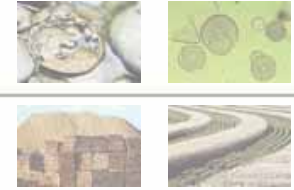




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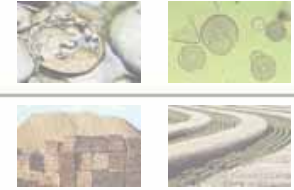


# Opportunities Created By Greenhouse Gas Regulation

Todd Wooten  
Director  
Southeast Climate Resource Center  
Nicholas Institute for Environmental Policy Solutions  
Duke University

8th Annual Southern BioProducts and Renewable Energy  
Conference  
May 21, 2009





# Cap and Trade

- Market based approach to regulating pollution
- Reductions must be made but not necessarily by the regulated entity
- In theory, encourages the most cost effective reductions throughout the economy





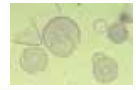
# Who is a regulated entity?





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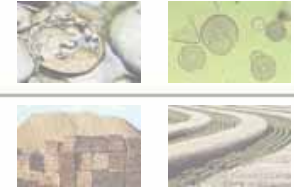
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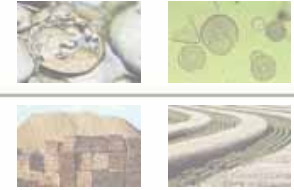




# What does it mean for regulated entities?

- Given the allowances necessary to meet that year's target
- Have to turn in emissions allowances for compliance
- Should emissions exceed the target, entity must acquire allowances necessary to cover emissions
- May acquire these allowances from other entities with emissions below their target or from outside sources



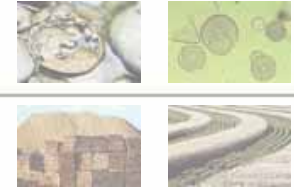


# What does it mean for everyone else?

- Not required to do anything
- But if they chose to anyway?

## Offsets





# How do we evaluate an offset?

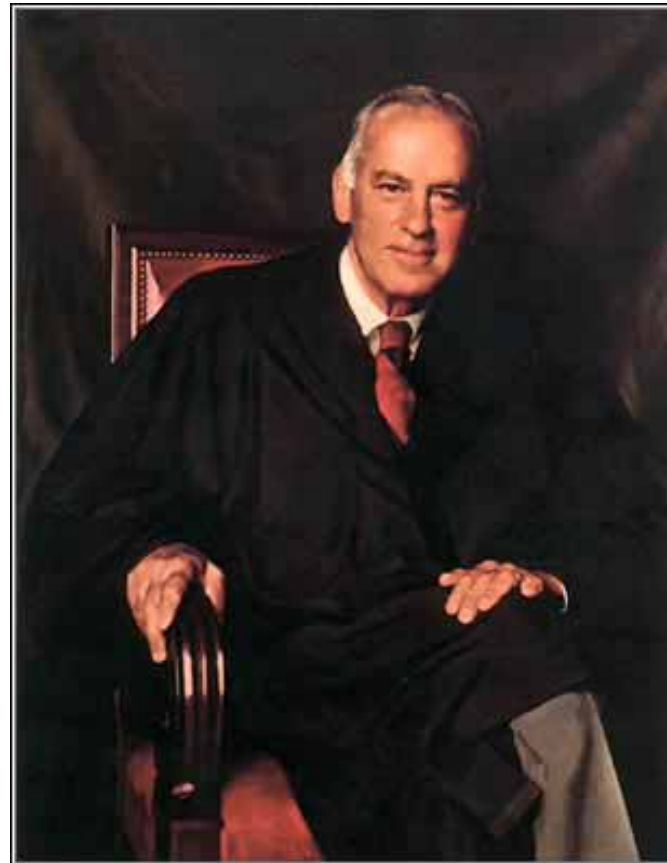
- Real
- Measurable
- Verifiable
- Additional

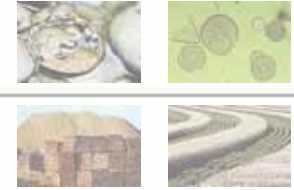




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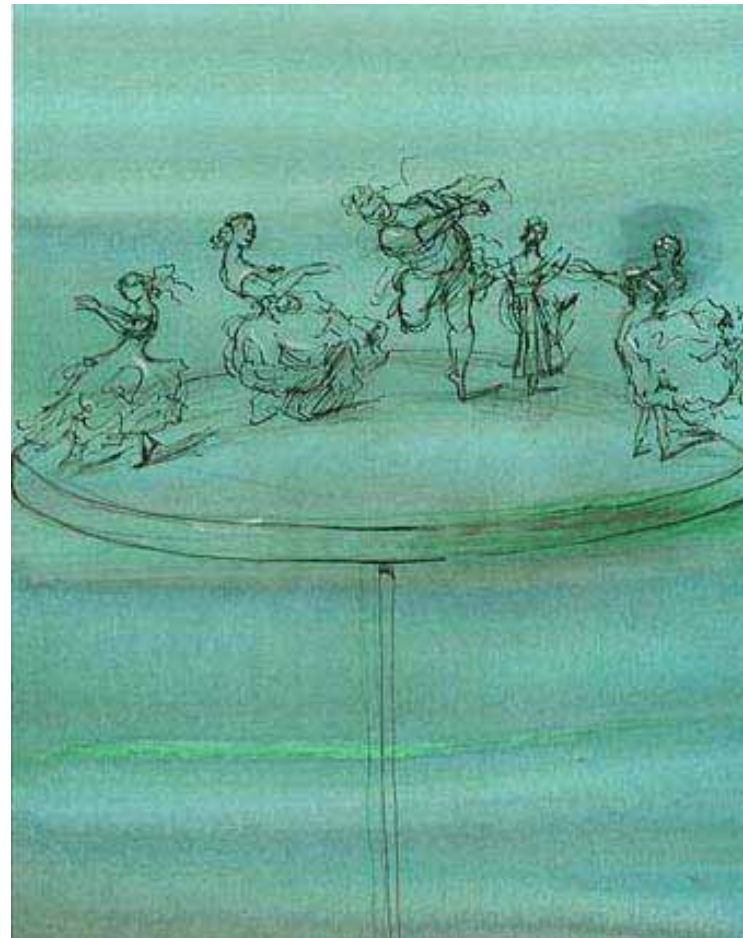
# Additionality

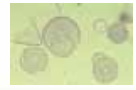
- Would these reductions occur in the absence of an active carbon market?
- Are entities required by law to undertake these actions?
- Is there an economic incentive to undertake these actions apart from the sale of carbon credits?





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# Regulatory



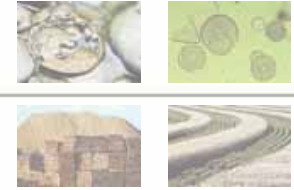
Wyatt Earp, c. 1886





# Baseline





# Waxman-Markey

## “Activity Baseline”

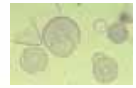
“to reflect a conservative estimate of business-as-usual performance or practices for the relevant type of activity such that the baseline provides an adequate margin of safety to ensure the environmental integrity of offsets calculated in reference to such baseline.”





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## RCM Covered Lagoon Digester

Biogas - December 1996  
Electricity - March 1997

RCM Digesters  
[rcmidigesters.com](http://rcmidigesters.com)

Barham Farm  
Zebulon, NC  
4000 sow -  
farrow to wean





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