

“Utilizing Carbon-Free Energy Technologies/Policies to Expand Clean Electricity in APEC”

Papua New Guinea



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Outline

- PNG's Current Energy Landscape
 - National Energy Goals & Commitments
 - Carbon-Free Energy Potential in PNG
- Key Clean Energy Projects in PNG
- APEC's Role in PNG's Clean Energy Expansion
- Challenges Facing PNG
- Opportunities for Growth
- Strategic Recommendations
- Conclusion

H a r n e s s i n g E n e r g y f o r L i f e

Introduction

- ☐ Papua New Guinea (PNG) - A developing island nation in the Pacific
- ☐ Clean electricity is vital for sustainable development
- ☐ PNG is committed to APEC's clean energy goals

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PNG's Current Energy Landscape

- ☐ Over 80% of PNG's population live in rural areas with limited grid access
- ☐ Electricity access rate ~20%
- ☐ Dependence on diesel generators in remote areas
- ☐ Existing use of hydropower and geothermal resources

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National Energy Goals & Commitments

- ☐ Vision 2050 and National Energy Policy
- ☐ Electrification target: 70% of the population by 2030
- ☐ Supports SDG 7 and Paris Agreement NDCs

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Carbon-Free Energy Potential in PNG

- ☐ **Hydropower: Large untapped potential (e.g., Ramu River)**
- ☐ **Geothermal: High potential (e.g., Lihir Island)**
- ☐ **Solar: Abundant sunlight across the country**
- ☐ **Biomass & Wind: Emerging opportunities**

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Key Clean Energy Projects in PNG

- ☐ **Ramu 2 Hydropower Project (under development)**
- ☐ **Lihir Geothermal Power Plant**
- ☐ **Community solar mini-grids (ADB/World Bank supported)**
- ☐ **PNG Power rural electrification initiatives**

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APEC's Role in PNG's Clean Energy Expansion

- ☐ Technology sharing and partnerships
- ☐ Regional investment and infrastructure development
- ☐ Capacity building and technical training
- ☐ Climate financing and innovation support

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Challenges Facing PNG

- ☐ Geographical barriers and dispersed population
- ☐ High upfront capital costs for clean technologies
- ☐ Limited technical capacity and infrastructure
- ☐ Climate vulnerabilities (e.g., rising sea levels)

Opportunities for Growth

- ☐ Expand public-private partnerships
- ☐ Develop localized renewable energy systems
- ☐ Leverage carbon markets and green finance
- ☐ Engage communities in sustainable energy planning

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Strategic Recommendations

- ☐ Increase regional cooperation within APEC
- ☐ Mobilize financial resources for remote energy access
- ☐ Promote innovation in off-grid clean technology
- ☐ Strengthen institutional and policy frameworks

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Conclusion

- ❑ Clean energy is critical for inclusive development in PNG
- ❑ Carbon-free technologies offer sustainable and scalable solutions
- ❑ APEC's support is essential to drive PNG's energy transformation

**Thank you for your
attention**



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