

### south pole Carbon Asset Management Ltd.

# **«Der Markt für Biomasse - Kompensationsprojekte: Potenziale, Entwicklungen, Ausblick»**

7. Schweizer Biomassegipfel in Basel 30. Januar 2012

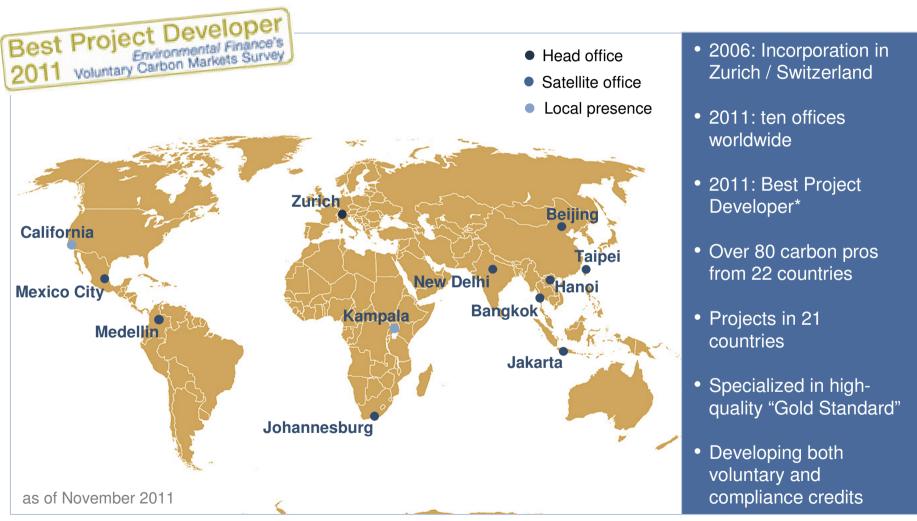
**Dr. Christoph Sutter, CEO South Pole Carbon Asset Management Ltd** 

#### **Executive Summary**



### South Pole – developing solutions worldwide





\* Environmental Finance: Voluntary Carbon Market Survey 2011

## South Pole Carbon's references: extensive network of high quality buyers



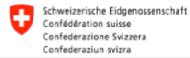
Unparalleled carbon market expertise

- Participation in the UNFCCC Methodology Panel
- Involved in major climate change negotiations since 1997
- Carbon advisory to international organizations (World Bank, European Commission, World Economic Forum, GTZ, Africa Progress Panel, World Food Programme, ...) and to registered CDM projects with a volume of 100 million tCO<sub>2</sub>e until 2012

Extensive client network

 Top-rated compliance buyers such as the Austrian Government, Swiss Government, Climate Cent Foundation (Switzerland), Italcementi Group, LUSO Carbon Fund (Portugal), EGL, ...







 Well-known voluntary buyers such as BP, Unilever, Axpo, Swiss Re, WWF, Austrian Post, Eneco Energy, RBC, Greenpeace, Ben & Jerry's, Transoflex, ...)























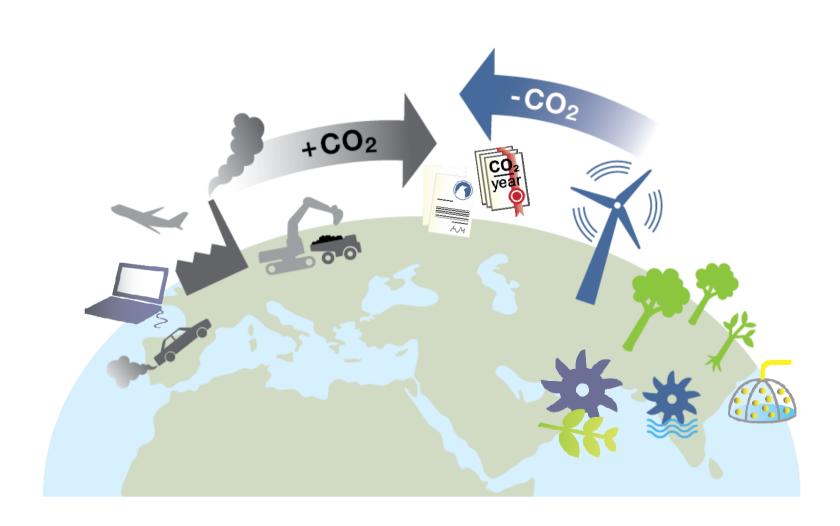


### The (various) carbon market(s)

- Biomass projects in the carbon market(s)
- Outlook and recommendations



#### Our business: carbon trade



## We distinguish compliance and voluntary carbon markets



#### **Examples**

### Compliance markets



- EU Emission Trading Scheme
- Kyoto Protocol Market
- Australian Emission Trading Scheme...

#### **Key features**

- Different types of compliance carbon credits
- Kyoto credits (CDM and JI) can be sold to Kyoto and EU markets
- High liquidity
- Unit price varies little across projects, but premium for Gold Standard certified projects

### Voluntary markets



- Gold Standard VERs
- VCUs
- CCBS
- Social Carbon
- ..

- Carbon credits generated on the basis of voluntary standards
- Not suitable for compliance purposes (Kyoto)
- Prices vary with quality and origin of projects, with Gold Standard projects fetching the highest price

## We distinguish stand-alone and quality add-ons standards



## Compliance markets



#### Stand-alone



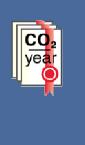




#### Swiss Emission Reduction Units



### Voluntary markets



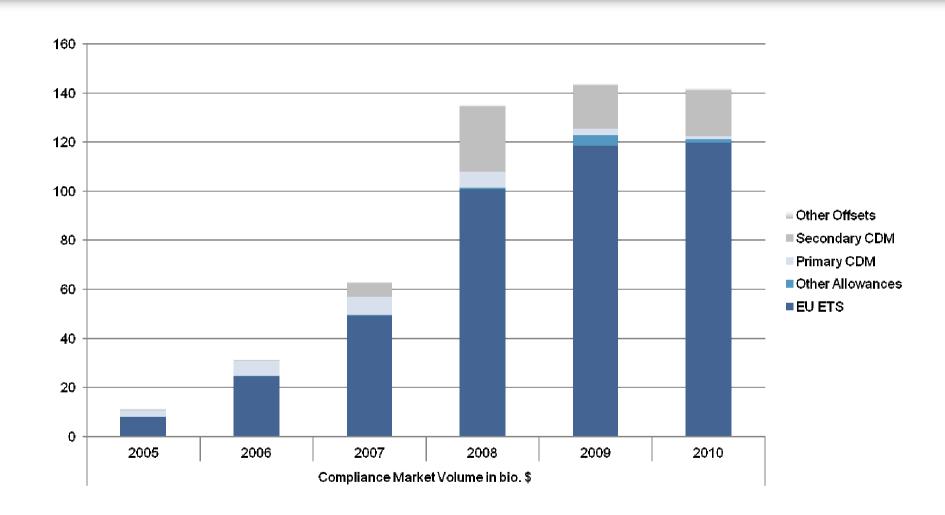






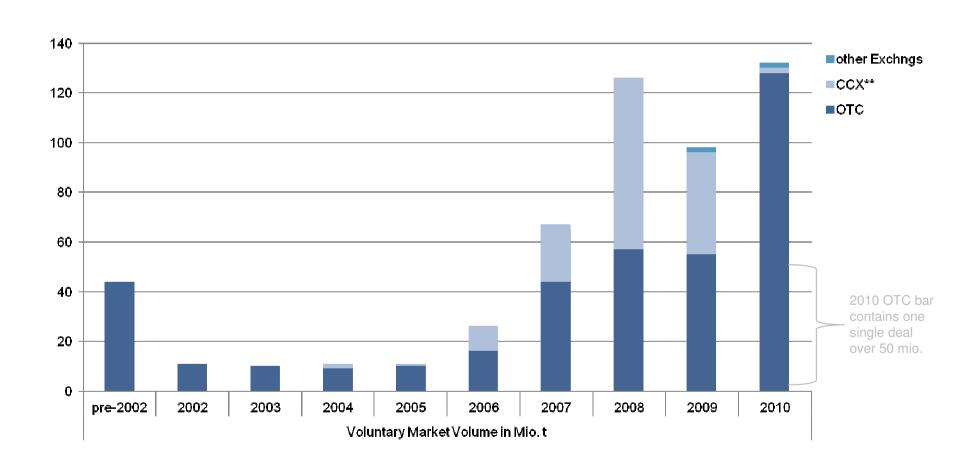
## Global carbon transactions (\$) in the compliance market





## Global carbon transactions (tCO<sub>2</sub>e) in the voluntary market

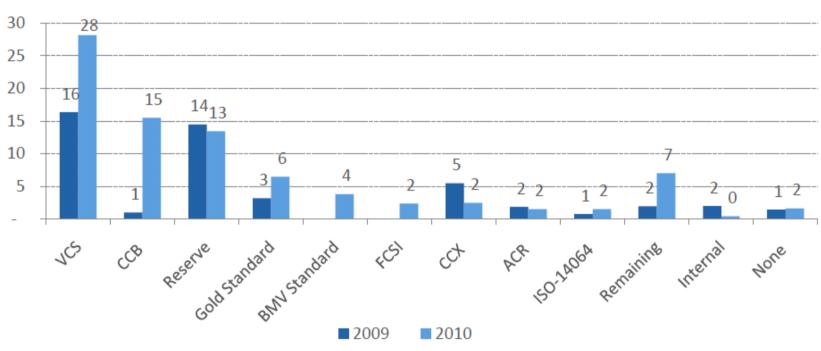






#### Transacted volumes by different voluntary standards

Figure 26: Transaction Volume by Primary and Secondary Standard, OTC 2009 vs. 2010 MtCO<sub>2</sub>e



Source: Ecosystem Marketplace, Bloomberg New Energy Finance.

Note: 2009 data based on 320 observations, 2010 data based on 676 observations.





### **Zurich and Switzerland offer perfect** conditions for demanding carbon players



 Swiss Institute of Technology (ETH) in Zurich: excellent climate scientific background



- Zurich is leading in carbon research and project development and is the world's 2<sup>nd</sup> important carbon trading hub after London
- Zurich's financial infrastructure: perfect conditions for a global market of €100bn
- The Gold Standard the industry's leading standard is based in Geneva



- The world's first national emissions trading registry opened in 2007 – in Switzerland
- Zurich Carbon Markets Association founded in 2010 with South Pole Carbon as founding member and about twenty institutions and companies on board
- The world's first scheme to offset carbon emissions from flights was developed by ETH students who then formed myclimate and later founded South Pole Carbon



The (various) carbon market(s)



Outlook and recommendations

## There are many different types of "biomass projects" eligible under the carbon markets







#### Different kinds of biomass projects under the CDM

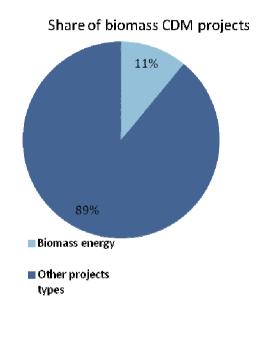


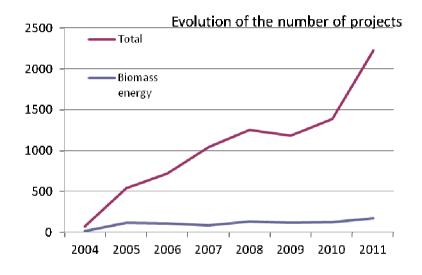
Description	Number of projects
Emission reduction through partial substitution of fossil fuels with alternative fuels in cement manufacture	36
Grid-connected electricity from <b>biomass residues</b> (includes AM4 & AM15)	340
Electricity generation from biomass residues (co-fired) in power-only plants	37
Co-firing of biomass residues for heat generation and/or electricity generation in grid connected power plants	0
Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants	0
Fuel switch from fossil fuels to biomass residues in boilers for heat generation	22
Grid-connected electricity generation using biomass from newly developed dedicated plantations	2
Use of <b>charcoal from planted renewable biomass</b> in the iron ore reduction process through the establishment of a new iron ore reduction system	3
	Emission reduction through partial substitution of fossil fuels with alternative fuels in cement manufacture  Grid-connected electricity from biomass residues (includes AM4 & AM15)  Electricity generation from biomass residues (co-fired) in power-only plants  Co-firing of biomass residues for heat generation and/or electricity generation in grid connected power plants  Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants  Fuel switch from fossil fuels to biomass residues in boilers for heat generation  Grid-connected electricity generation using biomass from newly developed dedicated plantations  Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a





About 11% of all CDM projects are based on biomass use

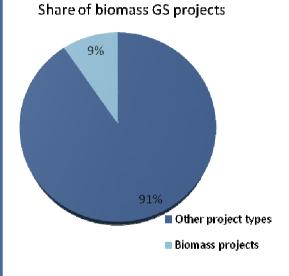






#### Biomass projects under the Gold Standard

About 9% of all Gold Standard projects are based on biomass use







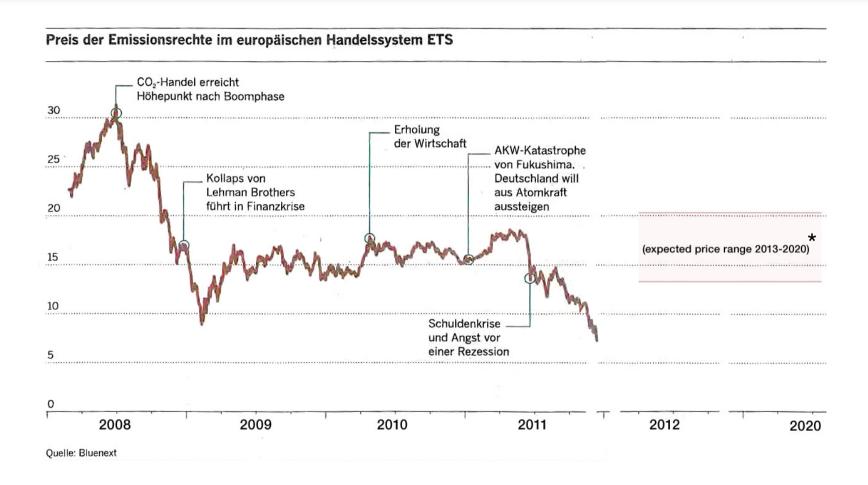
- The (various) carbon market(s)
- Biomass projects in the carbon market(s)



#### **Outlook and recommendations**



#### Price development for CDM (biomass) credits



<sup>\*</sup>source: Point Carbon





#### **Swiss Emission Reduction Units**



???



5 - 20 EUR/tCO2



3 - 6 EUR/tCO2



2 - 8 EUR/tCO2

#### Recommendations...



#### Vielen Dank!



#### **South Pole Contacts**

**Zurich** 

**Christoph Sutter** 

Phone: +41 43 501 35 50 c.sutter@southpolecarbon.com

**Bangkok** 

Patrick Bürgi

Phone: +66 2 678 89 79 p.buergi@southpolecarbon.com

Beijing

Caspar Chiquet

Phone: +86 10 84 54 99 53 c.chiquet@southpolecarbon.com

**New Delhi** 

**Thomas Camerata** 

Phone: +91 956 018 99 91 t.camerata@southpolecarbon.com

**Jakarta** 

Paul Butarbutar

Phone: +62 21 720 75 67 p.butarbutar@southpolecarbon.com

**Johannesburg** 

Bruce Wylie

Phone: +27 11 280 66 20 b.wylie@southpolecarbon.com

**Mexico City** 

Eduardo Piquero

Phone: +52 55 55319013 e.piquero@southpolecarbon.com

Medellin

Christian Dannecker

Phone: +57 311 7870 924 e.piquero@southpolecarbon.com

**Taipei** 

Jules Chuang

Phone: +886 4 2358 1592 i.chuang@southpolecarbon.com

Hanoi

Marco Hirsbrunner

Phone: +41 43 501 35 50 m.hirsbrunner@southpolecarbon.com