



Challenges for Investing in Small Scale Renewables in Thailand



12 December 2012

泰华农民银行集团 เครือธนาคารกสิกรไทย KASIKORNBANKGROUP
全方位的卓越服务 บริการทุกระดับประทับใจ Towards Service Excellence



Outline



- Credentials - KASIKORNBANK Group
- Key Barriers
- Risk Mitigations

Appendix

- Project Financing



Credentials



KASIKORNBANK Group

- The 4th largest local commercial banks in terms of asset size with THB 2,005 billion as of 30 Sep 12
- The pioneer in commercializing renewable power project financing in Thailand
- The most active bank in providing the integrated financing solution to clients in the renewable space with a variety of optimum financing products both debt and equity
- One of the leading Mandated Lead Arrangers in power sector, Thailand and Asia Pacific Source: Project Finance Magazine
- Dedicated power sector team ~20 headcounts



Key Barriers



Difficulty in accessing long-term debt financing especially for small renewables

- Scale – Size does matter
- Sponsor
 - Inexperienced Sponsor
 - Long-term commitment and support to the project
- Unfamiliarity with technologies
 - Insufficient track record
 - Uncertainties over their performance
- Specific risks to each type of project
 - Feedstock supplies – for biomass and biogas projects in particular
 - Environmental impact – for WTE projects



Key Barriers



Difficulty in accessing long-term debt financing especially for small renewables

- Complexity of project financing structure and process
- Other issues
 - Relatively high transaction costs e.g. Lenders' Advisors including Technical, Insurance and Legal
 - Resource management pre and post development



Risk Mitigations



- Credit enhancement structure
- Participation/support by local as well as multi-lateral agencies
 - As shareholder
 - As loan provider
- Involvement of strategic investors
- Dealing with size: Establish “Lending Guidelines”
 - Checklist of the required minimum qualifications
 - Standardized project financing package



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Project Financing



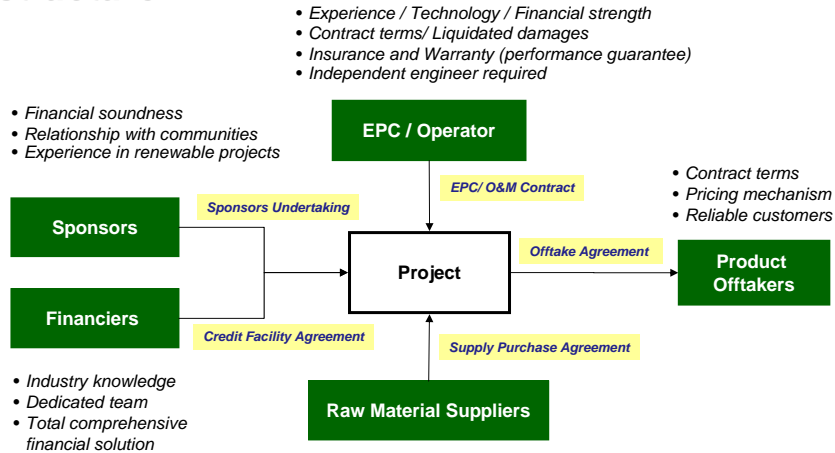
- Limited recourse project financing
 - Depend on the risk of Sponsor
 - Sponsor's support to ensure project completion
- Lending guidelines
 - Checklist of the required minimum qualifications



Project Financing



How each stakeholder enhance the project structure...



Project Financing



Indicative terms and conditions

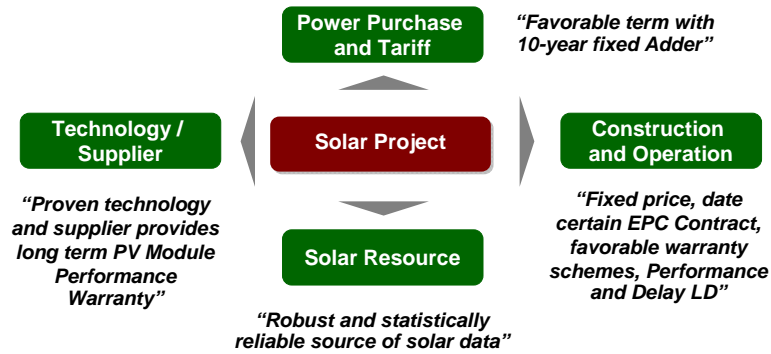
Facility Types	Tranche A: Long Term Facility Tranche B: Working Capital and/or Trade Finance Facility Tranche C: Hedging Facility (IRS)
Purpose	To support the development and construction of a renewable power project
Benchmark Interest Rate	Either MLR or THBFIX and apply the applicable margin
Tenor	Not exceeding the tenor of the government's subsidy (Adder period)
Key Security	i) Conditional assignments of all related contracts and project's proceeds ii) Mortgage of project's security iii) Pledge of reserves and waterfall accounts iv) Sponsor supports
Key Covenants	i) Debt service ratio – i.e. Debt Service Coverage Ratio (DSCR) ii) Leverage ratio – i.e. Debt to Equity (D/E Ratio) iii) Minimum cash position iv) Sponsor's undertaking in project ownership



Successful Case



1. Solar Project Financing



Successful Case



2. Solar Project Financing (Con't)

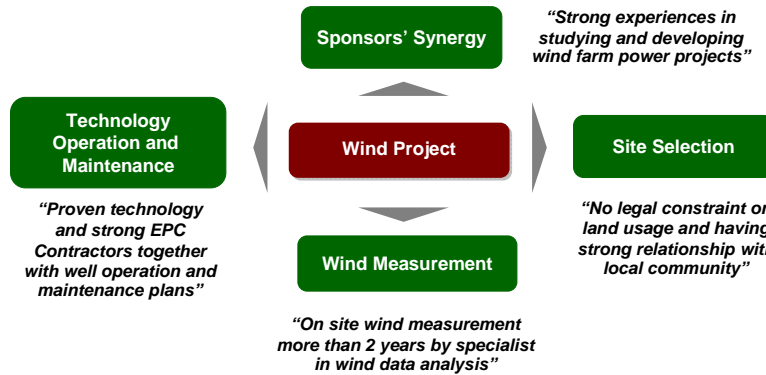
Key Stakeholder	Strengths Provided
Sponsors	<ul style="list-style-type: none"> Experienced Sponsors Proper selection of location and technology as well as matching and cost-effective components
Off-taker	<ul style="list-style-type: none"> Strong Governmental Agency Power purchase agreement under strategic and long term governmental support
Counsels/Consultants	<ul style="list-style-type: none"> Understand issues of renewable – supplier warranty, contract termination, performance warranty Understand dynamic of technical development – assessments of area, irradiation yields, physical structure and BOPs
Financial Advisors/Lenders	<ul style="list-style-type: none"> Keen and familiar with renewable projects – understand key specific characteristic of renewable projects Understand project requirements – able to advise and deliver appropriate financial structure
EPC/Equipment Suppliers	<ul style="list-style-type: none"> Strong R&D and track records – traceable and proven records Production readiness – provide quality products within timeframe Commitment of services – ability to provide commitment/warranty



Successful Case



2. Wind Project Financing



Successful Case



2. Wind Project Financing (Con't)

Key Stakeholder	Strengths Provided
Sponsors	<ul style="list-style-type: none"> Experienced Sponsors Proper selection of location, long period of wind measurement, applied value experiences from both local and foreign Sponsors
Off-taker	<ul style="list-style-type: none"> Strong Governmental Agency Power purchase agreement under strategic and long term governmental support
Counsels/Consultants	<ul style="list-style-type: none"> Legal due diligence under new regulations applied to the first wind farm power project in Thailand Technical wind specialist particularly on wind data measurement and analysis
Financial Advisors/Lenders	<ul style="list-style-type: none"> KBank understands how to raise fund both equity and debt; and balances and maximizes the benefit of Sponsors and Lenders KBank successfully arranges the strong syndicated lenders with bankable terms and conditions
EPC/Equipment Suppliers	<ul style="list-style-type: none"> Proven track record of wind turbines and strong experiences in construction wind farm power projects together with O&M plans Concrete relationship with local community Environmental friendly and high safety standard