



좋은에너지, 더 좋은 세상  
Better Energy, Better World

# 韓國天然氣產業發展和競爭策略

September, 2014





# ***Korea's Gas Industry Development and Competition Policy***

**September, 2014**



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**2** 韓國天然氣產業

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**4** 授權KOGAS管理



**KOGAS**  
KOREA GAS CORPORATION

Better Energy, Better World

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**KOGAS**  
KOREA GAS CORPORATION

Better Energy, Better World

# 1 KOGAS 簡介

1. KOGAS 公司組織架構
2. 海外投資計畫
3. 組織及公司治理
4. 財務現況



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**1**

## KOGAS Overview

- 1. KOGAS Corporate Profile**
- 2. Overseas Projects**
- 3. Organization & Corporate Governance**
- 4. Financial Status**



# 1. KOGAS 公司簡介

- 成立於1983年8月，根據“韓國天然氣企業法”
- 1999年12月於韓國證券交易所上市
- 政府持有**54.6%KOGAS**股權
  - 韓國政府(26.15%), 韓國電力公司(20.47%), 地方政府(7.94%)

## KOGAS 業務範圍



上游探勘



LNG採購



建造及操作  
LNG儲槽及天然氣管線



天然氣銷售



# 1. KOGAS Corporate Profile

- Established in Aug. 1983, pursuant to “Korea Gas Corporation Act”
- Listed on Korea Stock Exchange in Dec. 1999
- **Governmental entity holds 54.6% of KOGAS shares**
  - Korean Government(26.15%), KEPCO(20.47%), Local Government(7.94%)

## Business Scope of KOGAS



Exploration & Production



LNG Purchase



Construction & Operation of  
LNG Storage Tanks and  
Transmission Network



Natural Gas Wholesale





## 2. 海外投資計畫

### ➤ KOGAS海外投資計畫(包含上游探勘計畫)



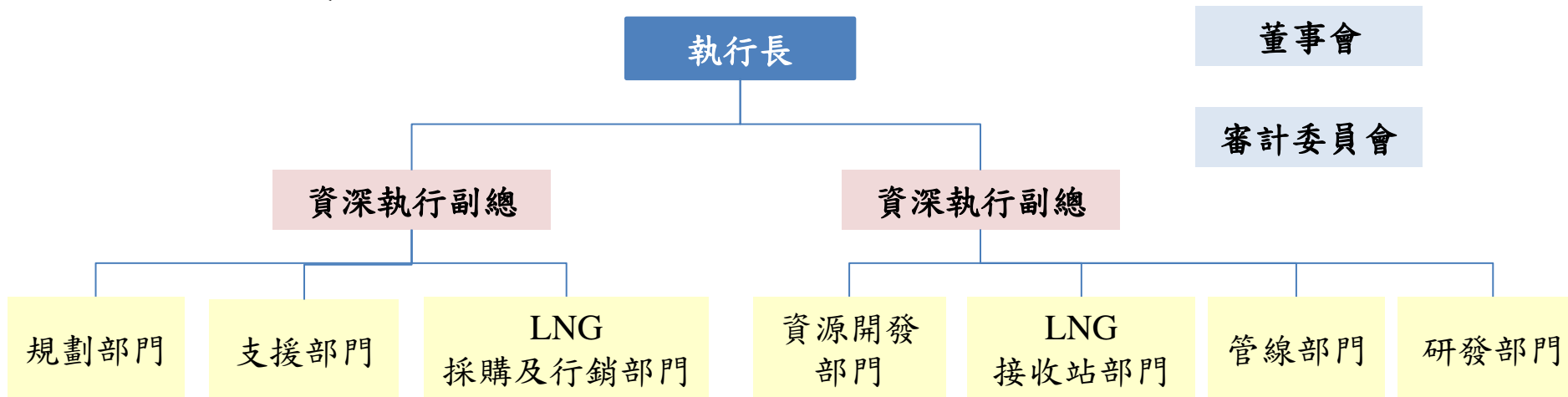
# 2. Overseas Projects

## ➤ KOGAS' Overseas Projects (Including E&P Projects)



### 3.組織及公司治理

#### 公司組織圖



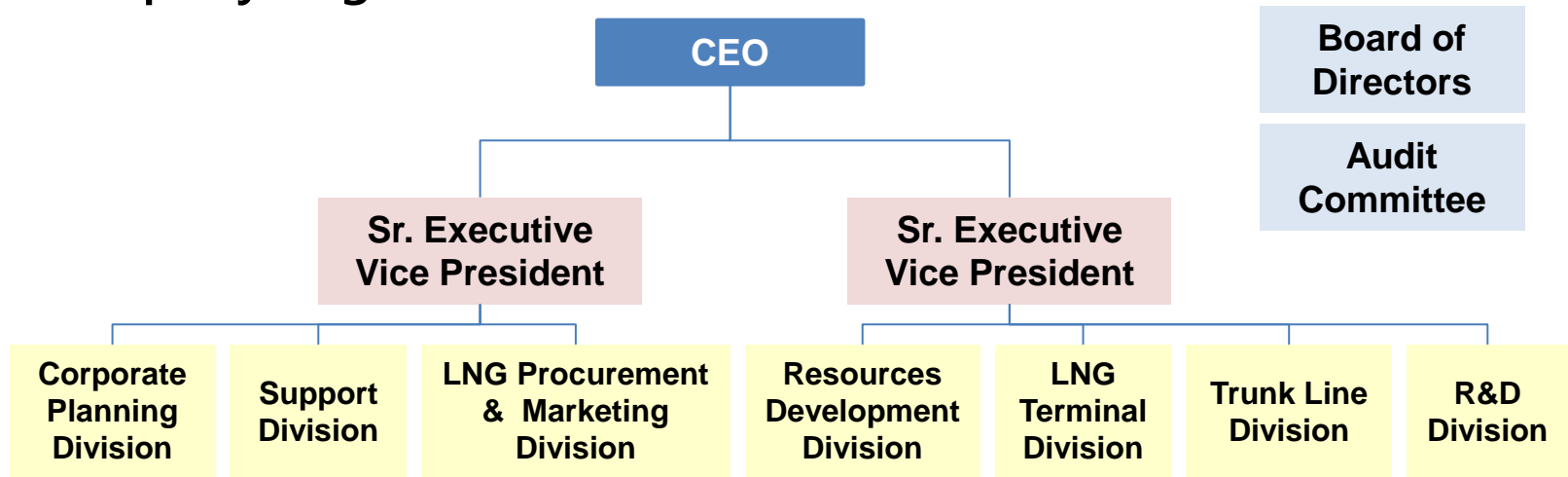
#### 公司治理

- ▶ 執行長、常務監察人及非常務董事皆由韓國政府指名
  - 常務董事由執行長指派
  - 所有董事會成員之任命須經由股東大會通過
- ▶ 董事會主要由非常務董事組成
- ▶ 由國民大會進行年度稽核，由韓國審計及檢查局（監察院）定期稽核
- ▶ 政府依公共機構管理法進行年度考核



# 3. Organization & Corporate Governance

## → Company Organization



## → Corporate Governance

- **CEO, standing auditor and non-standing directors** are appointed by the government
  - Standing directors are appointed by CEO
  - Every board members are appointed after passing the general meeting
- **Non-standing directors are majority in the board**
- Annual audit by **National Assembly** & Regular audit by **Board of Audit and Inspection**
- **Annual performance evaluation** by the Government under the Act on the Management of Public Institutions



## 4. 財務現況

### ➔ 損益表

(單位:百萬韓圓)

說明	2013會計年度	2012會計年度
銷售量	38,063	35,031
營業利潤	1,488	1,267
淨利	<b>△204</b>	362

\* 2031淨損原因為海外氣田減損損失。

### ➔ 資產負債表

(單位:百萬韓圓)

說明	截至2013年12月	截至2012年12月
資產	43,666	40,622
負債	34,734	32,253
股東權益	8,933	8,369
負債淨值比	389%	385%



# 4. Financial Status

## → Income Statement

(billion KRW)

Description	FY 2013	FY 2012
Sales	38,063	35,031
Operating profit	1,488	1,267
Net profit	<b>△204</b>	362

\* Net loss in 2013 : Mainly because of impairment loss on overseas gas fields

## → Balance Sheet

(billion KRW)

Description	As of Dec 2013	As of Dec 2012
Asset	43,666	40,622
Liabilities	34,734	32,253
Shareholder's Equity	8,933	8,369
Debt to Equity Ratio	389%	385%



## 2

## 韓國天然氣產業

1. 產業結構
2. 需求增長
3. LNG來源－多源化
4. 基礎設施
5. 穩定供需平衡



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## 2

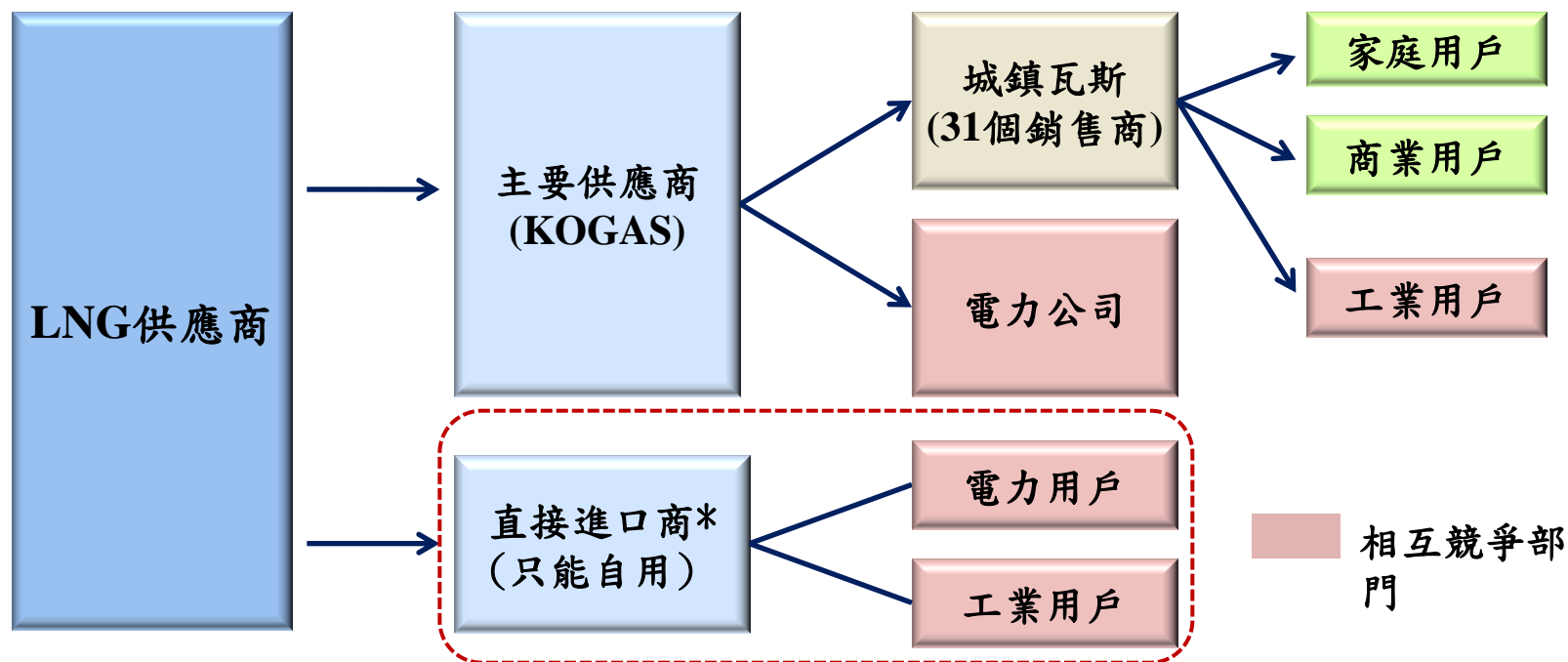
# Natural Gas Industry In Korea

- 1. Industry Structure**
- 2. Demand Growth**
- 3. LNG Sources – Diversification**
- 4. Infrastructure**
- 5. Balancing Demand and Supply**





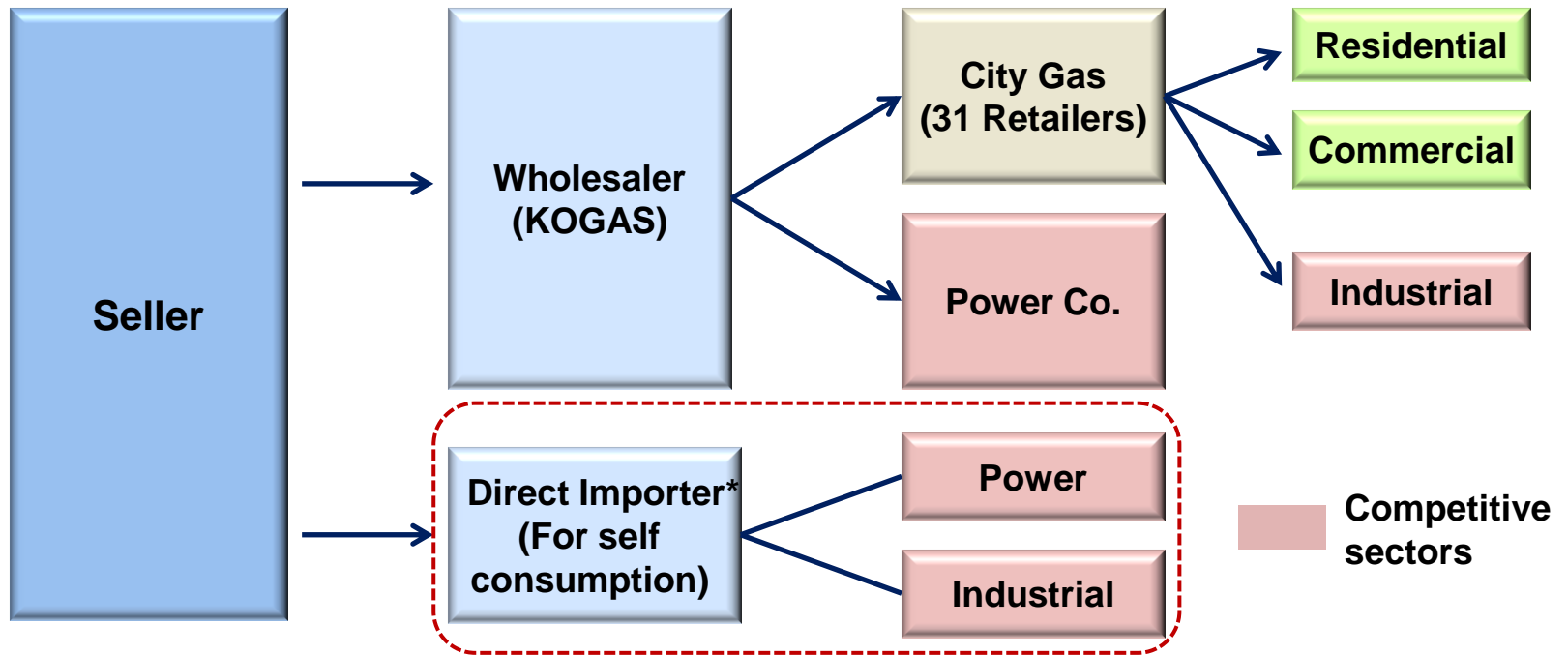
# 1. 產業結構



\* 目前直接進口商: POSCO, SK E&S, GS Caltex



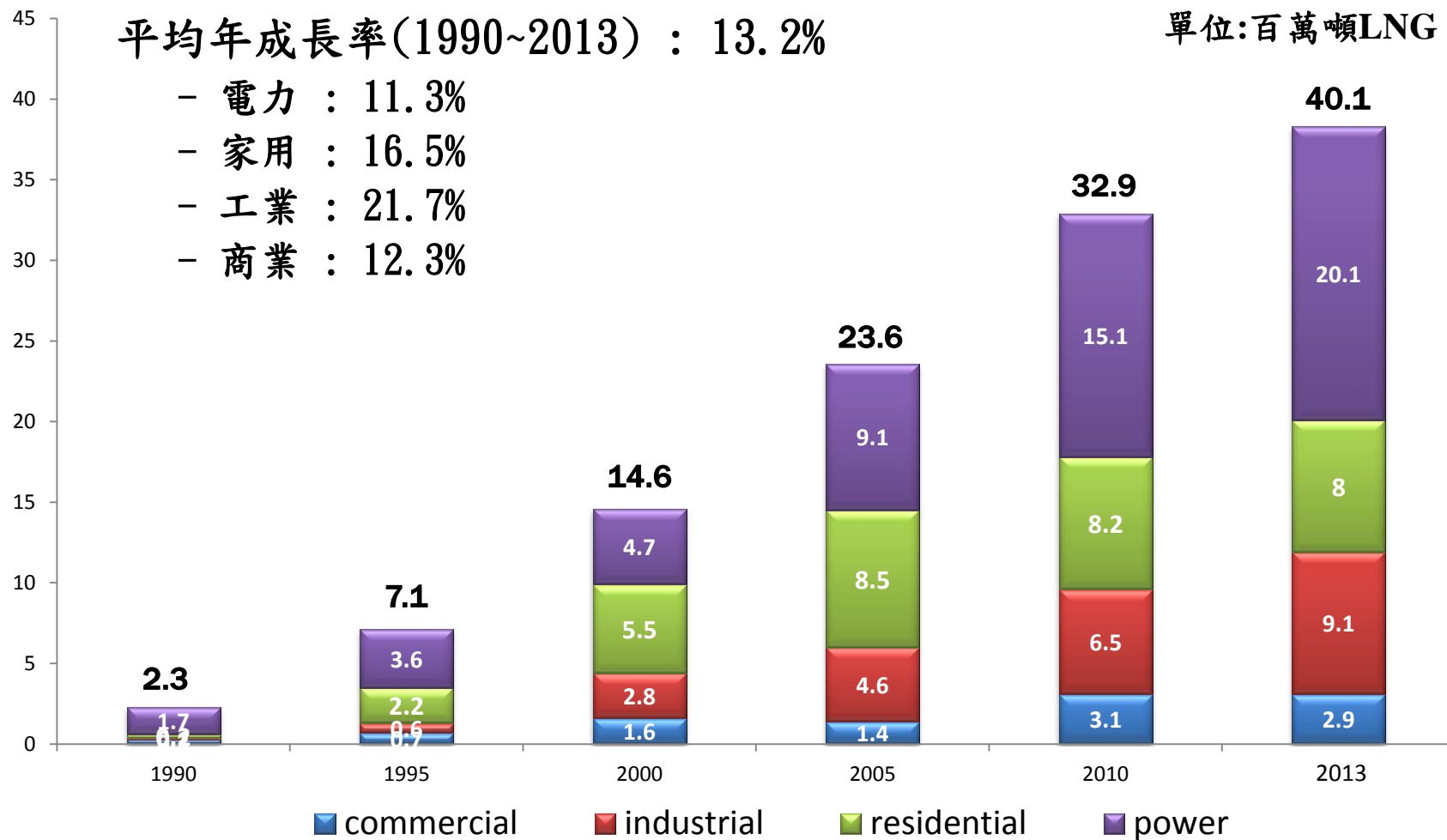
# 1. Industry Structure



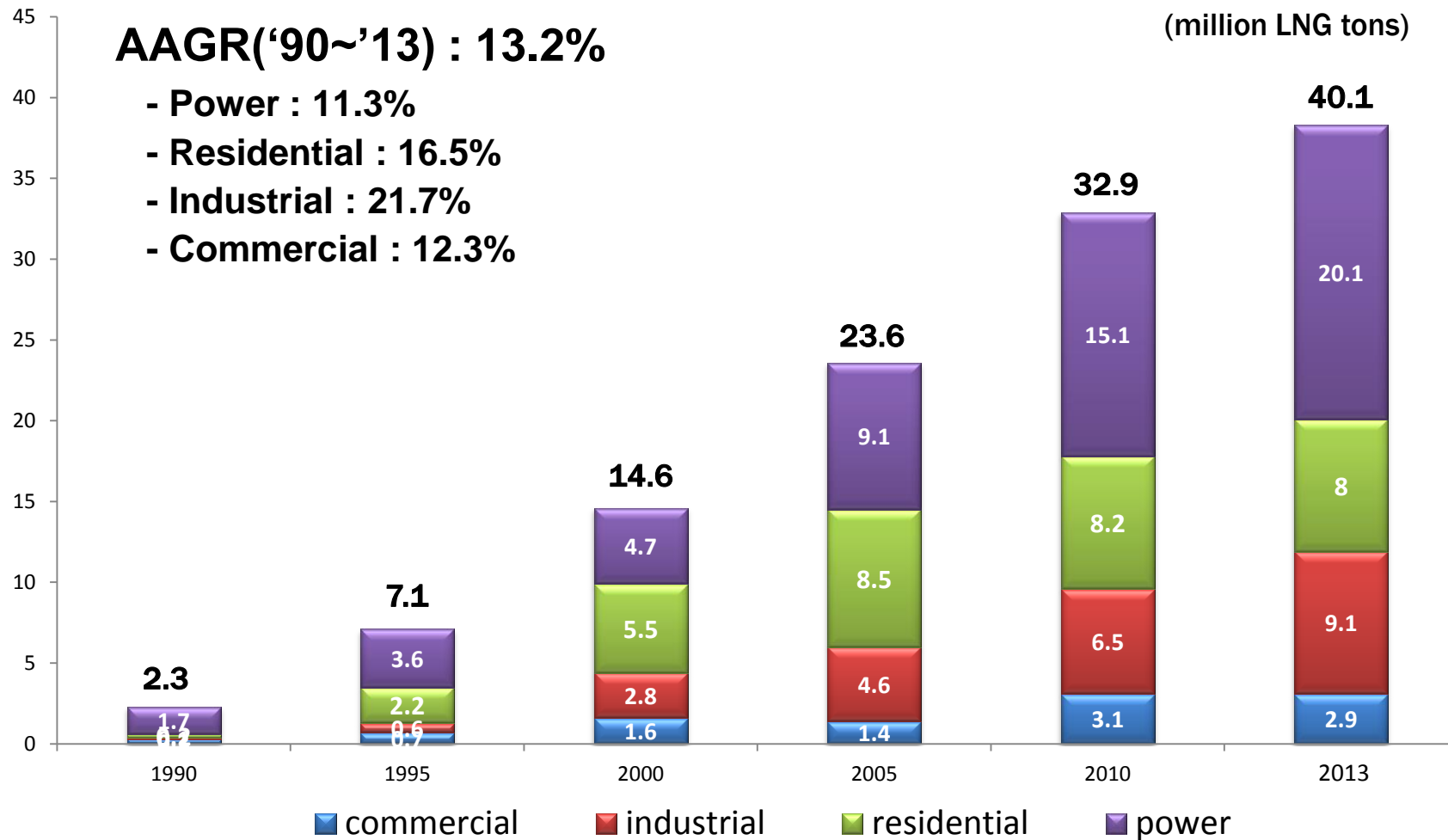
\* Existing direct importers : POSCO, SK E&S, GS Caltex



## 2. 需求增長



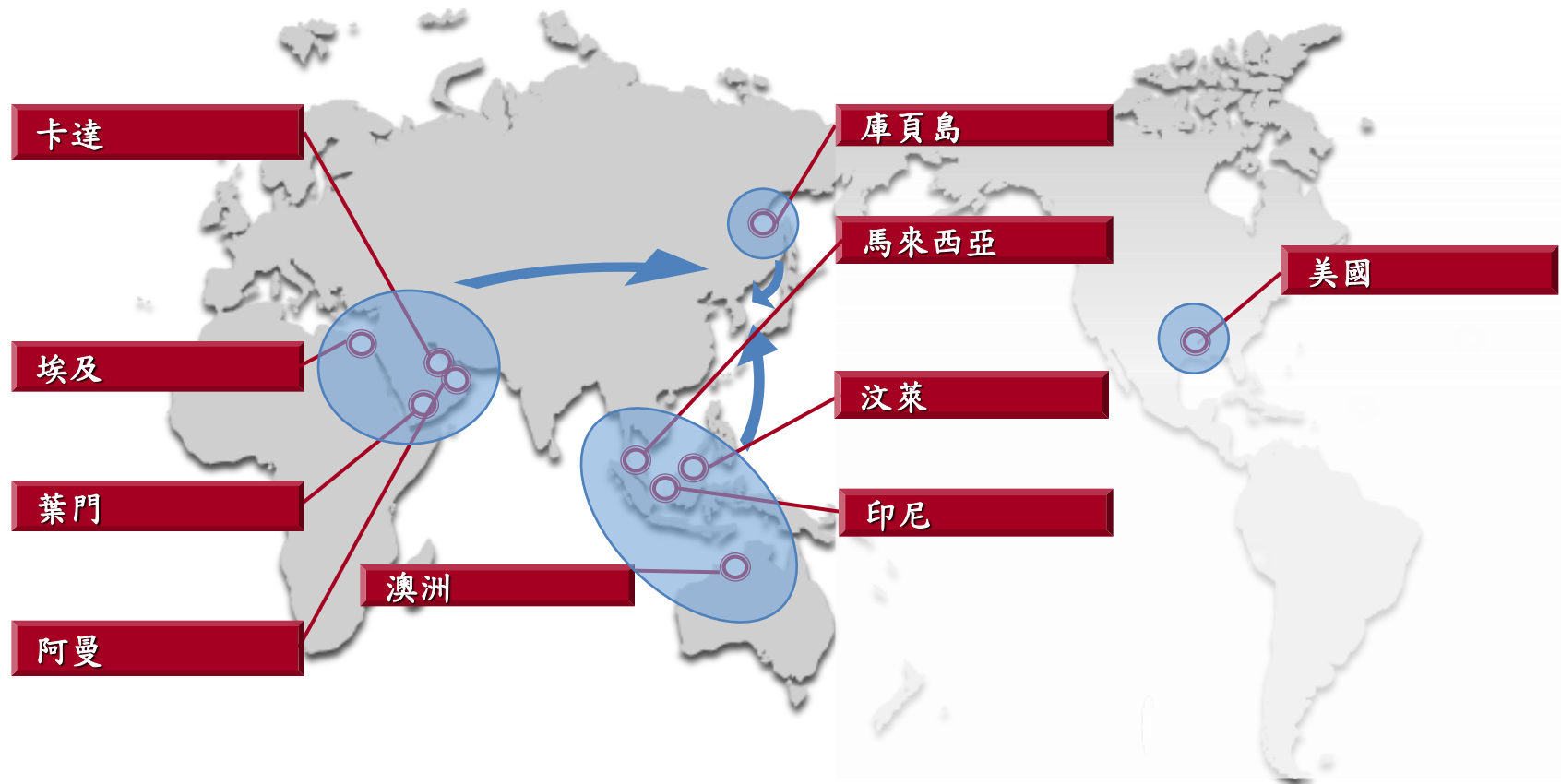
# 2. Demand Growth



### 3. LNG 來源 – 多源化

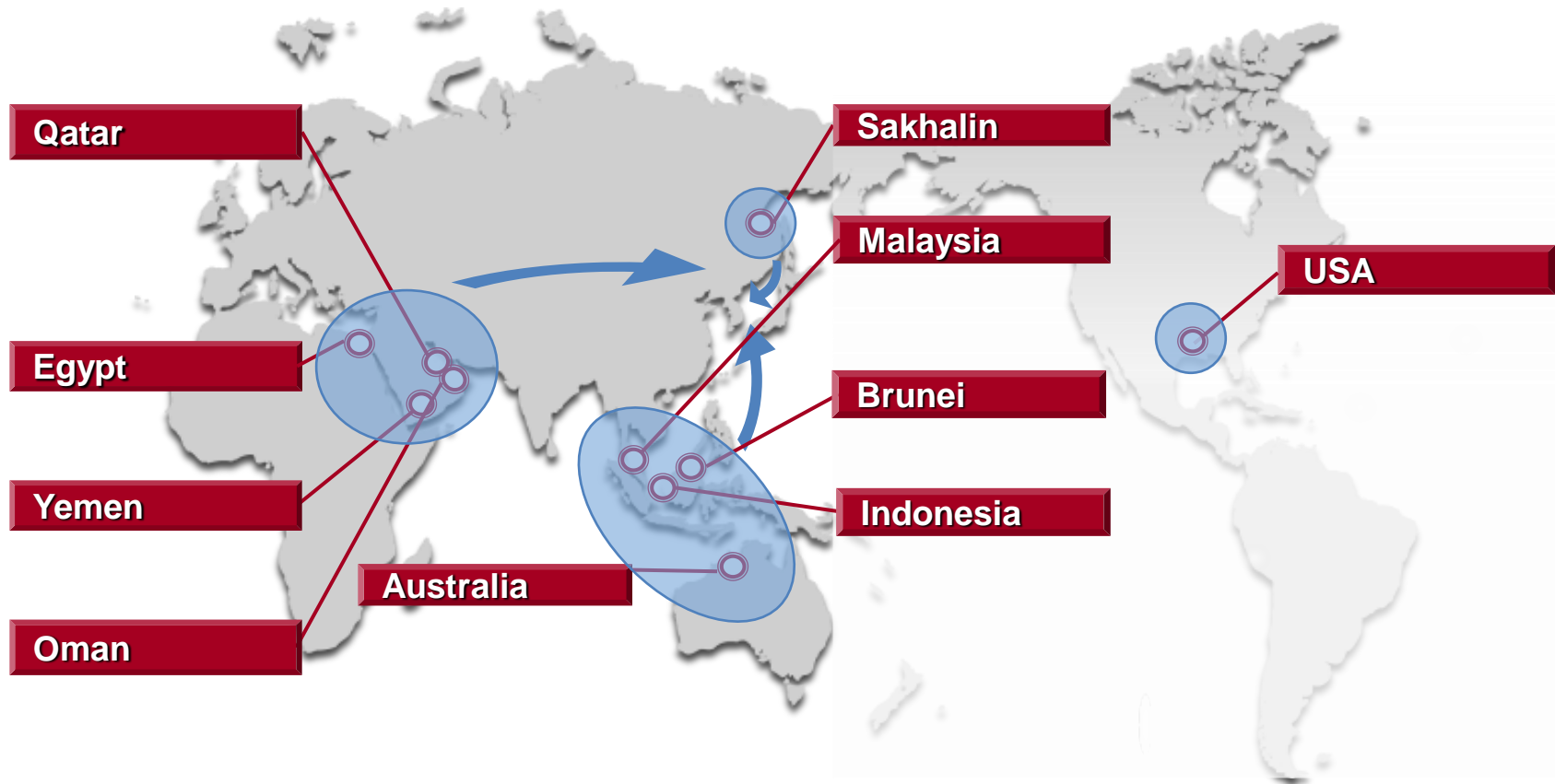
#### ➔ KOGAS 於10個國家有 16個長期合約及 3個中期合約

- LNG 來源多源化可增強能源供應穩定性
  - 韓國進口天然氣有99%以LNG型式進口
  - 於冬季時，家庭用戶使用天然氣作為加熱用



# 3. LNG Sources - Diversification

- ➔ KOGAS has 16 L-T and 3 M-T contracts in 10 countries
  - LNG sources are diversified to enhance security of supply
    - 99% of Natural Gas is imported in the form of LNG
    - Natural gas is main heating source in the residential area in winter



# 4. 基礎設施

## ➔ LNG接收站及儲槽

### ➤ KOGAS (千噸LNG)

接收站	儲槽數	儲存量
Pyeongtaek(1986)	23	1,525
Incheon(1996)	20	1,308
Tongyeong (2002)	17	1,190
Samcheok(2016)	12	1,185
總儲存量	60+12	4,023+ 1,185= 5,208

### ➤ 直接進口商

接收站	儲槽數	儲存量	備註
Gwangyang	4	241	POSCO
Boryeong(2017)	3	272	GS Energy SK E&S
總儲存量	4+3	241+272 = 513	

## ➔ KOGAS 天然氣管網

- 至2014年7月總計共長4108公里，838km興建中
- 地方輸配管網：31個城市天然氣零售商(地區專賣)



# 4. Infrastructure

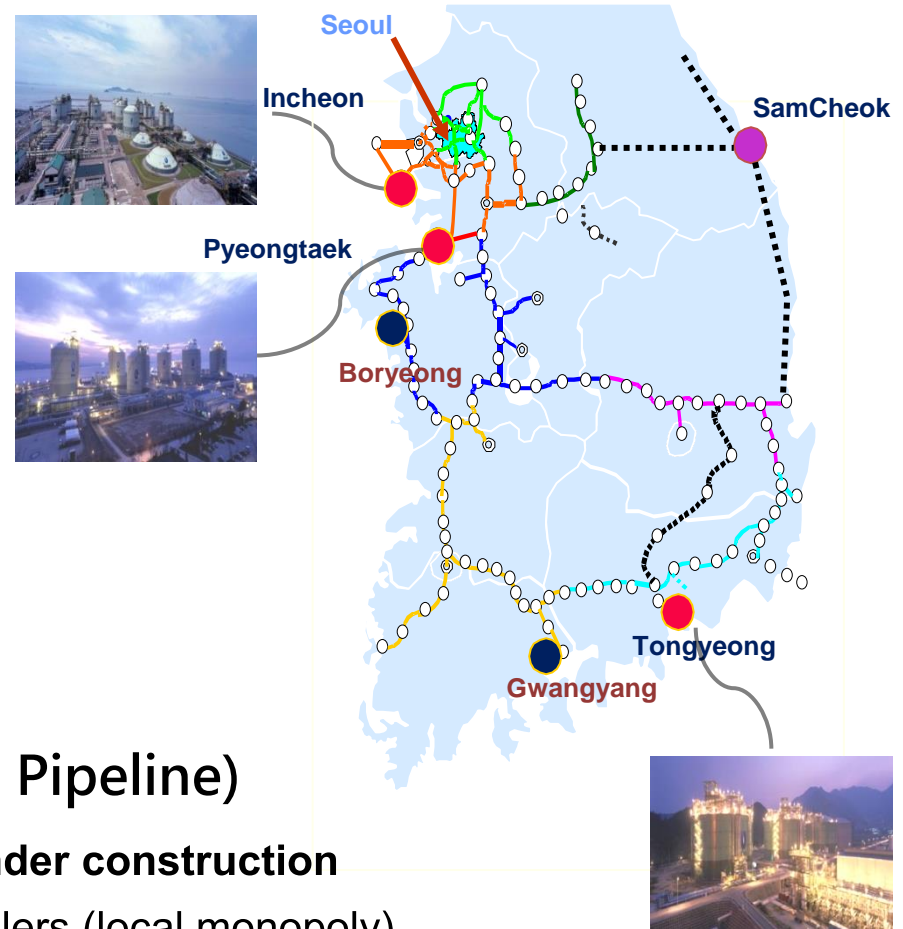
## ➔ Receiving Terminals & Storage Tanks

### ➤ KOGAS (thousand LNG Tons)

Receiving Terminal	No. Tanks	Sub-Total Capacity
Pyeongtaek(1986)	23	1,525
Incheon(1996)	20	1,308
Tongyeong (2002)	17	1,190
Samcheok(2016)	12	1,185
<b>Total Capacity</b>	<b>60+12</b>	<b>4,023+ 1,185= 5,208</b>

### ➤ Direct Importers

Receiving Terminal	No. Tanks	Sub-Total Capacity	Remark
Gwangyang	4	241	POSCO
Boryeong(2017)	3	272	GS Energy SK E&S
<b>Total Capacity</b>	<b>4+3</b>	<b>241+272 = 513</b>	



## ➔ Transmission Network (KOGAS Pipeline)

- 4,108km (as of July 2014), 838km under construction
- Distribution network : 31 city gas retailers (local monopoly)





# 5. 供需平衡

## 韓國政府所估計天然氣需求

### 第二次國家能源基本計畫 (2014年1月)

	(MTOE)			
	2012	2025	2030	2035
煤	80.9(29.1)	100.2(28.3)	107.7(29.1)	112.4(29.7)
油	106.1(38.2)	111.0(31.3)	107.1(29.0)	101.5(26.9)
液化天然氣	50.2(18.1)	64.8(18.3)	69.8(18.9)	73.3(19.4)
核能	31.7(11.4)	59.6(16.8)	65.3(17.7)	70.0(18.5)
再生能源	8.7(3.1)	18.5(5.3)	19.9(5.4)	20.8(5.5)

\* 各能源需求管控目標為概估值

- 需求管控目標
- 發電燃料組合 (煤)



### 11<sup>th</sup> 長期天然氣供需預測 (2013年4月每兩年預測一次)

	()		
	2015	2020	2027
城市瓦斯	22,156	25,952	29,943
電力	17,611	8,018	7,756
Total	39,767	33,970	37,699



### 12<sup>th</sup> 長期天然氣供需預測 (將於2014年底公布)

☞ KOGAS根據長期天然氣供需預測，已簽訂各長期供氣合約滿足需求。



# 5. Balancing Supply & Demand (1/2)

## ➔ Demand Forecast by the Government

**2<sup>nd</sup> National Energy Basic Plan  
(January '14)**

	(MTOE)			
	2012	2025	2030	2035
Coal	80.9(29.1)	100.2(28.3)	107.7(29.1)	112.4(29.7)
Oil	106.1(38.2)	111.0(31.3)	107.1(29.0)	101.5(26.9)
LNG	50.2(18.1)	64.8(18.3)	69.8(18.9)	73.3(19.4)
Nuclear	31.7(11.4)	59.6(16.8)	65.3(17.7)	70.0(18.5)
Renewable	8.7(3.1)	18.5(5.3)	19.9(5.4)	20.8(5.5)

**11<sup>th</sup> L-T Natural Gas Forecast  
(April '13, every 2 years)**

	(thousand Tons)		
	2015	2020	2027
City gas	22,156	25,952	29,943
Power	17,611	8,018	7,756
Total	39,767	33,970	37,699

\* Ambiguous demand control target for each energy



- Demand control target
- Power mix (coal)



**12<sup>th</sup> L-T Natural Gas Forecast  
(To be released at the end of 2014)**

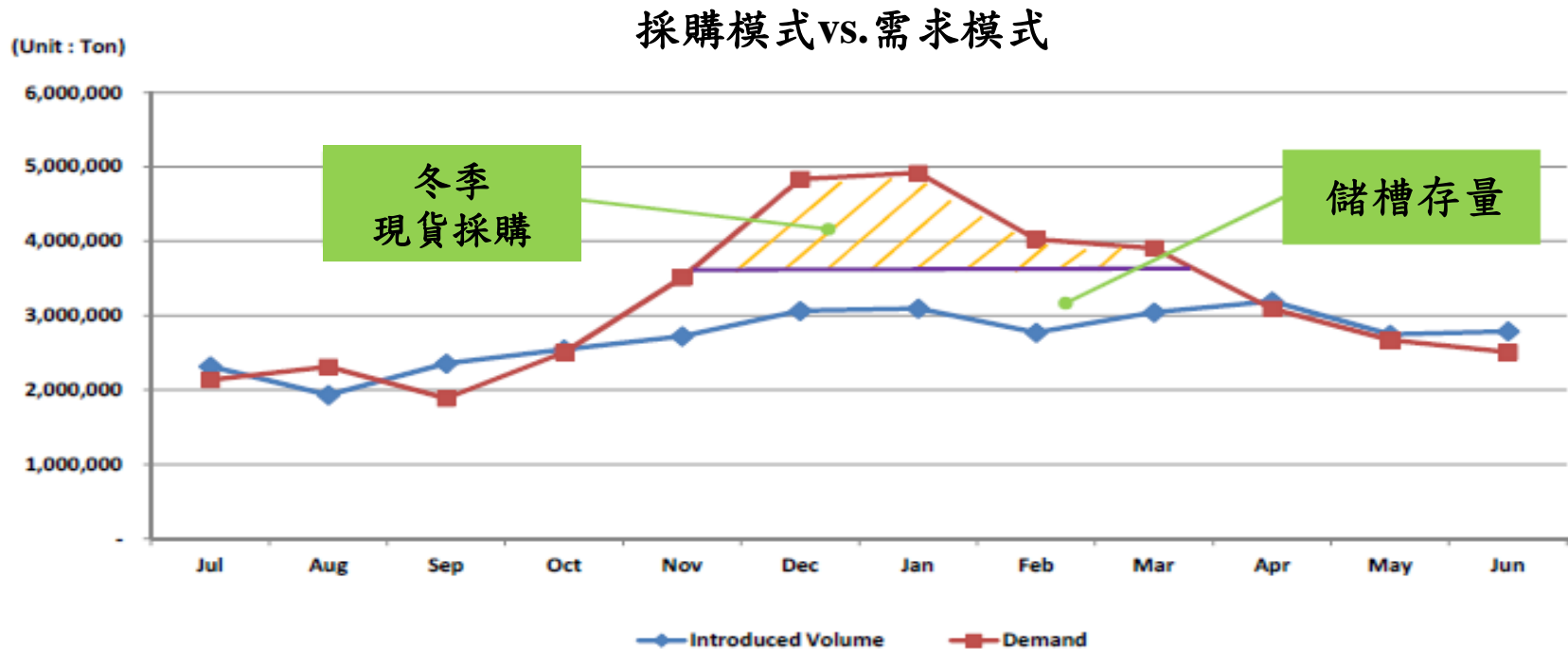
☞ Under L-T forecast, KOGAS concludes L-T contracts



# 5. 供需平衡

## ➔ LNG現貨採購彌補供氣量不足部分

- 天然氣實際需求及長約供應量間之供應缺口由現貨採購補足
- 對於現貨採購之依賴度逐漸升高，主因為冬季大量需求、儲槽容量限制及低估之需求量

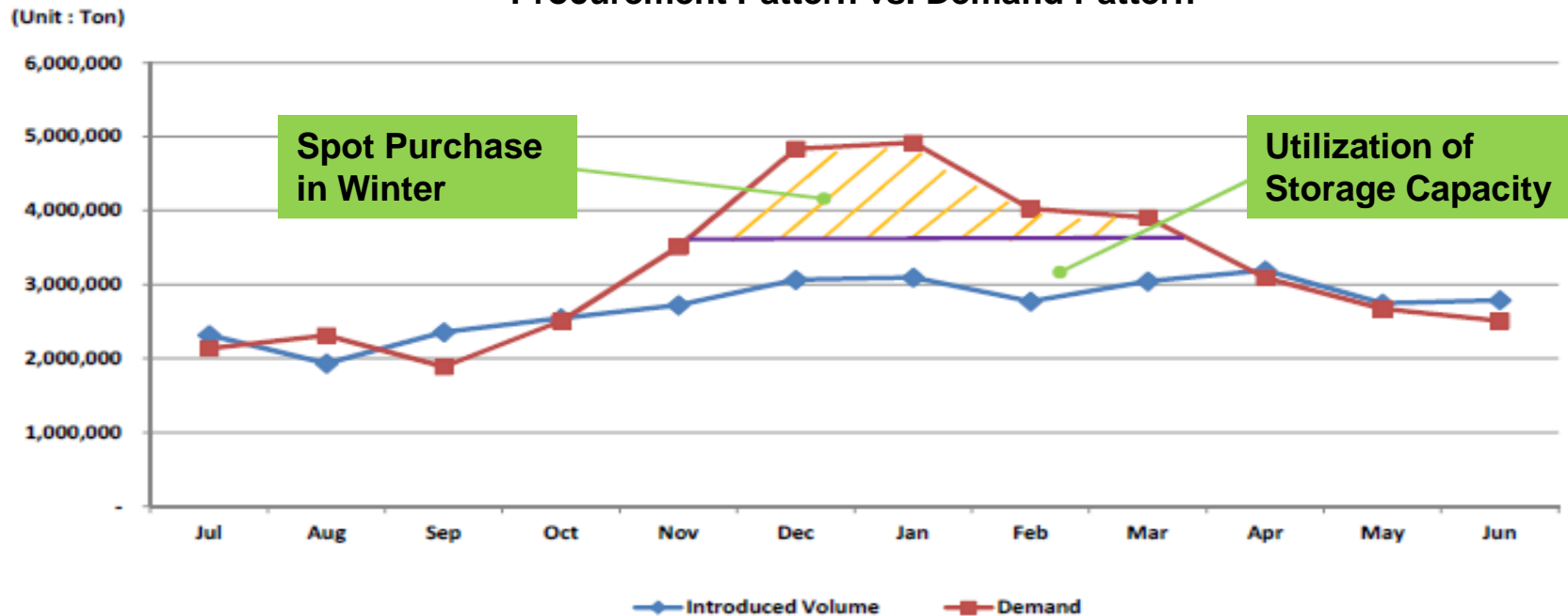


# 5. Balancing Supply & Demand (2/2)

## ➤ Spot Purchase as Supplement for Deficient Supply Volume

- The gap between actual demand and supply from L-T contract is supplemented by spot purchase
- Dependency on spot purchases has been raised because of **winter-oriented demand**, limitation on storage capacity, and underestimated demand forecast

Procurement Pattern vs. Demand Pattern



### 3

## 競爭政策及直接進口

1. 天然氣競爭政策
2. 直接進口
3. 第三方輸送



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**3**

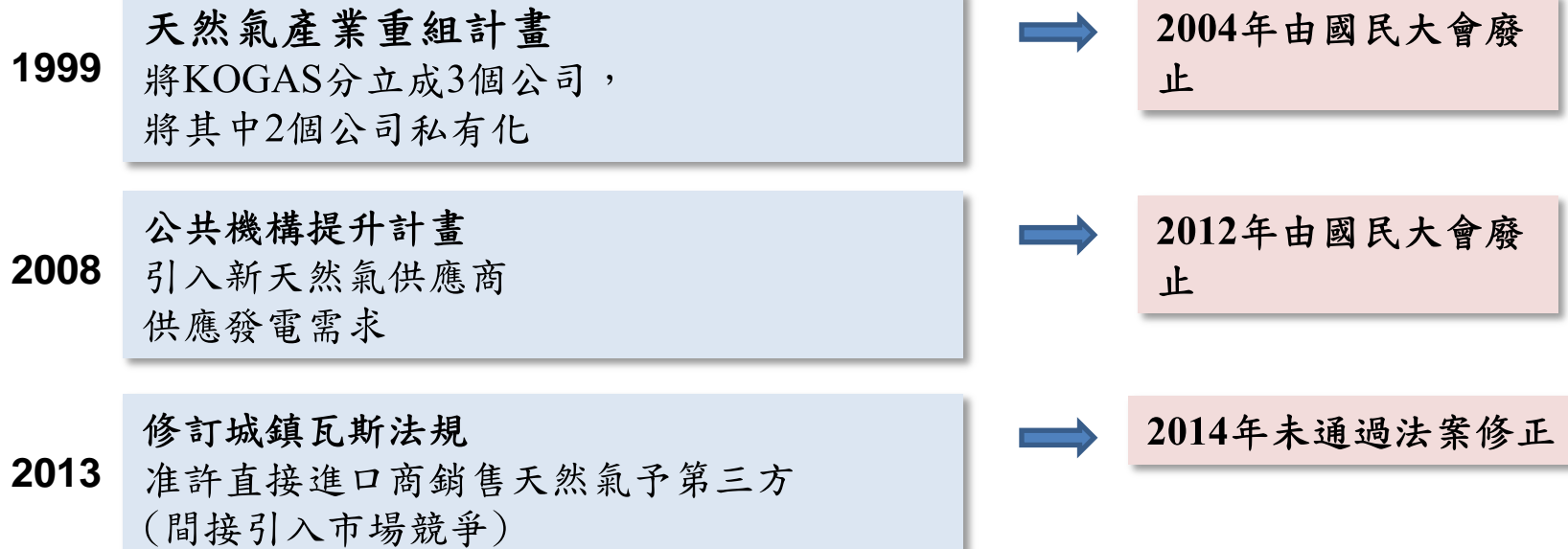
## Competition Policy & Direct Import

- 1. Competition Policy**
- 2. Direct Import**
- 3. Third Party Accessrhkwk**



# 1. 天然氣競爭政策

## → 韓國競爭政策歷史



### 👉 廢除競爭政策之原因

因競爭政策可能導致氣價上漲、天然氣供應不穩定等因素，使得國民大會無法通過法案修正



# 1. Competition Policy (1/2)

## ➔ History of Competition Policy in Korea

<b>1999</b>	<b>Gas Industry Restructuring Plan</b> Split KOGAS into 3 companies Privatize 2 of them	➔	<b>Disposed in 2004</b> Due to termination of National Assembly
<b>2008</b>	<b>Public Institute Advancement Plan</b> Introduce new wholesalers for power generation use	➔	<b>Disposed in 2012</b> Due to termination of National Assembly
<b>2013</b>	<b>Amendment of City Gas Act</b> Allow direct importers to sell gas to third parties (Indirect attempt to introduce competition)	➔	<b>Disposed in 2014</b> Not included in the final revised bill

### 👉 Reason for disposal of competition policy bills

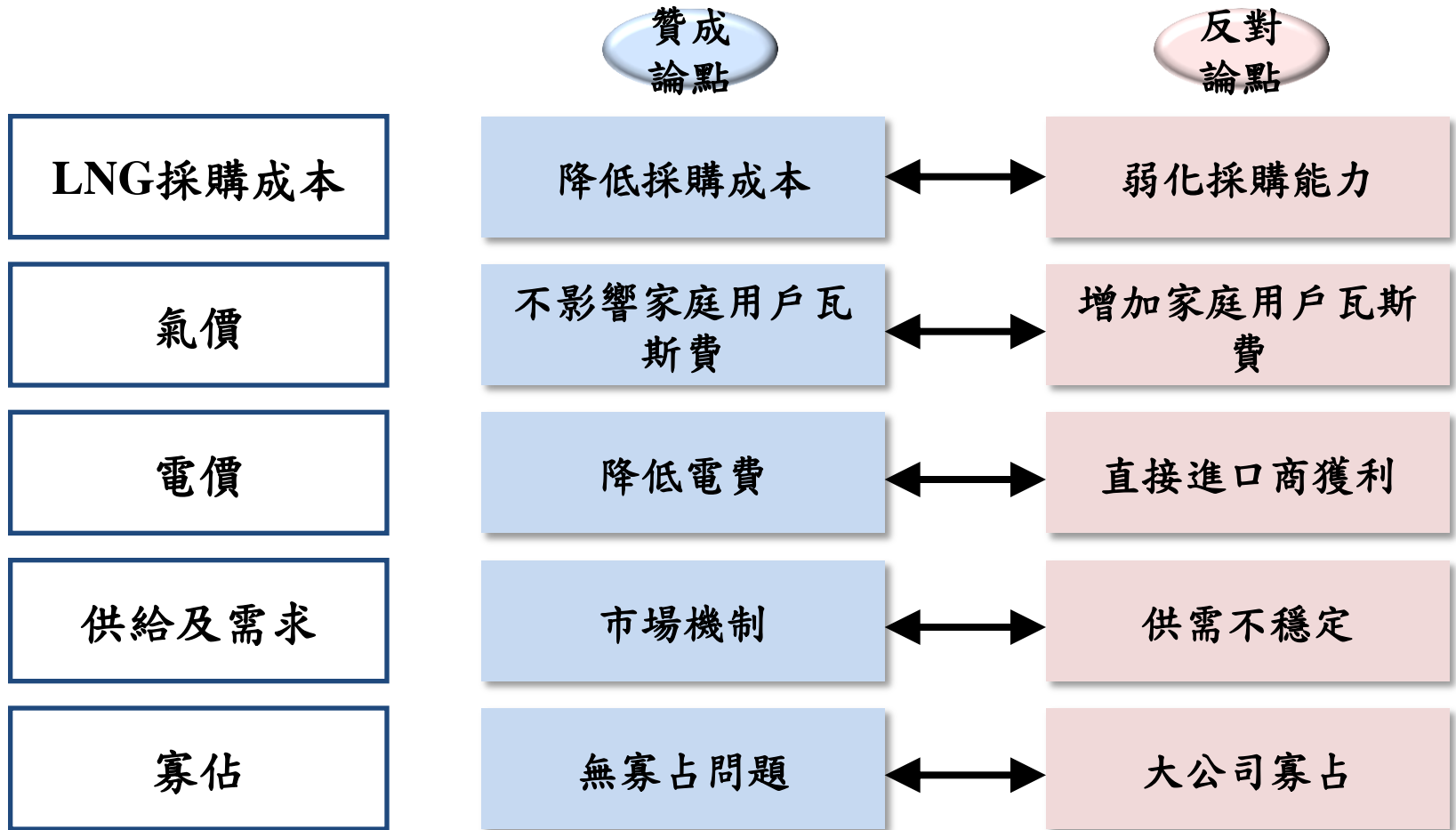
National Assembly failed to pass the bills within the period, due to continuous controversy on **gas rate increase** and **instability of supply and demand**





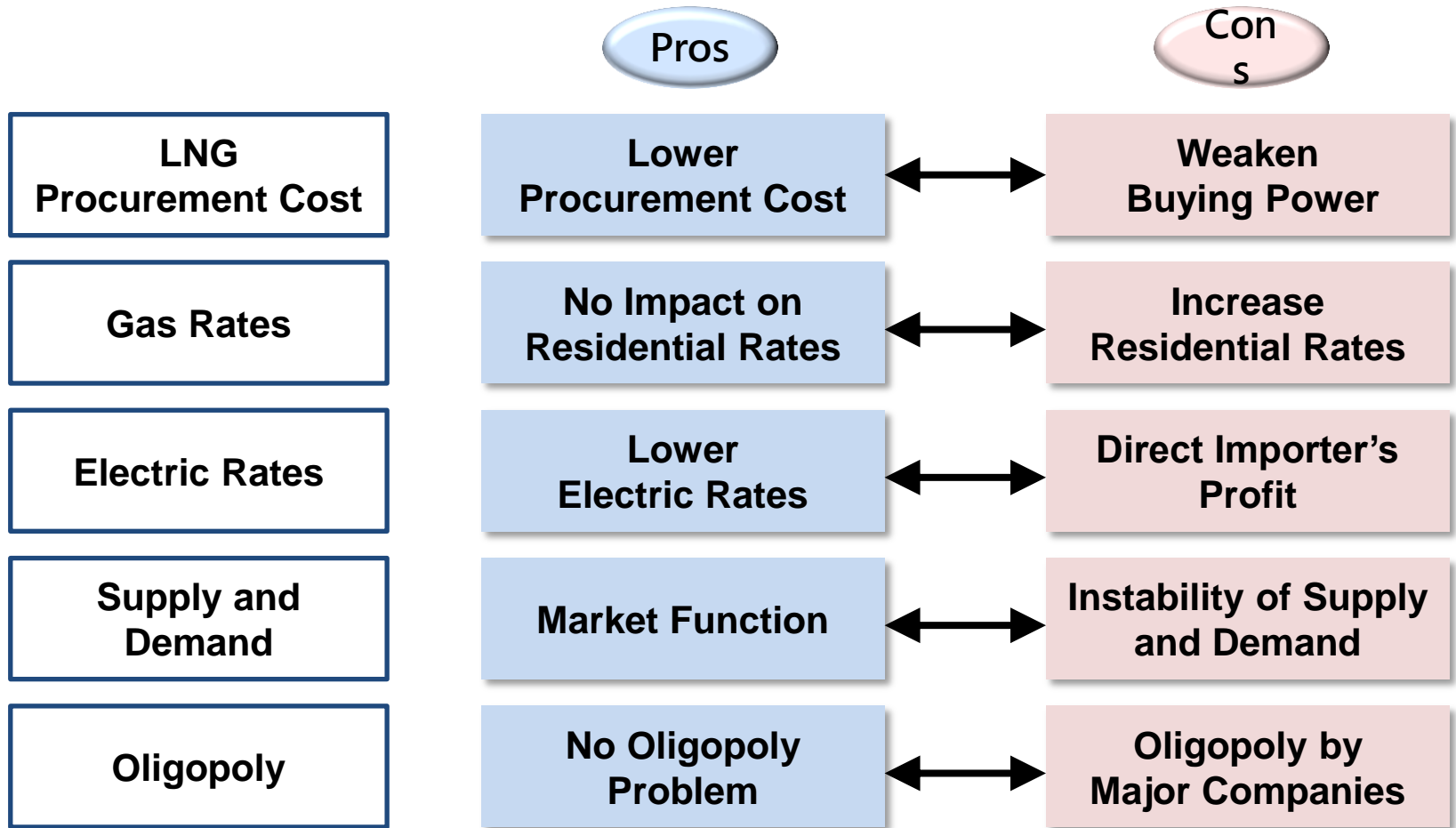
# 1. 天然氣競爭政策

## ➔ 韓國競爭政策之爭議



# 1. Competition Policy (2/2)

## → Controversy on Competition Policy in Korea



## 2. 直接進口(1/2)

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### ➤ 直接進口的歷史

- 1995：引入直接進口用於產業自用
- 1998：政府核可 → 提出報告
- 2013：放寬儲槽最低存量要求（移除存量至少需100,000kl之限制）

### ➤ 直接進口用途

- 僅自用(不能轉售韓國國內第三方)
- 僅發電用及工業用
- 僅限於新需求(供需穩定性)

### ➤ 儲槽最低存量要求

- (天然氣主要供應商) 相當於維持國內年銷售計畫量30天之存量。
- (直接進口商) 相當於維持業者本身年消耗計畫量30天之存量。



# 2. Direct Import (1/2)

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## ➔ History of Direct Import

- 1995 : Introduction of natural gas direct import for self consumption
- 1998 : Approval → Report
- 2013 : Relaxed storage capacity requirement (Removed threshold of 100,000kl)

## ➔ Use of Direct Import

- Self consumption only (**cannot resell** to domestic third party)
- Power and industrial use only
- New demand only (stability of supply and demand)

## ➔ Requirement for storage capacity

- **(Wholesaler)** Equivalent to 30 days volume of annual domestic sales plan
- **(Direct Importer)** Equivalent to 30 days volume of its annual consumption plan



## 2. 直接進口(2/2)

### ➤ 直接進口

#### ➤ 3個直接進口商每年進口量

(單位:千噸LNG)

直接進口商	2005	2007	2009	2011	2013
POSCO	280	570	510	630	610
SK E&S*	50	540	800	850	800
GS Caltex	-	-	60	360	20
<b>總和</b>	<b>330</b>	<b>1110</b>	<b>1370</b>	<b>1840</b>	<b>1430</b>

\* 前身為 K-Power

#### ➤ KOGAS市場占比持續下滑(主要在電力部門)

\* KOGAS 發電市場占比：95%(2013) → 91%(2015) → ?

#### ➤ 直接進口商之進口視國際天然氣市場狀況而定(LNG價格)

#### ➤ KOMIPO(韓國電力子公司)及其餘民營電廠希望能直接進口LNG



## 2. Direct Import (2/2)

### ➔ Direct Importers

#### ➤ Annual imports by 3 existing direct importers

(thousand Tons)

Direct Importer	'05	'07	'09	'11	'13
POSCO	280	570	510	630	610
SK E&S*	50	540	800	850	800
GS Caltex	-	-	60	360	20
<b>Sum</b>	<b>330</b>	<b>1110</b>	<b>1370</b>	<b>1840</b>	<b>1430</b>

\* former K-Power

➤ **KOGAS' market share will continue to decrease** (mainly in power generation sector)

\* KOGAS market share in power generation sector : 95%('13) → 91%('15) → ?

➤ **Direct importers depend on global market conditions (LNG Price)**

➤ **KOMIPO**(subsidiary of KEPCO) and **several IPPs are interested in direct import**



### 3. 第三方輸送(代輸)

#### ➔ 韓國第三方輸送歷史

➤ 2007：引入R-TPA 於天然氣供應商管線

\*天然氣供應商必須提供直接進口商可使用天然氣管網  
(城鎮瓦斯法第 39-6條)

➤ 2009：制定第三方認證碼可授權使用天然氣管網

➔ R-TPA 用於天然氣供應商管網， N-TPA 用於其餘天然氣管線

設施業主	LNG 接收站	天然氣管網	地方分配管網
KOGAS	Negotiated TPA	Regulated TPA	-
其餘供應商	Negotiated TPA	-	Negotiated TPA



# 3. Third Party Access

## ➔ History of Third Party Access in Korea

### ➤ 2007 : Introduction of R-TPA for wholesaler's pipeline

\* Wholesaler shall offer direct importers to use gas pipeline facilities within the extent of facility capacity (City Gas Act, Article 39-6)

### ➤ 2009 : Enactment of Third Party Access Code for Transmission Network

## ➔ R-TPA for wholesaler's pipeline, N-TPA for the rest

Facility owner	LNG terminal	Transmission Network	Distribution Network
<b>KOGAS</b>	Negotiated TPA	Regulated TPA	-
<b>Others</b>	Negotiated TPA	-	Negotiated TPA





## 4

# 授權KOGAS管理

1. 政府法規
2. 授權管理
3. 進口合約
4. 定價機制
5. 公共事業限制



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## 4

# Managerial Empowerment of KOGAS

- 1. Government Regulation**
- 2. Managerial Empowerment**
- 3. Import Contract**
- 4. Tariff System**
- 5. Limitations of Public Enterprise**



# 1. 政府法規

管理機構	監管對象	內容	管理方法
韓國企劃財政部	公司治理	<ul style="list-style-type: none"><li>• 執行長、監察人及非常務董事之指派</li><li>• 組織之營運</li><li>• 人事管理</li></ul>	<ul style="list-style-type: none"><li>• 公營機構管理法</li><li>• 年度考核</li><li>• 政府指導</li></ul>
貿易、工業及能源部	天然氣產業整體經營	<ul style="list-style-type: none"><li>• 穩定供需平衡</li><li>• 直接進口</li><li>• LNG採購合約</li><li>• 天然氣探勘</li><li>• 安全管理</li></ul>	<ul style="list-style-type: none"><li>• 城鎮瓦斯法</li><li>• 事先諮詢及/或核可</li></ul>
審計及檢查局			<ul style="list-style-type: none"><li>• 定期稽核</li></ul>



# 1. Government Regulation

Regulatory Agency	Object of Regulation	Details	Methods of Regulation
<b>Ministry of Strategy and Finance (MOSF)</b>	Corporate governance	<ul style="list-style-type: none"> <li>• Appointment of CEO, auditor and non-standing director</li> <li>• Operation of organization</li> <li>• Personnel management</li> </ul>	<ul style="list-style-type: none"> <li>• &lt;Act on the Management of Public Institutions&gt;</li> <li>• Annual performance evaluation</li> <li>• Government management guide</li> </ul>
<b>Ministry of Trade, Industry &amp; Energy (MOTIE)</b>	Natural gas industry, Business in general	<ul style="list-style-type: none"> <li>• Balancing supply and demand</li> <li>• Direct import</li> <li>• Procurement contracts</li> <li>• Resources development(E&amp;P)</li> <li>• Safety management</li> </ul>	<ul style="list-style-type: none"> <li>• &lt;City Gas Act&gt;</li> <li>• Prior consultation and/or approval</li> </ul>

➤ **National Assembly : Annual audit**

➤ **Board of Audit and Inspection : Regular audit**



## 2. 授權管理 (1/2)

	Details
基本原則	<ul style="list-style-type: none"><li>• KOGAS(董事會, 股東大會) : 決策最高層級</li><li>• 政府 : 管理指導, 績效評核</li><li>• 國民大會, 審計及檢查局 : 事後稽核</li></ul>
預決算	<ul style="list-style-type: none"><li>• KOGAS自主編訂/執行預算 (諮詢政府意見)</li><li>• 年度財務報表經董事會、股東大會通過後 → 需經政府核准</li></ul>
盈虧	<ul style="list-style-type: none"><li>• KOGAS 盈虧自負(與政府財政無關)</li><li>• 盈餘分配股東及提撥公積</li><li>• KOGAS對子公司的投資需合併報表 , 依據國際會計準則</li></ul>



## 2. Managerial Empowerment (1/2)

	Details
<b>Basic Principle</b>	<ul style="list-style-type: none"><li>• Decision making : KOGAS(Board of Directors, General Meeting)</li><li>• Government : Management guide, Performance evaluation</li><li>• Post-audit : National Assembly, Board of Audit and Inspection</li></ul>
<b>Budget and Settlement</b>	<ul style="list-style-type: none"><li>• KOGAS establish/execute budget independently (consult with the Government)</li><li>• Settlement of account confirmed in Board of Directors, General Meeting → Approved by the Government</li></ul>
<b>Profit and Loss</b>	<ul style="list-style-type: none"><li>• KOGAS is responsible for its profit and loss(separated from National Treasury)</li><li>• Profit → Distributed to stockholders, Capitalized</li><li>• Investment to subsidiaries is included in KOGAS' account, according to IFRS</li></ul>



## 2. 授權管理 (2/2)

	Details
組織及人力資源	<ul style="list-style-type: none"><li>• 組織員額：需經政府核准</li><li>• 組織、人力資源管理、薪資：政府指導</li><li>• 公營事業之績效評核：政府實施嚴格管控</li></ul>
營運管理	<ul style="list-style-type: none"><li>• KOGAS 制訂年度營運計畫（諮詢政府意見）</li><li>* 鉅額投資及附屬單位之成立：需經核准</li><li>• 由貿工能源部監督 KOGAS</li></ul>
定價機制	<ul style="list-style-type: none"><li>• 嚴格管控（需經上級機關核准）</li><li>• 物料成本 → 每季報核 → 年度報核</li></ul>



## 2. Managerial Empowerment (2/2)

	Details
<b>Organization and HR</b>	<ul style="list-style-type: none"><li>• Number of employees : Prior approval by the Government</li><li>• Organization, HR management, Wages : Management guide by the Government</li><li>• Strictly controlled by performance evaluation by the Government</li></ul>
<b>Operation</b>	<ul style="list-style-type: none"><li>• KOGAS establish annual operation plans independently (consult with the Government)</li><li>* Large-scale investment, Establishment of subsidiary : Needs approval</li><li>• MOTIE supervises KOGAS' operations of business</li></ul>
<b>Tariff</b>	<ul style="list-style-type: none"><li>• Strictly controlled (Approval by MOTIE and MOSF)</li><li>• Material cost → Approved quarterly / Supply cost → Approved annually</li></ul>





### 3. 進口合約

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- 天然氣主要供應商：須先獲得政府核可部分
  - LNG進口合約及載運合約之簽署
  - 已核准之進口合約之重大修正(包含價格重議)
  
- 直接進口商：須先向政府報備並於30天內提出報告
  - LNG進口合約及載運合約之簽署
  - 現行進口合約之重大修正
  
- 近期之修正方向(於2014年7月預先公告)
  - 天然氣主要供應商之現貨合約: 由事先獲得核准 → 提出報告
  - 直接進口商: 事先報備並提出報告 → 提出報告



# 3. Import Contract

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## ➔ Wholesaler : Prior approval of government

- To conclude an LNG import contract & transportation contract
- In case of major changes (include price review) on approved contract

## ➔ Direct Importer : Prior notice to government

### + Report within 30 Days

- To conclude an LNG Import contract & transportation contract
- In case of major changes on existing contract

## ➔ Recent Amendment (Pre-announced in July 2014)

- Wholesaler's **spot contract** : Prior approval → Report
- Direct Importer : Prior notice + Report → Report only



# 4. 定價機制

## ▶ 天然氣主要供應商之賦稅

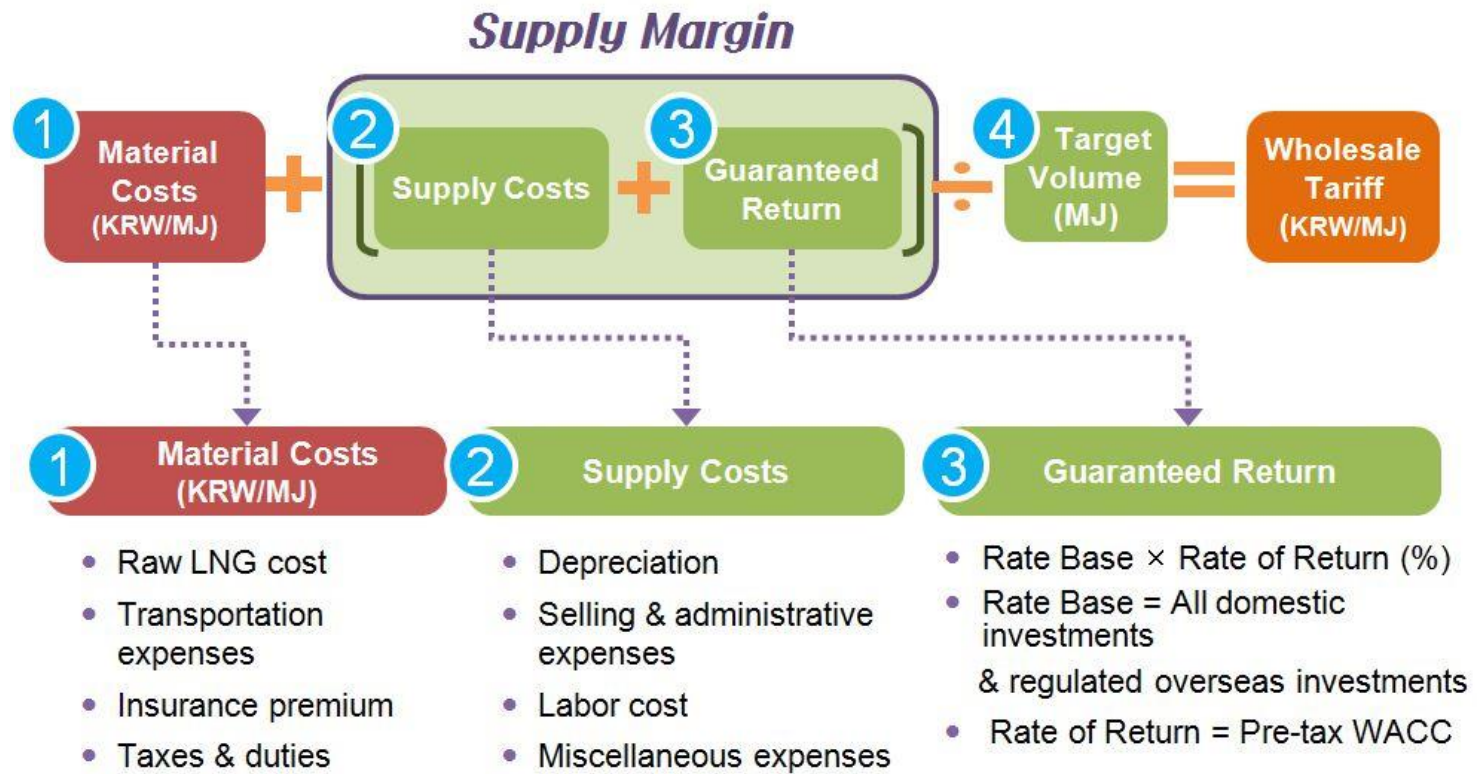
- ▶ 原料成本轉嫁至稅額 (對於營業利潤及淨利無影響)
- ▶ 保證報酬為主要營業利潤來源
- ▶ KOGAS每年根據政府核可訂定供應成本及保證報酬



# 4. Tariff System

## ➔ Regulation on Wholesale Tariff

- Material costs passed on to wholesale tariff (no impact on operating profit and net income)
- Guaranteed return is the main contributor to the operating profit
- KOGAS sets supply costs and guaranteed return annually under approval of the government



## 5. 公共事業限制 (1/2)

### → Limited Business Scope 經營範疇限制及其影響

➤ 公司拓展新事業或液化天然氣關聯產業(發電、造船等)需依規定報請政府同意

→ 不利於經營效率及整體綜效之提升

### → Organization and Personnel 組織及人力資源發展

➤ 執行長限制三年一任, 必要時得延長一年

→ 不利於長期策略之發展及沿續

➤ 組織及人力資源法令限制 → 組織未能彈性調整不利於競爭

### → Exploration & Production 油氣探採事業

➤ 由於KOGAS 及 KNOC的探採事業有所重疊, 政府考量將二國營公司的油氣探採部份合併或重組

→ 不利於建立上下游價值鍊



# 5. Limitations of Public Enterprise (1/2)

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## ➔ Limited Business Scope

- Expansions in new businesses or LNG-related industries(power, shipbuilding etc.) are limited by the law and government regulations
  - Hard to improve efficiency and create synergy

## ➔ Organization and Personnel

- CEO's term is limited(3 years, renewal by 1 year if needed)
  - Hard to maintain consistency or establish long-term plans
- Regulation on organization and personnel → Hard to adapt to changes

## ➔ Exploration & Production

- Due to overlap between KOGAS and KNOC's business scope, the Government plans to merge or restructure both companies' E&P sector
  - Hard to form a whole value chain(including up/mid/downstream)



## 5. 公共事業限制 (2/2)

### ➔ LNG Import Contracts 液化天然氣採購長約

➤ 液化天然氣採購長約皆需先經政府核准

→ 不利於市場情勢變化的應對

\* 政府已修訂法令，現貨交易無需政府許可

### ➔ Tariff System 定價機制

➤ 政府法規 → 難以反映實際成本

➤ 成本由所有消費者平均分攤 → 不講求能源使用效率 (補貼)

### ➔ Direct Import 直接進口的限制

➤ 除非是買方市場，直接進口者方能有較多選項

➤ KOGAS 承擔國家供需平衡之責任

→ 即使市場條件不利買方，KOGAS仍需達成交易



# 5. Limitations of Public Enterprise (2/2)

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## ➔ LNG Import Contracts

- Every LNG import contracts needs prior approval by the government
  - Hard to respond to market conditions
  - \* Recent amendment by the government : Spot contracts do not need approval

## ➔ Tariff System

- Government regulation → Hard to reflect costs (Uncollected material cost)
- Average material cost to all consumers → Inefficient consumption (Cross subsidy)

## ➔ Direct Import

- Direct importers can buy LNG when it is a buyer's market
- KOGAS is responsible for controlling national supply and demand
  - Must conclude contract even when market conditions are unfavorable





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***Thank you!***



**KOGAS**  
KOREA GAS CORPORATION

Better Energy, Better World