
The Intersection of Biofuels / Bioenergy and Climate Change Legislation

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Sustainability Session 1

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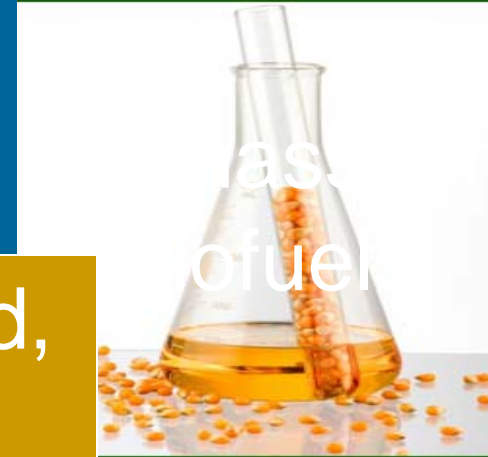
How Will Climate Change Legislation Affect Biomass?

- This is largely a question of land use and economics
- Climate change legislation will likely lead to additional costs and additional opportunities
 - The specifics matter, and these are very long bills
 - H.R. 2454 [Waxman-Markey] is 1428 pages
 - S. 1733 [Boxer-Kerry] is 937 pages

Cap-and-Trade Legislation

- Preferred approach of Obama Administration (EPA) and key Members of Congress
- General approach of most 111th Congress proposals
 - But carbon tax may be gaining traction
- Could be a key opportunity for biomass
 - But potential pitfalls (e.g., lifecycle assessment, competition for acreage) could limit the role for biomass

There are Many Potential Uses of Land



Also Wind,
Solar,
Bioproducts
etc.



But You Can't Use the Same Tree Twice

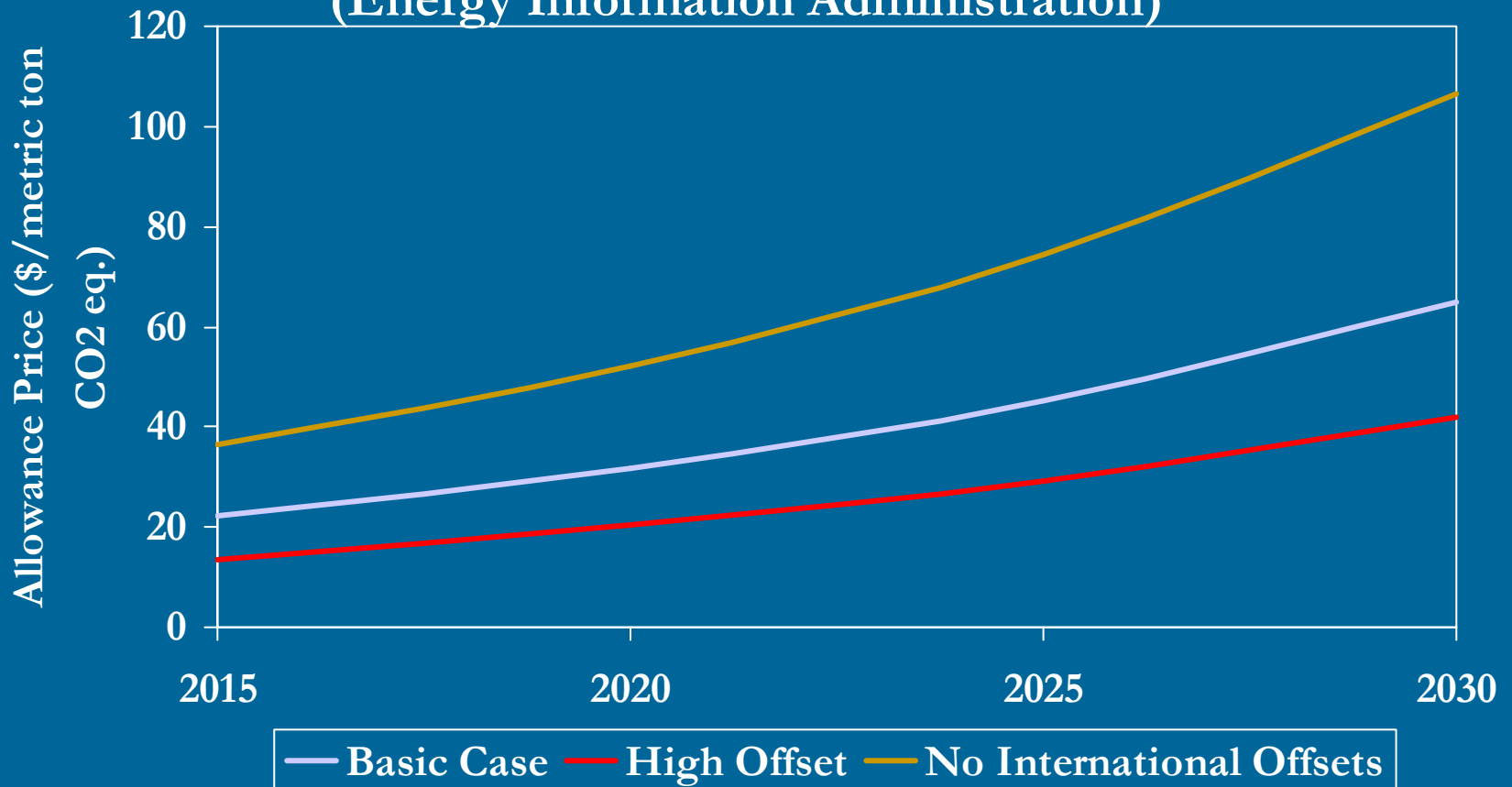
- ...or corn stalk, soybean, etc.
 - Some uses may be mutually exclusive
- But there may be multiple uses of the same land
 - E.g., grazing and wind power, or trees for biofuels and co-products

It Comes Down to Economics

- How do new incentives under a climate change bill interact with existing incentives?
 - Offsets/Sequestration credits
 - Biofuels mandates
 - Renewable electricity mandates
 - Tax incentives for biofuels, biomass power
 - Conservation incentives (e.g., CRP)
 - Conventional crop supports
 - Etc.

Offsets are Key to Making Cap-and-Trade Affordable

Allowance Prices Under H.R. 2454
(Energy Information Administration)



Some Key Challenges to Offsets Under Cap-and-Trade (and Biomass in General)

- **Additionality**
 - **Stackability**
 - **Permanence**
 - **Verification / Measurability**
 - **Early Adopters / Market Risk**
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Stackability

- Can land owners “stack” incentives?
 - E.g., can a land owner get a CRP payment and produce feedstock for biofuels?
- Some incentives may be more stackable than others
 - E.g., the concept of “additionality” that underpins offsets may run counter to the concept of “stackability”
 - Additionality assumes that emissions reduction wouldn’t have happened in absence of offset policy

What's in the Current Cap-and-Trade Bills?

Bill No.	H.R. 2454	S. 1733
Title	The American Clean Energy and Security (ACES) Act	The Clean Energy Jobs and American Power Act
Sponsors	Waxman-Markey	Kerry-Boxer
Biorefineries Regulated?	Yes	Yes
Biofuels Regulated?	No	No

What's in the Current Cap-and-Trade Bills?

	H.R. 2454	S. 1733
Biomass Power Plants Regulated?	No	No
Renewable Electricity Standard?	Yes	No

The Details Matter

- Side-by-side greenhouse gas, biofuel, and renewable electricity standards could lead to competition for the same parcel of land
- That would likely lead to higher costs for each program
- Definitions will also be key
 - I.e., “who’s in and who’s out”

Thank you

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