

Econergy International PLC.

Success Case – San Carlos Bagasse Cogeneration Project (SCBCP) - ECUADOR

Quito, March 23rd 2006



Agenda

- Econergy International PLC.
- Preliminary Concepts
- CDM Project Procedures
- Success Case: San Carlos Bagasse

Cogeneration Project

Econergy in the Web



Project Investment and Development

Econergy Investments is building a portfolio of clean energy assets that will generate both power and carbon credit sales in Latin America, the Caribbean, and other emerging economies.



Carbon Brokerage

Econergy's Carbon Brokerage division has successfully registered 24 projects through the CDM of the Kyoto Protocol, totaling close to 16,000,000 CERs through 2012. Econergy was awarded the best CDM project in 2004 and developed the first methodology for the CDM.



Consulting Services

Econergy Consulting is a leader in finding cost-effective ways to implement clean and efficient energy solutions in the areas of renewable energy, conventional energy, energy efficiency and carbon management. We have completed more than 220 projects in 50 countries.



International Company on Diverse Energy Services



**Nossa Missão é Agregar
Valor aos Nossos Clientes
pela Transformação de
Ativos Ambientais em
Ativos Financeiros**

Investment and Project Development

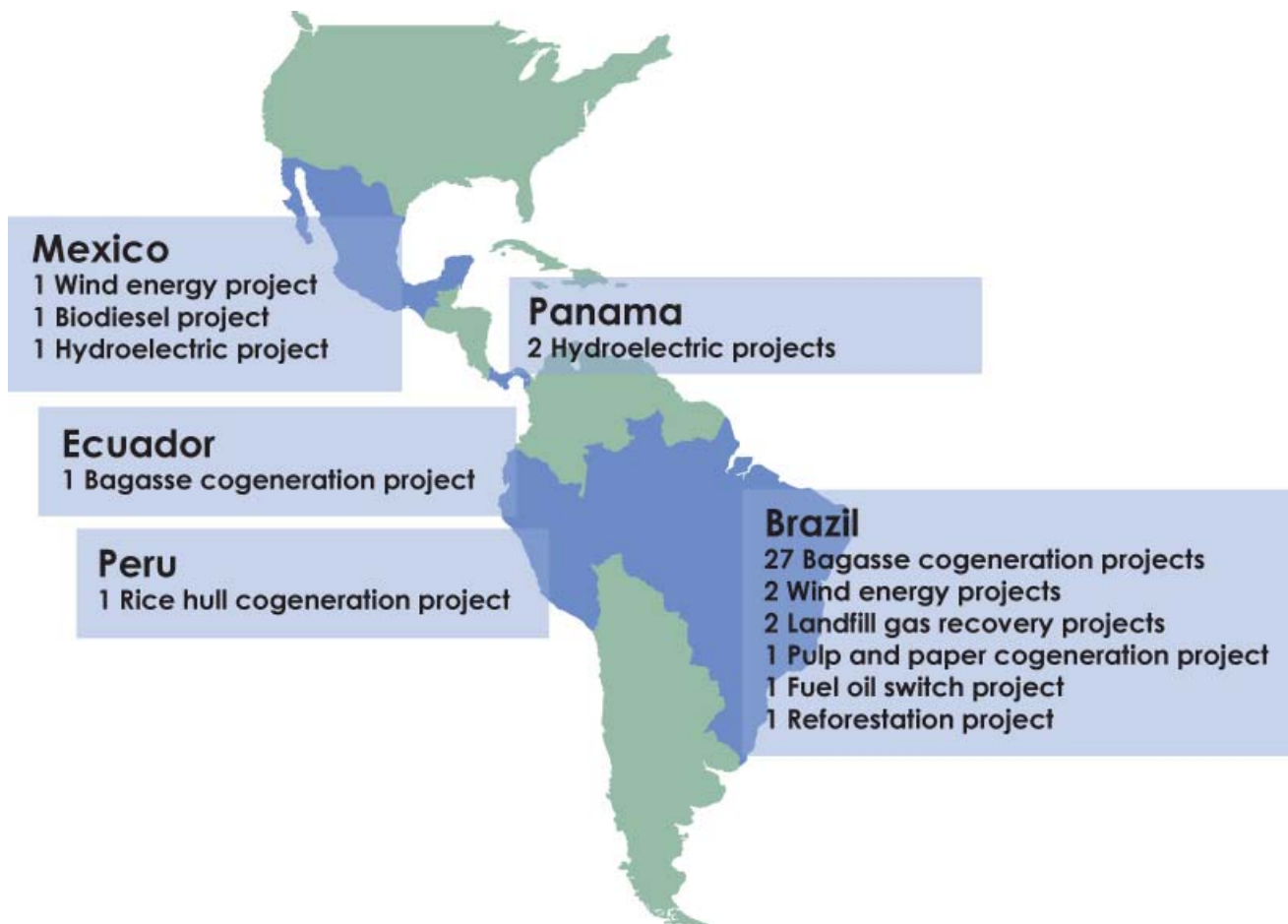
- Objective
 - ✓ Create a Portfolio of Clean Energy Assets
- Strategies
 - ✓ Project Development
 - ✓ Acquisitions
 - ✓ Private Equity



Carbon Brokerage Division

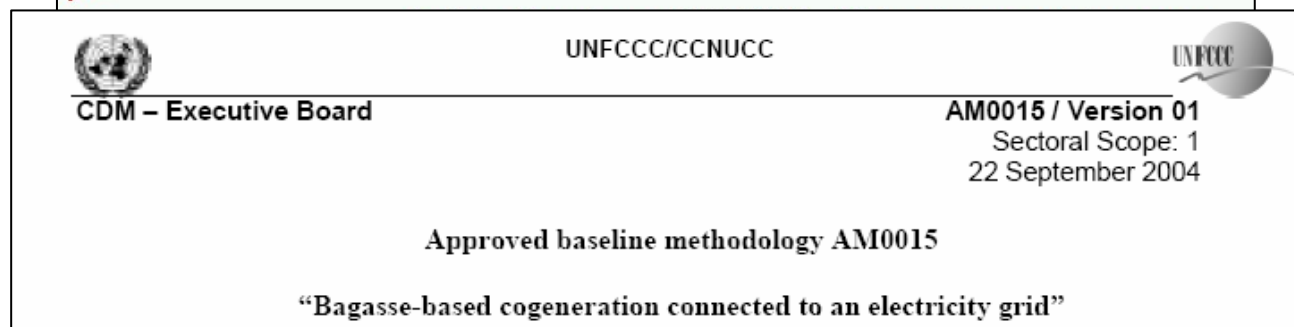
- Tailor-made solutions to CDM projects
- Advisory services
- Brokerage: over 4.000.000 CERs sold
- Carbon Portfolio of over 14.000.000 CERs
- 22 CDM Projects registered at the UN
- 14% Market Share

Our Projects



Approval of AM0015

- Submitted on March 23rd 2003
- Approved at the 12th CDM-EB, on December 2nd 2003
- Published on September 22nd 2004



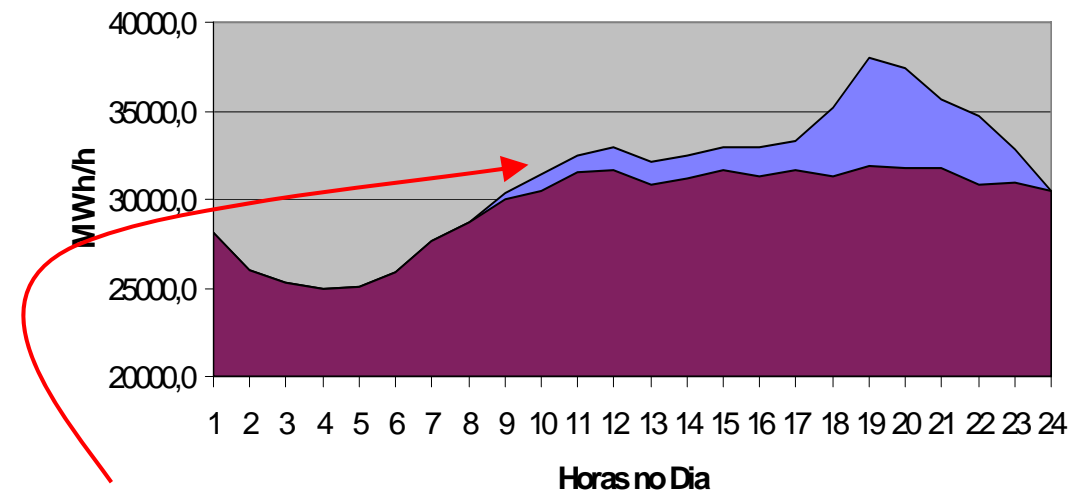
Cia Açucareira Vale do Rosário

- Production of electricity and steam through the bur of bagasse.
- Installed Capacity of 101 MW
- Carbon Contract US\$ 2 MM (300ktCO₂e)

Carbon Market
Insights 2004



Best CDM
Project



- Avoids the dispatch of energy produced by a mix of generators, including thermoelectric, operating at the system's margin.



Carbon Portfolio

Intelligent Business for Clean Energy

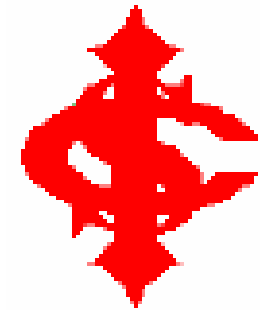
March 22, 2006



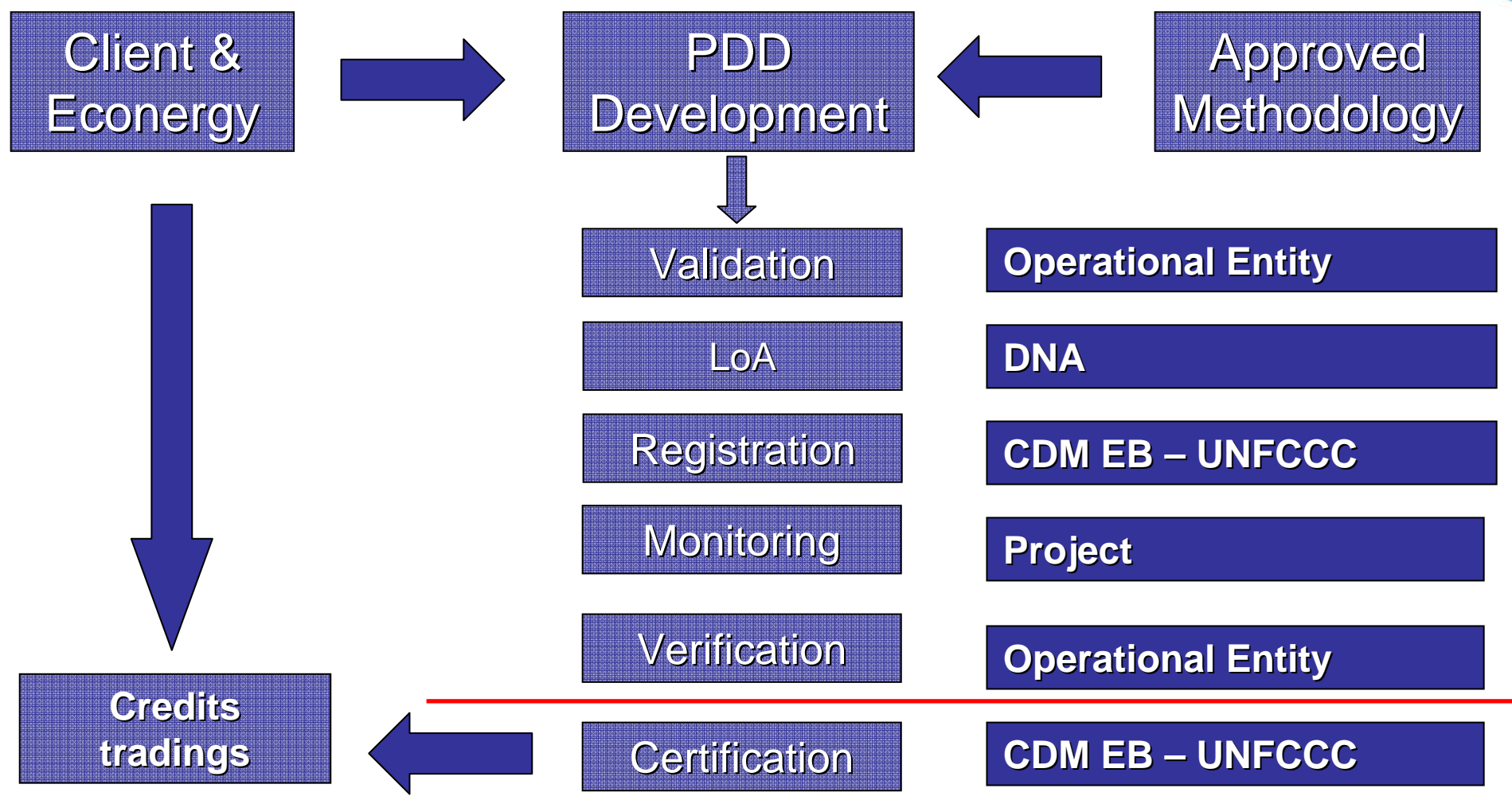
Type of Project	Country	Total expected CERs (2012)	Validation (DOE)	Status
Bagasse Cogeneration	Brazil	134.718	TÜV	Sold
Bagasse Cogeneration	Brazil	89.133	TÜV	Available
Bagasse Cogeneration	Brazil	124.667	DNV	Under Negotiation
Bagasse Cogeneration	Brazil	406.094	TÜV	Available
Bagasse Cogeneration	Brazil	78.907	TÜV	Available
Bagasse Cogeneration	Brazil	448.748	TÜV	Available
Bagasse Cogeneration	Brazil	292.066	TÜV	Sold
Bagasse Cogeneration	Brazil	40.487	DNV	Available
Bagasse Cogeneration	Brazil	126.922	TÜV	Available
Bagasse Cogeneration	Brazil	118.342	DNV	Available
Bagasse Cogeneration	Brazil	184.572	TÜV	Available
Bagasse Cogeneration	Brazil	77.930	DNV	Sold
Bagasse Cogeneration	Brazil	38.557	SGS	Available
Bagasse Cogeneration	Brazil	141.935	not chosen yet	Available
Bagasse Cogeneration	Brazil	164.903	not chosen yet	Available
Bagasse Cogeneration	Brazil	363.942	TÜV	Under Negotiation
Bagasse Cogeneration	Brazil	253.013	DNV	Under Negotiation
Bagasse Cogeneration	Brazil	101.022	TÜV	Sold
Bagasse Cogeneration	Brazil	142.193	DNV	Sold
Bagasse Cogeneration	Brazil	211.753	DNV	Available
Bagasse Cogeneration	Brazil	165.091	not chosen yet	Under Negotiation
Bagasse Cogeneration	Brazil	156.990	TÜV	Sold
Bagasse Cogeneration	Brazil	66.479	TÜV	Available
Bagasse Cogeneration	Brazil	260.750	not chosen yet	Available
Bagasse Cogeneration	Brazil	142.696	TÜV	Available
Bagasse Cogeneration	Brazil	199.354	not chosen yet	Under Negotiation
Bagasse Cogeneration	Brazil	129.908	DNV	Under Negotiation
Bagasse Cogeneration	Brazil	309.307	TÜV	Sold
Bagasse Cogeneration	Brazil	326.733	TÜV	Sold
Bagasse Cogeneration	Ecuador	350.405	TÜV	Available
Wind Energy	Brazil	56.286	SGS	Sold
Wind Energy	Brazil	83.366	SGS	Sold
Wind Energy	Brazil	682.635	not chosen yet	Under Negotiation
Wind Energy	Mexico	179.328	not chosen yet	N/A
Landfill Gas Recovery	Brazil	1,000.000	DNV	Sold
Landfill Gas Recovery	Brazil	1,487.908	DNV	Available
Landfill Gas Recovery	Brazil	571.987	DNV	Available
Landfill Gas Recovery	Brazil	1,000.000	DNV	Available
Landfill Gas Recovery	Brazil	1,200.000	not chosen yet	Available
Pulp and Paper Cogeneration	Brazil	96.372	not chosen yet	Under Negotiation
Fuel Oil Switch	Brazil	372.584	not chosen yet	Available
Reforestation	Brazil	720.258	TÜV	Available
Energy Efficiency	Mexico	36.864	not chosen yet	Under Negotiation
Hydroelectric	Mexico	402.000	not chosen yet	N/A
Hydroelectric	Panama	660.960	not chosen yet	Under Negotiation
Hydroelectric	Panama	205.000	TÜV	Sold
Rice Hull Cogeneration	Peru	110.554	not chosen yet	N/A
Total CER		13.793.461	Available CER	7.503.162
			Sold CER	2.885.610
			Under Negotiation CER	2.712.806
*tCER or ICER		720.258	Available tCER	720.258

* (Preliminary Evaluation) LCER vintage 30 years

INGENIO SAN CARLOS



Carbon Credits (Procedures)





San Carlos Bagasse Cogeneration

Project – Barriers (step 3 in the tool for additionality)

- **Political Barriers:** political instability as any developing country;
- **Economical Barriers:** lack of guarantees of sale in the electric production sector and the doubts about the regulations of this market;
- **Institutional Barriers:** licensing process, etc...

San Carlos Bagasse Cogeneration Project - Barriers

- **Climatic Barrier: El Niño (it means risk)**



San Carlos Bagasse Cogeneration Project - Results

- Global Stakeholders Consultancy at UN's web-site: from 11th November 2005 to 10th December 2005
- Public Presentation of the project on March 29th 2004, at Ingenio San Carlos
- Letter of Approval from Ministerio del Ambiente (Resolución No 10): 22nd November 2005
- **Project Registered on March 06th 2006 (registration number 0210).**

Carbon estimative from the First Crediting Period

San Carlos Bagasse Cogeneration Project									
	Item	First Creditation Period						Total CERs	
		2005	2006	2007	2008	2009	2010		2011
Grid-Connected Emission Reduction	Total Installed Capacity (MW)	35	35	35	35	35	35	35	306.118
	Internal Consumption (MW)	6,5	6,5	6,5	6,5	6,5	6,5	6,5	
	Standby (MW)	12,0	7,0	7,0	7,0	7,0	7,0	7,0	
	Installed Capacity Available for Sale (MW)	16,5	21,5	21,5	21,5	21,5	21,5	21,5	
	Installed Capacity Actually Available for Sale (MW)	15,0	15,0	15,0	15,0	15,0	15,0	15,0	
	Hours of Operation (h)	4.320	4.320	4.320	4.320	4.320	4.320	4.320	
	Energy to be sold to the grid, Applying for CERs (MWh)	56.160	61.560	61.560	61.560	61.560	61.560	61.560	
	Baseline Carbon Intensity (tCO ₂ e/MWh)	0,7194	0,7194	0,7194	0,7194	0,7194	0,7194	0,7194	
	Total CO ₂ emissions reductions (tCO ₂ e)	40.402	44.286	44.286	44.286	44.286	44.286	44.286	
Data for electricity production are estimates.									

Total of 306.118 carbon credits from 2005 to 2011.

Next step to the San Carlos CDM Project's SUCCESS

- Selection of a DOE for verification
- Arrangement of a verification and monitoring visit
- **Emission of carbon credits due to the project's emission reductions!**

Econergy International PLc

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