

THURSDAY 1 September

11.45 **SESSION 3: Regulatory Issues: Panel Discussion**

- ❖ International regulatory harmonization
- ❖ Barriers to investment
- ❖ Access issues: access to pipelines, storage facilities and receiving terminals
- ❖ Barriers to trade

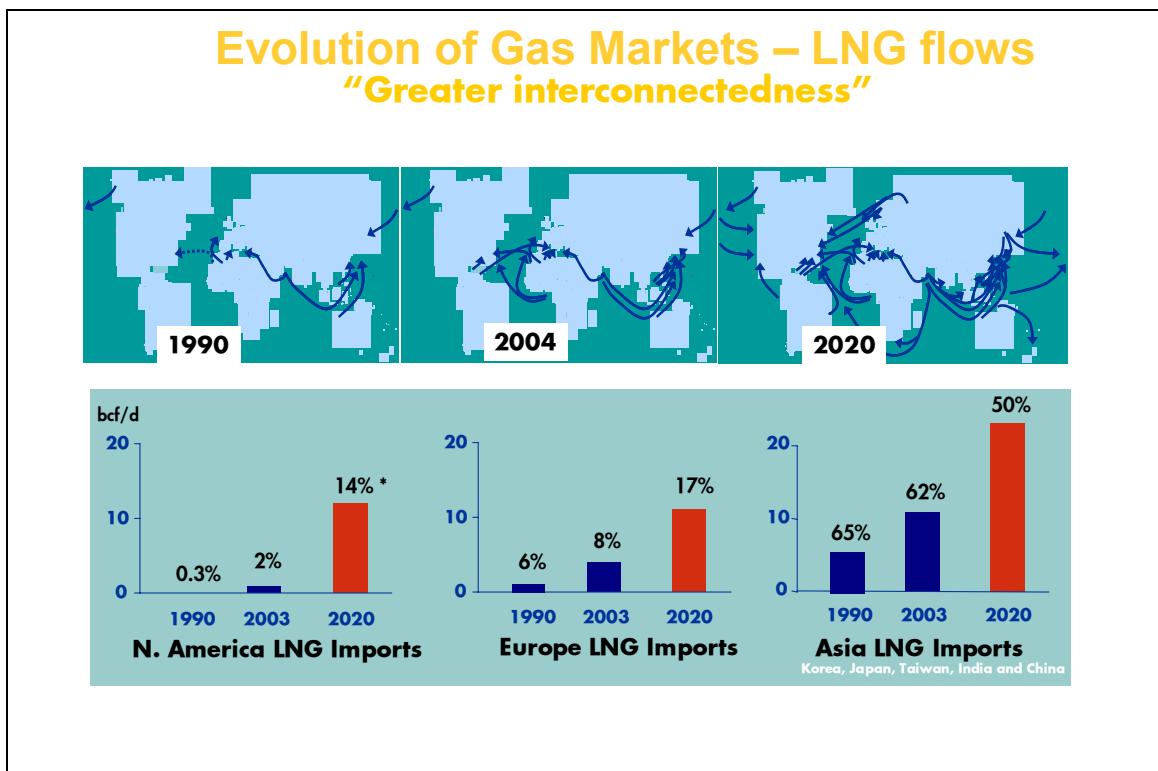
Bounds as Chair/first speaker (15-20 minutes)

In June 2004, APEC Energy Ministers met in the Philippines and affirmed their view that APEC economies should move towards best practice in the development of LNG trade. A set of 17 best practice principles was tabled at the Manila meeting and Ministers encouraged APEC member economies to adopt these principles. Here are two that are relevant to today's panel discussion.

- Economies should remove legislative and regulatory impediments to the economic transportation of LNG without compromising safety and security.
- Economies should promote, or not impose measures that impede, the development of flexible access arrangements.

Given these objectives of resource security, freer trade, lower cost energy and closer relationships – what steps can take us in that direction?

As can be seen in the following chart the world is already moving in that direction, nowhere more so than in gas trade within the APEC region.



From beginnings of the industry characterized by few exporters and importers we now have greater participation and aspirations of many APEC member countries to more fully participate in the emerging gas trade either via pipeline or LNG.

As industry participants we have been given the opportunity through our recommendation to the Ministers later this year to assist this process. So what weight can we throw behind this moving ball and keep it going faster and at even lower cost?

Here are a few examples of low hanging fruit or easy wins that, when resolved, will facilitate easier cross border trade in natural gas, lower transaction costs and risks and thereby easier finance.

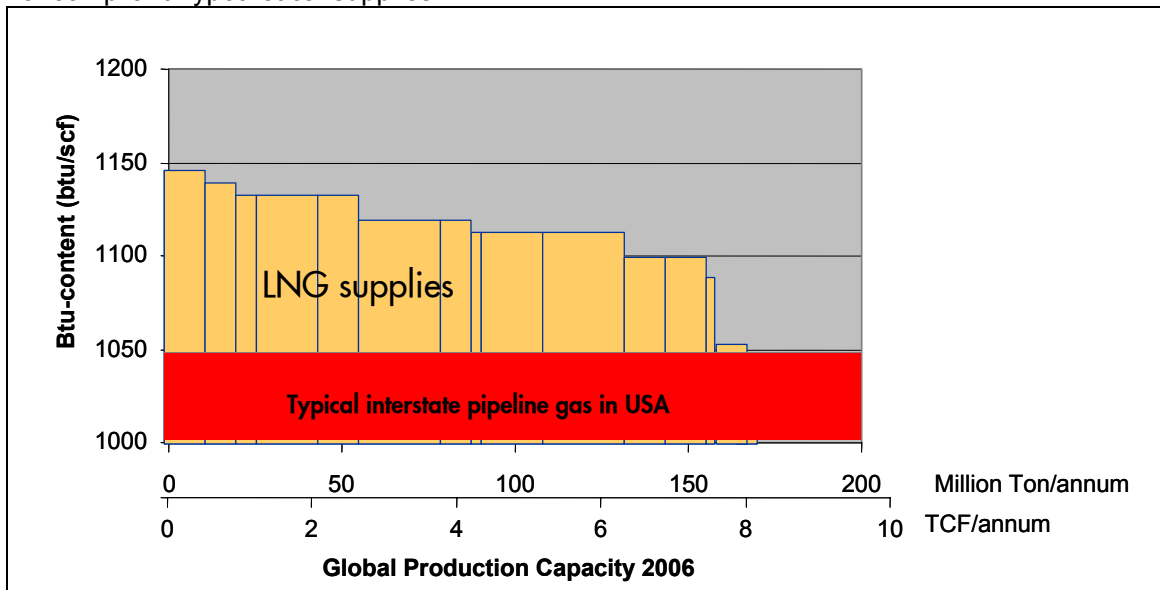
As this session is all about Regulation and Access I pick up the issues of performance based regulation in gas quality and industry self-regulation with respect to ship and port safety and security.

Gas Quality

There has been a noticeable increase in gas quality concerns around the world in the last few years, which made the awareness of gas quality issues across the entire supply chain ever more crucial. Gas quality is an emerging issue for various reasons:

- The liberalization of the gas industry results in an increased cross border gas transfer and increased use of short-term gas purchases rather than long-term contracts.
- High gas prices spur the development of new non-conventional supplies with a gas quality that differs from those of the historic supplies.
- The tightening of environmental legislation is resulting in stricter quality constraints for gaseous fuels

Issues related to gas quality need to be addressed for the development of all new supplies by taking a holistic view of the entire gas value chain. Upstream field development strategies and blending opportunities are affected, for new gas supplies, as a minimum requirement, have to be compliant with all applicable gas quality regulations in the short and medium term. However, this may not be sufficient, as end users design and tune their facilities to handle historic gas supplies based on long-term gas contracts, rather than a broader range of compliant hypothetical supplies.



On the other hand some gas quality regulations can be overly specific, especially if they use compositional instead of performance or safety related specifications. Taking specifications at face value can lead to an unnecessary increase in the cost of supply (e.g. redundant inert and NGL limits); in such cases, changing them can be a win-win proposal for all stakeholders, which increases supply options while providing a more meaningful performance-related guarantee to end-users.

Wherever specifications are set by governmental agencies, industry's ability to influence these regulations is important. A cost-effective solution to introduce the new gas supply into the market will most likely involve a combination of technical (and commercial) solutions in the upstream (e.g. production planning, blending with equity and/or third party gas, LPG extraction, H₂S removal and spiking), midstream (e.g. NGL extraction, O₂ scavengers) and downstream (e.g. N₂ injection, blending, equipment modification).

LNG Ship Vetting and Acceptance

As is well known to the industry the number of LNG ships has increased substantially as have the number and variety of routes. The following chart shows the prospective number of ships into the future.

As an APEC objective of course "lower cost energy" means more than "lower import price" for gas; there are many inefficiencies in the value chain that need to be addressed (including transportation costs and distribution costs in recipient countries. The rapid increase in shipping numbers gives requirement for new ship owners/operators to understand and work within the exemplary safety regime for LNG shipping.

The history of success in this area has been the industry emphasis on working together rather than relying on specific regulatory targets in any one country of registration. This is consistent with the APEC agenda and one that we in industry can encourage.

The rapid expansion of the industry LNG fleet and the trend towards commoditization of the trade have attracted some operators and ship management companies without previous LNG experience. This naturally gives rise to concerns that there may be an increase in the likelihood of incidents. Assurance on the effective implementation of the required assurance and controls can be obtained through a system of positive vetting of ships, including regular review of the quality of ship operators, and reviews of marine terminal operations. Maritime safety is not achieved by just focusing on the ships. Ship Quality Assurance by the Industry focuses both on the ships themselves and on the ship operators. Defects, non-conformances and accidents on the ships are symptoms of gaps in the management processes, so there is increasing focus on the quality of the operators.

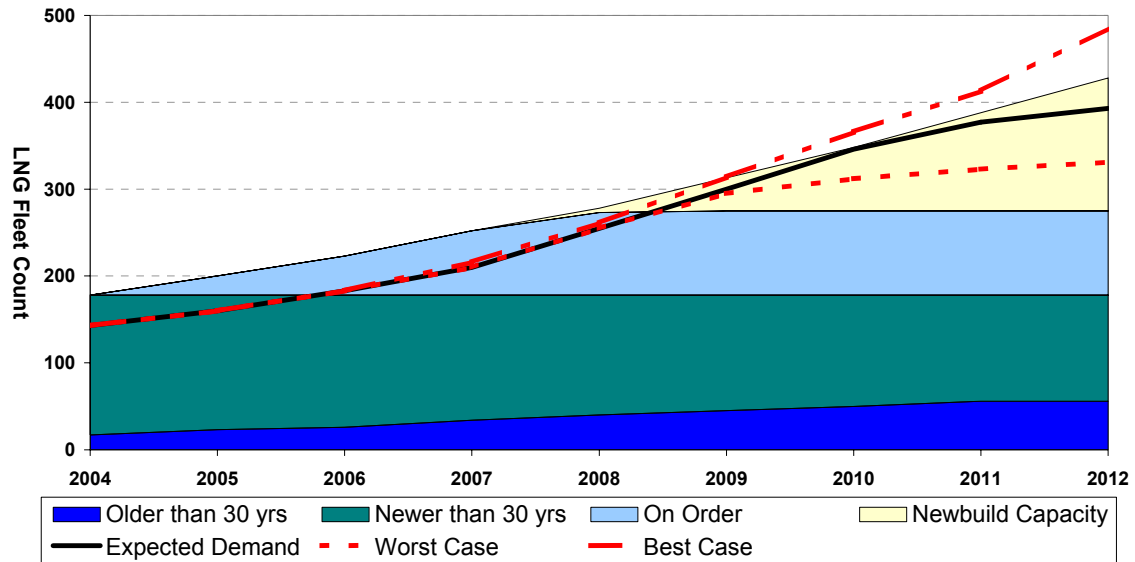
Vetting is the process by which all information, including review of the ship operator, inspection reports, etc., is assessed and a decision made regarding the suitability of a ship. Ship Quality Assurance must be based on a robust system of Positive Vetting, i.e. there must be positive information that a vessel is suitable. Mere absence of negative information, or no information at all, is not sufficient.

Key components of a robust positive vetting system include:

- Assessment based on a range of data inputs, including ship inspections by accredited industry inspectors, Port State Control inspections, management reviews, casualty reports, etc., and, for older ships, structural reviews.
- Continuous evaluation to ensure that up-to date information is evaluated. Each vessel must be assessed on every occasion it is proposed for use.
- Competent marine staff to carry out the assessments.

The assurance processes must apply to all tankers with which our industry is associated. For an LNG company, this includes a wide spectrum of contractual arrangements, from long-term project vessels to those that may be used in the loading of spot FOB cargoes.

It is also essential that ports and marine terminals be properly operated. Ports & Terminals are encouraged to self-assess their operations, and to have independent audits, based on industry references. If we are to address the demands of this rapidly growing industry and keep costs competitive then we need to review matters such as the time it takes to get approval to bring a ship into a Port (particularly for the first time); the use of port charges as revenue earners for local authorities which adds to end cost to the consumer; and the use of night time curfews in ports need to be reviewed, 24/7 operations adds significant flexibility & efficiency to import operations without necessarily eroding safety and security.



Finally in handing over to the panel to discuss other matters I remind the Forum that we have an opportunity to move the industry forward in the region through our recommendations tomorrow afternoon arising from this Forum. I encourage a discussion from the floor.