



CDM & Sustainable Development

- Quantification & Qualification – remains a challenge
- Monitoring – need for consistency
- Local SH involvement & awareness raising
- Value added carbon credits – G B S - CDM
- **100 % Upfront financing – makes it attractive**
- SD benefits Vs Emission reductions
- Integration of rural development policies and energy security & access



CDM : Institutional Reforms

- To make DNA infrastructure permanent
- Refine approval process : DNA – Sectoral Ministry Linkage for approval
- International & domestic procedures to screen projects : avoid carbon credits flooding the market
- Regional and state level CDM agencies
- National, Regional and State level policies and programme : CDM as an accelerator
- Local Climate Change Centres of Excellence (3CE) : to link Research – Academics – Field
- Ensure international post 2012 process on track



CDM and Technology Transfer

- National portfolio approach always a +
- CDM TT incubation centres
- Indigenous TT & South South TT : not to be ignored
- Integrated service : National & Local FIs
(due diligence, techno-economic appraisal, tech portfolio etc.,)
- **FI – Technology Suppliers : join force (e.g. REEEP-X)**
- Outreach pilot & success on a large scale for accelerating replication
- **National / Regional level fund for seed fund / low cost debt / guarantee**
- Need to keep transaction costs low, retarding TT
- TT for SMEs : Huge investment support needed (e.g ESCOs)



CDM : Financial barriers

- Unification of environmental benefits :
Carbon Credits
- Alliance : National & International FIs
- Project Equity based funds crucial
- Additionality : Not mere a number game
- Pricing of carbon credits : role of
exchanges and financial products



CDM :Sectoral approach

- LULUCF – slow but steady
- Transportation – Public and captive fleet
- SMEs : Industrial and Commercial
- Urban municipal needs based projects
(MSW / EE in water supply / Sewerage / T&D losses)
- Rural population oriented projects
- Adaptation projects based credits !



Meaningful participation of NA I

- CERs discounting method
- All post 2012 CERs for meeting NA I targets
- To also include Govt. projects and ODA projects
- Prompt start applied
- NA I Emission trading links
- NA I Trading Exchange(s) to boost liquidity
- Technology – Financing Exchanges encouraged
- Gradual but enhanced inclusion of SMEs

Political uncertainty : not considered !



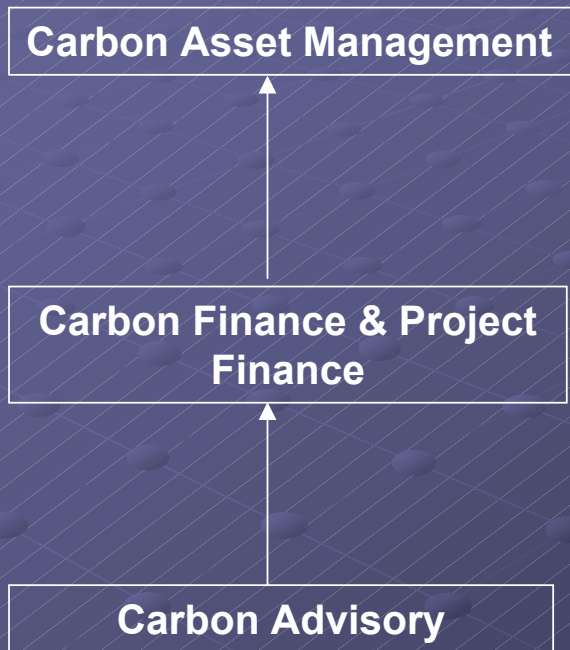
ACG – An Overview

- Group's activities conceptualized, researched and developed since 2001
- Founded : Feb 4 2003 two years ahead of Kyoto coming into force
- Presently operating 14 entities in 9 countries
- Strong presence in The Netherlands (Annex I) :Developing CDM and JI projects where we also aggregate Buyers
- Strong Asian presence through Singapore (Non Annex I); Develop unilateral CDM projects and also Aggregate Sellers of CERs from Non Annex I countries
- Strategic Alliance with Kanso Technos in Japan (Annex I)
- Centres of Excellence in Singapore, Vietnam, India
- Advance stage of development for a Centre of Excellence in China

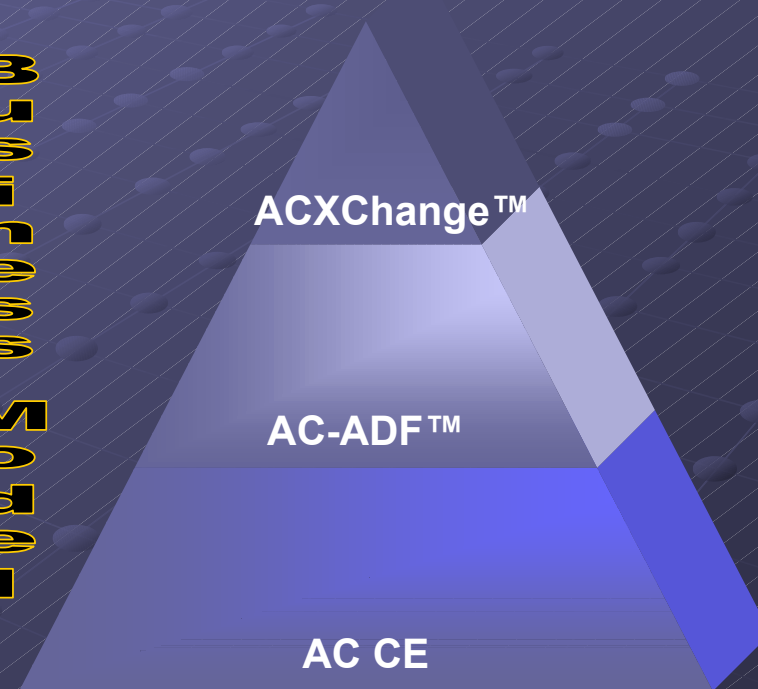


Group's Unique Business Model

Vertically Integrated to provide a one stop solution in
carbon advisory, carbon finance and carbon asset management



VERTICALLY INTEGRATED





AC-aDF™

Operational since February 2005

- 1) Identify, fund & develop PDDs for CDM/JI projects
- 2) Manage Carbon Assets

Projects :

- Projects identified and under development in Vietnam, India, Indonesia, Sri Lanka, Singapore, Malaysia and Philippines



Project Portfolio Highlights 1

past 12 months..

Partial list ...

- 15 MW grid connected small scale wind power project
- 57 MW grid based hydro power
- 10.8 MW grid connected small scale hydro power project
- 16 MW grid connected large scale hydro power project
- 24 MW grid based hydro power
- 14 MW grid based hydro power

Initial CDM feasibility study for 90 MW captive power project – switch from Diesel to Natural Gas in Indonesia



Project Portfolio Highlights 2

- Waste heat recovery and grid connected wind power project
- 7.5 MW grid connected small scale biomass power project
- 20 MW grid connected large scale biomass power project
- 21 MW grid connected large scale biomass power project
- 14 MW grid connected small scale wind power project
- 5.5 MW grid connected small scale wind power project
- Boiler Fuel Switch power project
- 13.6 MW Fuel Switch power project
- Waste heat recovery power project
- Biomass gasifier based power project
- 30 MW bagasse cogeneration project
- 19.5 MW grid connected large scale wind power project

Pre-feasibility study on Technical Loss Reduction in the Electricity Distribution Sector of Sri Lanka under CDM



Projects in the pipeline

- Food waste to energy
- Municipal Solid Waste to Power
- Fuel Switch in Public Transport sector
- Forestry
- Energy Efficiency in Public Lighting
- N₂O destruction project
- PFC reduction project
- Energy Efficiency in HVAC
- **ACG has covered almost all the 6 GHG Emissions that qualify for CERs and ERUs through our various projects**
- **ACG also has capability to prepare new methodologies for acceptance by the Executive Board, UNFCCC**



ACX-Change™

*First on line exchange in the world to
Provide a common platform for
Sellers and Buyers
of Carbon Assets
Outside of EU Allowances*

- Web based 24 x 7
- Built in registry and trading facilities
- Soft launch – Carbon Expo - May 2005, Cologne, Germany.
- Fully operational since November 2005
- Carried out five consecutive online auctions to date
- Re launch new look and feel platform – May 2006, Cologne, Germany

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ACX-Change : Our Value Proposition

ACX:

- Links CDM community to Global Carbon Market
- Understands Carbon Asset Management is fundamental in a carbon constrained world and places emphasis of this in the carbon market value chain
- Increases comfort levels for both sellers and buyers
- Provides much sought after opportunity for optimizing real time returns
- Ensures Effective tools in place for transacting carbon assets (cost, efforts, standardization etc.,)

Practical Solution for price questions

- No window shopping, no guesswork, no hawking and no bucket shops
- Real time one stop solution for CERs transactions (from trade to ERPA negotiations and custodian)
- Least cost solution provider for management of CERs



ACX-CERs Auction Platform

Asiacarbon Exchange - Microsoft Internet Explorer

Date: May 30, 2006 Time: 14:35

ACX-Change™ Leading Global Carbon Market Initiatives

Round 1 TimeLeft 18:53
Buyer Response Time Started

PickList

Projects

- ☒ 44
- ☒ 45

Latest Bids

Project Code	Order ID	Price	Time
45	183	5.0	R1:14:13:20
45	182	5.0	R1:14:13:17
45	sc134	5.0	R1:14:13:15
44	176	5.0	R1:14:13:13
45	184	4.0	R1:14:13:09
45	183	4.0	R1:14:13:07
45	182	4.0	R1:14:13:05
45	sc134	4.0	R1:14:13:03

Project Codes: 44 Product: CER

Order ID	Vintage	Quantity (ton)	Price (Euros)	Value (Euros)
176	2009-2011	300,000.00	15	5,400,000.00
Show		300,000.00	5.0	1,500,000.00

Project Codes: 45 Product: CER

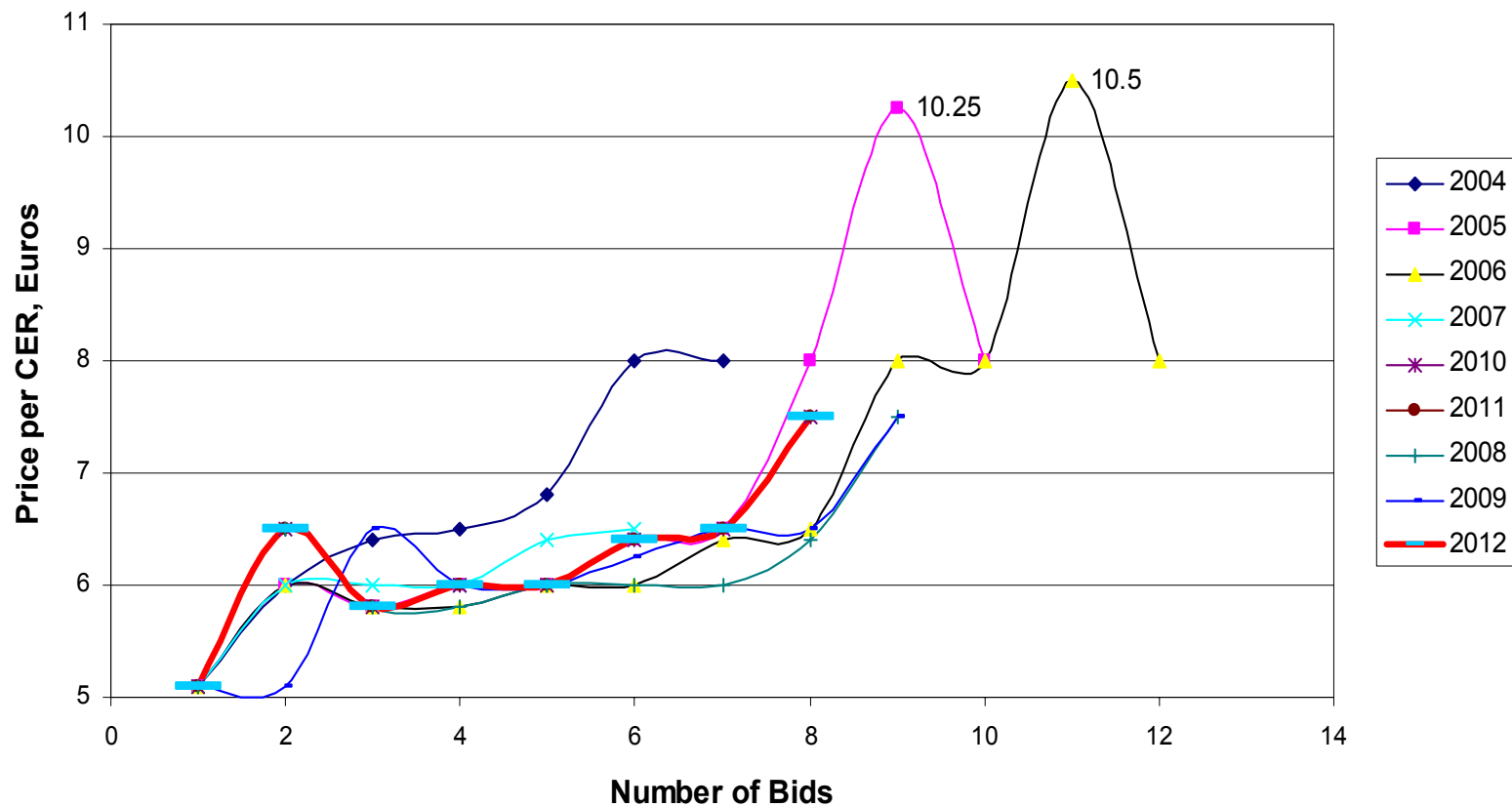
Order ID	Vintage	Quantity (ton)	Price (Euros)	Value (Euros)	Time	Buyer ID
sc134	2009-2011	40,000.00	15	640,000.00	May 30, 2006	
Show		40,000.00	5.0	200,000.00	R1:14:13:15	acxbuyer1
182	2006	10,000.00	15	150,000.00	May 30, 2006	
Show		10,000.00	5.0	50,000.00	R1:14:13:17	acxbuyer1
183	2009	10,000.00	15	150,000.00	May 30, 2006	
Show		10,000.00	5.0	50,000.00	R1:14:13:20	acxbuyer1
184	2010	10,000.00	15	150,000.00	May 30, 2006	
Show		10,000.00	4.0	40,000.00	R1:14:13:09	acxbuyer1
185	2011	10,000.00	15	150,000.00	May 30, 2006	
Show		10,000.00	2.0	20,000.00	R1:14:12:39	acxbuyer1



ACX CDM Auctions – An Analysis

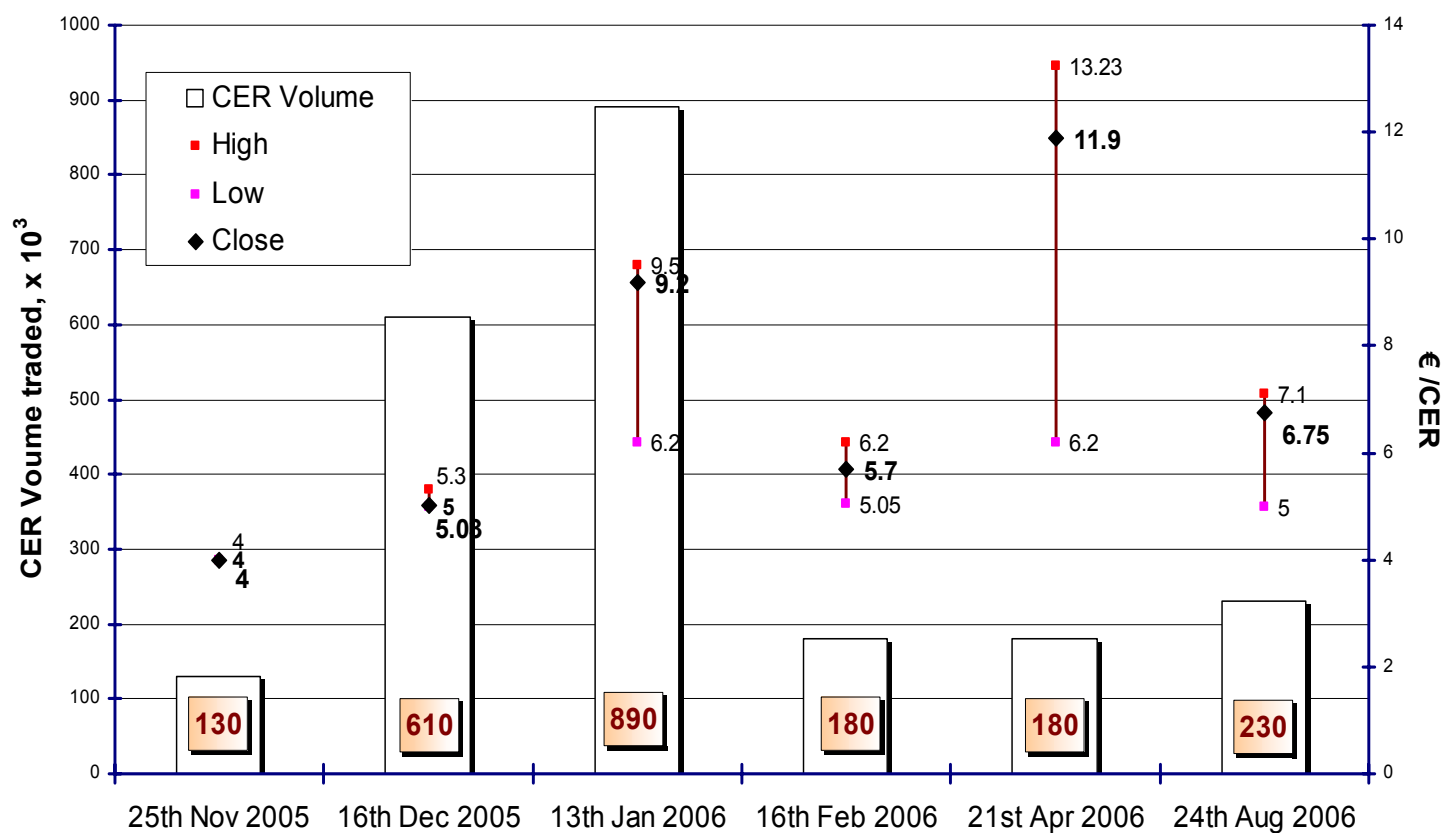
Buyers Bids

Price of CERs on same project





ACX-Change CER Auction - An Overview





**“The supreme reality of our time is the vulnerability of our planet.”
– John F. Kennedy**

Thank you

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