Evolution of the spot trade since Fukushima
By: Simon Ellis ICIS
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Asian LNG prices have come full circle since 2008

Source: ICIS
Overview: Responding to Fukushima
Japan’s demand spike rebalanced market

Japan’s electricity utilities as share of total East Asian LNG procurement
H1 2011 - H2 2012

Source: FEPC Japan, customs agencies
Unprecedented volume secured on spot basis


Source: ICIS
Different short-term structures met Asian demand

East Asia short-term sales by basis
H1 2011-H2 2012 (ICIS estimates)

Incremental

Short and mid-term contract (< 5 years)

Spot (< 6 months from transaction date)

Source: ICIS
Short-term demand spread beyond Japan

**Procurement of all short-term (<5 years) LNG by region 2012**

- **Tokyo utilities**: 27%
- **Chubu utilities**: 13%
- **Osaka utilities**: 13%
- **Other Japan**: 12%
- **CPC**: 6%
- **Chinese buyers**: 11%
- **Korean buyers**: 18%

*Source: ICIS*
Japanese buyers dominated on pure spot basis

Estimated spot procurement by region 2012

- Tokyo Utilities: 25%
- Osaka Utilities: 13%
- Kyushu Utilities: 13%
- Chubu Utilities: 11%
- Other Japan: 14%
- Korean Buyers: 9%
- Chinese Buyers: 8%
- CPC: 7%

Source: ICIS

www.icis.com
Sell-side market share still concentrated

Share of all short-term sales into East Asian markets by commercial entity 2012* (ICIS estimate)

- **TOP 5**
  - Qatargas
  - RasGas
  - BG Group
  - Shell
  - BP

- **30+ OTHERS**
  - 38%

**Qatargas, RasGas, BG Group, Shell, BP**
Price analysis: Explaining recent volatility
Seasonality a key driver in current Asian market

East Asian spot prices January 2011- April 2013

Assessment date

Source: ICIS
Production outages contribute to volatility

Production problems vs EAX prices 2012/2013

EAX assessment ($/MMBtu) vs Size of plant (mtpa)*

Day of assessment/ production days affected

- East Asia Index (EAX) front month
- East Asia Index (EAX) M+2
- Atlantic Basin outage/ reduction
- Pacific Basin outage/ reduction

*Based on 2011 production performance
South American import surge adds to competition

South American spot demand Oct '12 - Apr '13

Assessments by delivery date

- Increase in South American imports on previous year (right hand scale)
- ICIS East Asia Index (EAX) front month (left hand scale)
- ICIS South America Index (SAX) front month (left hand scale)

Source: ICIS, customs agencies
Terming out of flexible LNG erodes spot liquidity

Finalised diversions of flexible volumes by contract start date

- Long-term (5+ years) East Asia
- Mid-term (2-5 years) East Asia
- Long-term (5+ years) Other Asia
- Mid-term (2-5 years) Other Asia
Sellers offer discount for mid-term deals

Recent oil-indexed contracts into Asia (ICIS estimates)

Crude oil price ($/bbl)

Contract price $/MMBtu

Source: ICIS
Asian spot outlook: Evolution or regression?
Short-term outlook: Liquidity faces constraints

Market tightening scenario
- New entrants (SE Asian buyers, Mexico, etc)
- Ongoing feedgas, production problems
- Further re-allocation of spot to contracts

Market easing scenario
- Japanese nuclear restarts possible after August
- Angola LNG start-up, feedgas additions
- Newbuild vessels enter market
Firm ground gained since 2008...

Participation
- More than 60 companies have traded East Asia spot LNG

Financial trading
- Cleared swaps traded 2012, METI study into Japan contract

Market Information
- Increasing transparency over bids, offers and trades
...But Asian spot market faces shortcomings

Buyers deterred by spot volatility

**Northeast Asian prices spike on Nigeria supply constraints**

LNG spot prices jumped to new highs over the past week as buyers with outstanding March requirements and traders with short positions felt the pressure of production issues at NLNG

*ICIS Global LNG Markets, 14 February 2013*

Sellers require Asian buyer of last resort

**Prices tumble, spring market takes hold**

"Buyers are receiving offers from potential suppliers at $17.00-18.00/MMBtu, down by $3.00/MMBtu in just a week“ - Asian utility

*ICIS Global LNG Markets, 7 March 2013*
Challenges for Asian market development

- **Asian trading hub**
  - Singapore leads proposals, though requires significant storage build

- **Spot pricing outside Asia**
  - Competing markets have own dynamics not easily captured by simple East Asian netback

- **Who will fund surplus capacity?**
  - Post-Fukushima response to Asian demand based on shrinking pool of flexible LNG volumes
Plants starting 2014-17 provide limited flexibility

Finalised sales from committed plants starting 2014-17 (mtpa)

- East Asia SPA: 56.2 mtpa
- Other Asia SPA: 11.3 mtpa
- Asian buyer equity: 8.0 mtpa
- Portfolio supplier SPA: 11.7 mtpa

FID has been taken on 88 mtpa new LNG production, with majority allocated under firm long-term contracts.
US LNG can play role in underpinning liquidity

Henry Hub Asian supply versus oil-indexed contracts at futures market prices (based on NYMEX Brent and Henry Hub 20 March 2013)

Source: ICIS, Cheniere statements, NYMEX
Thank you for your attention

Simon Ellis, simon.ellis@icis.com