
The Carbon Market: Current situation & perspectives for a post-Kyoto Regime – A European perspective

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Today I will be covering....

- What the ETS has done for CER prices
- Where is the demand coming from
- The relationship between the EUA price, CER issuance and CER prices
- How much supply can Annexe I take
- Price differentiation – how valid is it?
- VERs
- What might post 2012 landscape look like?

EDFT Overview

- **The wholesale trading arm of EDF in the Emissions market**
 - 100% owned by EDF S.A. and based in London (U.K.).
 - Active on Emissions, Electricity, Coal, Freight, Gas, LNG and Oil markets, with over 600 counterparts, enacting 125,000 transactions.
 - Manager of the €300m EDF Carbon Fund.
 - 2006 main figures: €47bn turnover, €580m profit before tax, 480 employees worldwide.
- **An important player in CO2 market**
 - From 2004, management of a large portfolio of CO2 positions generated from the optimisation of EDF assets, the hedging products provided to industrial customers and the proprietary trading activity.
 - Member of Nordpool Exchange, ECX and Powernext Carbon. Very active in the OTC market with over 30 counterparts.
 - A significant number of ERPAs already signed, several thousands of tons of CERs already received in our CDM registry.
 - Independent credit rating of **A3** by Moodys

The blessing – and the burden of the ETS

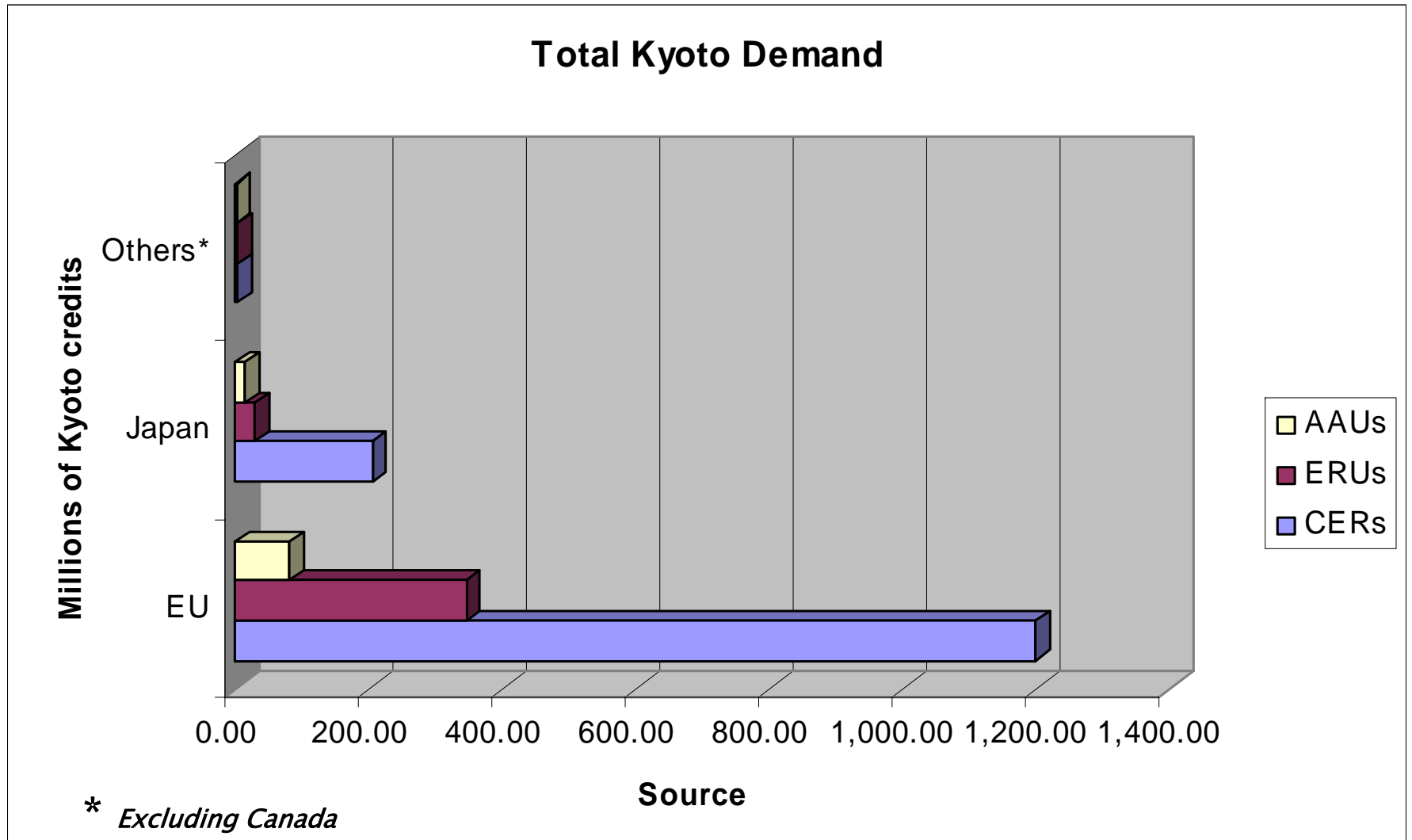
- Before the ETS no-one knew where to value projects – early projects sold for \$5 and lower
- The ETS created a benchmark to base CER prices off
- However in times of low EUA prices, anecdotal evidence suggests European buyers withdraw
- The high volatility in the ETS makes contracting difficult – the time gap from term sheet to ERPA signature can be significant
- Overall though the ETS has benefited project owners with better prices for their CERs and more buyers

Who is buying?

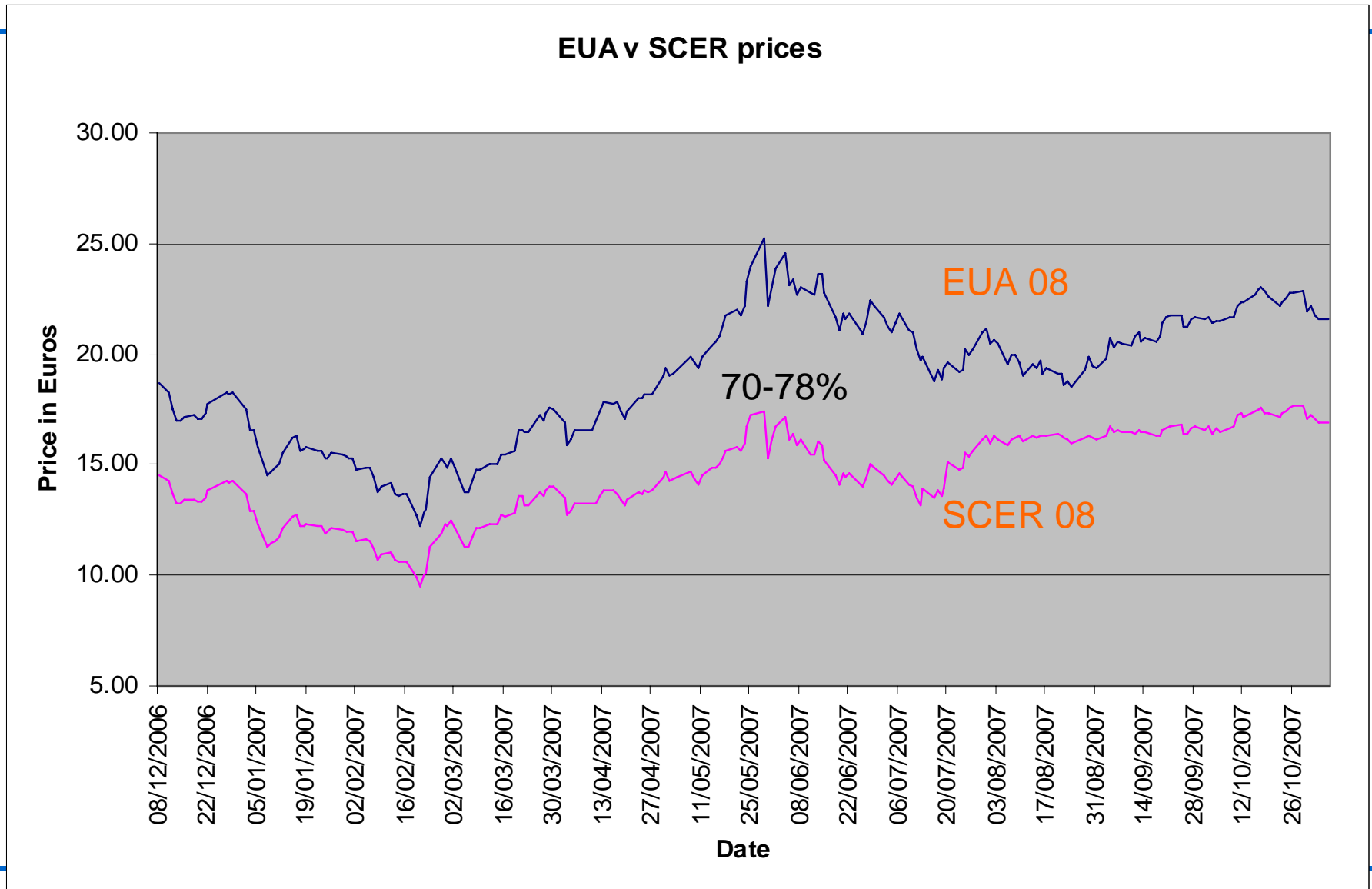
Top 20 buyers	Projects	Organisation Type
EcoSecurities	161	Developer/ intermediary
Carbon Asset Management Sweden	79	Fund
IBRD	62	Development bank
EDF Trading	54	Compliance buyer
ENEL	50	Compliance buyer
AgCert	50	Developer/ intermediary
Agrienergy	45	Developer/ intermediary
Cargill International	42	Developer/ intermediary
Trading Emissions	40	Developer/ intermediary
Noble Carbon	38	Fund
CAMCO	37	Developer/ intermediary
RWE	35	Compliance buyer
Energy Systems International	31	? Architect?
Kommunalkredit	30	Bank
Mitsubishi	24	Fund
Carbon Resource Management	24	Developer/ intermediary
Mitsubishi UFJ Securities	24	Fund
Endesa	22	Compliance buyer
Arreon Carbon UK	21	Developer/ intermediary
Marubeni	20	Industrial Group

2 banks,
8 intermediaries,
4 funds,
4/5 compliance
buyers

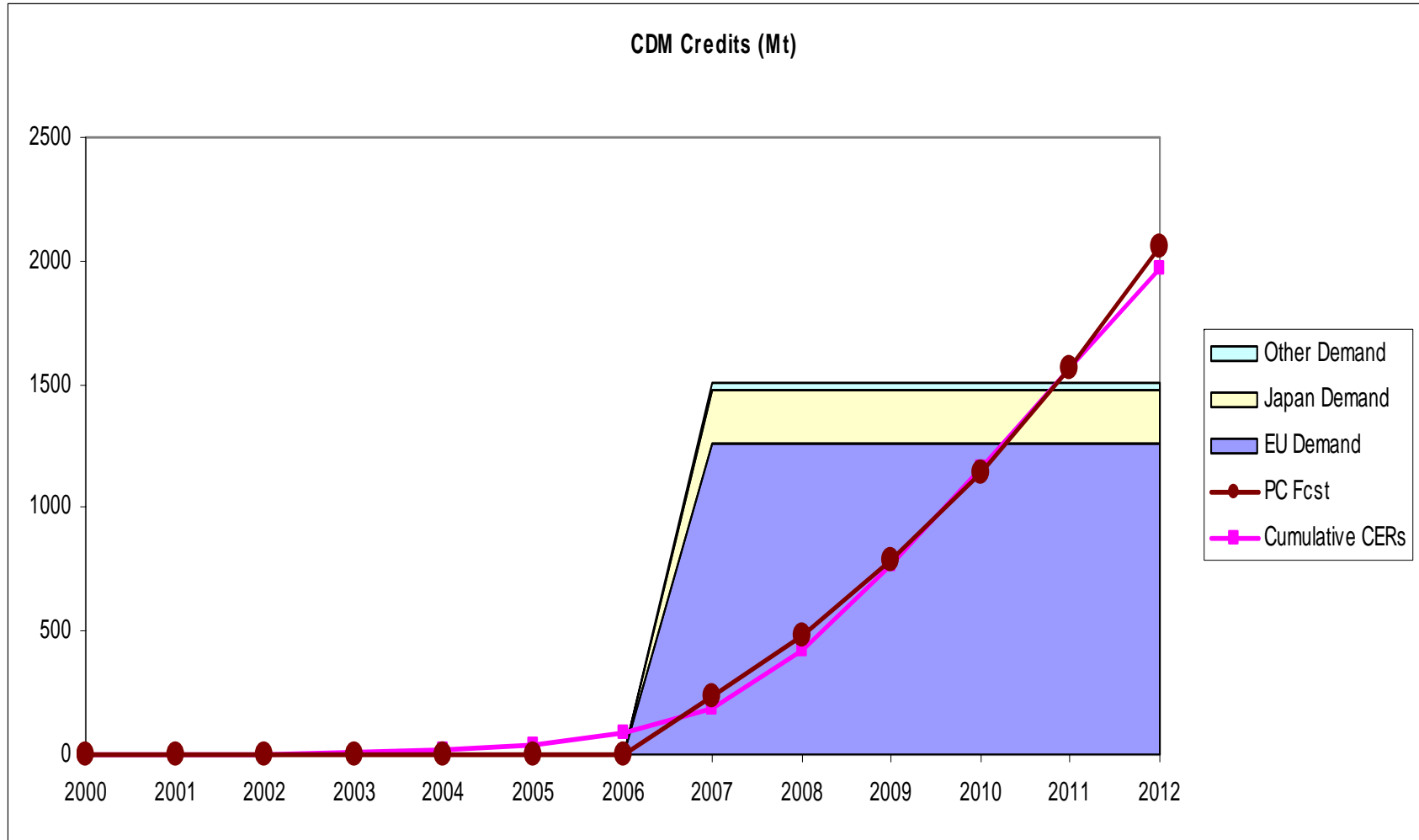
Where are they all going?



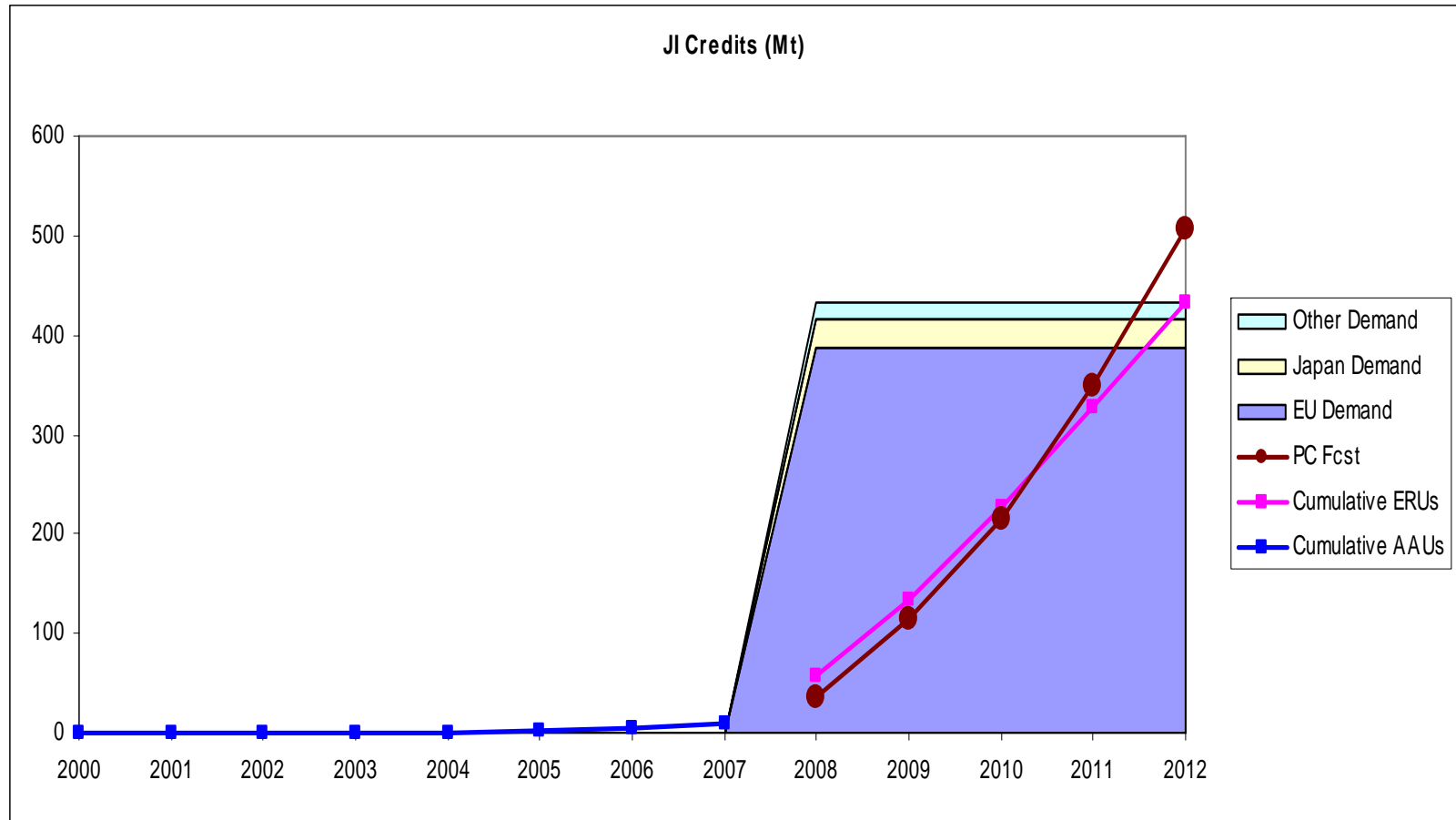
The effect of EUAs on CER prices



CERs

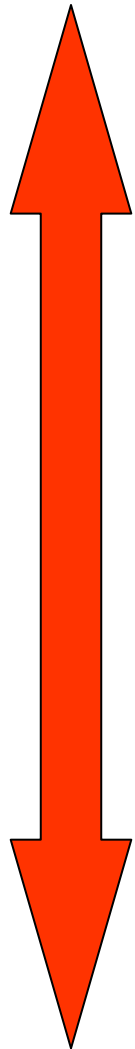


ERUs



2.4 Mt total supply; c.2.0 Mt total demand until 2012

Price differentiation in CDM – how valid is it?



Gold standard

Renewable energy

The Rest of the World projects

India projects

Chinese projects

Waste Industrial gases

Large hydro, palm oil

N2O projects

HFC projects

*Differentiation
by
methodology
and geography*

Voluntary Emissions Reductions (VERs)

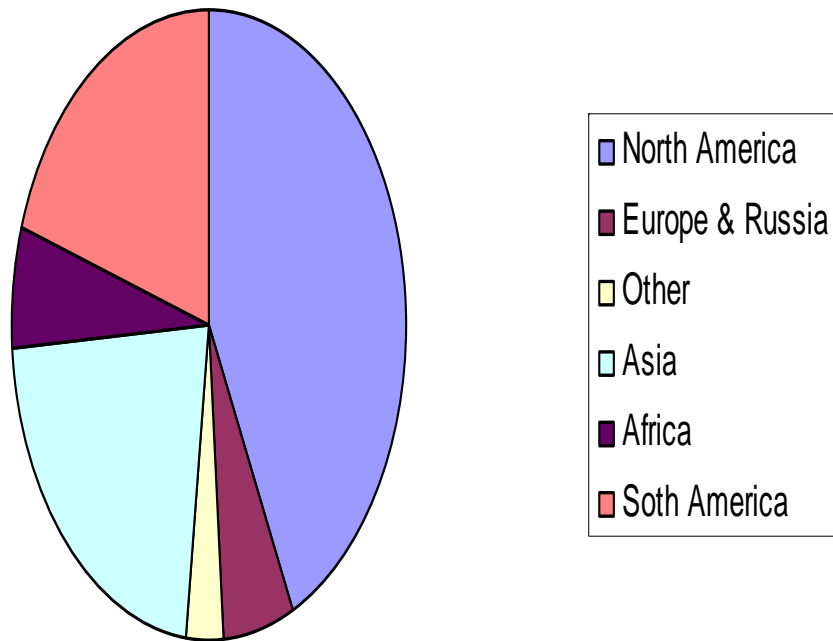
- What are VERs?
- Where do they come from and why?
- Who uses them?
- Where are they used?
- What price?
- Problems

VERs I

- These are emissions reductions which come about separately from the regulated Kyoto Market, but with the same additionality criteria aims
- Route for small projects which find CDM too expensive
- 13 Mt coming from same sources as Kyoto
 - Forestry 4.7m
 - Renewable energy 4.3 Mt
 - Industrial gases 2.6Mt
 - Energy efficiency, various types methane abatement
- Individuals, events/conferences, companies own activities, companies for their clients and NGOs
 - Price a dominant feature with companies, but development/community benefits also highlighted, whilst for Events main driver is reputation

VERs II

Voluntary Offset Projects 2006 in % of 13 Mt



World Bank / Ecosystem Marketplace

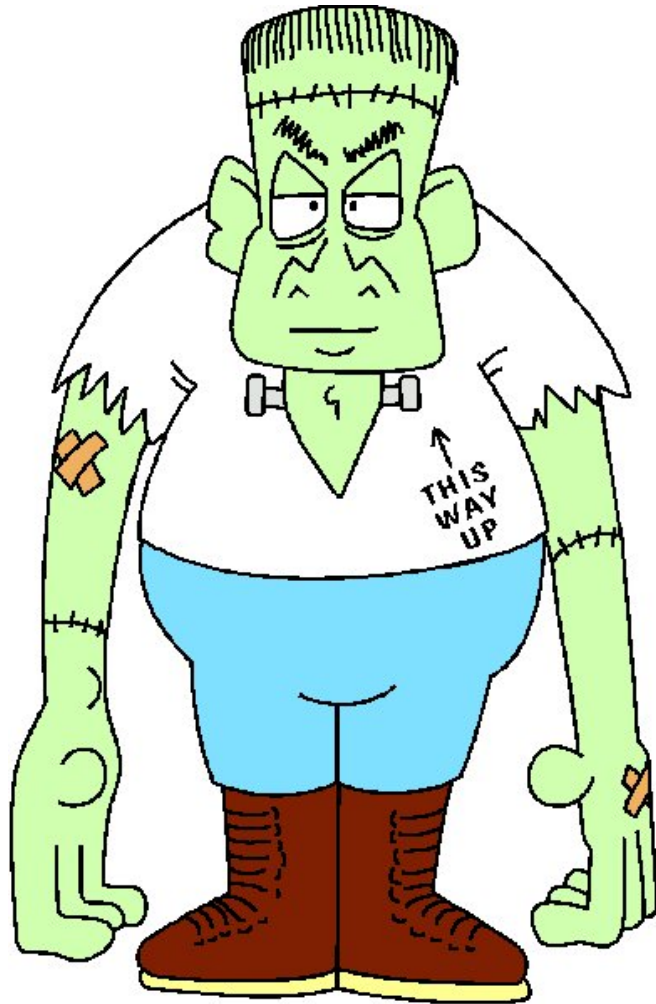
- N America €1–30 c. €9
- Australia €5–15 c. €10.9
- Canada & NZ €6–32 c. €18.1
- Europe €5–53 c. €19.1

VERs -III

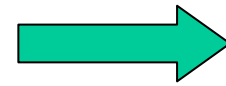
Issues

- Differing Standards
 - Voluntary Gold Standard, Voluntary Carbon Standard, Green-e, Chicago Climate Exchange, Voluntary Offset Standard, VER+/TUV
- Differing Registries, leading to the danger of
- DOUBLE COUNTING
- Interesting to note that CDM Gold Standard has been used ENTIRELY for offsetting, rather than compliance buying
- Around 70 offset providers, all with different carbon footprint calculation methodologies
- USA oversupplied with some nonsensical projects
- Additionality questionable in some cases

Son of Kyotostein!



- Where will the demand come from post 2012?
- Will there even be Annex I involvement?



In all probability, there will be some sort of post Kyoto scheme – definitely EU ETS

- Expect Canada, USA and Australia to be materially involved by then – if not at federal level, definitely at state level
- More sectors? Definitely aviation, maybe others (maritime)

Post 2012 possibilities?

- CP: there will be an EU scheme that will be able to use CERs
- Future Treaty may look way beyond 5 years – possibly to 2050!
- Annexe I / non-Annexe I: HDI= Israel (23) South Korea (26)? Singapore (25)? CHILE (38)! Lowest Annexe I is 32nd & 7 EU states below Chile
- What price reference do we have?
 - Maybe best way is either index price (no certainty for project owner)
 - Or Floor plus share of upside. THIS IS EXPENSIVE!
 - Suggest you do not accept low fixed price offerings from buyers
- How will non-Annexe I countries ‘do their bit’?
 - Suggestion out of UN this year that obligation could be taken on by retiring portion of CDM credits
- **CONCLUSION: Arguing about *relative* emissions is meaningless when we have an *absolute* problem!**

Thank You!

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