

The Implications of Carbon Offsets for Development

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About Me



Introduction

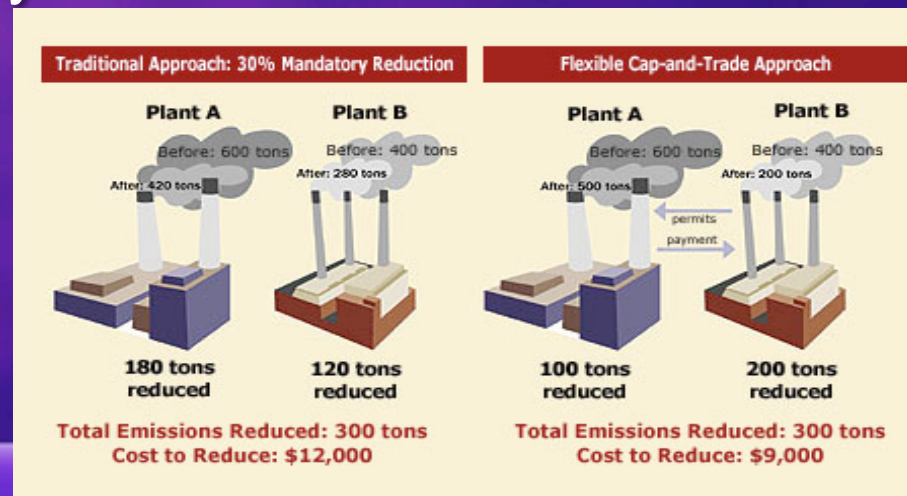
- Analyze the use of offsets in 34 cap and trade policy venues identified in “Mapping Emissions Trading of Greenhouse Gases”
- Examine relationship between climate change and development
 - Recommend and justify use of offsets as option to promote capacity building

What Are Offsets?

- Offset: an emissions reduction, removal, or avoidance of CO₂ equivalent (greenhouse gas- GHG)
- Offset Project Types:
 - Carbon Sequestration: afforestation, reforestation, avoided deforestation, forest/grazing land management, conservation tillage
 - Methane Capture and Destruction: capture CH₄ (byproduct of anaerobic breakdown of waste) in landfills, coalmines, and farms
 - Renewable Energy: solar, wind, hydroelectric, bioenergy, hydrogen, geothermal, ocean/tidal
 - Energy Efficiency: energy use reduction

What Are Offsets?

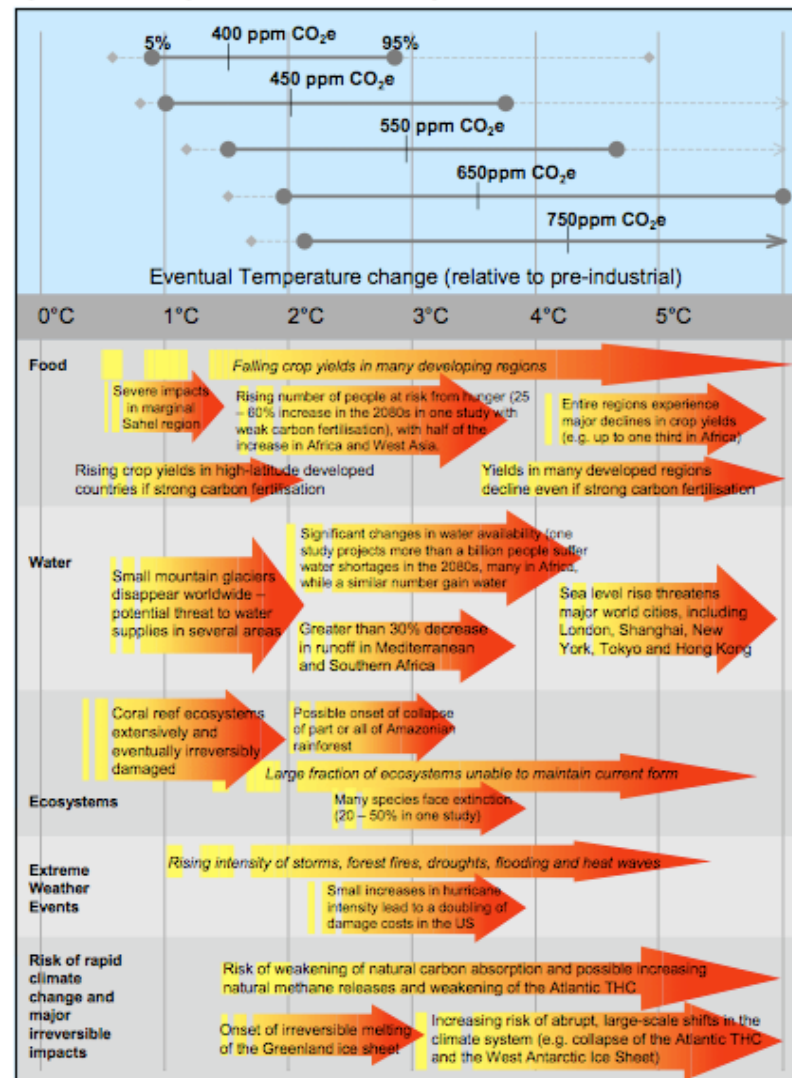
- Offsets frequently used in cap and trade system:
 - market approach (versus command and control) to decrease emissions and cost
 - authority establishes cap on total emissions, then issues right-to-pollute permits (amount of permits issued declines annually) to be traded as private property



Climate Change and Development

- Climate change disproportionately affects poor, due to increased vulnerability

Figure 2. Projected Changes Associated with Global Warming.



(Source: HM Treasury, 2006)⁷

Climate Change and Development

- Adaptive Capacity: ability to adapt to climate change (depends on resources and effectiveness of community/government)
- Capacity Building: programs to enhance communities' capabilities, and increase resilience of vulnerable groups

Equity

- Current climate policies are inequitable
 - Does not take into consideration the correlation between per capita emissions and wealth
 - Developing countries also have a “right to pollute”
- Politically, growing economies (China, Brazil, India) will not cooperate with inequitable policy

Equity

- To integrate equity into policy, rich must pay
 - Environmental debt: emitted into atmosphere freely (preventing developing countries from doing so), led to human-induced climate change
 - Only ones with ability to fund mitigation/adaptation
- Funding should go towards capacity building through offsets

Conclusion

- Created hypothetical model of offset design to promote sustainable development
- Message to take away:
 - Equity must be central to any climate change policy
 - Offsets are a viable option for using funding to reduce vulnerability