

Powering Indonesia's Rural Development Impact Investing in Mini Hydropower

Indonesia is a vast country of more than 17,000 islands and home to over 250 million people. Its geography and disparately located population present significant challenges to the government as it seeks to ensure that all citizens enjoy the benefits of economic growth rates that are the envy of most western nations. Not least of these is the provision of reliable and affordable electricity. In efforts to meet this challenge, and to reduce its dependence on fossil fuels, the government is committed to increasing the share of renewable energy to 25 per cent of primary energy supply by 2025. As of 2010 renewable energy, including hydropower still made up only 6.9 per cent of the nation's energy mix.

Over 80 per cent of the 70 million Indonesians who lack access to a reliable electricity source live in rural areas. This village is powered by small-scale hydropower



Over 70 million Indonesians (more than the population of the United Kingdom) do not have access to a consistent electricity supply. The State Power Company, PLN, is increasing electrification rates by expanding the national grid but to do so it must overcome difficult terrain, rising costs and a history of corruption which has resulted in jail terms for many senior executives, including the former President Director. PLN is working hard to shake-off its reputation as a dubious state-owned company and in contrast to previous management, the current President Director, Nur Pamudji, was recently awarded the prestigious Bung Hatta Award for his efforts to promote transparency and integrity at the energy giant.

Current energy business models rarely result in investments in rural small-scale renewable energy production because of high perceived risk and the difficulty of identifying and developing new projects.



Programme participants visit a small scale hydropower project being developed by IBEKA in West Java

To overcome these challenges participants on GIFT's 33rd Global Leaders Programme developed a new business model which reduces risk through co-ownership with communities and leverages award-winning NGO IBEKA's healthy pipeline of projects around the country – the new company, *NusaTerang*, also takes a groundbreaking approach to factoring in the true cost of valuable natural resources by paying for their eco-system services.

For over 20 years the People Centered Economic and Business Institute (IBEKA) has used small-scale hydropower as a means to promote community development and economic empowerment. They have completed 66 community-owned projects across the country. IBEKA has been instrumental in shaping renewable energy policy in Indonesia and Executive Director Tri Mumpuni lobbied three successive energy ministers to allow small-scale energy producers to sell their power back to the grid. Today PLN is obliged to purchase small and medium-voltage power from IPPs, providing a Power Purchase Agreement (PPA) is in place.



IBEKA's Executive Director and Ramon Magsaysay award winner Tri Mumpuni speaks to the group in Hong Kong

In October 2013, 22 executives from ten countries and fifteen organisations including BASF, DBS, MasterCard, NEC, Origin Energy, ORIX and others arrived in Hong Kong for the first module of the Programme. In the following five days they explored the opportunities and challenges presented by globalisation and analysed the changing roles of business, government and civil society in the 21st century. Participants were encouraged by GIFT and guest speakers to challenge business orthodoxy and critically examine the drivers of change across many of Asia’s dynamic emerging markets.



L to R: Hang Lung Chairman Mr. Ronnie Chan shares his views on leadership; Senior GIFT mentor Prof. Hideaki Takahashi on why positivity is integral to high performance teams; GIFT’s head of programmes Karim Rushdy leads a discussion around ethics; Participants from Japan, Indonesia, USA, Malaysia and Hong Kong

For the second Module the group travelled to Indonesia, where they first visited the remote capital of the Kasepuhan Kingdom in Mt. Halimun National Park, West Java. Known for their iconic rice storage huts, the Kasepuhan people, who have inhabited the area for over 700 years, lead a lifestyle which revolves around indigenous customary law and agricultural practices. IBEKA has worked with the Kasepuhan on a number of community-led small-scale hydropower projects, helping them to establish a community cooperative that owns and manages the various plants.



The Kasepuhan’s iconic rice storage huts dot the landscape of Mt. Halimun National Park

Participants met with local residents and community leaders to better understand how access to electricity and the income generated by selling power impacts their livelihoods. The group also saw an IBEKA-initiated plant that was under construction. As during every stage of IBEKA’s projects, the local community was actively involved, providing labor and other inputs in exchange for eventual ownership of the plant.



Participants discuss the traditions of the Kasepuhan with current and former “cabinet” members of the local government



PLN President Director Nur Pamudji addresses the group in Jakarta

Back in Jakarta the group worked late into the night to build out their ideas in preparation for a forum where they would present their recommendations to local business leaders and potential investors. They were treated to an intimate discussion with PLN’s President Director Nur Pamudji who expressed a keen interest in offering preferential tariff rates to IPPs producing renewable energy and actively engaging the community in the project.



Dennis Chang, Head of China for MasterCard Worldwide introduces the NusaTerang business model at the final forum in Jakarta

The final forum was attended by investors, renewable energy companies, local business leaders and representatives from PLN. The participant's presentation offered highlights of the full business plan (below) and led to a lively discussion around impact investment, the true economic value of natural resources, and rural development and electrification – two issues which remain high on the list of national priorities not only in Indonesia but throughout Asia.

Highlights of the NusaTerang business model:

- Leveraging IBEKA's experience, expertise and national network of rural communities to lower risk and keep a healthy pipeline of projects;
- Engaging local communities throughout the project period, offering them a stake from day one, with the eventual goal of 100% ownership by the community;
- Seeking to secure premium tariff rates from PLN by actively involving the community and conserving valuable natural resources by paying for their eco-system services;
- Aiming to raise US\$30 million to fund five projects totaling 15MW, have a rate of return around 5.5 – 6.5% (base case without preferential tariff rates for selling power), and provide approximately US\$500,000 p.a. to local communities for social and infrastructure development projects.

View the full NusaTerang business plan created by participants by visiting the GIFT website. For more information contact Karim Rushdy at GIFT, krushdy@global-inst.com or Tri Mumpuni at IBEKA, tri.mumpuni@gmail.com.



The 33rd Global Leaders Programme team with the King and Queen of the Kasepuhan Kingdom

The Global Institute For Tomorrow (GIFT) is an independent pan-Asian think tank providing content rich and intellectually challenging executive education from an Asian worldview. GIFT is dedicated to advancing an understanding of the impacts of globalisation through thought leadership and positive action to effect change. www.global-inst.com

The People Centred Business and Economic Institute (IBEKA) is an Indonesian NGO promoting community development via the provision of local energy, mainly hydroelectricity. A core principle of all its work is to develop human resources as well as physical resources. <http://ibeka.netsains.net/>