



Cattle Grazing Under Eucalypt Plantations

SUSTAINABILITY

Environmental

The project will meet the highest world recognised environmental standards.

Economic

The project will be financially secure for all participants and require no subsidies or grants.

Social

The project will provide social benefits and improve the well being of local people through improvements in employment, business opportunities, health and education.



Biomass Power Station, Scotland

ALL BENEFITS STAY IN PNG

- Provides energy independence for PNG
- Owned & operated by PNG companies
- Generates >500 direct & >3000 indirect jobs
- Based on 30MW ultimately the project will save over 10million barrels of oil over 20 years and more than 200,000 tonnes CO2/year
- The Project will be a major PNG taxpayer.
- It will support economic and social development in the Morobe province
- Demonstrates PNG's commitment to sustainability and will significantly enhance PNG's reputation internationally
- Provides the foundation for doing similar projects within PNG to expand electricity for remote regions
- It will be a iconic project that with make PNG proud

LOW COST SECURE AND SUSTAINABLE POWER

- The project is very competitive against fossil fuel alternatives
- Power prices will be stable and not influenced by increasing oil prices
- While people need power and trees grow the power plant will operate.
- Will Improve farming opportunities

PNG BIOMASS



CONTACT US

Mr Francis Kabano (Oil Search)
+675 322 5599 | francis.kabano@oilsearch.com

Mr Garry Townley (Aligned Energy)
+675 7301 7347 | garry.townley@alignedenergy.net

TOKSAVE

Power for the People
by the People



PNG Biomass Plantations in the Markham Valley

DEVELOPED BY PNG'S LARGEST COMPANY



Oil Search Limited is PNG's largest company. A partner in the PNG LNG project, operating in PNG for over 80 years. Committed to PNG's Development and Community Wellbeing



Aligned Energy Limited a company dedicated to sustainable power in developing countries with access to world class professional team

A WORLD CLASS ICONIC PROJECT

- Internationally certified 100% sustainable
- Reduces power costs and provides stable power
- Once operating will be 100% PNG owned
- Creates massive employment opportunities
- No negative environmental impacts
- Enables landowners to access more areas for food crops

SIGNIFICANT LONG TERM BENEFITS FOR LAND OWNERS AND LOCAL BUSINESSES

- Secure landowner benefits - Survey and registration of land with formation of ILGs at no cost to landowners
- Project will be one of the largest employers in Morobe Province
- Provides secure base-load power for businesses, schools, hospitals and other amenities
- Long term secure lease and royalty payments
- Creation of new business opportunities
- Creates long term opportunities for local children
- All jobs to transition to local people
- Removes reliance on overseas companies and fuel imports
- Keeps the money in the local economy
- Opportunity to expand local food gardens
- Potential for cattle grazing in older plantations

PROJECT LOCATION

The project is located in the Markham Valley, Morobe Province of Papua New Guinea. With the plantations established between Lae City and Water Rais.



Bampu Community Nursery

SIMPLE AND PROVEN PROCESS

- Trees are grown on underutilised land and harvested and taken to the power station.
- The trees are turned into wood chips and fed into a boiler which uses the heat to make steam at very high temperatures .
- The steam spins a turbine and generator to make power, which is then fed into the transmission lines.
- Water from the river is used to cool the steam and the cycle continues
- The process can go on indefinitely and does not rely on imported fuels or manpower, *ie it is 100% local*



PROJECT IS READY TO GO

- The JV has invested significantly over 4 years developing this project
- >150,000 trees have been planted in 16 separate locations in the Markham Valley
- A world class tree improvement program has been established in partnership with PNG FRI
- Government has been briefed at all levels
- Project has full support from PNG Office of Climate Change, PNG Forest Authority and Department of Agriculture
- Project requires initial 15MW power contract from PNG Power to commence
- Project could begin development in 2015 with rapid government signoff