

“Developing Indonesia's Alternative Energy: Policy and Practical Implications”

An Open Forum with

Arian Ardie

COO of Terrasys Energy and Strategic Risk Consultant

February 25, 2011

On February 25th, USINDO hosted an open forum with Arian Ardie of Terrasys Energy to discuss renewable energy development in Indonesia.

Despite being the largest economy in ASEAN, Indonesia still has one of the lowest per capita consumption rates of electricity in the region, consuming only 55.3 megawatts per year. Recurring blackouts continue to plague Indonesia with some regions suffering from an average of 5 hours a day without electricity. While there have been improvements, they have been concentrated in Java. The poor state of the electrical system is due to a legacy of under-investment by the state-owned electricity company (PLN) and other independent companies, which was exacerbated during the 1998 crisis. Only within the past 4 to 5 years have independent players returned to the market place.

Ardie asserted that Indonesia needs to double its power generating capacity over the next five years to keep up with demand. The majority of this new power generation will come from coal.

supplemented by geothermal energy and hydro-power. Investment in electricity will be focused on generation, with small percentages of investment allotted to transmission, distribution, and renewable energy.

Although the Electricity Law of 2009 successfully devolved authority to the district level, it has not addressed core regulatory issues. The role of PLN is ambiguous; currently they act as a producer, distributor and regulator, which causes unavoidable conflicts of interest.

Other government initiatives have helped improve the investment environment, such as a definite pricing schedule for independent power projects less than 10 megawatts and financial incentives for renewable energy established by the Ministry of Finance.

The Negative Investment List now allows for investment in projects less than 10 megawatts; however, it is still undefined what role small and medium sized businesses must play in partnerships with larger companies in

order to get approval. Terms surrounding purchase power agreements are still vague, and there is a lack of coordination between ministries in the government on regulations and implementation of the new law.

In the private sector, Ardie said, a funding gap has emerged, which poses an additional challenge to investment in energy. Investors prefer to invest in low-risk large-scale projects, which has left a scarcity of venture capital for early-stage project development.

Finally, issues with the project tendering process, uncertainty in the Environment Law of 2009 regarding renewable energy projects, and land rights issues continue to hinder development.

Ardie outlined recommendations for the Government to help spur energy development. He suggested developing a comprehensive investment framework for renewable energy that includes tenure, pricing, and incentives. He also recommended a national renewable energy inventory, increased accessibility to spatial plans, a carbon footprint inventory, and the development of a payment guarantee or insurance policy for investments. All of these steps will ensure progress in the development of renewable energy by providing incentives and clear investment options.

Q and A session:

Q. What is the potential for solar energy in Indonesia?

A. Solar is still quite expensive on a megawatt basis and is difficult for PLN. For example, it would be hard for them to charge per household and difficult to

figure out how to distribute it. In eastern Indonesia, there has been a large push for solar cookers, but that has not expanded to the rest of the country. In Indonesia, we do not have the intense sun light needed for geo-solar energy so while the potential is there it has been limited to small scale off the grid development coming from aid projects.

Q. What should a geo-thermal company looking to enter the Indonesian market look for or be knowledgeable of?

A. The biggest challenge to entering the Indonesian market is nailing down a project. The tendering process is not transparent and corruption has stopped several projects from moving forward. Another difficulty is obtaining a geo-thermal drilling license which can have an unclear process.

Q. On the corruption issue you have mentioned, did the government set up any measures for people to go to a secondary authority to complain?

A. No, corruption is one of the biggest risks or challenges for companies. As a company, you can get around corruption by doing as much research and investigating below the radar as possible in the region in which you want to invest. Many local governments also understand that roads and power are the top deliverables for voters so they are willing to cooperate with companies to achieve development.

Q. With a change in the administration in Indonesia, is there a risk they'll be a significant change in approach toward energy development?

A. I think there is as much risk of change in the U.S. as there is in Indonesia. Since Indonesia lacks a clear energy policy, like the U.S., the focus is on demand and need to get power going. Therefore, whoever is running the government, there will still be a need to develop power.