

EXECUTIVE SUMMARY

Lack of infrastructure and supporting facilities is one of the inhibitors to increase the economy and standard of living in the eastern part of Indonesia that has abundant economic potential. Low electrification ratio make it difficult to realize a variety of economical improvement programs on there.

Various conventional power plant projects that had been done by the government through PT. Perusahaan Listrik Negara (PLN) in increasing electrification ratio are still largely based on oil, gas and coal in the large scale which causing the investment and operating costs increase if applied in Eastern Indonesia. In addition to its lack of availability of raw materials to be used by each power plant, geographical factors and population distribution that scattered leads to those high costs.

It's time for an alternative solutions in the supply of electricity in Eastern Indonesia that tailored to geography and population patterns and it will be better if that solution also maximizing the use of best local resources in raw materials and human resources.

Several alternative solutions based on renewable energi such as wind, micro hydro and solar systems in the technology terminology are not new things in Indonesia and have often attempted but the implementation results are mostly with failure or short-lived. Some of them caused the project feasibility analysis is less mature and not involving the local community that directly related to the electrification project in the planning stages. It makes the readiness analysis of local resources both human resources and supporting industries is incomplete (probably not even exist). And finally it giving rise to many problems after the project is handed over.

Investment on power plant based on renewable energi generally requires higher value compared to conventional power plants so that the various potentials that exist are often overlooked. That's why our business plan is structured to provide an overview of an implementation of the investment feasibility of small-scale power plants (up to 10 MW) using renewable energi sources with the most potential sources of a region in Indonesia and involves some variety of factors and supporting elements which owned the area. Community development patterns we use in this business to embrace the various elements and factors in the area in hopes to better ensure project sustainability and future business.

This business plan will be realized in the form of a limited liability company named PT. Alternative Power Nusantara (PT. APN) with initial site selection was in Merauke using wind power as a primary energy source. This selection was referred to the Cost of Goods Provision (Biaya Pokok Produksi/BPP) that created by PLN Branch Papua in 2008, mostly diesel-based, determined in the range of IDR 2.526/kWh to IDR3.192/kWh. While the purchase of renewable energy-based electricity by PLN according to Regulation of Minister (Permen) ESDM Number 31 at 2009 only IDR1.506/kWh for Maluku and Papua areas. And the launching of Merauke as one of the food estate area by the government recently estimated will further increase the demand for electricity as one of the agribusiness industry infrastructure supporting the next few years which will further add to the electricity subsidies due to high ofelectricity BPP in Merauke.

We ensure our business plan in the form of a small scale of wind power plant with NPV IDR 6,8 billions, IRR 20,40% and payback period 6,85 years will not only benefit to the share holders but also PLN as our main consumers. And we also promise are newable electrical energy supply solutions that are continuous and more secure in availability and proven on the environmentally friendly.