



MEETING SUMMARY
IOWA CLIMATE CHANGE ADVISORY COUNCIL
Agriculture, Forestry and Waste Subcommittee
Call #9, May 27, 2008

Attendance:

Subcommittee members: Peter Thorne, Richard Cruse, Duane Sand, Dave Miller

Center for Climate Strategies: Joe Pryor, Jackson Schreiber, Jen Jenkins, Steve Roe, Brad Strode

Iowa Department of Natural Resources: Marnie Stein

Public Attendees: None

Background Documents: (http://www.iaclimatechange.us/Agriculture_Forestry.cfm)

1. Meeting Notice and Agenda
2. PowerPoint for Teleconference
3. Summary of Call #8
4. Policy Options Document
5. Common Assumptions Memo

Discussion and Key Items:

1. Call to order and roll call
2. Review and approve prior call summary
3. Discuss Next Steps in Development of Straw Proposals
4. Next Steps for AFW subcommittee
5. Public Input and Announcements
6. Agenda, Time and Date for Next Meetings

Call to order and roll call – CCS Introductions

No Comments.

Review and approve prior call summary

No Comments or Revisions. Prior call summary approved.

Discuss Next Steps in Development of Straw Proposals

No Comments.

Discuss Development of Policy Options

1. AFW-5
 - a. The analysis should be done to encourage perennial grasses/biocrops, not to encourage increased forestry.

- b. This option is designed to convert other energy crops to perennial grasses/cellulosic energy crops. This should avoid the concern that this decreases the world supply of food.
 - c. We are measuring the relative GHG reduction that comes from the acreage change in AFW-5.
 - d. CCS will send out some explicit details on the cost assumptions of afforestation to the TWG so they can look them over.
2. AFW-9
- a. The Subcommittee has yet to set a goal regarding how much methane/how many landfills to control under AFW-9. There are currently 4 landfill operations in Iowa with methane capture operations. Those 4 facilities capture 40% of landfill methane in the state.
 - b. There are 17 additional landfills where it would be possible to capture methane. These remaining landfills could capture an additional 35% of landfill methane. At the moment, these sites are uncontrolled.
 - c. 75% of methane emissions can be controlled when methane capture is installed. In the BAU estimate, it is assumed that no additional methane capture technology will be installed in the state unless the landfills will grow large enough to fall under the regulation of federal/state requirements.
 - d. CCS will estimate a goal for methane capture and send it to the Subcommittee for review.
3. AFW-8
- a. Solid waste is assumed to be increasing 0.14% per year through 2020.
 - b. The WARM (Waste Reduction Model) is an EPA model used to measure the energy used to recycle, compost, or landfill various products. This can also be used to estimate the GHG emissions of various waste plans.
 - c. The BAU assumes the same ratio of landfilling/recycling as was seen in 2005.
 - d. The goal as it is currently set is not significantly higher than the BAU estimates. The goal is designed to reduce the growth of waste production in the state. There was a discussion regarding whether this option should be made more aggressive. It was agreed to get more input from Tom Haddon regarding whether it would be reasonable to increase this goal to make recycling/composting more aggressive.
4. Common Assumptions Memo
- a. Each of the subcommittees is developing a common assumptions memo so that there is consistency within and across subcommittees regarding the same information. For example, fuel and electricity costs should be quantified the same way for all options.
 - b. Options doing a lifecycle analysis can have dramatically different results from more specific analyses.
 - c. If you are measuring statewide emissions effects vs global emissions effects, there can be problems. For example, in the waste sector, looking at global emissions effects, it is possible for an aggressive state program to have greater

emissions reductions than total state landfill emissions, which can be worrying to some observers.

- d. In the Common Assumptions Memo, there is a renewable energy mix assumed in the state as part of the BAU. Some of the assumptions made in this table were discussed. It seemed surprising that wind/solar were projected to remain constant in the state through 2020. There will be coordination between the AFW and Clean Renewable Energy subcommittees so as to make sure that there is no double counting of options, and that all assumptions made are reasonable.
- e. The fuel prices table forecasts energy prices of crude oil, natural gas, coal and biomass. These can be modified based on the subcommittee input.
- f. Fertilizer costs in the assumptions memo currently use April 2007 costs. These costs may not be appropriate, given how tied fertilizer costs can be tied to energy costs. If we are assuming energy costs to be relatively constant, then it is appropriate to assume relatively constant fertilizer costs as well.
- g. There was a request to add information to the fuel prices table in terms of cost/physical unit for the three fuels (coal/natural gas/oil). CCS agreed to calculate this information.
- h. All subcommittee members should review the common assumptions memo and if any of the assumptions made in the document are outdated or unreasonable, please provide any sources for why that might be the case.

5. AFW 1

- a. There are a variety of factors that should be considered under AFW-1A (Nutrient Management), such as better soil testing, educational efforts for better N utilization/timing, incentives to encourage rapid adoption of new seed technologies that result in higher N utilization.
- b. We should assume increasing yield, and make sure that we are improving efficiency of yield per N applied, not just N application.
- c. In Iowa, total nitrogen application has flat-lined over the past ten to fifteen years.
- d. Permitting information indicates that smaller operators often are not as efficient (compared to larger farms) in terms of N application and manure management.
- e. For AFW 1B (Seasonally Flooded Areas), you cannot pre-apply N in these areas, you can only post-apply. This results in cost increases.

6. AFW 3

- a. An Iowa State publication cited the costs of Switchgrass to be 113\$/ton. A 2007 study found crop residues to be 56\$/ton to sell crop residues. This is significantly higher than the costs currently shown in the analysis.
- b. Switchgrass costs were 86\$/ton delivered to break even at the farm level.

Agenda, Time and Date for Next Meetings

The next ICCAC meeting will be held on June 12, 2008. The next Subcommittee Meeting #10 will be **Thursday June 26, 2008 from 9:00-10:30 am**, Central Time. CCS

will email the meeting dates for the remaining AFW subcommittee meetings. Proposed dates are:

IA AFW Call #11 Thursday July 24, 9:00-10:30 CT

IA AFW Call #12 Thursday August 14, 9:00-10:30 CT

IA AFW Call #13 Thursday September 18, 9:00-10:30 CT

IA AFW Call #14 Thursday October 16, 9:00-10:30 CT

Public Input and Announcements

None

Thank you to everyone who participated on the call and contributed to the discussion of these issues.