RIETI “Brown Bag Lunch” Seminar

Emissions Trading Developments across the world - lessons for Japan?

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Who are IETA?

• Only cross-sectoral private sector international organization promoting emissions trading to secure environmental goals
• Founded in 1999
• Membership: 181 companies
  – 49%: emitters
  – 51% project developers, intermediaries, financial institutions, brokers, verifiers, legal firms
  – 60% EU, 30% US/Canada, 10% Asia
• Swiss non profit
• Offices: Geneva, Brussels, Washington, Toronto
Three Key Current Areas for IETA:

1. EU-ETS Third Phase Design
2. Emerging US National Schemes
3. Sentiment of the Carbon Market
EU - ETS
Key Elements of the Commission Package

- a significant contribution to a -20% or -30% reduction by 2020
- extension of coverage to new sectors and gases, with opt-out for smaller installations
- a single European cap with a linear decrease to 2020 and beyond
- Harmonised allocation with a major and increasing role for auctioning, taking into account cost pass-through and “carbon leakage” (but also to redistribute resource between MS)
- Auctioning income substantial – 20% should go to climate change
- Strongly based on economic analysis: GDP impact -0.35% in 2020
- Slightly easier path to linking
- Harmonisation of MRV
- Integration with renewables, CCS and “burden-sharing”
Where are the Political Problem Areas?

- Level of ambition vs competitiveness
- Auctioning vs free or benchmarked allocation
- Application of auction revenues
- Forestry – “something must be done”
- CDM – possibly?
- Speculators!
- Special weighting for CCS or other favoured technologies
- Transport coverage
- Carbon leakage, and the international negotiations
- Border adjustments
- Special member-state circumstances (eg dependence on Russian gas) and ...getting it all done by December 08

Source: Mission Climat/Caisse des Depots
The Competitiveness Puzzle – not many sectors seriously affected but the effect is real

Note: Trade sensitivities estimated from range of historical variability
Source: Data from CIRED, as presented in Carbon Trust (2008)
No mechanism (fixed free allocation)

- Profit-maximising or Strategic protection

Inside EU ETS

Outside EU ETS

Levelise at non-carbon costs
Conditional allocation/revenue recycling

Value of allocation cancels out cost of CO2

Support consistent differential
Border adjustments

Fiscal, process standard or allowance adjustment at border

Globalise carbon costs
Full-cost sectoral Agreements

Price with carbon cost

Sectoral agreement with CO2 cost in all major production

Source: Michael Grubb/Carbon Strategies

So what can be done?
IETA’s verdict: Necessary Operational improvements

Some devil in the post-legislation detail but, the principles are very good:

• A longer period for price to operate and signal
• A clear direction of travel
• Principle of auctioning central
• Harmonised cap and allocation methodologies
• Evidence of determination to avoid inadequate demand
• Harmonised definitions
• Some expansion – still cautious
• Linkage into a global market provided for
Credibility and stability

• Phase 1 price crash did damage, even if only in international politics.

• Auctioning, if well-managed, can help keep the market stable.

• But some of the “over-allocation” argument is over-done: new research shows 2005 and 2006 emissions lower than baseline projections by 50-100mt – 5%.

• Phase 2 was 14% lower – price is sustained.

• Full credibility requires sustained price signals: but reductions from fuel switching and projects are not to be despised.
Some Confusions Remain

- Non-transparency of modelling price assumptions
- Availability of international project mechanisms could be severely reduced: no new projects?
- Trigger of “an international agreement"
- External price and cost controls could get in the way
- Competitiveness dragon not slain
- Auctioning methodologies not clear and timescales are tight
- New Entrant Reserve large but limited
- Application of revenues
- Fairness between countries and EU-ETS/non-EU-ETS sectors
There is an unresolved confusion with renewables support policy

- Uneasy relationship between price, subsidy and regulation
- Renewables targets look highly uncertain without new mandatory policies (CCS too?)
- If sufficient emissions reductions actions are mandated, no role for the market to help choose
- Give the market a chance first

Source: IPCC, from Neuhoff
UK – Expansion and Independent Oversight

Carbon Reduction Commitment

• mandatory emissions trading for c3000 non-energy intensive but large commercial and public sector organisations. (10% of UK emissions)
• Starts in January 2010 with a three year introductory phase featuring simple fixed price sales of allowances. From 2013 a cap on the number of allowances, and all will be auctioned each year

Committee on Climate Change

• Independent Committee with unprecedented economic power
• Reports to Government and parliament on whether 60% by 2050 is enough, on 5-year budgets rolling out to 2050 budget
• Analyses international constraints, marginal abatement cost curves, use of bought-in credits, and other policy issues
US Developments
The Presidential Hopefuls

- market-based cap-and-trade to reduce 80% by 2050, back to 1990 levels by 2020, with immediate annual reduction targets
- 100% auction
- some revenue used for clean energy development, energy efficiency and transition costs
- 25% renewables by 2025: support to clean coal, CCS, reforestation, new technologies
- Global Energy Forum of the largest Greenhouse gas emitters

“IM ASKING YOU TO BELIEVE. Not just in my ability to bring about real change in Washington ... I’m asking you to believe in yours.”
The Presidential hopefuls

• cap and trade scheme covering 90% of the economy
• targets for 2012, 2020 (return to 1990), 2030, 2050 (60% below 1990)
• permits eventually (2050?) auctioned with some proceeds going to research (including CCS and nuclear) and deployment support
• early allocation of permits to help transition and endow the Climate Change Credit Corporation, which will reward early action
• a commission to decide the balance of freely allocated and auctioned
• banking and borrowing allowed
• unlimited initial offsets from domestic and international sources
• integrating the US market with others, in pursuit of lower-cost reductions
• a strategic carbon reserve as a source of permits during hard economic times
• lead UN negotiations, and incentivise rapid participation by India/China
• same environmental standards applied to those countries as to US
Bills in Congress

Comparison of Legislative Climate Change Targets in the 110th Congress, 1990-2050
December 7, 2007

For a full discussion of underlying methodology, assumptions and references please see http://www.wri.org/climate/targets. WRI does not endorse any of these bills. This analysis is intended to fairly and accurately compare explicit carbon caps in Congressional climate proposals. Data post 2080 may be derived from extrapolation of EIA projections.
Lieberman-Warner

- emissions reductions of about 2% pa from 2012 – 19% by 2020, 71% by 2050 for covered sectors
- up to 15% domestic offsets, with emphasis on farming and forestry
- up to 5% international project-based credits, another 10% international forest protection credits
- strong market oversight to prevent manipulation
- Carbon Market Efficiency Board reporting to Congress, able to apply cost-relief measures
- Climate Change Technology Board to distribute revenues
- banking and borrowing allowed
- automatic extra supply released (borrowed from future) at predetermined price level
- fixed reward for early action
- much transitional relief
- all major emitters to reduce – otherwise importers Must acquire allowances
- states can take measures if not less stringent
A Dry Run – and then how long?

- Inauspicious times: when will the L-W Bill now get on the floor? What will it show when it does?
- A Bill to Congress 100 days after Jan 09 swearing in?
- To Congress May 09, marked up Fall 09
- To Committees, who meet in conference Spring 2010 earliest
- Legislation passed 2010; executive action “within 180 days”; could take till 2012 to implement
- Lawsuits aimed at preventing implementation – if granted, add 2 more years
- Use of Clean Air Act, Endangered Species Act, Executive Agreement for international elements – all bear traps
Some key US IETA concerns

• Fundamental misunderstandings of cap and trade – lack of knowledge about EU-ETS and other precedents
• Growing sympathy for taxation rather than trading
• Problems with price caps and safety-valves
• Fundamental mistrust of international offsets
• Unsophisticated approaches to preconditions for auctioning
The State and Sentiment of the Carbon Market
Value of world carbon market increased by 120% in 2007

- Mostly driven by increased volume and price of EUAs

Source: New Carbon Finance estimates
How the Carbon Price does affect clean energy investment – CDM analysis

Source: World Bank
State of Carbon market 2007
Fewer respondents intend to increase participation for the next year.

The GHG market will be a better business proposition in the next year and we expect to increase our participation.

The GHG market is an established instrument that will continue post 2012.
Significantly higher prices beyond 2012

EUROPEAN CARBON MARKET

Between now and 2012

- Under Eur10: 1%
- Eur 10 - 20: 6%
- Eur 20 - 25: 29%
- Eur 25 - 35: 51%
- Over Eur 35: 7%

2012 - 2020

- Under Eur10: 4%
- Eur 10 - 20: 9%
- Eur 20 - 25: 28%
- Eur 25 - 35: 47%
Prices of CER also expected to increase post 2012

- Under Eur10
- Eur 10 - 15
- Eur 15-20
- Eur 20 - 25
- Over Eur 25

Between now and 2012
- Eur 10 - 15:
  - 3%
- Eur 15-20:
  - 14%
- Over Eur 25:
  - 44%

2012 - 2020
- Under Eur10:
  - 8%
- Eur 10 - 15:
  - 7%
- Eur 15-20:
  - 8%
- Eur 20 - 25:
  - 16%
- Over Eur 25:
  - 27%
Issues for the Future
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• Are we kidding ourselves about an international agreement in place for 2013?
• What is the true scope for linking when ambitions for 2020 are still so different?
• Is the EU’s negotiating ploy going to knock the bottom out of the project market?
Issues for Japan

• When is it reasonable to expect Japan’s competitors to be adequately covered?
• Is the idea of an international sectoral approach going to produce any dividend?
• Is there any difference between a “hard” voluntary scheme and a cap and trade scheme?
• But is that difference going to prevent linking, and if so does it matter?
Singapore, 12-13 November 2008