

Facilitating the Development of Liquefied Natural Gas (LNG) Trade in the APEC Region

Natural gas is an energy source that is both economically and environmentally attractive. It has the lowest greenhouse gas emissions of any fossil fuel. It is in strong demand (globally and within the APEC region), with gas consumption growing at a faster rate than total energy consumption, doubling in the past 25 years and projected to double in the next 25 years.

Natural gas is abundant within the APEC region, with approximately 40% of global reserves projected to be adequate to support current levels of production for the next 200 years. However, the majority of natural gas reserves are 'stranded' (isolated from established markets), and it is estimated that 75% of all new gas production could potentially enter into cross-border trade (pipeline and LNG).

Natural gas can be safely transported in a liquid form known as LNG or liquefied natural gas. LNG takes up about 1/600th of the volume it did when it was in a gaseous state, making LNG economical to transport. The flexibility and cost competitiveness of LNG transportation, particularly over long distances, and the fact that it can be transported safely, highlights the potential for extensive LNG trade within the APEC region.

There is currently 100 million tons per annum of LNG liquefaction capacity dedicated to serve the APEC region, equating to annual trade of approximately US\$25 billion. Trade in the APEC region has grown steadily in recent years, underpinned by the principles of free trade between buyers and sellers and the establishment of commercial agreements that support the significant investments required. However, to capitalize on LNG's enormous, untapped potential, APEC economies should support policies that facilitate the development of further LNG trade in the APEC region.

To assist these efforts, an APEC Workshop to Facilitate LNG Trade was held in San Francisco, USA, 29-30 April 2004. Through the workshop, a series of best practice principles and recommendations for future Energy Working Group activities were identified and are listed below.

BEST PRACTICE PRINCIPLES

Trade – General

1. Economies should promote, or not impose measures that impede, the development of a proper and transparent LNG trading system that allows free and open markets to set the price across the LNG value chain.
2. Economies should promote, or not impose measures that impede, the development of a flexible LNG trading system that may include short term/spot trade, the capacity to develop a futures/options market for gas and LNG, and the removal of unnecessarily restrictive contractual practices.

3. Economies should establish predictable and stable legal and fiscal frameworks that protect the sanctity of contracts and do not distort the market through subsidies, inequitable cost allocation, uneconomic tariffs, or retroactive legislation. Legal frameworks should be clear and transparent to promote LNG investment and the fiscal regime should support non-discriminatory policies for LNG trade and investment.
4. Economies should remove legislative and regulatory impediments to the economic transportation of LNG without compromising safety and security.
5. Economies should promote, or not impose measures that impede, the development of flexible access arrangements that encourage competition, anti-monopolistic behavior and investment.

Financing/Investment

6. When establishing and reforming energy market structures, economies should not impose measures that impede the development of economically viable LNG projects.
7. Economies should develop energy market structures that promote investments with the capacity to support longer-term LNG contracts to get green-field LNG projects up and running and encourage increased LNG trade in the APEC region.
8. Multilateral financial institutions should be encouraged to support the development and expansion of LNG projects.

Emergency Scenarios

9. Economies should develop and coordinate their security frameworks to enable LNG to continue to be transported in a secure and safe manner, including sharing information on counter-terrorism measures.
10. Economies should promote, or not impose measures that impede, the development of a capacity to ameliorate “sudden shocks” to the LNG system (e.g. increase storage capacity, secure multiple sources of supply and excess capacity, establish time trade arrangements, encourage more trading flexibility among stakeholders).

Technology Transfer and Knowledge Sharing

11. Economies should facilitate technology and skills transfer to help build the capacity of related sectors within member economies and reduce costs through the LNG value chain.
12. Economies should facilitate LNG trade through the collection and dissemination of natural gas data and the exchange of non-confidential commercial information among member economies (e.g. exports, imports, prices, supply, and demand). This sharing of information should be balanced with commercial and security concerns.

Permitting Processes and Regulatory Issues

13. Economies should develop clear, transparent, non-discriminatory, coordinated and timely project approval processes for permitting LNG facilities, including providing justifications for decisions.
14. Where appropriate, economies should consider the potential for making available government-owned land for the siting of LNG infrastructure (e.g. receiving terminals).
15. Economies should share information on LNG-related regulations, standards and quality specifications and, to increase the flexibility of LNG trade, consider ways to further their harmonization.

Public Education

16. Economies should promote public education campaigns to build positive perceptions about LNG by highlighting its demonstrated safety and reliability and emphasizing its economic, environmental and energy security benefits.
17. Economies should clearly articulate their energy security policies as they relate to LNG.

RECOMMENDATIONS FOR FUTURE EWG ACTIVITIES

1. Invite LNG experts within member economies to join the EWG Expert Group on Clean Fossil Energy (EGCFE).
2. Encourage relevant multilateral financial institutions, for example, the International Finance Corporation (a member of the World Bank Group), to consider how they can facilitate and support the development of LNG projects within the APEC region.
3. Develop a mechanism for collecting and disseminating LNG data and exchanging non-confidential commercial information among member economies. The Joint Oil Data Initiative provides a guide on what information could be included.
4. Develop a mechanism, possibly through the EGCFE, to share information on regulations, standards, public education campaigns and other best practices, for example through case studies, workshops and APEC-funded projects.
5. Develop a program for interested member economies to visit various LNG liquefaction and receiving terminal facilities in the APEC region as a means to expand the knowledge base.
6. Utilize the Implementation Facilitation Assistance Team (IFAT) mechanism to assist member economies, on their request, to implement any of the above best practices.