

Manual for the IPP Checklist

Introduction

This manual is intended both for the ATI underwriters, for IPPs and sponsors who consider applying for political risk and liquidity risk cover, and for government and utility specialists who need to understand how insurers look at government and off-taker risks. It is primarily meant for the Regional Liquidity Support Facility (RLSF), but to a large extent it will also be valid for the other insurance products that ATI offers to IPPs, e.g., termination, currency inconvertibility and expropriation risks.

It gives guidance on how ATI looks at the risk related to power projects and how it takes a decision whether and/or at which conditions it can insure a project with confidence.

It is not a scoring system, it just gives the main considerations that will play a role for each checkpoint. The manual is definitely not complete and other factors that are not mentioned here can also play a major role. Depending on the type of renewable energy and on the entire set-up of the project the priority of factors may vary fundamentally.

Experience of the Investor

1. Experience of the developer with the technology and developing projects

A new power production facility is always different and the development never goes entirely according to the book. Especially in the renewable energy space the technology evolves very fast, and the natural resources don't always behave as intended. The level of risk varies greatly according to the technology, with geothermal and large hydro probably being the most challenging and small scale solar the easiest – but there is always risk and it is important to have a developer who understands how to manage unexpected problems.

The same applies to the management of the project and the respect of the timelines. Time is money and as a project gets delayed for whatever reason the whole viability of the business plan can be challenged.

Our experience is that unexperienced developers, as we find them quite frequently among small scale humanitarian projects, face many problems that likely could have been anticipated and mitigated upfront, and drive the project to a dead end.

2. Experience of the developer with IPP's in Africa / this particular country

The experience from Europe or US cannot be transferred as such. On average it takes at least one year more to achieve financial close in Sub-Sahara African countries than in developed economies. Many African countries have limited experience with IPPs and the

regulatory and legal framework is not mature. It is difficult to find experienced competent professionals in the ministries to talk to. There is often a lack of communication. At times, there is even competition between different governmental institutions within one country. Personal relations matter more, and so do regional and tribal issues. On top there is a culture of bribery and corruption in most countries at many levels – essentially people ask to be paid for what they should do anyway. Without the right experience and know how projects can stall indefinitely.

3. Local Partner Strength

Many promoters opt to work with local partners, who have the right connections at national and local level and/or own the land or other assets that are needed for the project. Alternatively, it is the other way around and a local company that has some of the resources tries to attract a foreign shareholder with the technical experience and cheaper funding. It is important to assess the track record and the professionalism of the local partner and understand the added value he will bring. Our experience is that very often the interests are not aligned and the local partner tries to take control over the project even if he is a minority shareholder. The problem-solving abilities of the local partner are often less impressive than thought.

Financial Viability

4. Project Return at Attractive Levels

The financial viability is important and the financial model has to contain sufficient buffers against adverse events, otherwise it will be difficult to find funding or resources to complete the project. The risk is likely higher in countries where the feed-in tariff is replaced by an auction system and the prices are driven down to very low levels.

If financial strains cause delays or problems to complete a project, or unplanned changes in the project design occur, a number of contractual obligations with off-takers and governments can lapse. This can generate disputes and strained relationships with contractual partners on the government side. Many claims that we have seen reveal a very complicated exchange of claims and counterclaims and in the end an arbitration is the only way to resolve them.

5. Equity Sourced

Most lenders will insist on roughly 30% equity. Small promotors will spend most of their initial investment in feasibility studies, land acquisition, going through the licensing and PPA negotiation etc. If the positive result does not come as fast or is not as positive as expected it will be a problem to find additional capital. When they approach ATI for cover at this stage, we can confirm our interest in principle, but commitments can only be made once the project set-up is finalized. Very often ATI is seen (and used) as an argument to convince potential investors about the quality of the project, while this is not our role. ATI will also set a number of conditions to its cover that are not easy to meet at the beginning of the project.

6. Debt Secured or Letter of Confirmation from Lender

Many promotors find it difficult to find funding at the cost that they expect, and this phase can trigger significant delays. On top most banks will set "conditions precedent" that are hard to meet and "chicken and egg" stalemates occur where the PPA will only be signed if the financing is assured and the banks will only lend if the PPA is signed. This type of problem can delay the financial close significantly, while other contracts (e.g., with suppliers, contractors, leasing companies) that may have been signed can have deadlines and cancellation options. For these reasons ATI prefers to move beyond an initial non-binding indication only if the complete funding is in place.

The loan conditions themselves are also part of ATI's assessment. Many financiers invest in African infrastructure projects because they expect extremely high returns. Disproportionally high interest rates, acceleration clauses and other conditions can affect the resilience of the project.

7. Business Plan robust and Thought Through

A business plan typically has to anticipate all the factors that can change over the time of the project and develop reasonable buffers or risk mitigants. This includes liquidity risks, currency exchange risks, performance risks, environmental and social risks, transmission risks, logistic issues, political risks etc. Again, less experienced investors may overlook or underestimate some of these. If they get unnoticed, problems may arise at any point in time during the life span of the venture. If they are discovered before financial close they can cause significant delays. One single problem can trigger many others. For that reason ATI will carefully review the business plan and test it according to its own criteria.

8. Creditworthiness of the off-taker

Eventually the cash flow and the profit of an IPP comes from the money it gets from its (usually unique) client. The client is usually a public utility that will enter into a power purchase agreement with the IPP. Most offtakers have a weak credit rating. Very often they are forced to sell power to the end-users at subsidized prices. Many don't have the capital to upgrade their infrastructure, cope with illegal tapping, and/or have problems to be paid by their larger end-users (very often other government entities). Therefore, there is a real risk that they won't be able to pay their suppliers on time and in some countries the delays exceed one year. This is one of the risks that ATI can cover and it will be a main point of concern, since it is a direct trigger of claims.

9. Complexity of The Project and the Technical Layout

Each technology comes with its own challenges and these will affect the time that the IPP needs before it can start operating. Projects like large hydro and geothermal IPPs are extremely challenging while small scale solar projects are often very straightforward. When ATI issues a preliminary non-binding indication the assessment of technical risks will be mentioned as a condition to bind the policy. The first and one of the most important duediligence questions is whether the project can be completed on time and on budget (completion or construction risk). Other technical risk components include planning risk, risk of cost overruns, risk of process technology, environmental and transportation risk.

10. Technical Layout Defined

At the time that ATI starts its full underwriting it is expected that all technical problems have been identified and addressed, that the permits have been issued, that the insurances are in place, that the land has been secured, the site is accessible, the equipment will be available, etc. Normally, the due diligence on the technical aspects of the project will have been done by or at the request of the lead financier and ATI will expect to receive a copy of the project information memorandum that covers these. It does not expect to do anything else than validating the work that has already been done.

11. Grid Impact Assessment

ATI's first concern will be the availability of the transmission line to connect the IPP to the grid. If the transmission requires way leaves, expropriations, identification of the rightful owners and subsequent negotiation the delays can be significant. When the transmission line has to be built by a different entity than the off-taker (e.g., Ketraco vs. KPLC in Kenya) there can be a lack of synchronization of the projects. In all cases the budget for the construction of the transmission line can be an issue, even if it is donor-funded.

The other concern is the capacity of the infrastructure. The type of renewable energy can affect the investments to be made on the electricity network to maintain safe operations, and on the leveled costs of electricity.

12. Resource Assessment

Ideally the availability of water, sun, wind or steam has been measured over several years and verified by an independent consultant, and guaranteed at 95% at least. Even then the business plan has to foresee a buffer that ensures the viability of the project if the resource is below expected levels for a significant period.

The impact of climate change has to be considered as well, and not only for hydro power. Man-induced changes in the natural environment can also have an impact.

13. Identified Competent EPC Contractor / Equipment Supplier

30 to 50% of the IPPs face technical and financial problems during the design and construction period and the experience of the contractor can significantly increase or reduce the problems that are mentioned elsewhere in this document. This is a competitive market and large projects have been in trouble because of the financial problems and even bankruptcy of the contractor (or subcontractor). Especially contractors with liquidity problems will be very aggressive in their bids because they need the advance payments to continue their operations. An additional problem in Africa is the scarcity of skilled labor and unexperienced contractors may not anticipate this sufficiently.

14. Logistics (including transport)

Many renewable projects are located in remote areas and the implications have to be well understood: recruitment, housing and catering of staff, transport of materials, availability of water and power. In several countries the clearing of imported materials and equipment at the port of entry can be a problem.

Environmental and Social Assessment

15. Environmental Risk

Most RE IPPs intend to manage the environmental impact carefully. Unfortunately, the consultants who will typically prepare the assessment and mitigation measures are not always up to standard. Especially when DFIs (Development Financial Institutions) are involved in the financing the assessment may be complicated and cause delays. Different DFIs may have different standards and combining and accommodating them will complicate the life of the IPP.

ATI follows broadly the IFC standards and will carefully review the studies that have been made without adding another layer of due diligence, but depending on the rulesof its own sponsors (e.g., EIB, KfW) its requirements could vary slightly.

16. Social Risk

We have seen significant problems, delays and even complete failure (Kinangop) of good projects due to unforeseen social issues. These are not always "fair". Political motives and selfish interests of local leaders can play a role, as do the actions of some NGOs. Again, the quality of the consultants used can make a difference.

The impact of a big construction project on the local population and their perception of the differences in treatment between the workforce and their own living conditions can cause major problems.

17. Awareness of the Developer

Some investors see the environmental and social impact assessment more as an expense and a formality. Most initial assessment reports will mention mitigation measures and recommendations for further monitoring and ATI will follow up on these. Negligence can result in the withdrawal of cover and strong responses from DFIs and the banks that adhere to the Equator principles.

Regulatory Environment

18. PPA Agreed / Signed

The finalization of the PPA is an important milestone for every IPP, and it is often a condition to unlock funding and attract investors. The negotiations can be very protracted. We also have seen authorities delaying the signature because they are unsure of the utilization of the power that is generated. For ATI it will be difficult to do a full assessment of a project if the PPA is not finalized.

19. Quality of the PPA

There are a number of pitfalls that have to be avoided in order to make the PPA bankable and insurable. They include the decision on the law that is applicable, the definition of force majeure, the "take or pay" clauses, the settlement of disputes, the termination agreement, the mechanism for future price adjustments, the management of currency exchange rates. ATI

will look at these in detail, and even more so for the RLSF as it wants to avoid that the LC is called while the off-taker has the right to cease payments, even for "frivolous" reasons.

20. Procurement rules followed (Auction, FiT or direct negotiation)

The more transparent the process for deciding the tariff, the better. Especially in case of direct negotiation the risk always exists that after a change in government the new authorities will claim that the deal was rigged and that therefore they can change or cancel the agreement unilaterally. ATI will in that case be very careful in its assessment of the business plan and the rationale for the agreed tariff.

21. Track Record of The Country With IPPs

Countries that have just embarked in the privatization process are at risk of working with an inconsistent or ambiguous legal and regulatory environment that can lead to future disputes and potential claims.

In a period of fast technological developments that drive the cost of production down, there is a high probability that future tariffs will go down. The future Government, 5 years down the road, can then ask why it should still pay an excessive price. The track record of the country is also important to assess the way the country will manage existing contracts with relatively high tariffs that have been committed for a long period of time.

22. Legal Framework (and its implementation)

ATI will assess the legal environment in which an IPP operates and the potential impact of anticipated changes on the viability of the company. There are many legal issues that can affect the long term sustainability of an IPP, on top of those that were already mentioned. They include the tax regime (and exemptions), the status of the off-taker (and the potential impact of a privatization or unbundling), the (changing) rights of local and regional authorities, restrictions on foreign ownership, etc.

The way the tariffs for end-users are set is extremely important, as many utilities are forced to sell the power at tariffs below cost and this can be a direct trigger for default.

Long-term Economic Sustainability

23. Cost Reflective Tariffs

Quite simply, if the IPP makes too much profit it will tempt the authorities to reduce the tariffs. If the IPP struggles to make profit there is a risk that the production will be affected and that the terms of the PPA will be breached. This in turn can lead to disputes and eventually claims under the RLSF.

24. Country Tariffs vs. PPA

This is a slight variation on the previous paragraph. Countries that have a very low cost of power because the initial investments have been completely written off –as can be the case with large hydro projects- or because the domestic fossil resources (gas, oil) are factored in at subsidized rates, will be more reluctant to accept a higher tariff even if it is cost reflective;

Since the cost of renewable energy is expected to go down, and very large infrastructure projects (Inga 3 in DRC, Koysha Dam in Ethiopia) potentially will generate exports of cheap power to the neighboring countries, PPAs that are "generous" will inevitably come under scrutiny.

25. Overall Country Risk

Besides the power specific considerations, the status of the country as a whole is an important factor: political stability, amount of forex reserves and the related inconvertibility risk, currency exchange fluctuations (especially if the utility is paid in local currency and has to pay the IPP in hard currency), risks of terrorist attacks, the sustainability of the national debt, the dependency of the country of donor funding for its budget.

Support from the Host Country

ATI draws comfort from its preferred creditor status and its special relationship with the governments of its member countries to take risk that the private market would normally reject. For that it must be sure that the recourse mechanisms that are described in its contractual agreements effectively work. The challenge with IPP projects is that (1) the risk is on the utility, usually a semi-autonomous parastatal entity where the government may not see its direct responsibility. And (2) the contracts cover a long period that may see several changes of government. For these reasons the formal support for a transaction, and at different levels, is important.

26. Support Received from MoF

By default ATI will expect that the IPP gets a guarantee from the Ministry of Finance. This is the standard in most African countries. Over the last years Governments have become more reluctant to do so, because guarantees add to the national debt that is closely monitored by the IMF. A strong letter of comfort can be an acceptable alternative, depending on the country and the wording used.

Independently from the comfort that the IPP will get, ATI will also engage the MoF, which is its contractual counterpart. The minimum requirements will vary from case to case, but they can include

- A direct reference to the role of ATI in the PPA
- A separate letter of comfort given to ATI
- A letter of "no objection" with a specific reference to the obligations of the Government towards ATI
- A memorandum of understanding signed by the MoF. The Ministry of Energy and the offtaker that confirm the government support to ATI's initiatives in the energy sector.

The weaker the projects scores on the factors described above, the stronger the commitment has to be.

27. Support Received from the Ministry of Energy

ATI's experience is that if an energy related transaction runs into trouble and ATI engages the MoF, the Minister will ask for clarification from the Minister of Energy. For that reason it is important to have an evidence that the Ministry of Energy was aware of and supported ATI's role.

28. Support Received from the off-taker

Eventually the risk that ATI takes with RLSF is on the off-taker and in case of problems that will be the first port of call. Especially with RLSF ATI replaces the cash collateral requirement that normally the utility has to provide. The utility has to appreciate the support it gets this way and in return commit to give a priority to its obligations.

One of the features of the RLSF is the set-up of the "Transparency Tool".

ATI is convinced that the liquidity risk that justifies the request for the collateralized LC is often more a perceived risk than a real threat to the IPP.

In order to correct this perception the RLSF project will develop a web based platform where IPPs will report the actual payment made by the off-takers, and the actual aggregate performance of each utility will be made public. Part of the support mentioned above will include the agreement of the off-taker to make such payment data public.

Conclusion

The ability of ATI to insure an IPP will largely depend on the rating of the factors mentioned in this document. In the end the decision is taken by the management of ATI.

The full underwriting will require a comprehensive documentation, including (but not limited to)

- The technical feasibility study
- The business plan
- The PPA
- The Implementation Agreement
- The Government guarantee and support letters
- The environmental and social impact assessment
- The term sheet of the bank
- The profile of the EPC contractor and the main subcontractors

In principle ATI does not wish to have access to the data rooms.

Annex: Checklist

RLSF		
IPP Pipeline Assessment	Iraft May 2017	
Inderwriter		
Prospective Client		
Country		
Name of the project		
Technology		
Nominal capacity (MW)		
Total project cost (\$M)		
Expected date financial close		
Expected date of Commercial Operation		
Assessment of project attractiveness	Scored on a 1-5 Progress to fin close	i basis hancial Level of risk (= no risk) + +++ +/- + ++
Experience of the investor / sponsor		
Experience of the developer with the technology and developing proje	cts	
Experience of the developer with IPP's in Africa / country		
Local Partner strength		
Financial Viability		
Project return at attractive levels		
Equity sourced		
Debt secured or letter of confirmation from lender		
Business plan robust and thought through		
Creditworthiness of offtaker		
Technical		
Complexity of the project and the technical layout		
Technical layout defined		
Grid impact assessment (including transmission line)		
Resource assessment		
Identified EPC / equip supplier with strong track record		
Logistics (transport)		
E&S		
Environmental risk		
Social risk		┙┕┙╴┝┥┝┥┝┥┝┥┝┥
Awareness of developer		
Regulatory Environment of country		
PPA agreed / signed		
Quality of the PPA		
Procurement rules followed (Auction / FiT or direct negotiation)		
Country track record with IPPs		
Legal framework (and its implementation		
Long term Economic Sustainability	-2)	
Country tariffs match or are similar to proposed tariff in PPA	X?)	
Overall Country Risk		
overall oountry hore		
Support from the host country		
Support received from the MoF		
Support received from the Ministry of Energy		
Support received from the off-taker		
comments		
	Progress to fin	nancial Level of risk (= no
	close	risk)
	+/-	+ ++ +/- + ++
Final account		
rinai assessment		