

# **Constraints for IPPs in developing Mini Hydropower Projects in Indonesia**

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## Current Situation:

- Legislation introduced over the past 10 years has created a mini boom in MHP projects
- Potential is there but many of the projects have experienced difficulties in fulfilling expectations
- To identify the main problems a study of 7 IPP MHP projects was conducted to assess the main barriers experienced
- Their projects ranged from 0.5 - 8 MW and were located in 5 different provinces in Indonesia

## Provincial and District Government:

- The general feed back was that district governments were constructive and supportive of their projects
- The introduction of “single window” (Pusat Penanaman Modal dan Perizinan Terpadu PPMPT) at district government level is very positive
- The most complicated aspects of project development is the issue of land acquisition

## PLN – post 2009:

- PLN is familiar with the new legislation and is adopting it without negotiation for new projects
- Post 2009 projects all have tariffs as per the ministerial regulation indicating full compliance from PLN & PPA contract periods of 15 – 25 years
- The majority of IPPs stated administrative arrangements with PLN were uncomplicated and PLN were constructive

## PLN – pre 2009:

- Pre 2009 projects all have tariffs <IDR 500 / kWh pre-2009 tariffs are on average half the currently agreed levels
- A new ministerial decree issued in 2014 (Permen No 12 (& 22)) which provides the basis for a correction to existing tariffs
- A regular complaint from operating IPPs about PLN is the quality of their grid and the implications this has on capacity factor of their plants, can be significant !

## Financing Institutions:

- Some larger banks already having a portfolio of projects (Bank Bukopin, Bank Mandiri), however, they don't have MHP specific programs
- The maximum loan to equity ratio banks consider is 70 – 30 with average grace periods of 2 years and interest rates between 11 – 13%
- Finance to cover Interest During Construction (IDC) obligations can be made available if required
- Feasibility Study (FS) and Bill of Quantity (BoQ) for projects are assessed by external consultants

## Financing Institutions:

- The project must be built on land legally owned or leased by the developer and loans cannot be used for financing FS or the purchase / acquisition of land
- Collateral must be provided in the form of firm assets (e.g. property) or cash deposits
- Disbursement of loan is made in accordance with progress of construction
- Verification of progress is made by external consultant contracted by the bank at the cost of the borrower

## Financing Institutions:

- Due to time & cost overruns, borrowers may need to deposit 20-30% of total cost with bank (Bank Bukopin)
- Syariah banks may be more compatible than conventional banks for MHP projects as they see themselves more as a stakeholder within the project
- ALL projects experienced cost and time overruns, in some cases these were significant
- Time overruns are most feared most by developers because loan disbursement is linked to site progress consequently on going accrual of operational costs without disbursement of loan funds results in liquidity problems for the developer



## Third party interventions:

- The majority of projects had a CDM agreement with a third party company (company arranging the sale of CERs)
- The concept of a “guarantee fund” was what the IPP community would like to see from int. organizations
- This concept has been explored by World Bank, AFD (France) and Pusat Investasi Pemerintah (PIP) but so far no projects have materialized as a result

## Conclusions:

- The process of securing IUKU at ESDM in Jakarta is relatively straight forward
- The new legislation introduced in 2009 and more recently in 2014 is having an impact in creating a financially attractive investment environment for IPPs
- PLN is embracing the program and is constructive in supporting IPPs, however, clear lines of authority are still missing regarding decision making
- Some Indonesian banks are already financing MHP projects following conventional approaches to lending

## Conclusions:

- A number of banks already have “burnt fingers” with financing poorly prepared projects, not a good situation
- There are currently no special lending programs existing for MHP or other RE projects
- Stringent lending conditions means that only companies having strong financial sponsors can secure loans
- Still difficult for small companies with limited resources and collateral to secure a loan for a MHP project
- So far no third party initiatives have had any tangible impact improving access to finance for developers
- There have been efforts to set up guarantee funds but so far no achievements have been reached

## Recommendations:

- To support MHP development, organizations should focus initially on smaller size projects to develop workable models and then move to larger scale (eg.< 2MW)
- Don't over complicate support programs, follow proven implementation and engineering models !
- Incorporate TA packages for developers at initial stage, current project preparation is mostly not good enough
- Explore innovative implementation models, for eg. so far there are no examples of local govnt. involvement, why ?
- The current level of success of support programs implies a re-assessment of approaches needs to viewed....