

3rd LNG Producer-Consumer Conference

The global LNG market: CPC's positioning & future trends

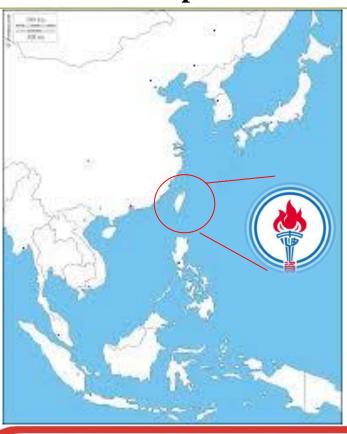
Sheng-Chung Lin
Chairman of CPC Corporation, Taiwan
Tokyo, Japan
6 November 2014





CPC at a glance

- **↓** Integrated oil & gas energy company, established in 1946.
- **Ranked 300th in the world in the Fortune 500 (15,000 employees).**
- **♣ Sole LNG importer & natural gas supplier in Taiwan**



Upstream

• E&P:23 fields in 8 countries

Downstream

- 3 Refineries: total capacity 720,000 bpd
- 3 Crackers: Ethylene (1.57 million tons/yr)

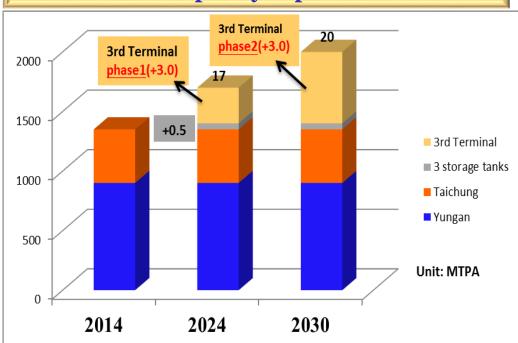
Marketing

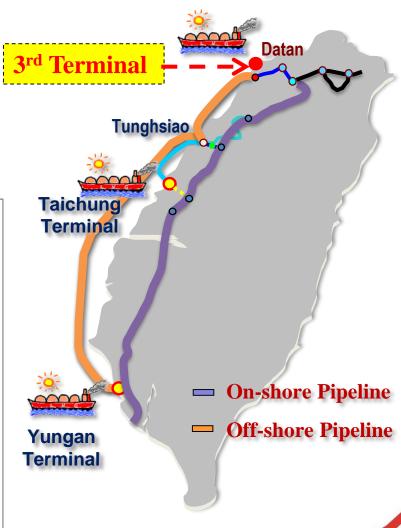
- 1,992 gas stations (79% market share)
- Natural Gas: 2+1 LNG terminals
- LPG, lubricants, solvents and chemicals



CPC's natural gas supply network

- **4** Operating Capacity
 - ♦ Yungan Terminal: 9 MTPA
 - **♦** Taichung Terminal: 4.5 MTPA
- **4** Planned Capacity (3rd Terminal)
 - **♦** Planned capacity: up to 6 MTPA

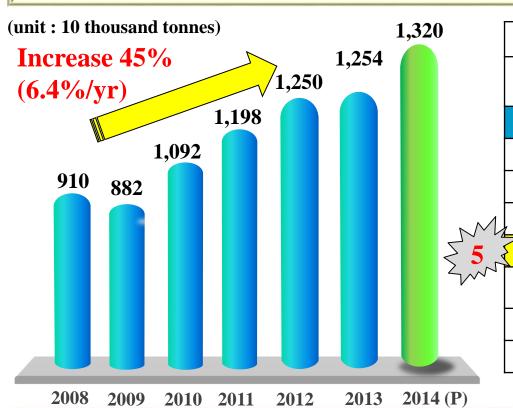






Increasing demand for LNG

- **4** Taiwan imported 12.54 million tons of LNG in 2013 a 5.4% share of global trade.
- **♣** The gradual year-on-year increase in Taiwan's LNG imports results from increasing demand for power generation.



LNG Main Importing Countries		
	Volume (10 thousand tonnes)	Ratio
Japan	8,798	37.1%
S. Korea	4,039	17.0%
China	1,860	7.9%
India	1,305	5.5%
Taiwan	1,254	5.4%
Spain	913	3.9%
UK	691	2.9%
France	594	2.5%

Source: The LNG Industry in 2013, GIIGNL



Natural gas market is evolving: 4M phenomena

- Indigenous gas
- Imported pipeline gas and LNG (re-load incl.)
- LNG trucks
- Methane hydrate

Multiple Sources

- Major oil company
- Utility company
- Facility holder
- Petrochemical company

Multiple Players

Multiple Participation

- Gas field
- Infrastructure (liquefaction/receiving terminal)
- Shipping

Multiple
Applications

- Power generation
- Industrial/household Use
- Marine bunker fuel
- Natural gas-powered vehicles
- Petrochemicals feedstock

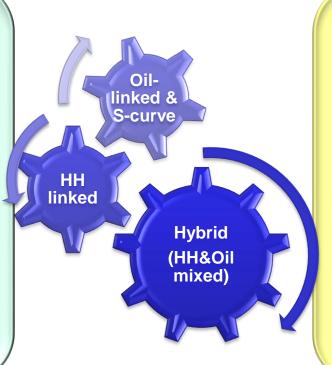


The driving forces of price movements

LNG price in Asia Pacific

4

- Increasing supply (US exports, European reloads, pipeline gas in this region)
- Restarting nuclear power plants leads to decreasing demand
- Oil and coal price decreasing



- Growing demand in Asia
- Rising development cost of LNG project
- ♦ Environmental policy (e.g. carbon emissions issues) leads to increasing demand



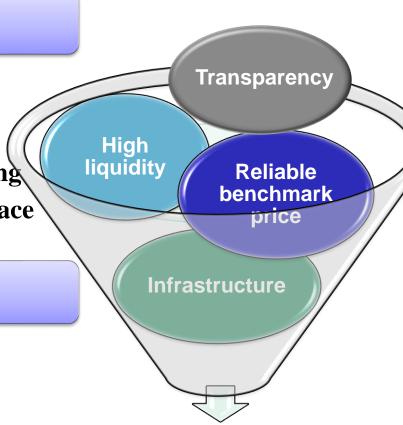
Views on the future market for LNG

Criteria for a successful trading hub

- A highly liquid commodity
- Reliable benchmark price
- Liberalized market decontrolled pricing
- Storage/transmission infrastructure in place

Benefits from the future market

- Price transparency and price discovery
- Information exchange
- Hedging feasibility trading futures
- Easier access for new players



Successful LNG trading hub



Conclusions

Asia remains the key driver of global demand for LNG.

CPC has initiated its expansion plan to boost LNG receiving capacity to 20 million tons in 2030.

LNG producers and consumers are moving toward a <u>new</u> trading methodology.

Taiwan will continue working with all LNG players to explore the potential of a promising future.

Thank You for Your Attention



