



Distinguished guests, Ladies and Gentlemen,

1. Good morning. I am pleased to join you at the 4th Asia Pacific Summit of the World LNG Series.

Trade is important to Singapore

 International Enterprise (IE) Singapore is the government agency responsible for promoting Singapore's trade as well as overseas investments. In addition to promotion of exports of goods and services, we also promote offshore trading in Singapore, focusing on three clusters: energy, agri-commodities, as well as metals and minerals.

LNG will emerge as an important source of energy

- 3. As you all know, Singapore is already an energy trading hub. In recent years, we have seen the emergence of LNG globally. We believe that there are good reasons, why LNG is on the verge of some exciting new developments.
 - First, there is a surge in Asian demand for LNG mainly due to rapid economic growth.
 - ii) Second, there is a huge increase in supply due to new technologies.
 - iii) And third, there are already signs that the pricing mechanism of LNG will see some interesting changes in the coming years.
- 4. As a trading hub, Singapore must recognise these trends and adapt to the emergence of LNG.

Asia will continue to be a major consumer of LNG

- 5. The first trend is the increasing importance of Asia as an importer, and a consumer in the global LNG trade. Global LNG trade has grown steadily. Last year, it increased 9.4% to reach 240 million tonnes. Various projections point to significant growth in the coming years. By 2020, it is likely that we would see at least, a doubling of the volume of LNG trade to about 500 million tonnes¹.
- Asia accounted for almost two-thirds of the global trade in LNG in 2011². And import 6. of LNG into the Asia-Pacific region is forecasted, to grow by an average annual rate of 7%, to reach 217 million tonnes by 2017³.

Major importers in Asia are Japan, China and even South-East Asia

- 7. Japan remains the world's largest LNG importer. Japan alone consumes about 83 million tonnes, which is about one-third of the total LNG trade. It is likely to continue to be the leading importer for some time. Japan's LNG imports are not likely to fall as it shifts away from nuclear power after the Fukushima nuclear power-plant accident.
- In fact, just a few days ago, Japan signed a memorandum with Russia to collaborate 8. on developing a LNG plant on Russia's Pacific coast, estimated to cost US\$7billion⁴.
- 9. Southeast Asia will also see an interesting change. Malaysia and Indonesia are currently the second and third largest LNG exporter respectively, after Qatar. Brunei comes in as the 10th largest⁵. But with their domestic output declining, it is expected that Malaysia and Indonesia will also become net importers very soon. Countries such as Singapore, Malaysia, Indonesia and Vietnam are already building LNG terminals to receive LNG imports. By 2015, Southeast Asia is expected to have 10 LNG terminals with total capacity of 34 billion cubic metres⁶.
- And of course, China is now evolving as a key player. Since 2000, China's demand for gas has increased by about 15% per year⁷. China further plans to increase the share of gas, in its energy consumption from 4% to 8% by 20168. The demand for gas will be met by LNG, piped gas and China's domestic production. China is already preparing to import more LNG. It is expected to account for a third of the total increase in this region's LNG imports⁹. To support this move, China plans to install 13 new LNG tanks, with a capacity of close to 2.1 billion cubic metres, and nine more LNG import terminals, over the next two years 10. What is less certain is how China

¹ J P Morgan projects that global LNG trade would reach 370 million tonnes by 2018. Eurasia Group estimates that global LNG capacity would reach 526m tpa by 2020.

Source: GIIGNL - The International Group of Liquefied Natural Gas Importers, an NGO.

³ Source: LNG Journal, June 2012 Issue

⁴ Russia, Japan agree to move ahead on LNG project, Daily Finance, 8 Sept 2012

⁵ LNG, A Liquid Market, The Economist, 14th July 2012

⁶ Source: IEA's "Are We Entering a Golden Age of Gas?, World Energy Outlook 2011"

Source: Economist, July 14th 2012 issue Source: Economist, July 14th 2012 issue

⁹ Source: LNG Journal, June 2012 Issue

¹⁰ Source: LNG Journal, June 2012 Issue

would tap on its own shale-gas reserves, which is said to be possibly the world's largest.

Shale gas revolution increases supply of gas

- 11. This brings us to the second trend of supply of LNG. A major breakthrough in the supply of gas, is the development of the fracking technology, to extract shale gas. Just a decade ago, there was not much shale gas extracted in the US. Today it contributes a third of America's gas. And some have claimed that the reserves of shale gas are large enough to last another 100 years in the US. Indeed, shale gas has made a great impact on the US economy.
- 12. In Europe and parts of Asia, there are also shale gas reserves. But these have not yet been extracted in large amounts for various reasons, such as fear of contamination to the groundwater, non-conducive business environment or a lack of technological know-how.

Shale gas and LNG

- 13. However, it remains to be seen, how much of the gas from the US will reach Asian shores. Thus far, the US Department of Energy has approved only one export project, with many applications still pending approval¹¹. How this will pan out eventually is complicated.
- 14. There are many considerations. For instance, there will be the benefits of low energy prices to the US economy, including the boost to America's manufacturing; there will be commercial interests as well as jobs to be generated from the export of LNG, and there will be expected competition when other countries start to extract shale gas.

<u>Third trend – Pricing mechanism of LNG will change</u>

- 15. The huge surge in demand and the large increase in supply, will impact pricing of LNG. The pricing of LNG is unique in at least three ways.
 - i) First, there are significant price differentials for different types of gas among regions. For instance, American gas costs about \$2-3 per MMBtu (million British thermal units), European pipeline gas costs about \$10-12 per MMBtu and Asia LNG costs about \$14-18 per MMBtu. The prices might have moved. But the differentials remain. One reason for this is that the transport of LNG requires highly capital-intensive liquefaction, and regasification facilities, as well as specialised super-tankers.
 - ii) Second, in Asia, gas contracts are often indexed to oil prices, mainly because gas was and still is a substitute to oil. As oil prices increased over the years, gas prices have similarly increased.
 - iii) Third, both piped gas and LNG require heavy investments so gas contracts are often long-term, 20-30 year, take-or-pay contracts.

¹¹ ICIS Heren Global LNG Markets, 24 August 2012

16. All these have come under pressure recently. Over the past five years, the share of LNG spot trading is estimated to have more than doubled, to 20% of the global LNG market. Will there continue to be significant price differentials among the different regions? Will contracts continue to be long-term and oil-indexed? How big would spot trading become eventually? And how will shale gas change the dynamics of the industry? I believe these questions will be discussed in this conference.

Shortage in Asia in the short term

17. Looking ahead, it is likely that there will be shortage in the supply of LNG in Asia in the near to mid-term. Earlier this year, gas prices shot to a high of US\$18 per MMBtu, in Asia. Though prices have softened over the past few months, we believe cargo diversions to Asia will continue to bridge supply gaps in Asia.

Singapore is well-positioned to become Asia's LNG Hub

- 18. In the midst of these exciting LNG developments, companies are positioning themselves for the new environment. Singapore is a good base for companies to get ready for and access opportunities in the region.
- 19. Global renowned companies are drawn to Singapore because of our stable business environment and open economy. Furthermore, the availability of talent, risk management services and a deep financial market put us in good stead.
- 20. IE Singapore works very closely with the industry, the exchanges and other government agencies to strengthen our trade infrastructure and groom talents. We have attracted over 350 commodities trading companies, which contributes more than 4% to Singapore's GDP. Among these, the petroleum companies form a large proportion, making Singapore, Asia's leading oil trading hub.
- 21. Singapore can similarly be a base for global and regional LNG players to expand their Asian operations.

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Examples of LNG players in Singapore

- 22. A whole ecosystem comprising LNG traders, service companies and the supporting physical infrastructure is now taking shape. With no significant LNG players five years ago, we now have 14 companies with LNG trading or marketing desks in Singapore. Key players here include BG Group, BP, Gazprom and Shell. Many have expanded their LNG desks with activities ranging from trading and marketing, to origination, operations and risk management.
- 23. Let me share a few examples. BP commenced LNG trading with three staff in 2010. Today, its core LNG team is 18-man strong, and carries out trading, origination, operations, LNG shipping assurance and risk management from Singapore.

- 24. Over the past year, we saw several new entrants to the LNG cluster in Singapore. GAIL recently established an LNG trading desk here to procure LNG to meet the growing energy needs of the Indian economy. Statoil has also established a LNG desk in Singapore, while Trafigura is looking to do the same in the near future.
- 25. Our eco-system is also enhanced with law firms such as King & Spalding, which are building their LNG teams and expertise in Singapore. LNG representatives from price reporting agencies like Platts, ICIS and Argus are also based here to cover the regional market. As liquidity increases, we see Singapore developing into a pricing centre for Asian LNG, similar to how it is the pricing centre for Asian oil products.

Singapore's LNG terminal

- 26. Singapore's first LNG terminal is making good progress, targeted to be operational by second quarter next year. When it comes on-stream, there will be increased opportunities for spot trading, break bulking and regional distribution of LNG cargoes.
- 27. BG, the current LNG aggregator for Singapore, is expected to reach its 3 million tonnes per year franchise by 2013. In June this year, Singapore's Energy Market Authority (EMA) concluded its first industry consultation on the post-3Mtpa LNG procurement framework. A second consultation paper is scheduled at the end of the year. We expect EMA to reach a decision on the framework by first quarter next year.

LNG Bunkering

- 28. Last but not least, the potential for LNG bunkering here is great. With increasing focus on clean energy, the industry is looking for cleaner marine fuels, including LNG as an option.
- 29. Today, Singapore is the world's top bunkering port, selling more than 40 million tonnes of bunkers last year. Singapore is committed to sustainable practices in the maritime sector. The Maritime and Port Authority of Singapore is assessing the feasibility of offering LNG bunkering in Singapore in the near future.

Conclusion

- All these developments strengthen Singapore's foundation to support and house a vibrant LNG cluster, be it for domestic use, storage, bunkering or trading.
- 31. IE Singapore aims to continue to grow Singapore into a leading LNG hub in Asia. I look forward to your participation, and would like to invite companies who are new to Singapore, to start a dialogue with us. I wish you a fruitful conference ahead.

Thank you.

Note to Editor

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International Enterprise Singapore

International Enterprise (IE) Singapore is the government agency driving Singapore's external economy. We promote international trade and spearhead the overseas growth of Singapore-based companies to grow Globally Competitive Companies.

IE Singapore attracts global commodities traders to establish their home base in Singapore. Today, Singapore is a thriving trading hub for the energy, agri-commodities and metals & minerals trading clusters.

Through our Global Company Partnership, we work with Singapore-based companies to customise total solutions in capability building, market access and financing for their internationalisation.

Our global network of overseas centres in over 35 locations provides the necessary connections in many developed and emerging markets.

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