



## Project Risk Matrix Global 1000 Schools Project B.V.

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Risk Category	Stake	Specific Risk / Events	Risk Mitigation / Control Mechanism	Risk Allocation
<b>Project Investors or Funders</b>	<b>Large</b> 1. Commitment, competence and credit worthiness of investors or Funders. 2. Will the alliance make the project work? 3. All parties to agreement are well established entities with stable track records.	Credit Risk	Credit Assessment required of Off Taker/ School	Sponsor / Lenders
		Large level of investment/ long tenor of return	Requires competence and industry knowledge of technical partner	
		Additional equity required later	Credit assessment of/by sponsors	
	<b>Small</b> 1. Funding of carbon units through crowd funding platform	Commitment to donate	1. Drawdown as milestones completed. 2. Lawyer Fiduciary/escrow accounts	
		Misalignment of investors' objectives	Investment part of G1000 project following established protocols	
<b>Implementation or Construction Risk</b>	Timing, cost and performance of the project – to be aligned with building construction	Cost overruns	1. Fixed price Engineering Procurement and Construction (EPC) contracts. If that is impossible, use one contract for turbines or panels and another for all the electrical components (Balance of Power).	Sponsor / Equipment Supplier

			<ol style="list-style-type: none"> <li>2. Completion guarantees. Progress</li> <li>3. Reports and make up of funding shortfalls prior to release of next phase funding</li> </ol>	
		<p>Completion delay Abandonment Non-completion</p>	<ol style="list-style-type: none"> <li>1. Equity in advance</li> <li>2. Penalty Payments: up to cap of 20% for any delay on daily basis (except <i>Force Majeure</i>)</li> <li>3. Requirement for contractor to be paid in installments on completion of milestones</li> </ol>	
		<p>Project Specifications / Quality</p>	<ol style="list-style-type: none"> <li>1. Performance Tests</li> <li>2. Use proven technology from well-known vendors</li> </ol>	
		<p>Force Majeure:  Sponsor changes order Natural disasters Political risk</p>	<ol style="list-style-type: none"> <li>1. Insurance by learning organization</li> <li>2. Agree to completion criteria between construction and operating companies.</li> </ol>	<p>Insurance</p>
		<p>Land/space Availability</p>	<ol style="list-style-type: none"> <li>1. Exclusivity Agreement</li> <li>2. Environmental indemnities</li> <li>3. Long lease that coincides with useful life of plant.</li> <li>4. Evidence provided by school</li> </ol>	<p>Building owner</p>

<b>Operations</b>	Cost, availability, environmental impact and changes in law	Unsatisfactory plant performance	<ol style="list-style-type: none"> <li>1. Performance Warranty</li> <li>2. Operating &amp; Maintenance Agreement</li> </ol>	Plant Operator & Sponsor
		Equipment Defect	Manufacturer warranties for performance against power curve and availability	Equipment Supplier
<b>Market Risk</b>	Volume, price and demand of output (i.e. power) as well as input (i.e. fuel where appropriate and transportation)	Demand for power Price of electricity	<ol style="list-style-type: none"> <li>1. Off-take agreement (PPA) for the whole lifetime of the plant. Although this reduces the market risk, a PPA introduces credit risk with regards to the purchaser.</li> <li>2. Hedge the risk (up to 5 - 8 years only?)</li> </ol>	Power off-taker / Hedge provider if hedge taken
		n/a Price for fuel Quality of fuel	n/a Fuel supply contract & term	n/a Supplier
<b>Transportation Risk</b>	Applies to construction and operations equally, if affected by blockages, strikes, and transport cost escalation		<ol style="list-style-type: none"> <li>1. Consider transport alternatives</li> <li>2. Agree on pricing terms</li> <li>3. Included in project submission</li> </ol>	School
<b>Environmental Risks</b>	Risk of incurring fees, fines or withdrawal of license resulting from laws or disasters	<ol style="list-style-type: none"> <li>1. Disposal of fixed assets</li> <li>2. Disposal of spent fuel/ material waste</li> </ol>	<ol style="list-style-type: none"> <li>1. Long-term contracts</li> <li>2. Include expenditure for disposal in business plan/ submission</li> <li>3. Evidence of EIA where necessary</li> </ol>	Sponsor/ School

		3. Breach of environmental laws		
<b>Financial Risk</b>	Changes in interest rates or exchange rates may affect payments	Interest Rate Swings and subsequent violation of terms	Interest Rate Hedge	School
		Exchange Rate Swing	Currency Hedge	School
<b>Country Risk</b>	<p>Political risk arising from operating in a foreign country including</p> <p>Transfer Risk Sovereign Risk Political Risk Exchange Rates Inflation</p>	<p>War and Civil Strife Confiscation, Expropriation and Nationalization (CEN) Increase in taxes levied on the project Import / Export duties Change in regulation</p>	<ol style="list-style-type: none"> <li>1. Political risk insurance through state sponsored agencies (range: 0.2% pa to 2% pa): Won't cover all events and based on book values.</li> <li>2. Keep part of the technology secret</li> <li>3. Debt finance preferred, as dividends are more likely to be blocked than interest payments.</li> <li>4. Use of local debt</li> <li>5. Use joint venture with local investors.</li> <li>6. Joint financing with international lenders.</li> </ol>	<p>Sponsor/Investor</p> <p>Export Credit Agency Development Bank Private Insurer</p>
		<p>Foreign exchange rate changes due to devaluation, convertibility or transfer restrictions</p>	<p>Insurance hard to get! Invest blocked funds in local financial markets or in internationally traded goods. Spend blocked funds buying local goods.</p>	Funder/ School
<b>Credit Risk</b>	Risk of default of counterparties or default on specific payments		Good credit risk management.	All

