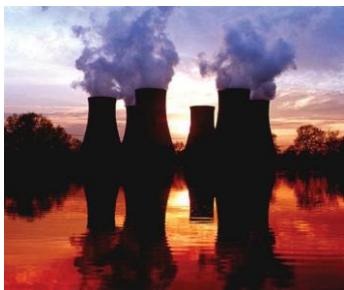


A Durban Debate



1 December 2011

A Durban Debate

Agenda

Sections

- 1 COP inheritance and purpose
 - 2 Our background
 - 3 Philosophy
 - 4 Creating money – how a scheme would work
 - 5 The maths
 - 6 The Green Climate Fund
 - 7 Conclusion
-

1. Our inheritance

COP 15 (Copenhagen) gave us:

- 1 Annex 1 commitments
- 2 The first mention of a Green Climate Fund

COP 16 (Cancun)

- 3 Delivered the Green Climate Fund, but no funding is identified

And purpose

- 1 To create a mandatory environment for reducing emissions
- 2 To do so in the least cost environment
- 3 To create a funding source for the Green Climate Fund

2. Our background

Rothschild

- 1 Global Financial Adviser – An Investment Bank without the 'I'
 - Advice is all we do - largest in our field
 - 1000 bankers in 40 countries
- 2 Leaders in government work around the world
 - Since early days of Thatcher privatisations
- 3 Like complex auctions of intangibles
 - 3G – two of the three largest (UK and India)
 - Lotteries
 - Created London Gold Fix in 1919
- 4 Consistent support of Cap & Trade
 - 1999 city response
 - 2000 first capital for CCX
 - 2001/2 UK-ETS
 - 2002-10 Contributions to EU-ETS debates
 - 2009 UK Renewable bank of the year

Clear commitment to emissions trading

Two Generations

Simon Linnett



- Vice Chairman
- 36 years at Rothschild
- Leads government work globally
- Keen interest in the environment

Charles Spencer



- Analyst
- 2 years at Rothschild
- Focus on industrials sector
- Keen interest in the environment

Shared interest

3. Philosophy

1

Cap and trade is best

- Global solution to global problem
- Enforces a cap
- Least cost solution
- Links well with regulation (less well with tax)

2

Evolution is good

- Voluntary to mandatory
- Reductions to allowances
- Gifting to auctioning
- Breadth of EU-ETS and countries increasing interest is good

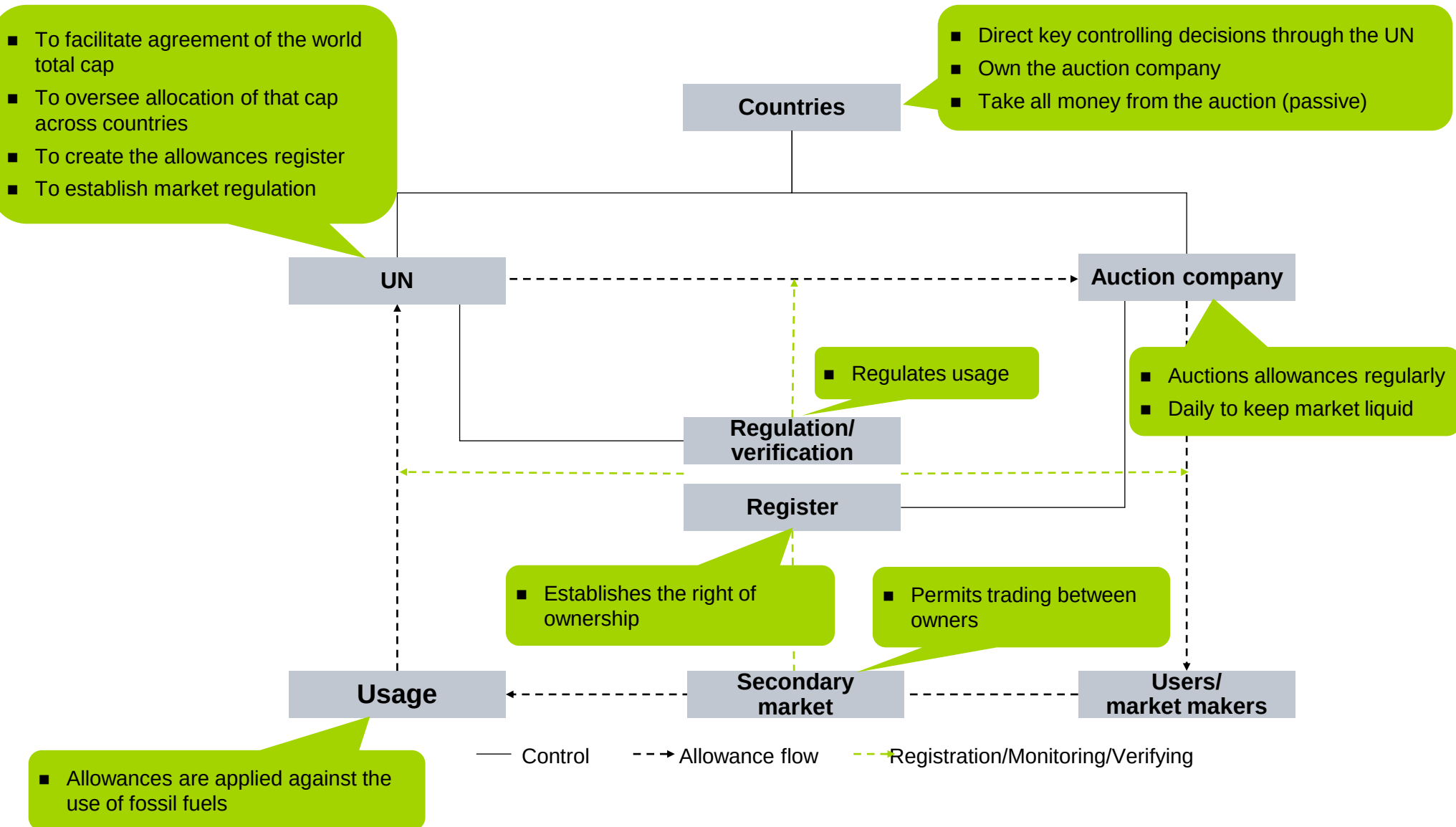
3

But needs to “get real”

- Across the world
- Across all fossil fuels emissions – levied at sale rather than at burn
- Allocation has to trend towards fairness

Long, Loud and Legal
Emissions trading should be the focus of the world solution

4. A scheme's working



5. More details

1

Allocation of the world cap across nations

- Trending from an allocation based on current usage
- To an allocation based on population
- Today's population to encourage population control?

2

Market regulation

- Based on Kyoto architecture
 - Equivalence, fungibility, exacting rules, etc
- Limits on total ownership by others than fossil fuel fabricators (3Fs)
- Regulates the secondary market and auction company (KYC, MiFID)
 - Transparency and liquidity are the keys to avoid “subprime” issues
- Limits on who can buy in auction
 - 3Fs and those 'making secondary markets'

3

Auction company

- Countries appoint governors
- Governors appoint professional board
- Board runs auction to distribute all money direct to governments

A fair, governed and managed market

6. The maths – inputs and outputs

2020 Inputs

1**Usage detailed by Copenhagen Annex 1 commitments**

- Modelling individually 70% of world population and 85% of emissions
- Adjusted for countries that would otherwise increase their CO2 output per capita and are already emitting above the average – China, Russia and South Korea
- To create a global cap of 30bn tonnes pa by 2020

2**Allowances allocated proportionately across countries**

- 50% based on population: US Census Bureau
- 50% based on current (2010) usage
- Trending to 100% population by 2030?

3**Using \$20/tonne of CO2**

Outputs

1**All countries collect**

- Collectively \$600bn pa
- The same as users pay!

2**Shifts across boundaries**

- Usage passes across natural boundaries
- Based on assumptions: \$75bn is transferred around the world – Rich to poor

The direction is all one way: towards world fairness

7. The maths

Country	Money raised	Money paid by users	Net
China	\$126bn	\$160bn	-\$33bn
India	\$70bn	\$59bn	\$11bn
US	\$73bn	\$93bn	-\$20bn
Europe	\$61bn	\$62bn	-\$1bn
Indonesia	\$14bn	\$5bn	\$10bn
ROW	\$265bn	\$230bn	\$34bn
Global	\$609bn	\$609bn	-

1

Money flows

- To governments balanced by from users
- \$75bn pa from developed to less developed

2

China stands out; but the “result” is based on assumptions that imply:

- China’s projected growth will make it a major economy by 2020 (BMI forecast China to narrow GDP gap on US from c. 50% behind in 2011 to c. 20% behind in 2020)
- \$33bn net contribution equates to \$25/capita; US is over \$50/capita
- \$33bn is an eighth of current trade surplus (although Chinese trade surplus forecast to decrease over next 10 years)

3

Go to www.rothschild.com/COP17 to analyse the model

- See your own impact (Annex 1 only)

The market and individual’s duties govern the flows

8. The maths – but what if...?

1

Suppose the price of oil and other fossil fuels adjusts for the price of CO2

- Say, by a third of the value of an allowance
- \$20/tonne of CO2 is \$10 on a barrel of oil; so adjustment = \$3 on \$120

Country	Money raised	Money paid by users	Reduction in fuel price	Net money paid by users	Net
China	\$126bn	\$160bn	\$53bn	\$107bn	\$19bn
India	\$70bn	\$59bn	\$19bn	\$40bn	\$31bn
US	\$73bn	\$93bn	\$31bn	\$62bn	\$11bn
Europe	\$61bn	\$62bn	\$20bn	\$42bn	\$19bn
Indonesia	\$14bn	\$5bn	\$2bn	\$3bn	\$11bn
ROW	\$265bn	\$230bn	\$75bn	\$155bn	\$110bn
Global	\$609bn	\$609bn	\$201bn	\$408bn	\$201bn

2

Result: a transfer of wealth

- \$200bn pa is transferred from producing nations to consuming nations
- Oil nations alone raise close to \$1tr pa of levies
- All nations are net winners on emissions trading

Allowances begin to shift world dynamics: demand scarcity may start to eat into economics of supply scarcity

9. Funding the Green Climate Fund

1

A levy on all auction proceeds would allow centrally managed pot for distribution amongst the poorest nations

- 8% modelled

Country	Money received	Money paid by users	Net	After notional fossil fuel price adjust
China	\$116bn	\$160bn	(\$44bn)	\$9bn
India	\$64bn	\$59bn	\$5bn	\$24bn
US	\$67bn	\$93bn	(\$26bn)	\$5bn
Europe	\$56bn	\$62bn	(\$6bn)	\$14bn
Indonesia	\$13bn	\$5bn	\$8bn	\$10bn
ROW	\$244bn	\$230bn	\$14bn	\$89bn
Global	\$560bn	\$609bn	(\$49bn)	\$152bn

2

An 8% levy raises \$50bn pa

- On top of \$75bn p.a. – richer to poorer
- May rise with time
- After national fuel price adjustment all nations modelled still in net surplus

3

Auction company could act as trustee (per COP 16)

The GCF becomes fundable – without debt dependence

10. The End ...

1

The world needs a cap

- A global cap to cap global emissions

2

By trading caps

- We create money that acts as an incentive to change behaviour
- And ensures that least cost solutions emerge

3

Money also creates an opportunity for fairness

- Allocating allowances not by history but by population
- To fund a Green Climate Fund to ameliorate the worst effects

4

But the world has to come together

- No one country can save the world
- Fairness only derives from a world solution
- The UN has to be the driver

... or the Beginning?

Who we are



*Promoting Efficient Market Solutions
to Combat Climate Change*

- **CMIA is an international trade association representing firms that finance, invest in, and provide enabling support to activities that reduce emissions. Our international membership accounts for an estimated 75% of the global carbon market, valued at USD 130 billion in 2009.**
- **Our effectiveness and credibility as a voice in the policymaking arena is founded on our unique profile - an international, emitter-free association, representing the entire value chain of carbon finance.**