



pure carbon
innovation

“Carbon-nomics”

The real value of carbon

Kinesh Chetty

Renewable Energy Africa Conference and Expo 2011

powered by



orbeo is market-maker on the main carbon exchanges worldwide



2009

~ 680 Mt CO₂
traded worldwide
~ 8% market
share worldwide



House of the
Year
Emissions
Europe 2008



8 May 2008
Signature of a
market-making
agreement on
BlueNext for
futures EUA
contracts

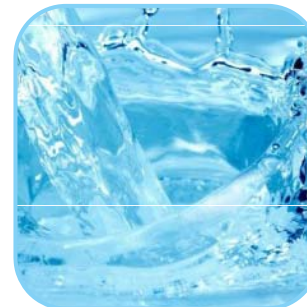


30 May 2008
orbeo selected
as **market-maker**
for first carbon
futures contracts
on **MCeX**



Best trading Cy

- EUA
- EUA options
- Primary CERs
- Secondary CERs



4 Sept. 2009
First **orbeo's** trade
on **RGGI** market
(USA)

orbeo's credentials



energy risk
awards 2008

**Emissions Europe
House of the Year**

Awarded to: 

JUNE 2008 UK



**environmental
risk**
rankings 2008

First place
EU ETS Options dealer

Second place
Primary CERs dealer
Secondary CERs dealer

Awarded to: 

AUGUST 2008 UK



energy risk
rankings 2009

Best Trading Company for

- EUA
- EUA options
- Primary CERs
- Secondary CERs



Awarded to: 

FEBRUARY 2009 UK



MARKET SURVEY 2007
**Environmental
Finance**
PUBLICATIONS

**Best Trading Company
Kyoto Project Credits**

Runner up
Best Trading Company
EU ETS

DECEMBER 2007 UK



energy risk
rankings 2008

**Best Trading Company for
European ETS allowances
(EUA)**



Awarded to: 

FEBRUARY 2008 UK

**2007 EDIE Environmental
Excellence Award
Scheme**



**Best Carbon
Reduction Project**

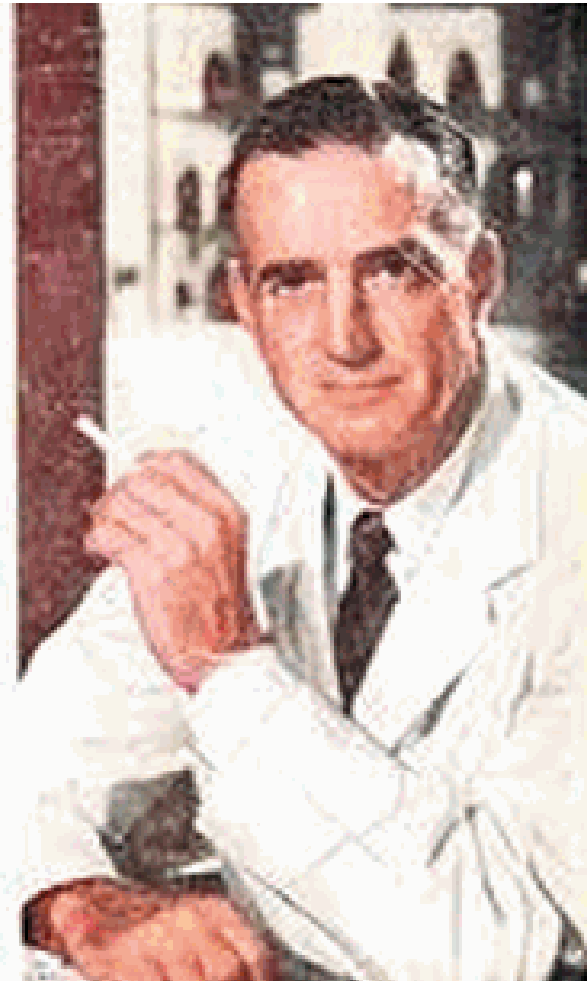
Awarded to:


OCTOBER 2007



According to repeated nationwide surveys,

**More Doctors
Smoke CAMELS
than any other
cigarette!**





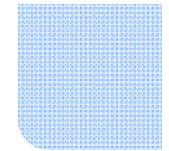
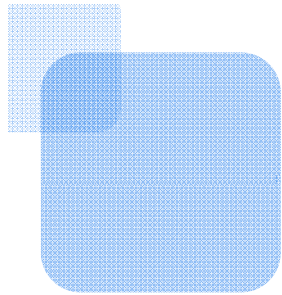
Its real and its happening now

Last decade warmest ever since modern record keeping - since 1880

- NASA '01/11

Rate of extinction in today's world is exceptional - as many as 100 to 1,000 times greater than normal

- Dr. Donald A. Levin



COP 17-CMP 7 DURBAN 2011

United Nations Conference on Climate Change

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COP 17 – CMP 7

COP 17-CMP 7 Venue:
International Convention
Centre (ICC) & Durban
Exhibition Centre (DEC)

Site Visits Programme

COP 17 – CMP 7

COP 17 – CMP 7



The 17th United Nations Framework Convention on Climate Change, will be held in the sunny city of Durban, South Africa. [\[more...\]](#)

COP 17-CMP 7 Venue



The city's extensive experience hosting large international conferences and events along with its established conference venues. [\[more...\]](#)

Site Visits Programme



Site visits will provide an opportunity for conference delegates to see Durban's climate change projects in action. [\[more...\]](#)





Carbon markets stability

- European Union Emissions Trading Scheme (EU ETS) will last till 2020
- “Ecosystems Marketplace / Forest Trends survey indicates voluntary carbon market transactions will increase to approximately:
 - 400 MtCO₂e in 2012
 - 800 MtCO₂e in 2015 and
 - 1,200 MtCO₂e in 2020
- Preference for quality credits from Africa

The real value of carbon markets

- Pioneered the creation of an environmental commodity
- Established a market reward for environmental sustainability
- Has brought Climate Change into the sphere of everyday life



“ Vestergaard Frandsen plans to provide clean water to some of the world's poorest people and charge them nothing. ”

The New York Times





Ch-ER-ry Picking



- An analysis of specially selected:
CDM projects – the compliance market
VCS Projects – the voluntary market
- **214** landfills in have been rehabilitated, with the potential to destroy **18mtCO₂e** from methane every year. **35mtCO₂e** already realized.
- **1001** hydroelectricity projects registered, capable of reducing **56mtCO₂e** with more than **102mtCO₂e** already verified.
- **32** solar energy projects registered able to reduce **150ktCO₂e** every year with **701ktCO₂e** issued.
- **399** biomass to energy projects capable of reducing **21mtCO₂e** annually with **24mtCO₂e** already issued



Ch-ER-ry Picking

- **791** wind energy projects registered across the globe. Reducing **46mtCO₂e** every year with **72mtCO₂e** credits verified and issued.
- In total these **2437** projects have the potential to reduce
141mtCO₂e every year
- **233mtCO₂e** already issued
- Completing the picture:
 - There are **3553** CDM and VCS projects
 - Estimated to reduce **526mtCO₂e** annually
 - **718mtCO₂e** issued



Think Global...Act local

- REFIT and EB22 Annex 3:

“Clarification on the consideration of national and/or sectoral policies and circumstances in baseline scenarios”

“....stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”

“Type E+, policy that increase GHG emissions”

“Type E-, policy that decrease GHG emissions”

“National and/or sectoral policies or regulations...[Type E-]...that have been implemented since ... 11 November 2001...need not be taken into account in developing a baseline scenario (i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place)”

Wind Projects and carbon finance

Scenario:

Inst Cap= 30MWe; LF= 31%; Capex= 15mZAR/Mwe;

REFIT = 0.94c/kwh; GEF= 0.9 tCO₂e/MWH

Estimated CER price (Euro)	7	10	14
Carbon Rev per yr (ZAR)	5	7	10
Percentage IRR increase	1%	2%	3%

Applied to wind farms around the world

Activity	Country	TCO2/yr	Installed Capacity
Carbon Asset Management	Turkey	67,500	31.5
Carbon Asset Management	Turkey		
Carbon Asset Management	Turkey	79,000	30.4
Carbon Asset Management	Netherlands Antilles	27,000	11.0
Carbon Asset Management	Turkey	44,500	14.9
Carbon Asset Management	Turkey	98,540	29.6
Carbon Asset Management	Turkey		
Carbon Asset Management	Turkey	46,500	20.7
Carbon Asset Management	Turkey	94,000	39.2
Carbon Asset Management	Turkey		
Carbon Asset Management	Turkey		
Carbon Asset Management	China	200,000	100.0
Carbon Asset Management	Turkey	85,000	30.4
PDD development	India		
Carbon credit sales	China	104,941	49.5
Carbon credit sales	China	123,442	49.5
Project development	China		720.0

One of the biggest portfolios of GoldStandard projects

Orbeo has one of the market's **biggest portfolios of Gold Standard (GS) projects:**



- a portfolio of **20 projects** under development
- **1 Mt of issued VER** in 2010
- **49% of all issued GS VER** credits worldwide

Gold Standard projects focus on **reducing CO₂ emissions through renewable energy and energy efficiency activities**. They not only reduce the effects of global warming but also provide additional sustainable development benefits in terms of boosting local economic or social development and mitigating local environmental problems.



OneCarbon has been the world's first carbon credit originator to register Gold Standard VER projects

In August 2008, the two Turkish wind farms **Anemon** and **Mare** with a combined capacity of 70 MW became the first to achieve Gold Standard Voluntary Emissions Reduction (VER) certification.

The wind farms are expected to avoid more than 173,000 tonnes of CO₂ and create important social and economical benefits (new infrastructure and creation of jobs).



Lessons learnt...



- Carbon offsetting (voluntary & compliance) is an established environmental commodities market and is set to stay...at least till 2020
- A clear and concise additionality case needs to be presented
- Monitoring of generated emission reductions is crucial to project success
- The CDM is one of the most respected, advanced and globally coordinated actions to reduce global green house gasses
- The effects of a changing climate have not yet been significantly addressed.
- Risky business? Is it worth it?



Contacts



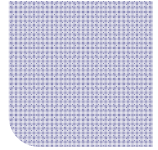
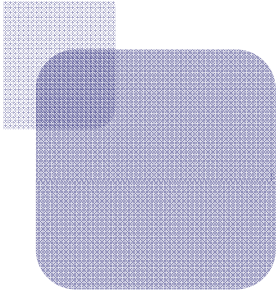
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