17th PAPUA NEW GUINEA RESOURCES & ENERGY INVESTMENT CONFERENCE

10th to 13th December 2023 SYDNEY, AUSTRALIA

"Regulator's Outlook - Energy"

David Manau

Secretary
Department of Petroleum

Presented By:

Jimmy Haumu

Director Petroleum Division



OUTLINE

- 1. Regional and Global Outlook Energy
- 2. Overview of Petroleum Activities in PNG
- 3. PNG Oil & Gas Industry
- 4. Regulatory Framework
- 5. Fiscal Terms
- 6. Challenges
- 7. Opportunities
- 8. Way Forward
- 9. Conclusion

REGIONAL & GLOBAL OUTLOOK

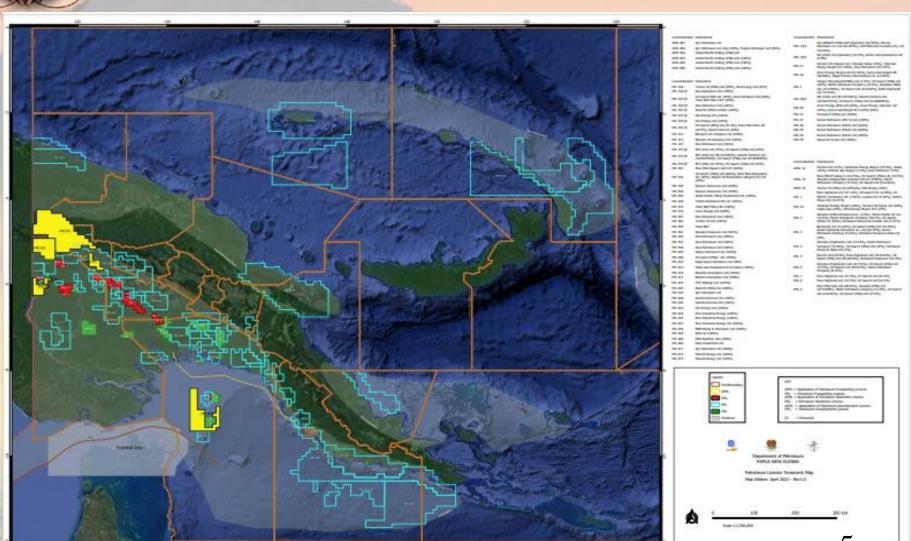
- Global Energy demand for Energy will increase, more so in the Asia-Pacific Region
- Fossil Fuel sources of energy dominance will continue throughout the coming decades and so will efforts in Renewable energy
- Climate Change initiatives are leaning towards renewables and cleaner sources of energy; Gas being the cleaner fossil fuel source.
- Mitigation strategies and technologies such as CCS /CCUS are now becoming a condition for petroleum projects development and financing.
- LNG demand will double due to it's convenience in transporting gas to the geography of the world and regions.



1. Overview of Petroleum Activities in PNG



Petroleum Licence Map_current





PNG Oil & Gas Industry

History:

- Petroleum was first discovered in 1911 in lower Vailala River area, Ihu, Gulf Province.
- 1986, a commercial discovery made, first oil flow commenced in 1992.
- Current production:
 - -Hides PDL1 (1991)
 - -Kutubu PDL2 (1992)
 - -SE Gobe & Gobe Main PDL3 & 4 (1998)
 - -Moran EWT PDL5 (1998)
 - -Gobe Main PDL4 (2002)
 - Southeast Gobe PDL3 (2003)
 - NW Moran PDL6 (2005)
 - Hides PDL7 (2014)



PNG Oil & Gas Industry cont'd

Upstream

- We have currently 47 Petroleum Prospecting Licences (PPL).
- That is a decline. From 2010 to 2019 pre Covid-19, PPLs were in in the range of 60 to 100.
- Currently we have 10 Petroleum Development Licences (PDL); PDLs 7, 8 & 9 are tied to the PNG LNG Project i.e Hides, Juha and Angore gas fields
- 4 Applications for Development Licence (APDL) are pending; They are APDL 12 (Ketu/Elevala Gas Fields), APDL 13 (P'Nyang Gas), APDL 14 (Pasca Gas Field) and APDL 15 (Elk/Antelope, Papua LNG gas fields)



PNG Oil & Gas Industry cont'd

Midstream & Downstream

- Oil, Gas and condensate pipelines dedicated for PNG LNG Project.
- Proposed Gas and Condensate Pipelines for the Papua LNG Project to commence construction in the coming year.
- Petroleum Processing Facilities in Kutubu, Gobe and Agogo.
- Gas Processing Facility in Hides (Hides Gas Conditioning Plant) for PNG LNG Project and 2 train PNG LNG Plant.
- Only one Commercial Refinery at Napa Napa outside Port Moresby with nameplate capacity of 32,500 barrels per day that supplies fuel products; diesel, gasoline, Jet fuel and LPG to the domestic market.



2. Regulatory Framework

- Primary Legislations & Regulation
 - Oil and Gas Act 1998 (as amended)
 - Oil and Gas Regulation 2002
- Policies
 - Petroleum Sector National Content Policy 2023
- Core Petroleum Regulating Agency
 - Department of Petroleum and Energy
 - The Energy Division separated into a new Entity, National Energy Authority with focus on Renewables, Energy and electrification.
 - The Petroleum Division now focuses on the hydrocarbon sector in licensing, regulating and administering the Oil and Gas Act, Regulation and Policies.
 - Currently both Department of Petroleum and NEA come under the Ministry of Petroleum and Energy.

Fiscal Terms

- Concessional Tax/Royalty system
 - 30% Corporate Income Tax for Oil and Gas Projects
 - We currently provide some incentives such as GST exemptions
 - 2% Royalty per wellhead value
 - 2% Development Levy per wellhead value
 - Other levies as negotiated and agreed in gas and petroleum agreements. Eg. 2% Production Levy in Papua LNG Project
 - Allowable tax deductions for Exploration and Capital Expenditures

Challenges



- Energy Security
- Climate Change
- PNG Energy Industry
 - Lack of access to energy; lack of infrastructure
 - Underexplored;
 - Lack of Data Access (Data Center)
 - High Cost of Exploration & Development; No synergy
 - Downstream sector;
 - Fuel & Energy Security
 - Institutional capacity of Regulator

Opportunities

- Global & Regional Demand for Energy projected to increase
 - PNG remains underexplored and has potential to supply the region's Energy needs
 - PNG has 'Political Will' to encourage onshore investments in Energy and has proven so in the past decades
 - We are a 'Gas country' and gas is widely accepted now as the cleaner source of hydrocarbon
 - Frontier oil & gas area with potential
 - Strategically closer to big energy Markets in Asia
 - Geologically proven petroleum plays and potential
 - Fair data coverage in some basins
 - Attractive Fiscal policy; promoting exploration
 - Up and coming major gas exporter in the region

Way Forward

Upcoming Projects

- Papua LNG first production 2028 at 6 million tonnes per annum (MTA)
- P'Nyang LNG planned for production in 2032. We anticipate a 3 MTA.
- Together with PNG LNG project, total LNG production is anticipated to be around 15 MTA in 2032 with potential upsides.
- Sub-commercial discovered Gas Fields
 - Aggregation and commercialization of our marginal gas fields to piggy back on the existing and upcoming mega projects' infrastructure and markets
 - Also for domestic market commercialization options
- Exploration
 - Synergize Exploration in the Papuan Basin, Gulf of Papua and northern basins, with focus offshore
 13

Way Forward cont'd

- Downstream Petroleum
 - Develop policies and regulatory framework
 - As per the Government's Medium Term Development Plan IV (2023)
 - 2027), work on policies etc on Downstream processing

Conclusion

- The Department shares the Government's Vision and we are willing to implement policies to achieve the set targets and goals in the Petroleum sector.
- Papua New Guinea has potential to be the next Petroleum and Energy hub of the Asia-Pacific Region;
- We aspire to make and facilitate more exploration and discoveries and supply the region's and our domestic energy and petrochemical needs for decades to come.
- We aim for all developments in this sector to be sustainable, embracing climate change mitigation factors and set targets and with minimal environmental footprint.
- The Government's targets are to achieve 70% access to electricity in PNG and 100% renewable energy by 2050.
- We invite all genuine investors to come to PNG and help us develop our energy industry