



## 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 4<sup>th</sup> 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



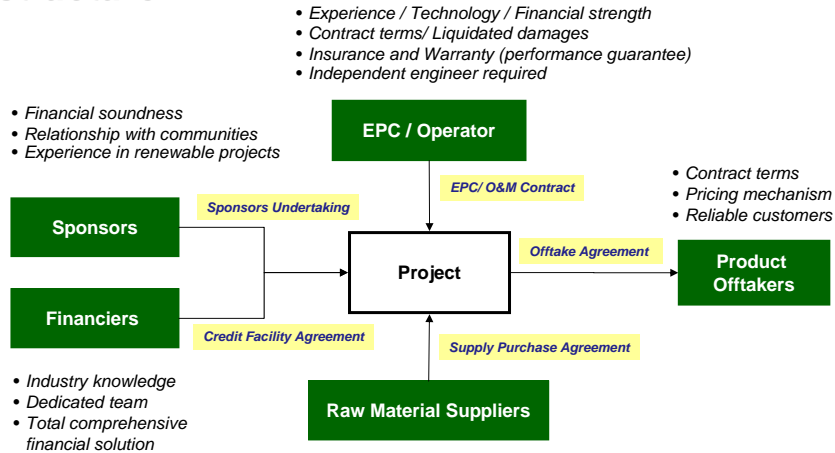
- Limited recourse project financing
  - Depend on the risk of Sponsor
  - Sponsor's support to ensure project completion
- Lending guidelines
  - Checklist of the required minimum qualifications



# Project Financing



## How each stakeholder enhance the project structure...



# Project Financing



## Indicative terms and conditions

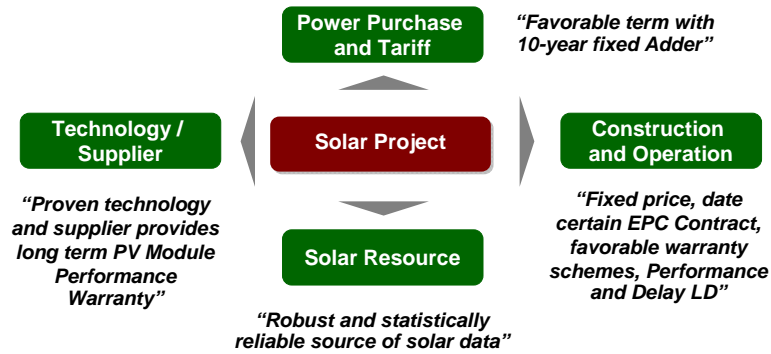
<b>Facility Types</b>	Tranche A: Long Term Facility Tranche B: Working Capital and/or Trade Finance Facility Tranche C: Hedging Facility (IRS)
<b>Purpose</b>	To support the development and construction of a renewable power project
<b>Benchmark Interest Rate</b>	Either MLR or THBFIX and apply the applicable margin
<b>Tenor</b>	Not exceeding the tenor of the government's subsidy (Adder period)
<b>Key Security</b>	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
<b>Key Covenants</b>	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)

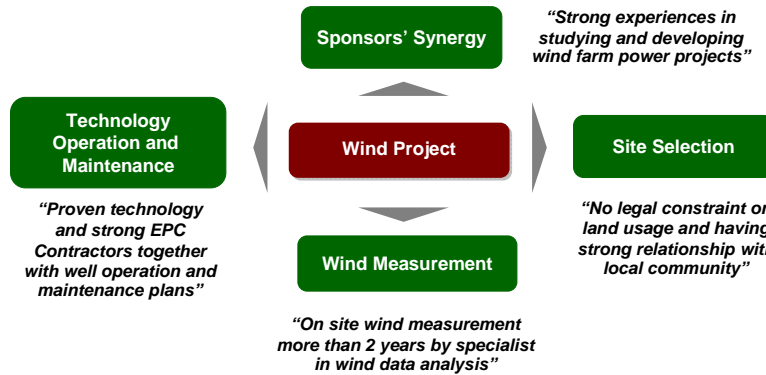
Key Stakeholder	Strengths Provided
Sponsors	<ul style="list-style-type: none"> <li>Experienced Sponsors</li> <li>Proper selection of location and technology as well as matching and cost-effective components</li> </ul>
Off-taker	<ul style="list-style-type: none"> <li>Strong Governmental Agency</li> <li>Power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



# Successful Case



## 2. Wind Project Financing



# Successful Case



## 2. Wind Project Financing (Con't)

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