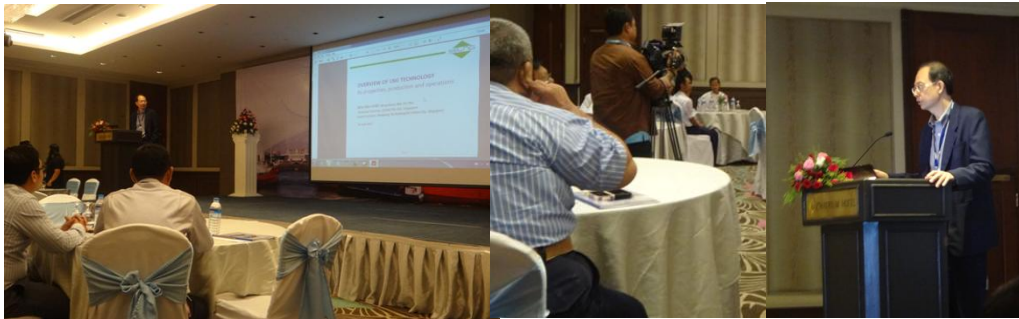


**Report on the LNG Myanmar 2017 Conference & Workshop, 14 – 16<sup>th</sup> June 2017, Yangon, Myanmar**

The event was held at the Chatrium Royal Lake Yangon Hotel. It was jointly organized by the Gas Academy, Singapore and Alpha Resources & Training Co., Ltd, Myanmar. The event was endorsed by the Myanmar Ministry of Electricity and Energy (MOEE). The event comprised of a one day training workshop on 14<sup>th</sup> June, followed by two days conference on 15<sup>th</sup> and 16<sup>th</sup> June. The training workshop on “Overview of LNG Technology” was facilitated by Dr. Wie Min Gho, Technical Director, Small Scale LNG Pte Ltd, Singapore. Around 180 delegates from overseas and locally attended the two days conference.

Local speakers included representatives from the Myanma Oil and Gas Enterprise (MOGE), Electric Power Generating Enterprise of MOEE, Myanmar Directorate of Investment & Company Administration (DICA), and World Bank Myanmar Office. Overseas speakers included representatives from PETRONAS, Malaysia; PERTAMINA, Indonesia; Wood Mackenzie, Singapore; Rim Intelligence Co., Japan; and Bumi Armada, Malaysia.



**Top:** At the Training workshop



**Top:** At the Conference

**Highlights of the presentations at the conference:**

- i. Myanmar offshore natural gas production will start to decline from 2021. Ministry of Electricity and Energy (MOEE) decided to implement LNG business in Myanmar to cater for the coming shortfall of gas production. A feasibility study on LNG conducted by MJM Energy for the World Bank had identified 5 potential sites for construction of LNG Receiving Terminals. This included construction of Floating, Storage and Regasification Unit (FSRU). The government is in the process of assessing the Study.

- ii. Existing electricity generation mix is 61% Hydro, 26% Gas Turbine and Combined Cycle, 11 % Gas Engines and 2% coal. Existing installed capacity is 5215 MW. Currently 70% (7.2 million households) of the country population do not have access to electricity. Government target to have 80% of the population accessible to electricity by the year 2030. LNG will play an important role in the government push for electrification as government plan to increase generation of electricity from gas.
- iii. Major challenge to increase access to electricity in the country is that current tariff of electricity of Kyat 35 / kWhr is below the cost of supply. The other major challenge is Institutional Fragmentation as 7 ministries are responsible for the energy sector in the country.
- iv. Currently Myanmar has 28,299 natural gas vehicles and 46 CNG refueling stations, consuming around 21 mmcf/d of natural gas. The number of natural gas vehicles in the country had not increased since 2016 due to tight supply of natural gas from onshore gas fields. With the coming supply of gas from offshore fields and also the plan to import LNG, the number of natural gas vehicles especially buses will be increased in the future.
- v. Investors in Myanmar are to contact and liaise with the Myanmar Directorate of Investment and Company Administration (DICA). DICA is set-up under the Ministry of Planning and Finance to: scrutinize investment proposals; organizing investment promotion activities; facilitate investment / businesses; and coordinate with Ministries, Region and State governments. DICA also acts as the Secretariat of Myanmar Investment Commission (MIC).
- vi. The world first operating Floating Liquefaction Plant (FLNG), owned by PETRONAS, Malaysia, delivered its first LNG cargo on 1<sup>st</sup> April 2017. Known as PLNG1, the FLNG plant has a train capacity of 1.2mtpa and is located 180km offshore Bintulu, Sarawak, Malaysia. It has storage capacity of 177,000m<sup>3</sup> of LNG and 20,000m<sup>3</sup> of condensates and can operate in 70m to 200m water depth. PETRONAS is now building a second FLNG i.e. PLNG2, with train capacity of 1.5 mtpa and can operate in 500m – 1500m water depth.
- vii. In April 2017, a small scale LNG Floating Storage Unit (FSU) (0.3 mtpa) begun its 18 years +10 months (fixed) chartered period at the Delimare LNG Import Terminal, Marsaxlokk Bay, Malta. The end user of the LNG is Enemalta, the Malta National Electricity company. The FSU, with storage capacity of 125,000 m<sup>3</sup>, was converted from “Wakaba Maru” Moss LNG vessel and chartered to Electro Gas Malta by Bumi Armada Berhad, Malaysian based international offshore energy facilities and services provider.
- viii. Indonesia is becoming a major LNG user. Pertamina is developing LNG infrastructure to fulfill domestic gas demand and global LNG trading. Existing regasification terminals are: Nusantara Regas (capacity: 3.0 mtpa, start up: 2012); Lampung FSRU (1.8 mtpa, 2014); Arun LNG (1.5 mtpa, 2015 – conversion from an export to an import terminal); and Benoa FSU (0.3 mtpa, 2016). Planned regasification units are: West Java LNG (1.8 mtpa, 2019); Small Scale LNGs in central and eastern Indonesia (1.0 mtpa, 2021); and Cilacap FSRU (3.0 mtpa, 2023). End customers of LNG are electricity generation plants, energy for industries, fuel for trucks and regional exports.