

'PNG Energy Generation Solution' MOA Signed

HIGHLIGHTS:

- MOA signed between Kumul Petroleum Holdings Limited (Kumul) and Mayur Power Generation PNG Limited (Mayur) in the establishment of a 50/50 joint venture for the development of PNG Energy Generation Solutions (PEGS)
- Joint Venture is to pool intellectual property, energy fuel supplies (coal and gas) with a bias towards utilizing 'domestic gas' energy solutions for vertically integrated downstream facilities and other energy generation opportunities
- MOA deploys a competitive and commercial development and supply framework using Kumul's own gas sources and the provision of domestic market obligation (DMO) gas via the agreement recently signed by the PNG Government for the Papua LNG Project
- Enables pathway for domestic gas to be provided to Mayur's Lae Enviro Energy Park (EEP) for an initial 50MW and underpinning a future expansion up to 200MW
- Provides a tangible commercial framework to utilize gas and coal in the development of Mayur's portfolio of projects in PNG with a focus on industrial minerals and other coastally located power generation projects
- Catalyst to setting up regionally competitive down-stream value add mineral processing facilities in PNG i.e. cement & quicklime
- Solidifies 'fixed price' energy sources that PNG possesses (coal and gas), providing protection for domestic power generation costs against exposure to international energy input price rises
- Promotes the continued engagement and negotiation of the Joint Venture with various Fortune 500 Energy Companies to support PEGS
- Provides PNG with a pathway to a low-cost diversified energy fuel mix, replacement of expensive high polluting heavy fuels and diesel imports, and improvement of foreign cash reserves

Mayur Resources Ltd (ASX:MRL) is pleased to announce, that after extensive collaboration, planning and scenario modelling since early 2018, a Memorandum of Agreement (MOA) with Kumul Petroleum has been signed. This MOA solidifies a joint commitment to the development of energy projects using domestic energy sources, being predominantly gas and supported by coal *and other renewable energy sources in PNG*.

The MOA's intended effect can now be realised following the recent publicly announced gas agreement signed between the PNG Government and the Papua LNG project owners, led by French oil and gas major, Total. As announced in the media by the Deputy Prime Minister, The Honourable

Charles Abel on 10 April 2019, the key terms of the agreement included inter alia; “Domestic market gas obligation of 5 per cent at US\$4.50 (per MMBtu) fixed price”.

The Kumul - Mayur MOA sets a framework for the co-ordinated development of Mayur’s portfolio of projects in PNG, related to power generation such as its Lae EEP, as well as its vertically integrated down-stream processing facilities for cement and lime and other standalone energy/power generation opportunities. These additional energy/power generation opportunities that aim to replace higher cost, higher polluting imported liquid fuels (such as heavy fuel oil) exist in Madang, Lihir Island etc. The current and potential future demand in these centres (including Lae) is in the vicinity of several hundred megawatts.

The Kumul - Mayur MOA and the supporting Papua LNG Project DMO obligations, enable Mayur to factor the utilisation of fixed price DMO gas as a fuel source into its EEP power station project in Lae. This gas can be used singularly or in combination with coal, biomass in the same facility supporting the power and co-generation steam supply along with use of solar. Whilst Lae is located on PNG’s east coast (away from the country’s gas production infrastructure near Port Moresby) it is still many thousands of nautical miles closer than PNG’s export customers in north Asia (e.g. Japan). Conversely Mayur’s Central Cement & Lime (CCL) project is immediately adjacent to the current PNG LNG and the proposed Papua LNG operations, and CCL’s energy needs may be serviced via a short connecting gas pipeline.

Negotiations with Fortune 500 energy companies wishing to partner across the development, construction and operations of energy/power related assets are continuing. The PEGS Joint Venture will continue the dialogue with these parties with an endeavour to finalise arrangements within calendar year 2019.

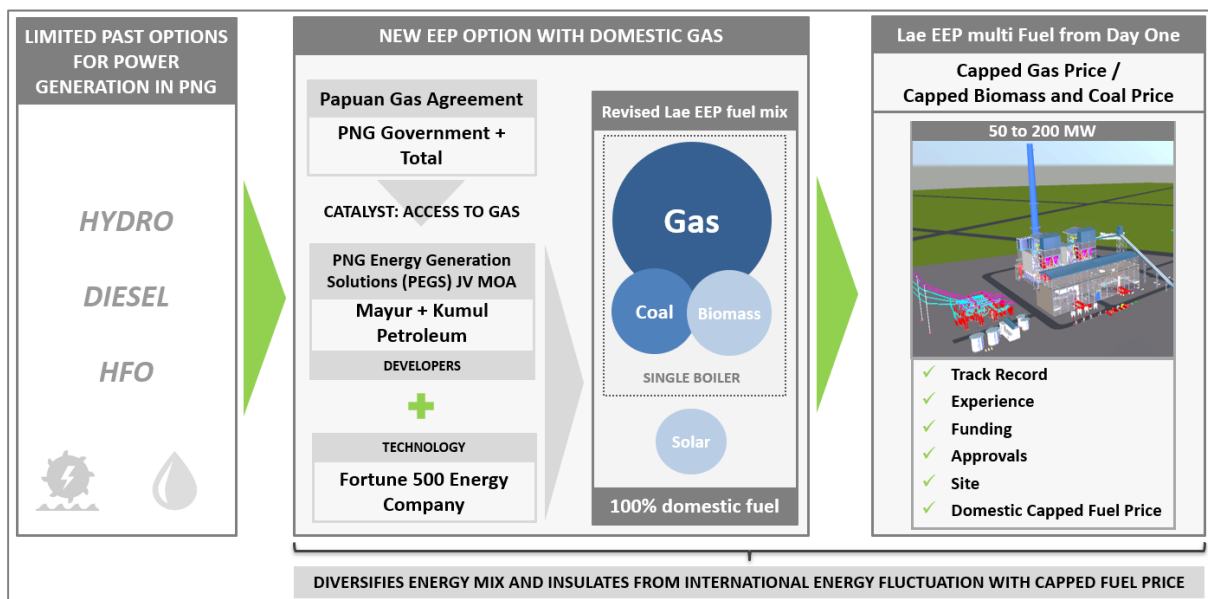


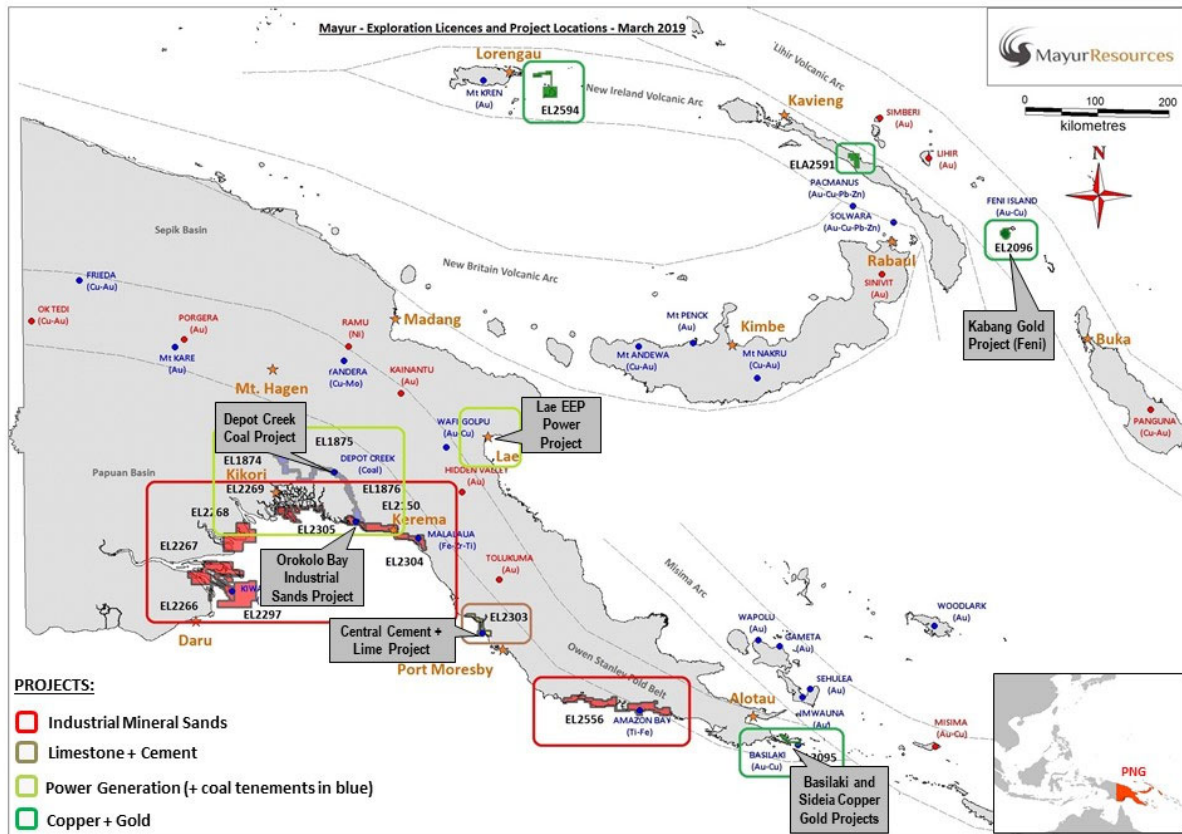
Figure 1 - Energy Plan Example - Utilisation of Gas in Mayur’s Lae EEP

MRL Managing Director Mr Mulder said “The signing of this MOA is yet another exciting development for both Mayur’s Energy Division and PNG. PNG has massive gas reserves, yet until now the vast majority of it is exported to Asia with limited in-country value add for PNG. We are delighted to be working with Kumul Petroleum, given its mandate to protect, maximize and promote energy/power and foster new vertically integrated industries within PNG throughout the upstream, midstream and downstream supply chain. Ultimately, our power generation projects, including the Lae EEP, are fuel agnostic, but the fuel must be PNG domestically sourced and provide a cheaper power price and superior environmental outcomes compared to the current prolific use of diesel and HFO. This endeavour and commitment is on behalf of, and ultimately to the benefit of PNG’s population of circa 8 million, rather than having 100% of this valuable commodity leaving PNG’s shores as LNG”.

About Mayur Resources

Mayur Resources is a diversified mineral exploration and energy development company operating in Papua New Guinea (PNG) across the following divisions:

- (a) **Industrial Mineral Sands (construction sands, magnetite sands, heavy mineral sands).** The Company is advancing the Orokolo Bay Industrial Sands Project along the southern coast of PNG. A pre-feasibility study has been completed which identified an opportunity to establish a project producing fine grain construction sands, titanomagnetite (iron sands) and a zircon-rich Valuable Heavy Mineral Concentrate by-product. The next steps include preparation of a Definitive Feasibility Study and, subject to the requisite regulatory approvals, the construction of a pilot scale demonstration plant.
- (b) **Cement & Quicklime.** The company has completed a DFS for the Central Cement and Lime Project which contemplates, subject to the requisite regulatory approvals, the quarrying of large-scale high-grade limestone deposits together with the development of a vertically integrated downstream processing quicklime and clinker / cement plant for domestic (import replacement) and export markets.
- (c) **Copper and Gold.** The Company holds exploration licences at the Feni Islands in New Ireland Province as well as Basilaki and Sideia Islands in Milne Bay Province.
- (d) **Power Generation.** The Company has proposed a vertically integrated domestic power project at PNG's second largest city of Lae. A detailed Power Purchase Agreement has been submitted to PNG Power, the state-owned power entity, for a 52.5MW (net) power facility (with future scalability to 200MW). A definitive feasibility study has been completed for the Lae project that contemplates the use of multi fuels (Enviro Energy Park) including renewables and potentially coal, subject to the requisite regulatory approvals, from the Company's Depot Creek project in Gulf Province.
- (e) **Coal Exploration.** The Company holds a portfolio of exploration licenses in Gulf Province that includes the Depot Creek Coal project.



Mayur's mineral exploration licence (EL) and project portfolio in PNG

About Kumul Petroleum Holdings Limited

Kumul Petroleum Holdings Limited (KPHL) is Papua New Guinea's national oil and gas company (NOC). The NOC was created by an Act of Parliament through the Kumul Petroleum Holdings Limited Authorization Act 2015 which replaced NPCP Holdings Limited.

Through Kumul Petroleum Authorization Act 2015, KPHL is mandated to protect and maximize the value of the Country's petroleum assets so that it can contribute to the maximum wealth for the people of Papua New Guinea.

Since its inception in 2009 as NPCP Holdings, the NOC was operating as a commercial entity with its core commercial interest being its participation in the PNG LNG Project.

KPHL is currently responsible for managing the State's 16.57% equity in the US\$19 billion PNG LNG Project through its subsidiary Kumul Petroleum (PNG LNG) Limited; becoming the 3rd largest partner in the largest single investment made by the nation to date.

KPHL has great potential to grow as a National Oil and Gas Company (NOC) because PNG has high oil and gas resources and largely because KPHL is the legislated State nominee and can always exercise its option for a 20.5% stake in every project.

Consistent with its vision, KPHL will continue to create value and opportunity for PNG and its people by becoming a major national oil and gas corporation.

This means "creating wealth and opportunities for Papua New Guinea now and into the future".