



Carbon Project Financing and CER Financing

February 2010

TISCO Credential

TISCO Group Business Structure

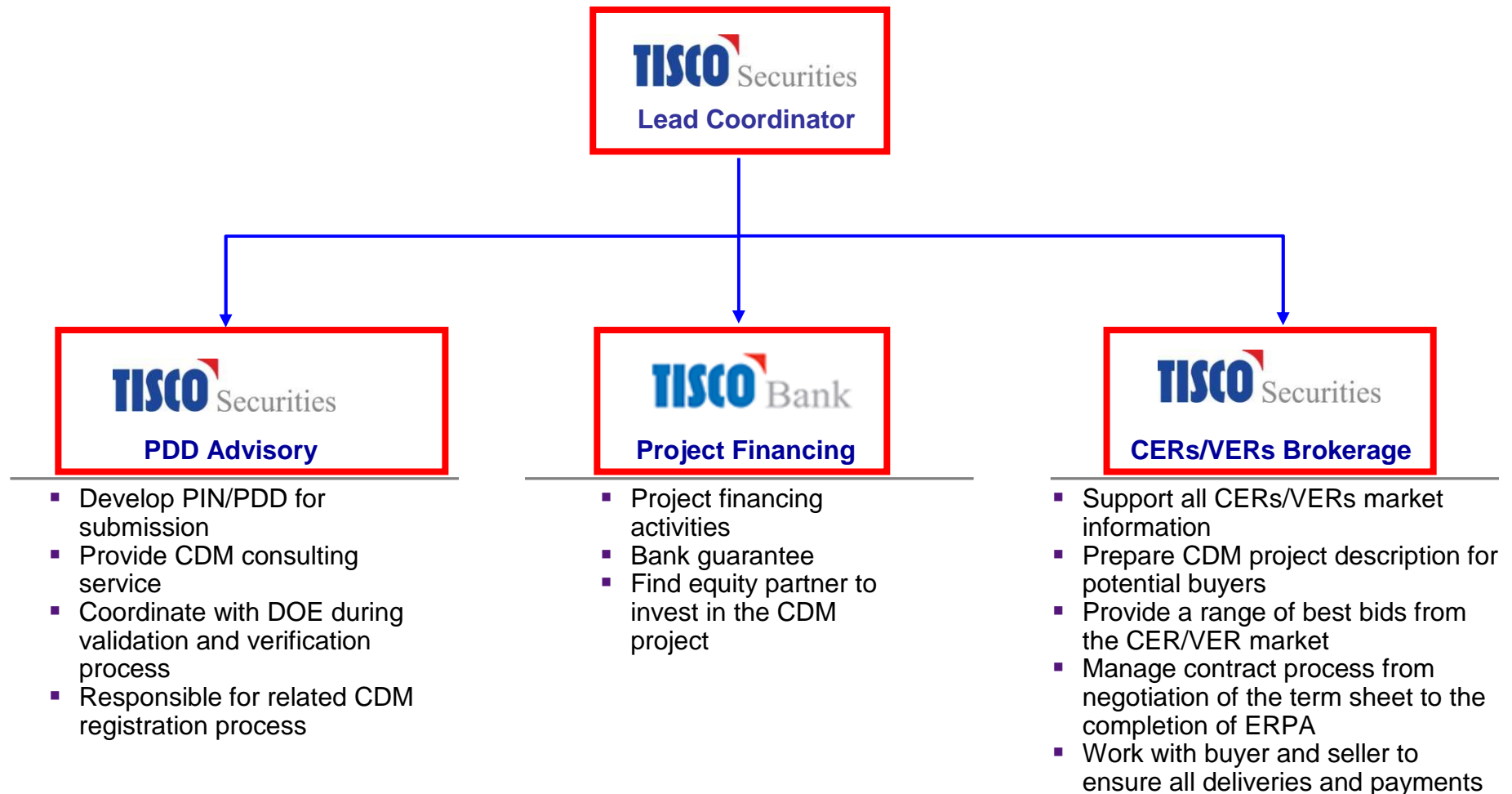
- ▼ TISCO Group has long been acknowledged as a leader in the Thai financial services industry, with history dating back 40 years. TISCO Securities Co., Ltd. has been established as a wholly-owned subsidiary of TISCO Financial Group Public Company Limited since 1 October 1998, following the separation of TISCO Group's finance and securities businesses.
- ▼ We are only a few Thai financial conglomerate with integration of bank, securities, and asset management.
- ▼ Our investment banking team has been widely accepted by investment community on their capability and commitment to deliver best services to clients.
- ▼ We have a strong claims of being the award-winning leader in Thai investment banking industry, with a long-established reputation and an enviable track record in providing full range of services, including fund raising from equity and debt capital market, privatization advisory and implementation, project financing, Merger & Acquisitions, debt restructuring, etc.



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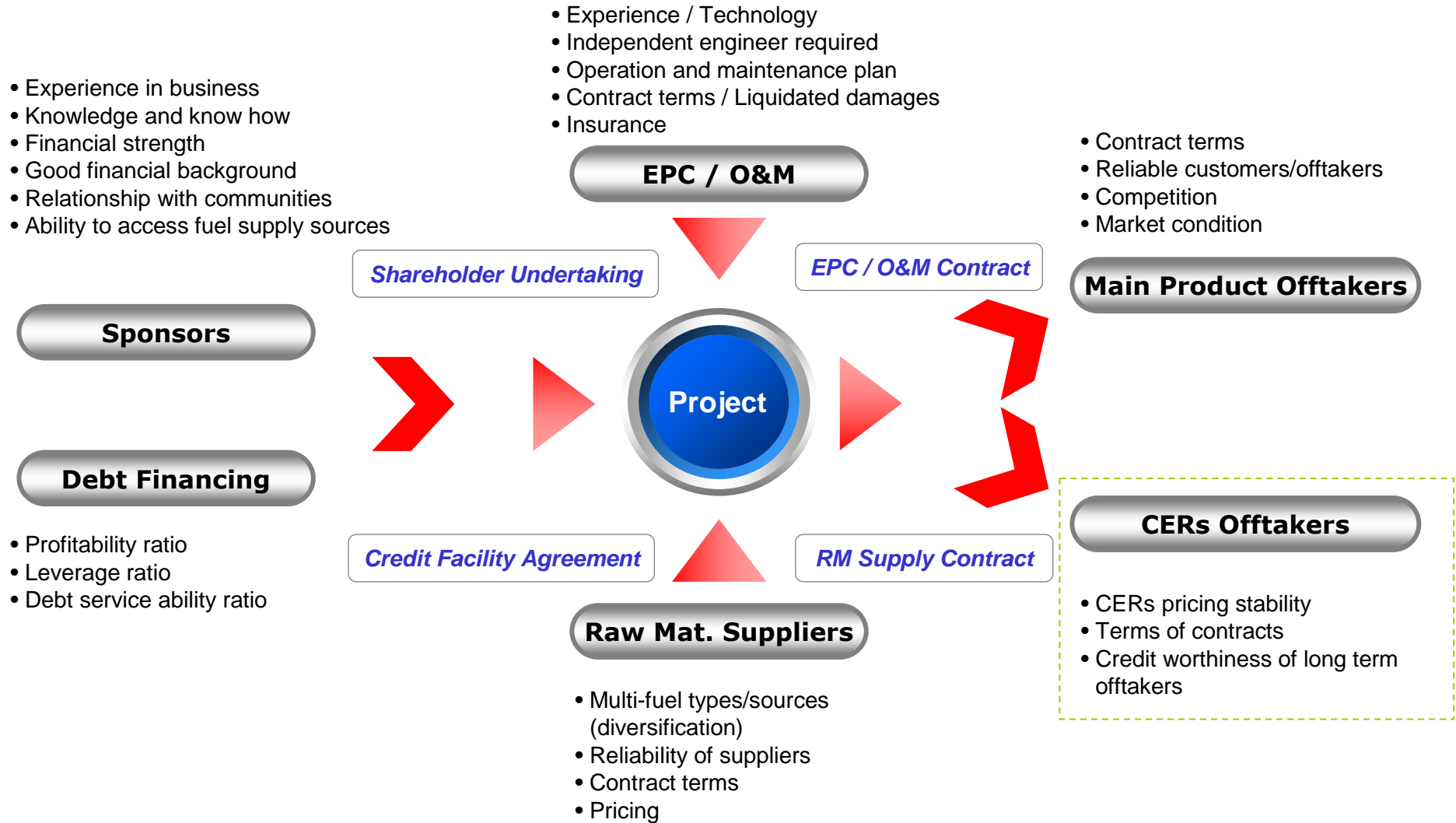
Integrated Carbon Services

TISCO acts as Lead Coordinator within CDM Work Force



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Evaluation Framework for Financing CDM Projects



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Risks and Mitigations Involved in CDM Process

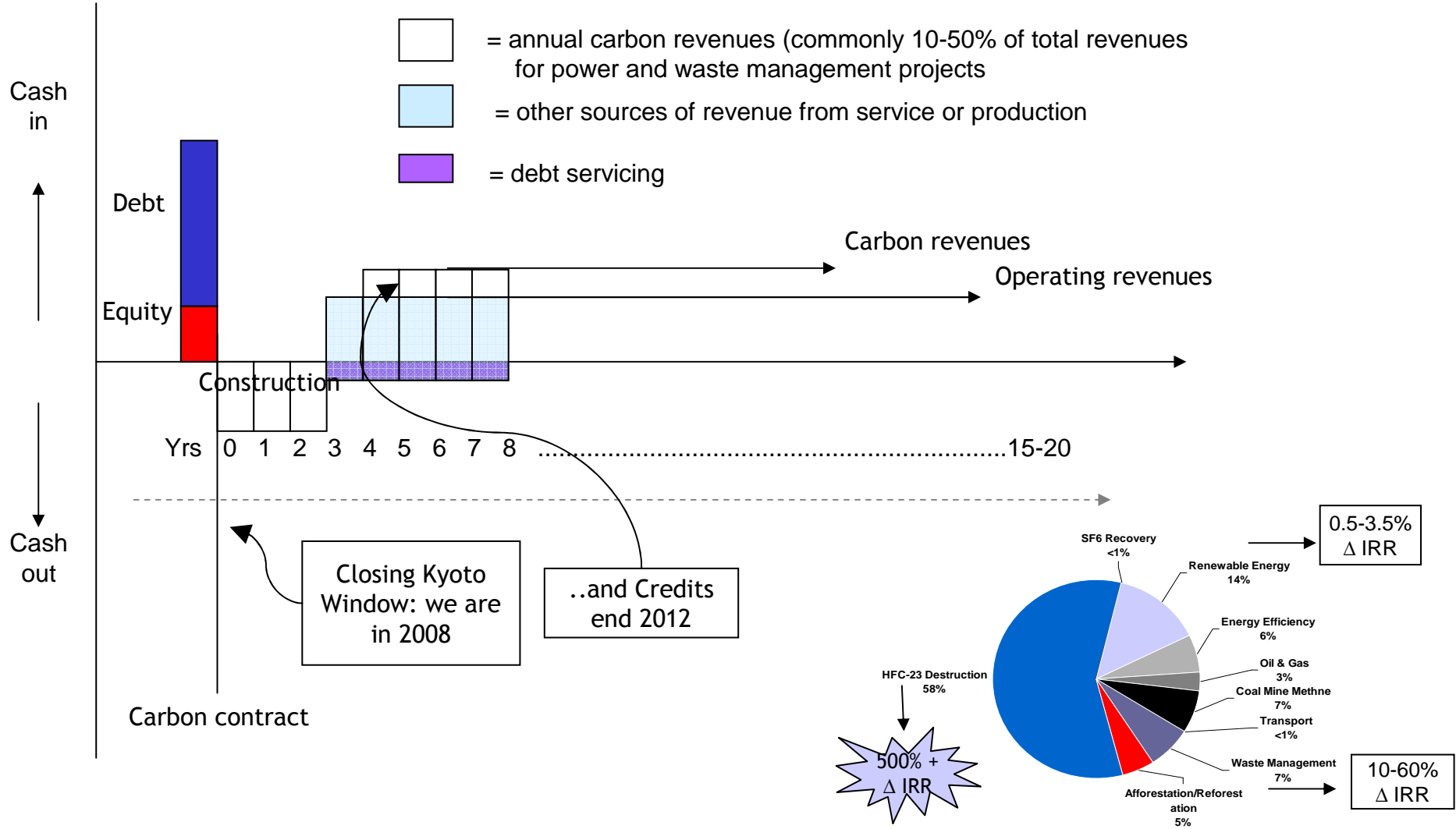
Risks	Mitigations
Methodology Risk	<ul style="list-style-type: none"> • Select an appropriate approved methodology • CER issuance is reduced/ suspended
Host Country Approval Risk	<ul style="list-style-type: none"> • May cause unexpected delay • Host nation revokes project Letter of Approval (LOA)
PDD Validation Risk	<ul style="list-style-type: none"> • To be Validated by Designated Operation Equity (DOE)
PDD Registration Risk	<ul style="list-style-type: none"> • To be registered by UN Executive Board

Risks and Mitigations Involved in CDM Process (Cont.)

	Risks	Mitigations
<p>Performance Risk</p>	<ul style="list-style-type: none"> • Under-performance due to excessive optimism • Lack of adequate monitoring data 	<ul style="list-style-type: none"> • Conduct a technical due diligence • Reasonably predictable generation of emission reductions • Assess monitoring system • Assess variation factors of emission • Keep tracking and recording information (data collection)
<p>Market Risk</p>	<ul style="list-style-type: none"> • Volatile CERs price 	<ul style="list-style-type: none"> • Enter into fixed price forward contract with CERs buyer • To arrange ERPAs (Emission Reduction Purchase Agreements) in advance
<p>Transfer Risk</p>	<ul style="list-style-type: none"> • Manage CERs Volume / Delivery 	<ul style="list-style-type: none"> • Typical forward contract has the provisions that 1) the seller is not required to deliver CERs to the Buyer if the CDM project could not issue, and 2) the Buyer is obligated to make payment only if the seller could deliver the CERs
<p>Cost Risk</p>	<ul style="list-style-type: none"> • Worth time and effort 	<ul style="list-style-type: none"> • Benefits and costs evaluation

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CDM Project Cash Flow – ERPA helps bring projects to financial closure



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Renewable Energy Loan – Sample Terms

Generally most of local commercial banks are keen to provide financing for renewable projects which could be under their normal loan program as well as special energy efficiency loan program of DEDE subject to certain conditions

Loan Size	Estimated loan portion of 66% of total project investment (Debt : Equity) = approx 2:1 or less, depending on project type and risks
Interest Rate	<ul style="list-style-type: none"> ■ Commercial Bank Loan = MLR +/- spread depending on factors such as collateral, credit risk and project cash flow and major shareholders ■ DEDE loan program = 4% p.a.
Maturity	Flexible depending on project life and cash flow project
Collateral Requirement	Normally Banks would consider loan for either <ul style="list-style-type: none"> ■ Corporate Finance ■ Project Finance
Note: current MLR (large bank) = 5.85%, MLR (medium size bank) = 6.25%	

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ERPA Loan – Sample Terms

Certain development bank is considering to provide ERPA financing to facilitate project owner for CDM project completion. However, ERPA is rather common in other non-annex 1 countries such as India

Loan Size	Depending on several factors such as <ul style="list-style-type: none"> ■ CER price ■ The number of CERs per year ■ ERPA period not more than 2020
Interest Rate	■ Commercial Bank Loan = MLR +/- spread depending on factors such as buyer credit rating, possibility of CDM registration and ERPA contract period
Principle Repayment	Deduction from cash flow from CER delivery
Collateral Requirement	Transfer of rights of payment received from CER sale and delivered
Note: current MLR (large bank) = 5.85%, MLR (medium size bank) = 6.25%	

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Strategic Equity Investment – Sample Terms

Several financial institutions and Renewable Energy Fund are keen to make investment in the renewable energy projects (i.e. ethanol, biomass, biogas, waste management and solar)

Investment Size	25% - 30% of equity interest of the project company with investment amount not exceeding 300 – 400 million
Expected IRR	Depending on type of project and risk profile (approximately > 15%)
Special Condition	Key project sponsor shall have strong experience with respect to the renewable project, management capability and fully committed to the success of the project
Investment Period	5 years from the first investment
Exit Strategy	<ul style="list-style-type: none"> ▪ Sell back to other shareholders ▪ Sell out to new strategic investors ▪ IPO in SET / MAI