

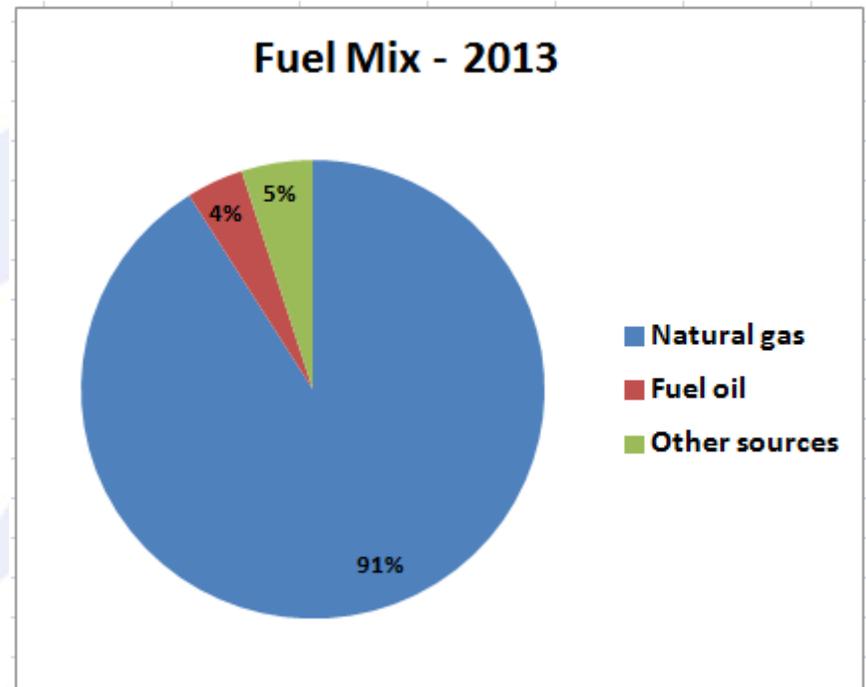
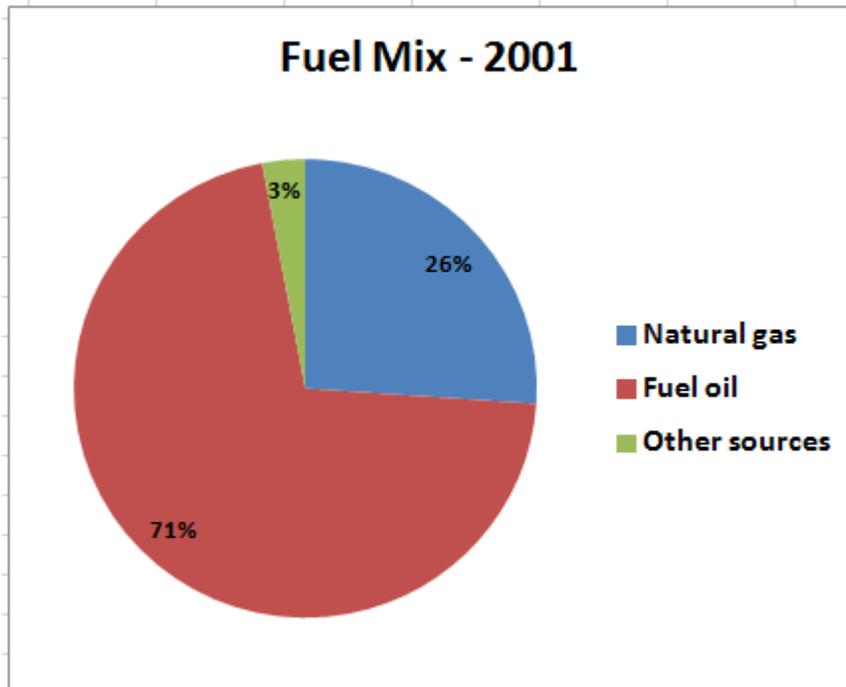
Singapore's Import of LNG

Panel Session 4:
New Procurement Behaviors by Consumers

Presentation at
LNG Producer-Consumer Conference
Tokyo, Japan
10 Sep 2013



Singapore Electricity Fuel Mix



Natural Gas is the most important fuel for power generation

Prior to starting LNG imports, Singapore imported all its natural gas via pipelines from neighbouring countries

Why Singapore Imports LNG

Why LNG

Dependence on natural gas is large, for industrial feedstock and electricity generation

Industry players expect gas to be **mainstay fuel choice**

Traditional suppliers have said they will prioritise gas for domestic consumption

Access to
global supply
sources

Meet growing gas
demand

Objectives

Enhance energy **Security** through source diversification

Greater access to **market-priced** gas

Opportunities to grow **LNG Trading** sector in Singapore

**Decision made in 2006 to
import LNG**

Singapore LNG Terminal Development

7 May 2013

Commercial operations



End 2013

Completion of Tank 3

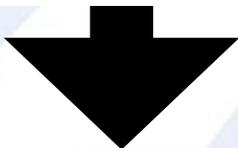
Capacity increases to 6 Mtpa



2016 / 2017

Completion of Tank 4

Capacity increases to 9 Mtpa



Current Terminal Capabilities:

- 2 tanks
- Primary jetty
- 3.5 Mtpa capacity

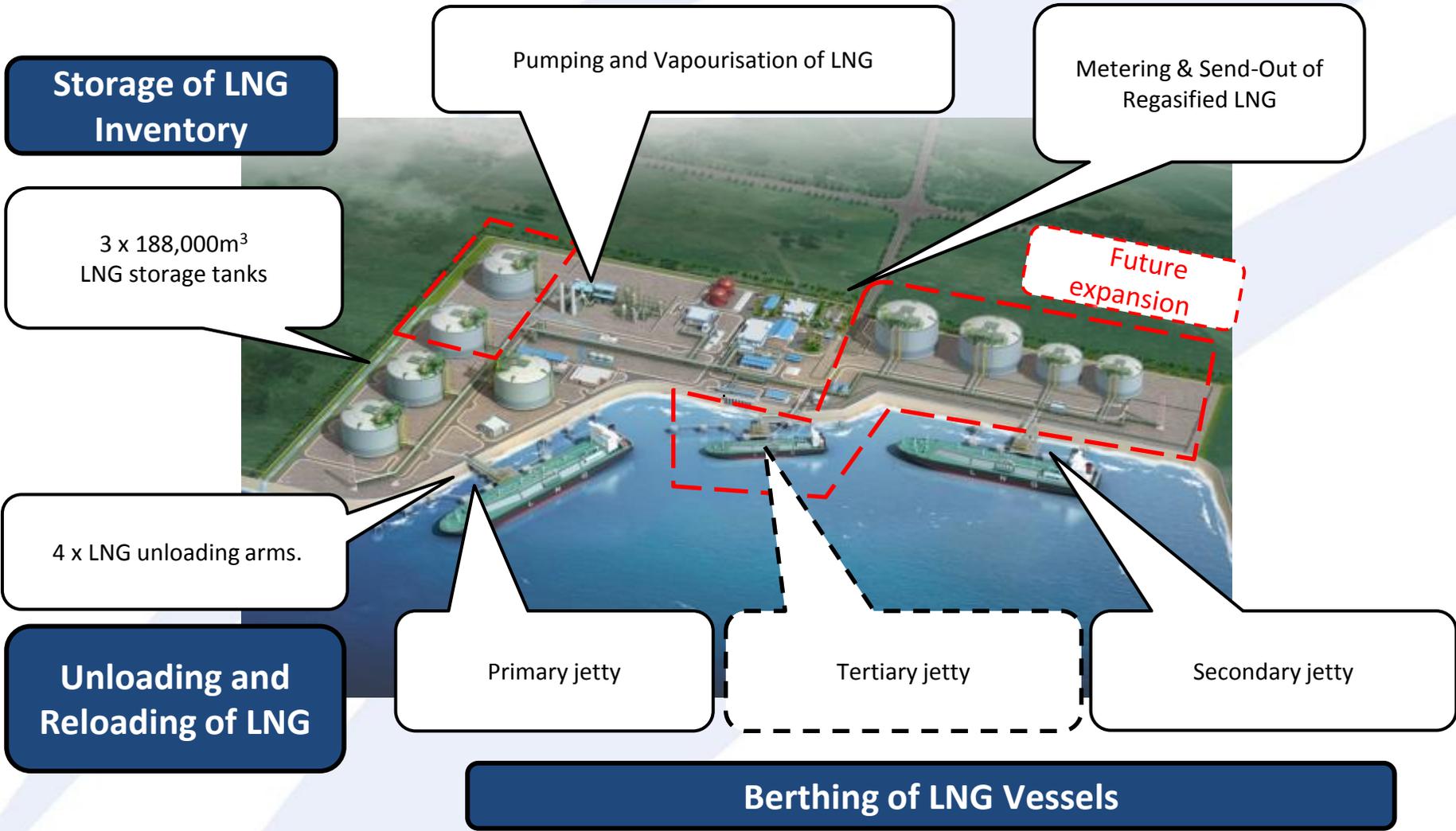


Under construction:

- Tank 3
- Additional regasification
- Secondary jetty



Overview of the LNG Terminal



Current LNG Import Framework

- Earlier consultation with industry concluded that Singapore should procure LNG through a single Aggregator, due to small size of Singapore market.
- After a competitive Request-For-Proposal, BG was selected to be the LNG aggregator for Singapore, with an exclusive right to sell up to 3 Mtpa of LNG or until 2023, whichever is earlier.
- BG has sold ~2.7 out of its 3 Mtpa franchise. EMA is studying new import framework that best suits Singapore's needs

Strategy for Changing Gas Landscape

Global LNG Trends

Market landscape continues to evolve. **New supply** coming from US, Australia, PNG, Russia and East Africa

LNG is increasingly sold through **smaller and shorter term contracts**. No longer necessary to buy large volumes in a single contract.

Instead of contract size, timing of LNG procurement is a key factor that affects price

Growing preference by buyers and sellers for a **portfolio of contracts** to reduce concentration risks

Implications for Singapore

Aim for **diversified gas contracts** of different supply sources. Where possible, have different durations, price indexation, price reviews and S-curves to manage volatility

Competitive process so that buyers gain access to competitive deal each time we buy LNG

Adopt **tranche-by-tranche LNG procurement**. Risky to “time the market” with big bets

Allow gas **buyers to customise their own supply portfolio** to fit their unique business needs.

Keep future options through flexible framework. Allow buyers to benefit from changing market conditions.

Recognise Singapore’s situation. Near-term incremental is not large, and terminal capacity takes time to grow.

Future LNG Import Framework

- Objective: Allow Singapore access to **competitively-priced** and **reliable** supplies of LNG whilst ensuring that the LNG Terminal is used efficiently

- Proposed framework: **Competitive Licensing Framework**
 - Tranche-by-tranche LNG procurement to keep options open → Singapore cannot attempt to time the market
 - Competitive RFP process when selecting the next importer(s) to supply long/short-term LNG
 - Appointed importer(s) will have obligation to offer to all buyers
 - Industry has been consulted on the framework

- Other concurrent measures under consideration:
 - Import of spot LNG, with conditions
 - Allow new Piped Natural Gas imports, subject to approval by EMA
 - Development of a secondary gas market to allow on-selling of gas

LNG Terminal Access Code

- Singapore LNG terminal has spare capacity which can be used for spot imports, reloading LNG and break-bulk of LNG.
- EMA released a draft consultation paper on the Principles of Proposed Terminal Access Code (TAC) to provide clarity on how third parties could access the terminal's facilities for ancillary services
- Objective of the TAC is to optimise the use of terminal's spare capacity after prioritizing long/short-term LNG imports
- TAC will draw from best practices of existing open-access terminals in EU.
- Terminal's spare capacity could take the form of standardized slots, which a Third Party could procure from the terminal operator to conduct spot/ancillary activities.

LNG Trading Opportunities

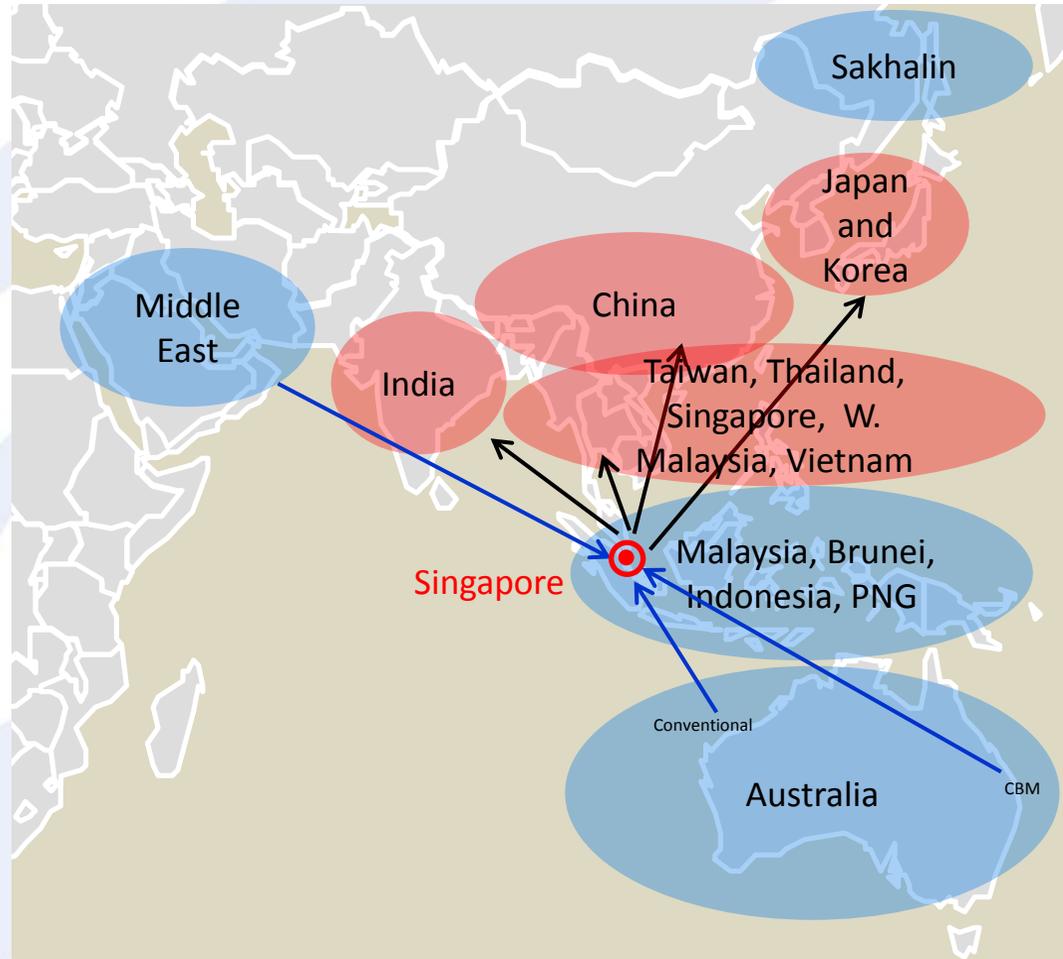
Singapore is one of the world's largest oil trading and bunker hub, and is Asia's pricing centre for oil products.

Could Singapore also be a LNG Trading and Bunkering hub?

- ✓ Many companies trading LNG have now opened offices in Singapore
- ✓ Tax incentive to attract trading offices
- ✓ Strategic location
- ✓ Well-developed gas infrastructure
- ✓ Business-friendly environment
- ✓ Global financial centre
- ✓ Synergies with existing strengths as oil trading hub

Existing and growing supply centres

Existing and growing demand centres



Thank you