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KUMUL PETROLEUM:
SOURCING ENERGY FOR INDUSTRY AND COMMERCE

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KPHL – more than a petroleum & energy company!
PRESENTATION OUTLINE

- INTRODUCTION OF KPHL AND MANDATE IN ENERGY SECTOR
- OIL & GAS COMPANIES CHANGING FOCUS GLOBAL SNAPSHOT
- ALIGNMENT WITH GOVERNMENT POLICY
- RISKS AND MITIGATION
- KPHLS ENERGY PROJECTS & OPPORTUNITIES
Kumul Petroleum Holdings is the national petroleum company and State nominee in all petroleum developments in PNG.

All the State’s oil & gas assets and interests are consolidated under KPHL.

KPHL can also participate in petroleum exploration, development, production, processing and marketing and downstream activities including petrochemicals, gas supply and power generation.

KPHL will perform a greater role in the years to come to enhance national content, national involvement and ownership of the petroleum & energy sector in its broadest sense, right across the national economy at many levels, creating a conducive ‘social licence’ for all resource developers.
All major oil and Gas companies are investing in cleaner energy sources.

Net Zero Carbon Emissions


Pathway-reduce global climate change to less than 2°C

Investment in Gas and Renewable Energy allows PNG to transition away from HFO Reduce Carbon Emissions for sustainable economic gains in the future

Requires clear Government policy
A study commissioned in 2014 by KPHL was undertaken by consulting group Mckinsey & Company – HDI - access to electricity.

KPHL began on this road for access to electricity with its Rural Electrification Program that now covers over 200Km of transmission lines across Southern Highlands and Hela provinces.

By participating in this project KPHL is aligning with the Governments MTDG’s for 70% of the population having access to electricity by 2030.

Power Generation sources is key for the population as well heavy industry for jobs and GDP growth.
## RISKS AND MITIGATIONS

### Energy/Power Markets

- **Third Party Liability** – Grid owner ability to pay for power supply
- **Interconnectivity** between power facility and Grid
- **Realistic demand forecasts**
- **Availability of land**
- **Solar power and uptime reliability**
- **T&D infrastructure**

<table>
<thead>
<tr>
<th>Collections need to be strengthened</th>
<th>Grid Impact studies</th>
<th>Proper registry/asset valuation</th>
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<tbody>
<tr>
<td>Target credible off-grid mines/projects</td>
<td>Grid rehabilitation</td>
<td>Start small and have flex to expand with demand</td>
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<td>Use State land</td>
<td>Early and continuous engagement</td>
<td>Battery Storage &amp; Hybrid options</td>
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<td>Requires rehabilitation or installation to reach customers</td>
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KPHLS ENERGY PROJECTS

Operational

Energy & electrification: KPHL is a 50% shareholder with Santos in NiuPower

Gas/LNG to power
Installed Power Capacity 54MW
Capex US$100mm
Gas Sourced from PNG LNG

Power supply feeds into Pom Grid has not reduced blackouts in Pom
KPHLS ENERGY PROJECTS

Planned and in Study Phase

Gas/LNG to power
54-200MW
US$100-500mm
Gas sourced: local and regional markets

Gas as fuel source for possible energy mix to Wafi Golpu and Labu SEZ with possibility for excess to Ramu Grid

Renewables Solar (replicated potential and expanded)
5-20MW
US$10-40mm

Targeting C – centre or loss making centre – Kavieng Pilot project
Cheap power generation for isolated areas such as special economic zone in Wewak
KPHL is interested in developing quick fix hydro power projects for remote towns in PNG
We have an MOU with Hela Provincial Govt

We are internally exploring options for fuel sources such as Hydrogen and Ammonia including Carbon Markets and how KPHL can feature in this sector as an oil and gas Company looking to take advantage of carbon offsets or carbon trade particularly as we involve more into the renewables sector

KPHL is investing in a fabrication yard that will target fabrication of steel structures for the Papua LNG project. Could generate jobs as well as training and help GDP growth
Thank you ...........!