

Establishing a domestic LNG supply chain

NiuEnergy is a natural gas aggregator focused on commercialising the distribution and consumption of domestic gas in Papua New Guinea.

- NiuEnergy has a 15 year gas sales agreement with PNG LNG (operated by ExxonMobil).
- We are testing the establishment of a PNG domestic gas market. We propose to undertake this by supplying LNG and CNG from a purpose-built small scale modular LNG Plant at Caution Bay. The LNG will be distributed to coastal provincial centres, mines and distributed power generation, largely based in Lihir, Lae and coastal power generation centres across our country.
- The PNG domestic market is best underpinned by large scale mining and industrial loads at Lihir and Ramu Nickel.
- The large users of heavy fuel oil are all potential targets for this LNG market.
- PNG has legislation in place that supports WHO and IMO MARPOL's 2020 targets to ban HSFO (High Sulphur Fuel Oil) imports, reducing sulphur content in these fuels from 3.5% to less than 0.5%. While a number of import exemptions have been granted, the Department of Transport has been tasked with enforcing the legislation and preparing an orderly transition to cleaner fuels.
- The domestic demand potential over the next 5 to 10 years is up to 0.5Mtpa, however building a new supply chain to viably supply coastal markets beyond Lae and Lihir is economically challenging. The introduction of subsidised supply chain assets as an offset to a Domestic Market Obligation (DMO) could significantly improve the viability of supplying such markets.

- It is proposed to conduct the Domestic LNG project independently from upstream activities, by initially procuring LNG from the PNG LNG JV and eventually Papua LNG from 2027.
- This mid and downstream business, largely involving LNG transport, storage and regas, is proposed to be managed by independent entity, NiuEnergy, as a 50/50 joint venture JV with Kumul Petroleum. In this role, NiuEnergy would produce LNG as an energy aggregator for local markets, on an arms-length basis, and sell to the mines, industrial and coastal generation centres.
- NiuEnergy would also be tasked with developing a LNG and/or CNG Pilot in Port Moresby. This trial will source gas from the Port Moresby Power Station. This trial will source gas from the POM Power Station and initially provide compressed gas to select customers in Port Moresby
- The key next steps with this initiative include:
 - engagement with potential customers, including mining companies, to confirm the scope and timing of their demand
 - support to the Dept. of Transport's transition plan to cleaner fuels

Proposed Supply Chain Infrastructure



POWER SOLUTION

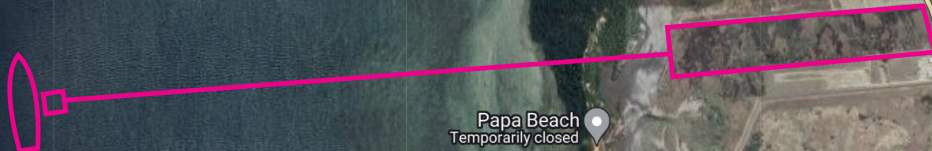


NiuEnergy is working with Chinese OEMs on small scale liquefaction, storage, transportation and regas solutions for potential customers

The Benefits

- Uses a domestically available resource
- Significant import cost reduction and improvement in terms of trade
- Cleaner, cheaper fuel
- Enables reliable distribution to coastal power generation sites

Hiri West Energy Hub



NiuEnergy Small Scale Domestic & Regional CNG, LNG Plant, Storage and Distribution Terminal

Metago United Church
Training Institute
Temporarily closed

Metago Bible College

K9 PNG

Dirio Power Plant

NiuPower
60MW Power Station

Laba Holdings Limited

Papua New Guinea LNG

LNGP Warehouse 1

Exxonmobil LNG
Plant Camp A

LNGP Private Car Park

LNGP Camp A Office



For more information, contact:
+675 320 0169
michael.uiari@niuenergy.com.pg

