ICAO Workshop

Aviation and Carbon Markets

Session 4 Carbon Offset Programmes

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Montreal, June 19, 2008

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  - US and EU carbon markets – potential regulation models
  - Role of offsets for compliance

What is an offset?

- A real, additional, verifiable and permanent reduction of greenhouse gas emissions – 1 tCO_2e
- Buying an offset means that the revenue stream generated has been instrumental in reducing a ton of CO_2e emissions
- Offsets are created under regulated and unregulated environments with widely different levels of environmental quality
- The credibility of offsets as a concept is severely challenged by public perceptions of the practices employed by the ”offset industry” – true or false - the bad expamples tend to define public opinions
- Offsets, when employed in a credible and controlled environment, provide a robust environmental approach and a very cost efficient abatement option for regulated and unregulated emitters

Role of offsets – voluntary demand

Individuals, governments & organizations:

Idealistic motives, leading by example, ”carry the torch”

Businesses:

Enhance shareholder value through CSR- proposing to clients, employees, shareholders & regulators

Role of offsets – pre compliance

- Legislators/regulators provide incentives for emitters to engage in pre-compliance reduction activities by:
  - Accepting banked offsets for compliance in cap-and-trade programs (e.g. Lieberman Warner)
  - Offering early action credits to entities with verified emission reduction activities (e.g. extra allowance allocations)

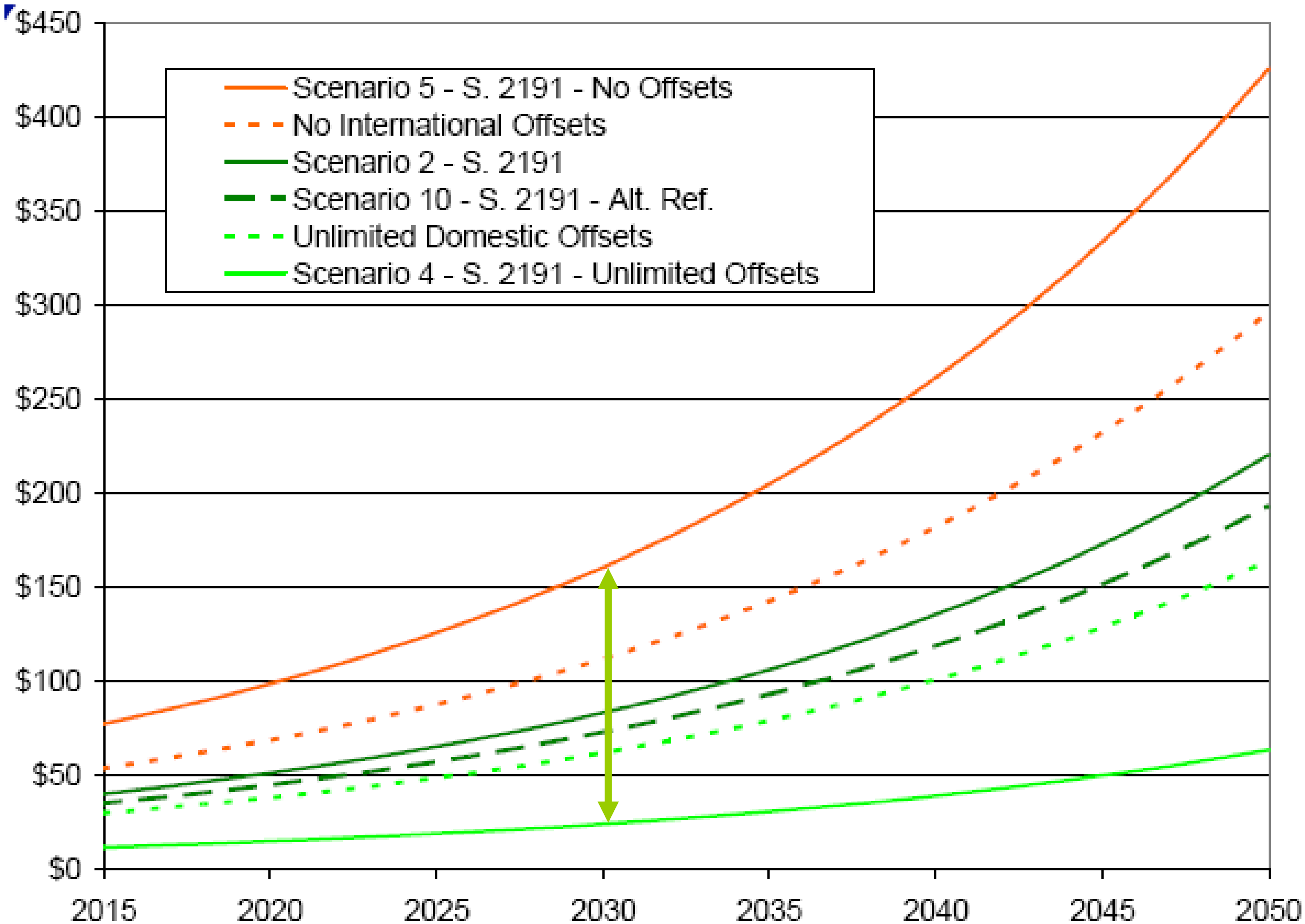
Intention: Kick-start abatement and avoid unintended incentives to put off projects in expectation of future regulation (Examples: CCX, 1605b)

Important driver in US voluntary market

Role of offsets – offsets for compliance

- Most cap-and-trade programs accept that emitters use offsets from sectors outside the coverage of the program
  - Subject to quantitative limits
  - Subject to sectoral/technology limitations
  - Subject to stringent verification & monitoring rules
  - Most important cost containment mechanism in cap-and-trade
  - Allows the cap (emissions) within the program to increase correspondingly

US Price Forecasts: Effects of offsets



Graph: EPA

Offsets and aviation

- Aviation industry likely to be subject to GHG regulation
  - EU – 2011/2012
  - USA – 2012/2013?
- US and Europe likely to introduce disparate systems
  - EU will cap emitters – offsets are eligible for compliance
  - US will cap fuel suppliers – aviation will see higher fuel cost

Offsets and aviation

- US aviation industry will see carbon costs embedded in fuel prices (if current proposals prevail)
  - emitters will respond to a ”variable fuel tax” and can not use carbon markets (offsets) for compliance
  - fuel suppliers have no abatement option, will pass through carbon cost, will use carbon markets(offsets) for compliance
- The farther carbon cost is moved away from point of emissions, the more likely environmental efficiency is lost due to distorted price signals
  - Carbon price fluctuations likely to be moderated through the value chain
  - Fuel suppliers likely to price-differentiate among customer groups

Offsets and aviation

- Aviation industry in Europe can use offsets for compliance
- US aviation industry may get ”refund” for carbon cost incurred in Europe - to avoid ”double taxation” - on fuel purchased in USA
- Current US L-W bill likely to keep carbon cost below EU levels
- US aviation industry could qualify for early action credits – rules pending
- Offset origination strategy critical to airlines with EU emissions

Contact

Thank you for your attention!

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