

EcoSecurities Group plc

Evolving Emissions Trading and Green Finance post-Kyoto

Where do we stand today?

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The policy goal is to develop an effective, global, low-carbon infrastructure across all economic sectors & stages of national development

Three main areas of focus

- 1. Accelerating development of new, GHG friendly, technologies
- 2. Creating a conducive manufacturing environment(s) for clean energy technologies
- Having a policy environment that accelerates deployment and successful operation of key technologies – both in home and export markets

This last component is crucial

- Are we effectively using relative GHG performance to catalyze and accelerate execution of emerging clean energy technologies?
- The only antecedent we can currently check is the CDM

The Mixed results of CDM

- Complex system up and running
- ><u>1700 projects UN registered</u> and >3000 more in the pipeline
- Gross current projection is less than <u>1.5</u>
 <u>billion tons of reductions</u>
- "Learning by doing" has created significant expertise base and a <u>global entrepreneurial</u> <u>culture around emissions</u>
- Solid proof that markets can indeed achieve social objectives
- Many failures can be attributed to "oversuccess" and regulatory stress
- Has accelerated existing technology
 <u>uptake in new markets</u>

- Successful early projects are extraordinarily concentrated – <u>Fewer than 30 of projects</u> <u>have generated approximately 70% of total</u> <u>credits to date</u>
- <u>System is overly complicated</u> and almost impossible for small projects to gain access
- High value, immediate return projects are done
- <u>Dwindling Kyoto timeframe creates</u> <u>virtually no incentive to invest in next set</u> <u>of projects</u>
- <u>Has done virtually nothing to incentivize</u> <u>new technologies</u> or really bring high end technology to key developing markets



Key Issue 1 : Time Frame and Stability of Policy

- Kyoto credit earning period of <u>five years is way too short</u>, to engender for the next generation of project types (renewable energy, energy efficiency, carbon capture and storage)
- 2. By the time people believed in the system, there was virtually no time for building out some of the slower development assets
- 3. Similarly, the US, renewable energy production tax credit (PTC) was an annual budget uncertainty in Congress for many years severely impacting market stability by creating regular boom and bust cycles around project execution
- 4. That broad discussion is now framed to 2050 is very positive, but they must be mirrored by real, on the ground, policies incentives that are stable and predictable

Solution: Long-term (20++ years) earning capabilities and stable policy commitments that reward/penalize relative GHG performance are an absolute requirement to reallocate capital efficiently



Key Issue 2 : Predictability of System participation (Positive Lists)

- Due to current vagaries of the CDM system's "case by case" analysis, project developers face great uncertainties in accessing the market
 - 1. Binary risks: Will a project qualify (get registered) or not?
 - 2. **Temporal risks**: When exactly will registration occur (earnings can only commence at that point)
 - **3. Knowledge gaps:** Why projects fail to qualify and the reasons that project get slowed in the regulatory process is unacceptably opaque.
- None of these factors impact actual emissions reductions performance, but rather the right to qualify to participate in the financial market around that performance

Solution: Regulation that relies on upfront technology approval where policymakers choose some winners and losers (of qualifying technologies) and automate the participation process to a far greater degree

Key Issue 3: Benchmarking Performance

- Today, enormous amount of systemic resources are used to calculate, prove and check particular volumes of emission reductions from assets
 - 1. We will NEVER account for precisely every hypothetical ton of reductions;
 - 2. Would free up enormous system resources that are current tied down in minutiae
 - 3. A technology benchmarking approach allow for environmental value to accrue to the next generation of GHG technologies smaller, more discreet assets which plays into the rollouts anticipated from the technology developments expected out of the research centers of GE, IBM, Siemens, etc
- Solution: The regulator needs to take more direct responsibility for environmental value created (assigning specific coefficients) understanding that an average means that all individual assets are wrong (some are high and other low) but collectively there is relative accuracy



AND JUST WHEN YOU THOUGHT IT WAS GETTING STRAIGHTFORWARD

HERE COMES THE US

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CDM 2.0 – The ACES Perspective

Sectoral International Offset Crediting

- EPA/State Department to identify sectors/countries where sectoral crediting is appropriate, and in those instances credit offsets ONLY on a sectoral basis
- Identification of sectors guided by considerations, e.g. host country GDP, absolute emissions, comparable treatment of sector in US, heterogeneity of sector emissions, competitiveness concerns, leakage risks, MRV, etc.

Non-Sectoral International Credits (CDM/CDM 2.0)

- EPA *may* issue "US international offsets" in exchange for CERs, *IF* EPA determines CDM EB requirements provide equal or greater integrity to domestic program
- Mainly

Will sectoral crediting work?

- ACES bill says: encourage high-emitting uncapped countries to set targets for certain sectors and receive incentive payments for going below those targets through an international offset market
- EPA/State to identify sectors/countries where sectoral crediting is appropriate, and in those instances credit offsets on a sectoral basis ONLY.
- **PROS** → Potentially strong financial incentives for developing host countries
- CONS →Uncertainty in estimating future BAU emissions (macro-gaming)
 → Impossible to tell now whether major developing countries would agree to such an arrangements without substantial incentives prior to future market rewards

Non-sectoral?

2 years after enactment (2012-ish), EPA/State/ USAID/Offset Advisory Board to promulgate regulations for international offsets <u>if</u> the US is a party to bi/multilateral arrangement that includes the host country

- Kyoto/Copenhagen not necessarily sufficient
- Host country must be a developing country
- No international offsets for black carbon or HFC destruction activities
- Limiting Factors for International Offsets
- Eligible Project Type List
 - Certainly a very restrictive asset class base for domestic offsets
 - <u>May apply to international offsets</u>, so CERs developed in US capped sectors in US potentially ineligible
- CERs also ineligible in countries/sectors where U.S is crediting sectorally
- Projects receiving funds from Int'l Clean Tech Fund ineligible for offsets

So, Where Do We Stand?

- One the one hand, an incredibly powerful source of demand is entering the market
 - Over time, there is no way that the US can meet its emission reduction objectives using only domestic policy and domestic offset assets
- On the other hand, the US is clearly looking to change the rules of the game to address its concerns with CDM 1.0
 - US legislators wants a "made in the USA" stamp on any international crediting mechanism—generally suspicious of anything UN-led
 - The degree to which the world can push back and get some middle ground agreement is paramount—goodwill about being back at the negotiating table only goes so far
 - US should not be allowed to pretend its decade of inaction simply never happened
- Improvements to CDM are paramount however, moving a fully clean sheet of paper as many US policy suggestions seem to imply, is stupid

Implications

- While the economic crisis certainly did not help the CDM, it came at a point where the Kyoto mechanism itself was already on the down slope, in terms of new asset identification and development
- While there may have been project financing issues in some markets, the main CDM market – China – rolled through the crisis with barely a hiccup in terms of capital availability for completing assets
- However, the presumed continuation of the CDM Market post 2012 with its potential and warts – could come to a grinding halt while the world tries to fully integrate the "new" ideas of the US
- The question is whether the US legislation is actually focused on all rapid growth developing countries or whether that is really a code word for one country only – China
- If it is just China, the implication is that the next generation of the carbon market will be increasingly multitrack and heterogeneous

Thank You

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For more information, please visit: <u>http://www.ecosecurities.com</u>

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