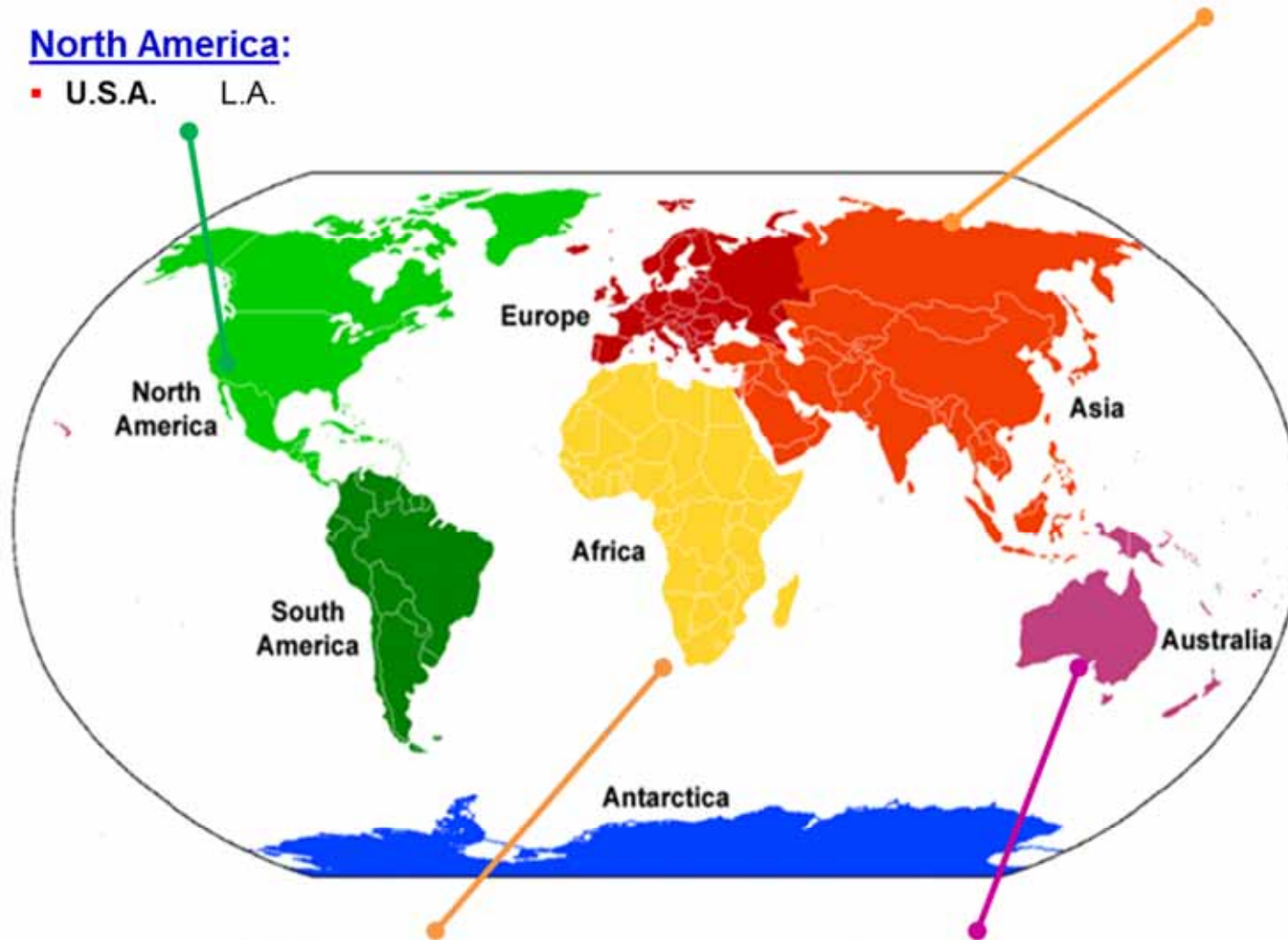
**...+ASEAN plants**

# SCG Trading's coverage:

26 offices in 16 countries, with strategic ASEAN distribution, logistics and retail sales.

## North America:

- U.S.A. L.A.



## Africa:

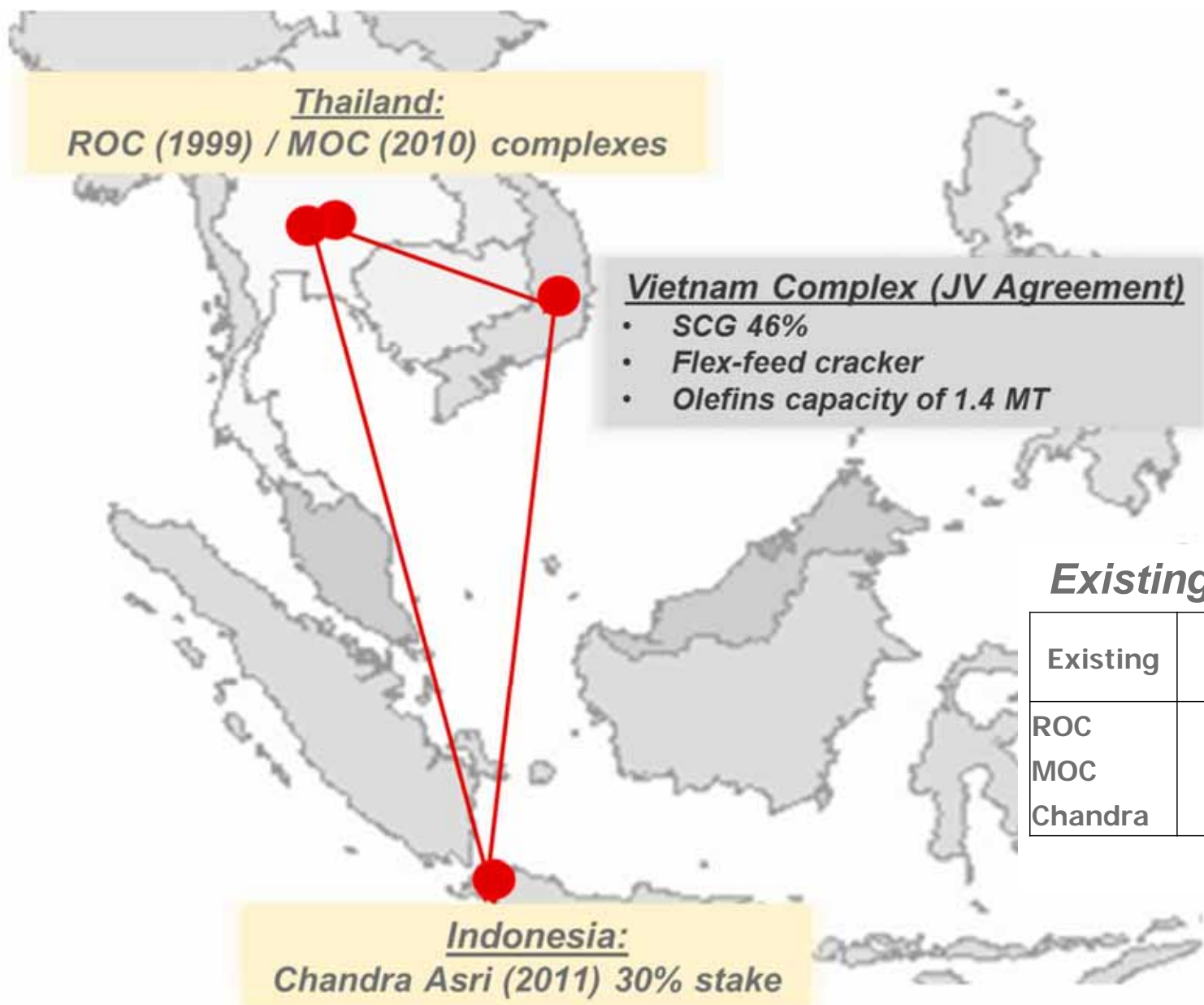
- South Africa Johannesburg

## Australia:

- Australia Sydney

## Asia:

- Philippines Manila
- Malaysia Kuala Lumpur
- Singapore Singapore
- Indonesia Jakarta
- Vietnam Ho Chi Minh City, Hanoi, Danang
- Cambodia Phnom Penh, Poipet
- Myanmar Yangon
- Laos Vientiane
- China Guangzhou, Foshan, Kunming, Nanning
- Hong Kong Hong Kong
- Taiwan Taipei
- India Chennai, Gurgaon
- Bangladesh Dhaka, Chittagong
- U.A.E. Dubai
- Jordan Amman



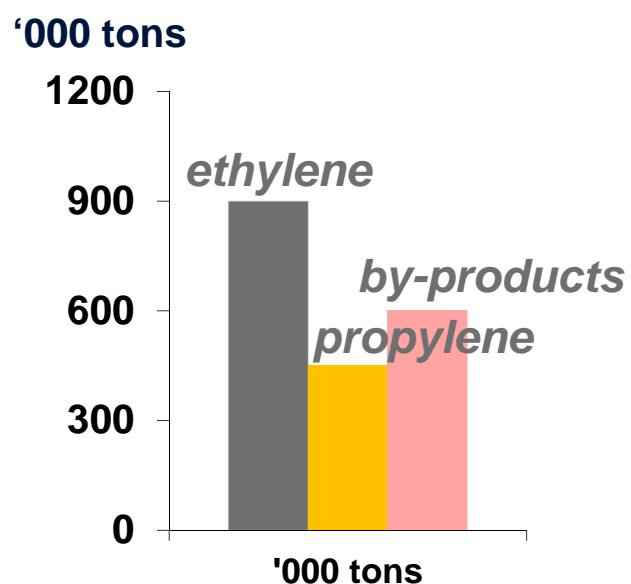
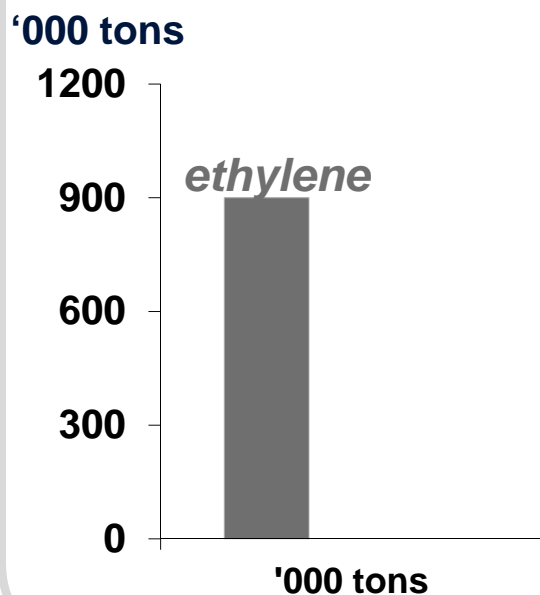
### Existing:

Existing	Stake	Olefins Capacity ('000 tons)		
		Ethylene	Propylene	Total
ROC	SCG 64%	800	400	1,200
MOC	SCG 67%	900	800	1,700
Chandra	SCG 30%	600	320	920
Existing total				3,820

## Typical crackers

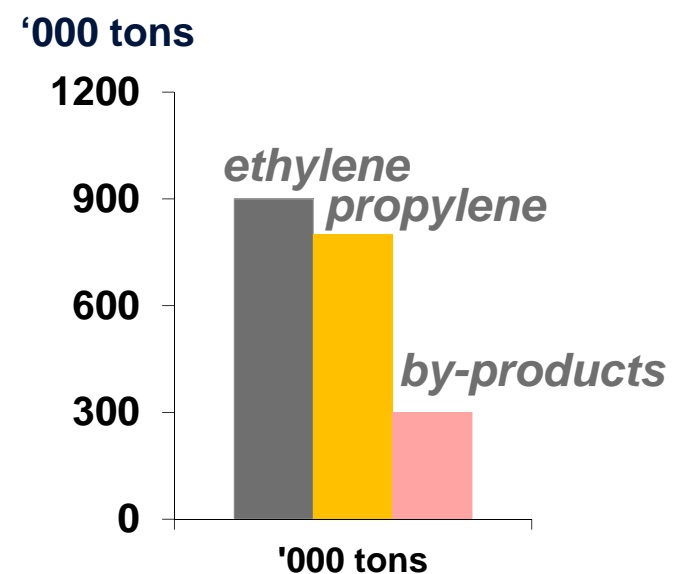
### Gas-based

### Naphtha-based



## Propylene-rich cracker

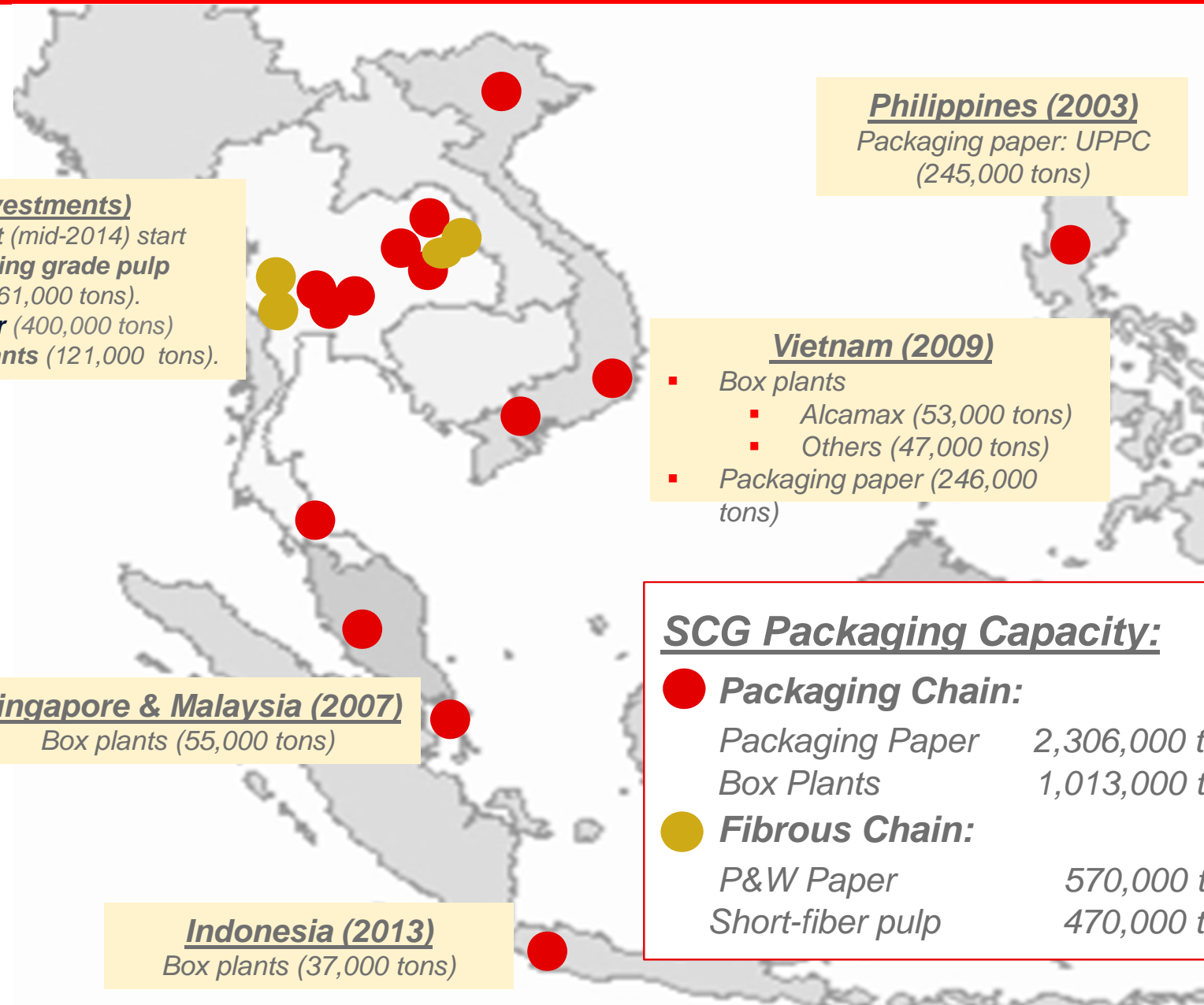
### Naphtha-based



SCG's 1<sup>st</sup>  
cracker  
(1999)  
1.2 MT

SCG's 2<sup>nd</sup>  
cracker  
(2010)  
1.7 MT





## SCG Packaging Capacity:

### ● **Packaging Chain:**

Packaging Paper	2,306,000 tons
Box Plants	1,013,000 tons

### ● **Fibrous Chain:**

P&W Paper	570,000 tons
Short-fiber pulp	470,000 tons

# SCG: eco value products

Thailand's first eco label, accounting for 27% of SCG's H1/15 sales, or 259,311 MB.

	2010	2011	2012	2013	2014	H1/15
% of total sales	13%	13%	14%	26%	31%	27%

**eco** = ecology + economy

The balance of environment, society and economy towards sustainable growth

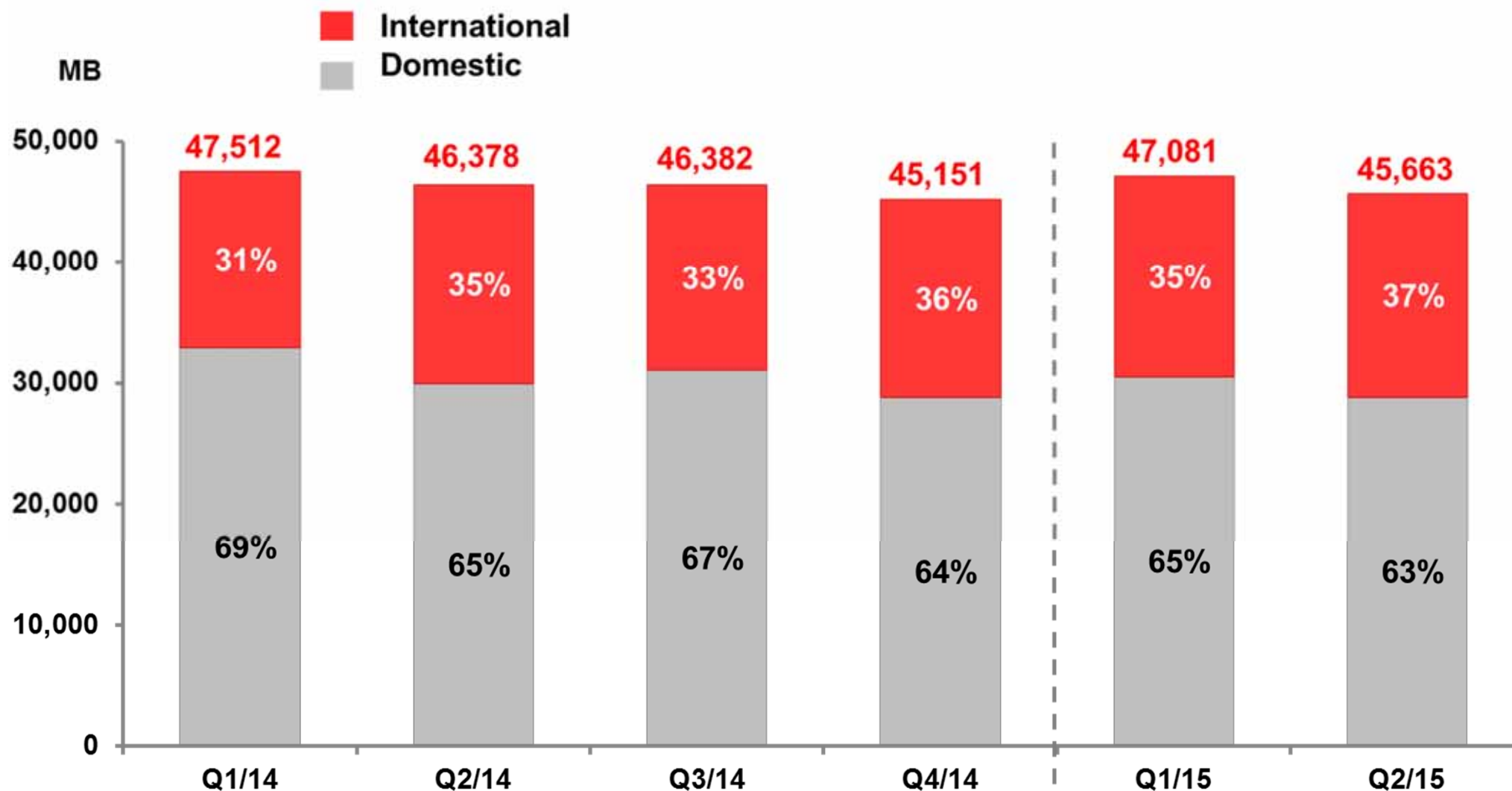


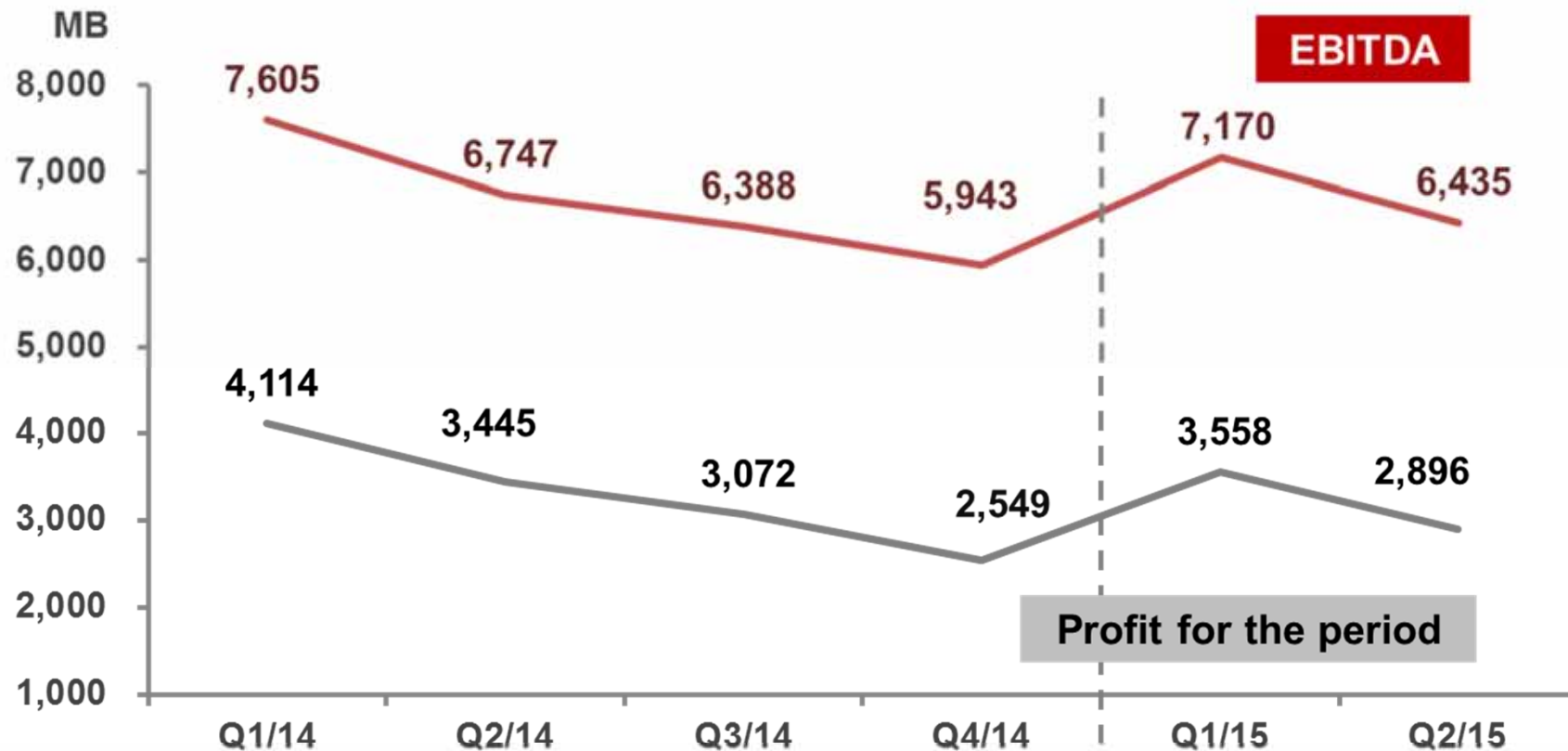
**value**

Value for stakeholders, society and environment received from innovative products and services

	Company	Industry	DJSI World	DJSI Emerging Markets
1	SCG	Construction Materials	X	X
2	PTTGC	Chemicals	X	X
3	PTT	Oil & Gas	X	X
4	PTTEP	Oil & Gas	X	X
5	IRPC	Oil & Gas		X
6	Thai Oil	Oil & Gas		X
7	Banpu	Coal & Consumable Fuels		X
8	TUF	Food Products		X
9	CPN	Real Estate		X
10	Minor	Hotels, Resorts & Cruise Lines		X

## Revenue from Sales





## EBITDA Margin \*

	Q1/14	Q2/14	Q3/14	Q4/14	Q1/15	Q2/15
<b>Total</b>	<b>16%</b>	<b>15%</b>	<b>14%</b>	<b>13%</b>	<b>15%</b>	<b>14%</b>
International	9%	9%	9%	10%	10%	11%
Domestic	18%	16%	16%	15%	18%	16%
Domestic Structural Pro	28%	26%	25%	21%	27%	24%

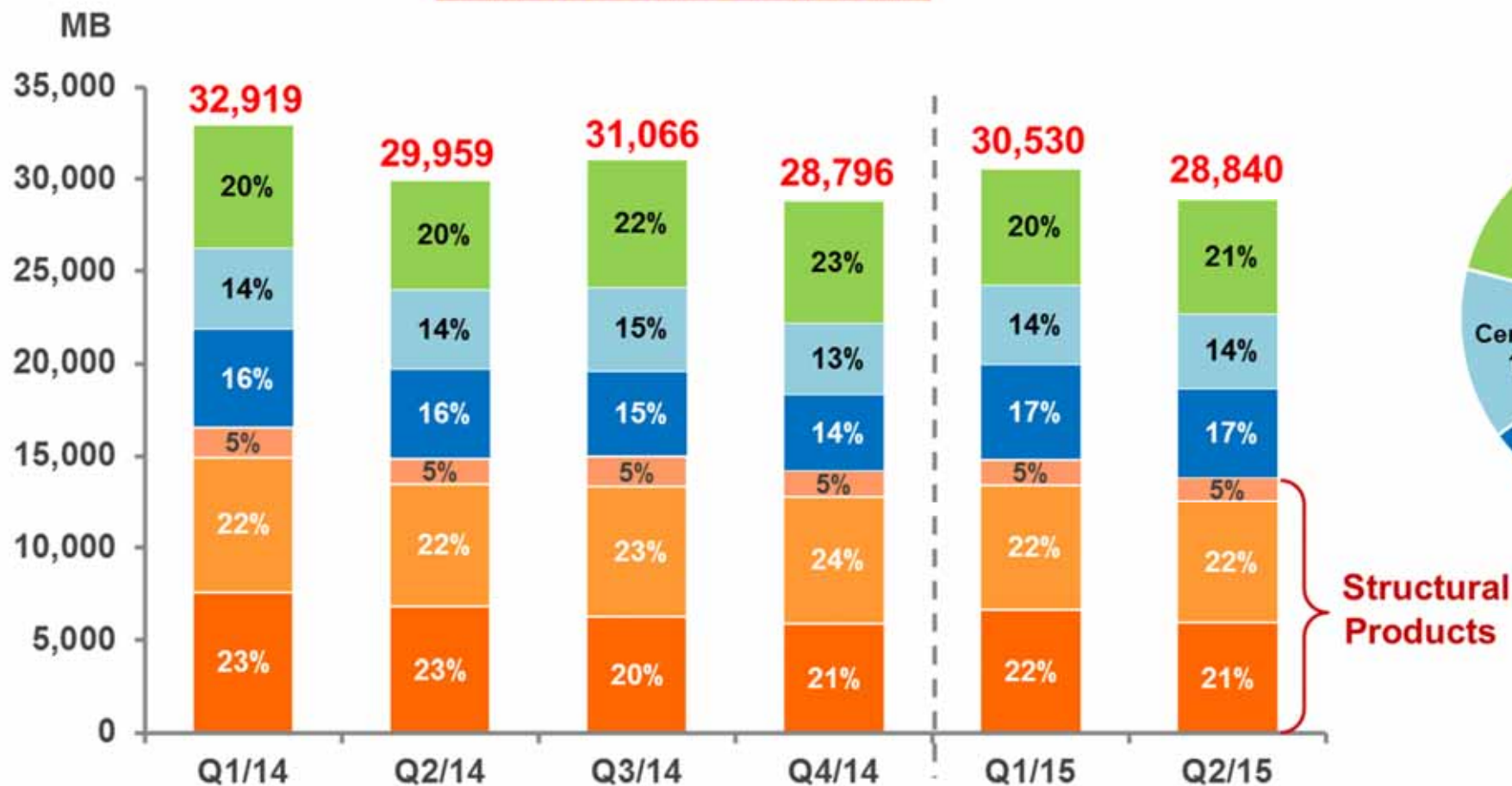
## EBITDA Portion

	Q1/14	Q2/14	Q3/14	Q4/14	Q1/15	Q2/15
<b>International</b>	<b>19%</b>	<b>25%</b>	<b>23%</b>	<b>28%</b>	<b>24%</b>	<b>29%</b>

\* EBITDA margin = EBITDA from Operations / Consolidated Sales



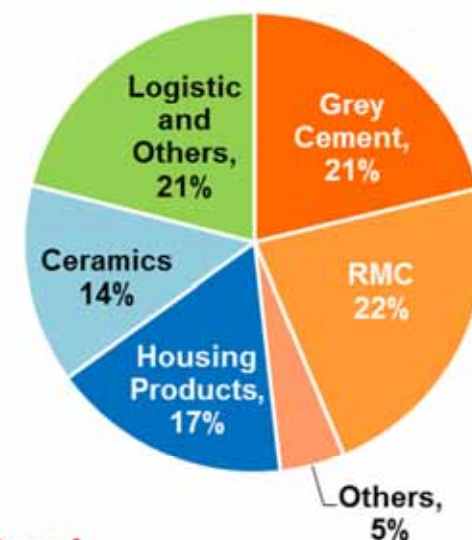
## Domestic Sales Segments



## Domestic Sales (H1/15)

**59,370 MB**

(-6% y-o-y)



**Note:** Domestic business: domestic sales from Thai operations

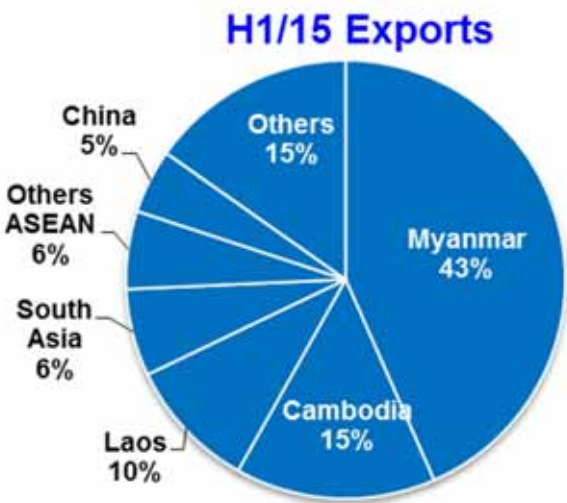
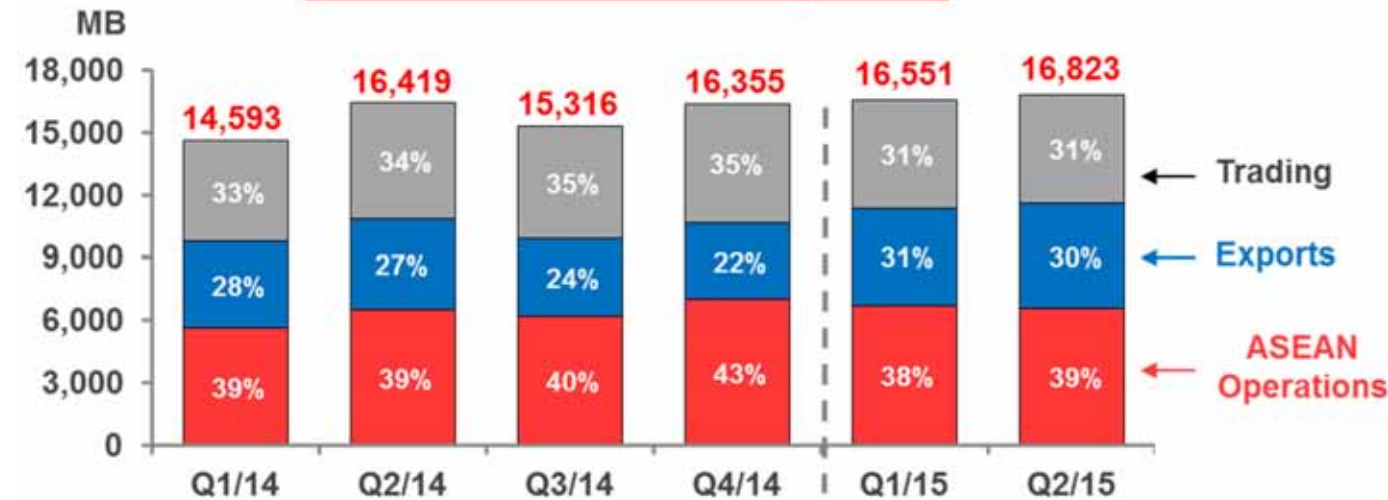
**Structural Products:** Grey cement, RMC, Others (mortar, white cement, and lightweight concrete blocks).

**Housing Products:** Roofing products, Board & Wood sub, and Home improvement.

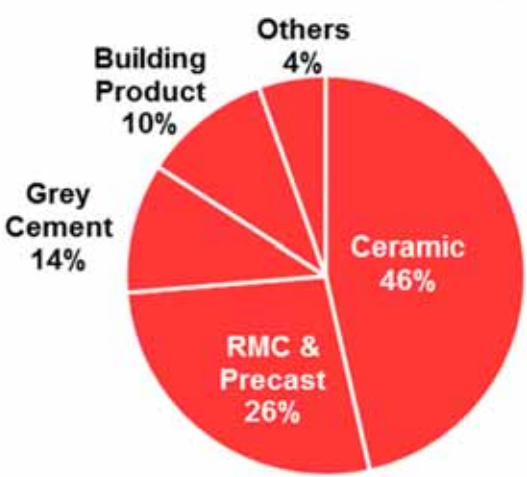
**Ceramics:** includes Sanitary ware and Fittings.



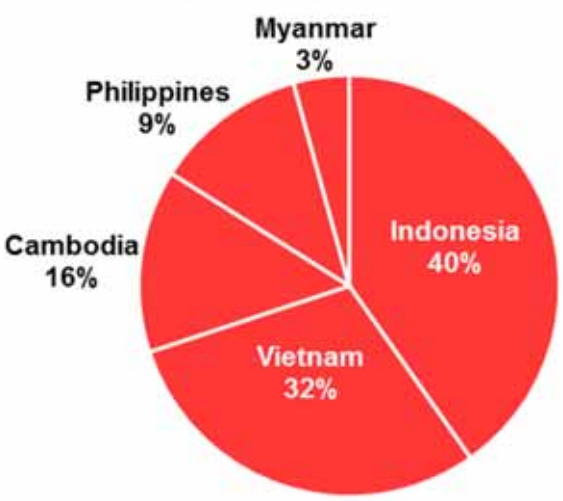
International Sales Segments



H1/15 ASEAN Operations (Products)

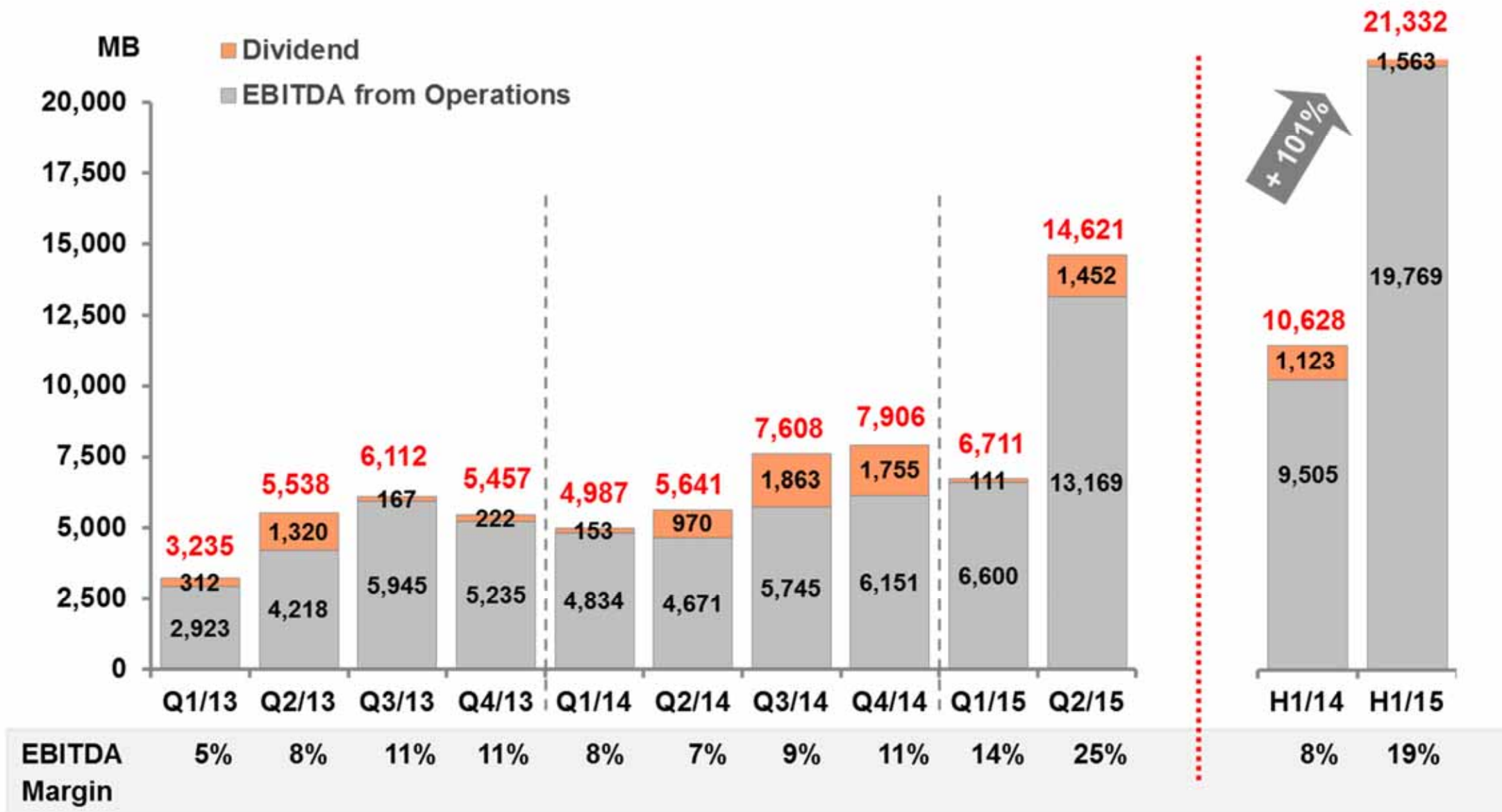


H1/15 ASEAN Operations (Country)



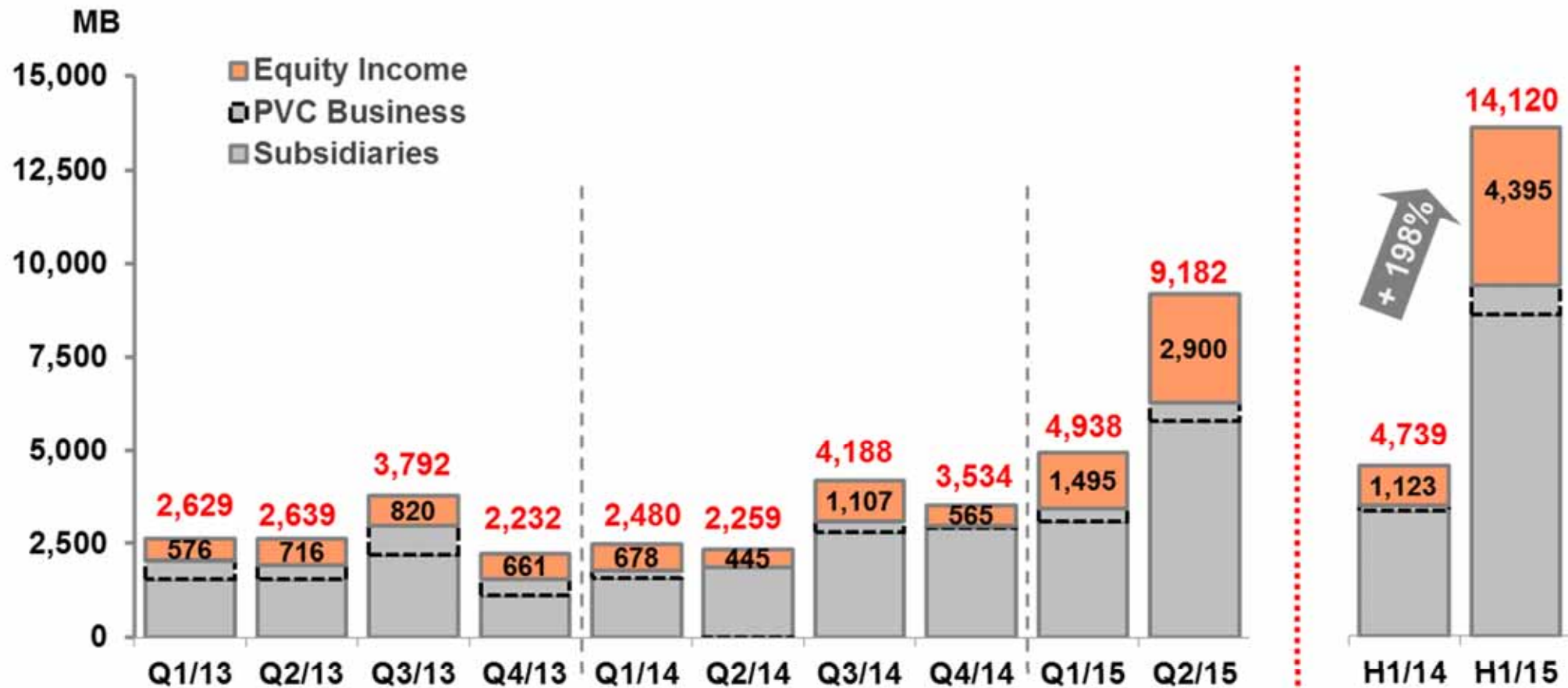
**Note:** International business = ASEAN Operations, exports from Thailand, and Trading business  
*Housing* - Roofing products, Board & Wood sub, and Home improvement.  
*Ceramics* - includes Sanitary ware and Fittings.  
*Trading* - are mainly trading of non-SCG products

# Financials: SCG Chemicals' EBITDA



Note: EBITDA = EBITDA from operations + dividend from associated companies

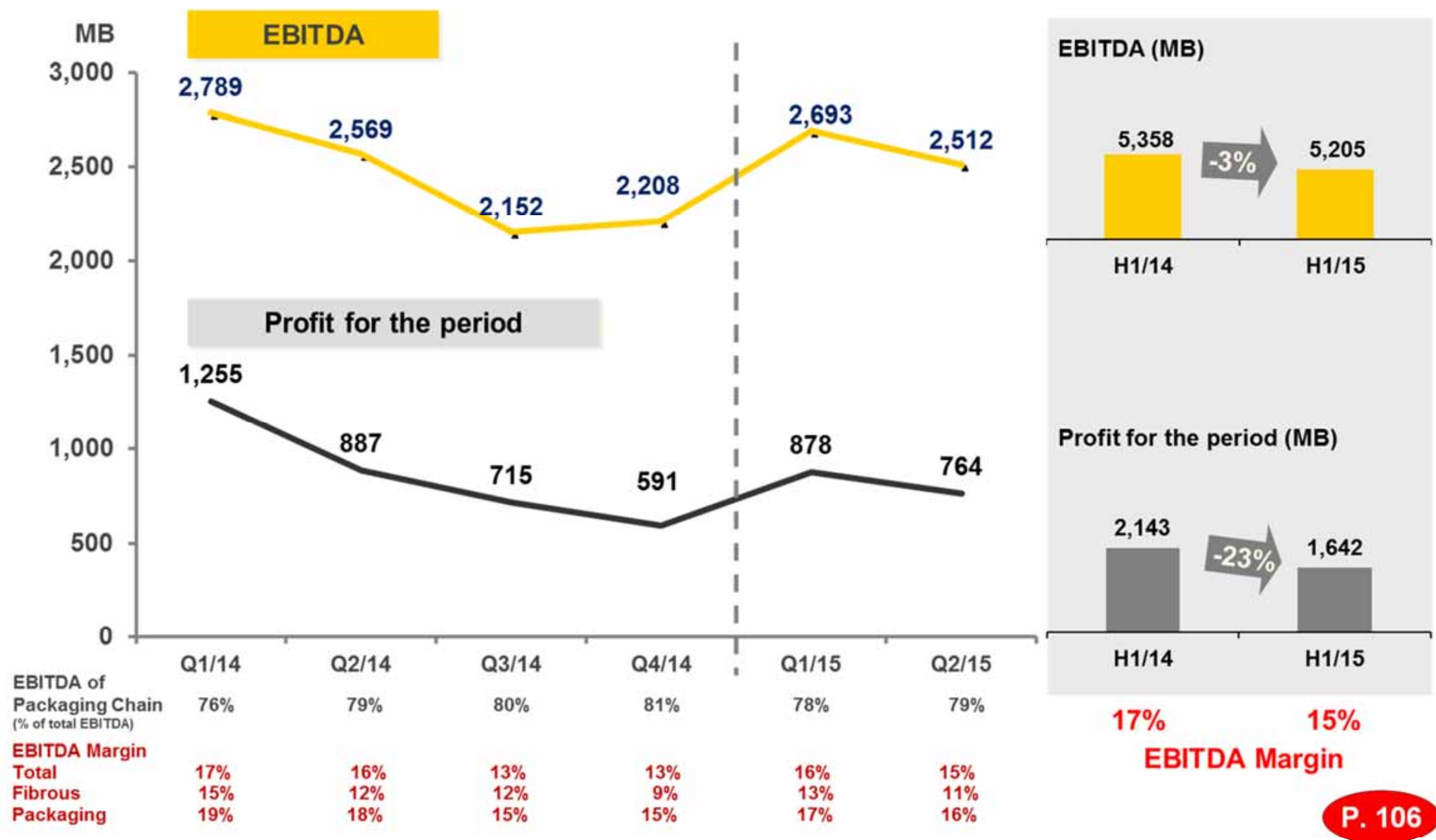
# Financials: SCG Chemicals' profitability



NCI (Non controlling interest)	630	110	(310)	(340)	(330)	(240)	(650)	(740)	(680)	(3,600)	(570)	(4,280)
Inventory	260	(840)	840	810	180	(80)	(130)	(2,960)	(930)	970*	100	40
Gain (Loss)**												

\*Sub/Asso : 90%/10%

\*\*Note: SCG Chemicals (Sub + Asso.)





## Sales & Assets (MB):

Sales (MB)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	H1/15
Consolidated	120,353	128,201	148,865	192,395	218,265	258,175	267,737	293,230	238,664	301,323	368,579	407,601	434,251	487,545	223,094
Cement	24,183	27,269	30,552	36,658	41,630	44,123	44,087	49,999	46,661	48,954	54,249	67,558			
Building Materials	13,046	16,129	18,147	20,542	22,227	22,745	21,281	23,351	26,873	30,719	34,171	41,340	174,642	185,423	92,744
Distribution	53,326	52,191	56,551	68,558	76,070	81,519	86,440	102,672	86,641	96,898	111,920	126,690			
Chemicals	38,152	42,394	50,767	75,185	86,084	122,645	130,223	136,527	101,115	144,317	192,929	203,539	209,997	248,118	101,592
Paper	26,995	29,305	33,564	38,265	40,306	42,645	43,890	47,110	42,729	51,714	54,839	57,430	59,135	64,614	34,283
Assets (MB)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	H1/15
Consolidated	174,804	167,388	176,566	191,081	199,370	226,264	248,256	285,776	315,992	359,219	373,789	395,573	440,633	465,823	462,386
Cement	59,618	60,624	56,315	54,801	55,953	57,791	60,132	60,770	60,681	61,018	60,115	66,808			
Building Materials	16,023	15,338	15,771	18,068	20,259	20,595	19,863	22,654	22,991	24,796	35,845	43,512	155,458	168,662	157,984
Distribution	7,813	6,864	6,631	7,765	8,560	10,610	11,143	10,903	10,110	12,177	16,234	24,463			
Chemicals	54,284	57,762	67,254	75,186	78,656	109,391	123,205	138,504	165,964	165,087	176,036	176,837	192,063	183,884	199,261
Paper	25,844	28,720	32,813	39,128	38,575	40,734	46,454	51,089	47,942	50,127	52,463	58,439	65,169	73,987	67,864

## EBITDA & Profit for the Period (MB):

EBITDA (MB)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	H1/15
Consolidated	28,884	30,418	37,188	54,626	53,507	57,151	50,008	38,783	47,116	45,949	46,253	45,716	61,265	66,493	43,679
Cement	7,615	7,917	11,581	13,175	13,235	12,200	10,198	11,272	11,616	10,810	12,781	14,824			
Building Materials	3,140	3,605	4,382	5,307	5,387	4,856	3,928	4,085	4,907	5,489	5,060	6,661	26,274	26,683	13,605
Distribution	1,268	1,214	602	1,541	1,546	1,498	1,576	1,739	1,581	1,440	1,532	1,564			
Chemicals	6,443	6,452	9,851	23,642	19,653	26,199	22,611	12,598	19,482	16,024	14,394	8,628	20,342	26,142	21,332
Paper	8,205	9,536	9,819	9,840	9,496	9,634	7,943	6,660	7,901	9,129	8,811	8,844	9,473	9,718	5,205
Profit for the Period (MB)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	H1/15
Consolidated	7,634	14,604	19,954	36,483	32,236	29,451	30,352	16,771	24,346	37,382	27,281	23,580	36,522	33,615	24,950
Cement	859	2,006	5,313	6,582	7,916	6,652	5,463	6,006	6,214	6,014	7,288	9,163			
Building Materials	410	1,521	2,253	2,700	3,071	1,939	950	778	1,617	1,872	1,476	2,949	16,092	13,180	6,454
Distribution	680	586	251	968	1,079	1,021	939	1,211	1,077	1,061	1,075	1,035			
Chemicals	2,611	5,285	7,777	20,523	16,656	17,574	16,982	6,136	12,556	22,609	11,190	2,690	11,292	12,461	14,120
Paper	3,272	4,079	4,424	4,122	3,689	3,574	2,353	1,658	2,286	3,490	3,331	3,560	3,587	3,448	1,642



# *Thank You*

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