

The background of the slide is a composite image. The top half features a large, semi-transparent American flag with its stars and stripes. The bottom half shows a rural farm scene with a large red barn, a smaller red building, and a field in the foreground.

Mitigation of GHGs by Agriculture

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Reducing GHGs...Energy Use

- Reduce emissions by conserving energy.
- We have done this in agriculture.
 - In 1978, agriculture consumed 2.4 quadrillion BTUs of energy annually to raise food and fiber.
 - In 2002, this number was reduced to 1.7Q BTUs...nearly a 30% reduction.
 - At the same time, yields have increased (30% for corn alone).

Energy Use Reductions in Agriculture

- We are using less fertilizer than we did a generation ago. N fertilizer is derived from natural gas.
- Biotechnology
- Increases in minimum till / no till techniques reduces trips across the field, saves fuel.
- Larger equipment reduces fieldwork time.
- Center pivot technology...more efficient.

★ Reducing GHGs...Renewables

- Ag derived renewable energy will allow agriculture play a role both on reducing dependence on fossil fuels and reducing GHG emissions.
 - Ethanol...production has doubled over the last four years to 3.4 billion gallons.
 - Cellulosic Ethanol shows great promise.
 - Biodiesel has a promising future.
 - Wind, biopower, biomass, methane digestion also growing through tax incentives.
 - Role in hybrids/hydrogen technology.

Carbon Sequestration

- AFBF supports carbon sequestration and the development of a voluntary carbon trading system.
- Applaud the ground work laid by USDA, Chicago Climate Exchange and other groups like the Iowa Farm Bureau.
- Also applaud those producers who have implemented cropping systems and tillage regimens that promote soil sequestration.

No-Till Adoption in the U.S.

- Has nearly double in last 10 years.
 - 38.9 million acres in 1994
 - 62.4 million acres in 2004.
- Decision by producers to invest capital in no-till is based on several factors...
 - Environment, region, types of crops grown.
 - Savings in energy vs. increased cost in new equipment and chemical use.
 - Yield...bottom line, is it a good business decision.

Government Assistance

- USDA Conservation programs being utilized for sequestration/GHG reductions.
 - EQIP...Assists both crop and livestock producers.
 - CRP...The management of idled acres.
 - CSP...Energy component has huge potential.
 - Forest Land Enhancement Program
- Climate VISION Program.
 - Focuses on reducing CO2 Intensity 18% by 2018.

Carbon Accounting System

- Difficult situation...
 - Must be verifiable yet must adhere to the KIS (keep it simple) rule.
- Accounting can not be:
 - Overly cumbersome
 - Cost prohibitive
- Participation will most likely be maximized
 - Indirect methods...stratified accounting, remote sensing, modeling.

Other Sequestration Factors...

- Forest acres may consume a significant portion of the funding and program assistance.
- Other sequestration methods such as geologic injection and oceanic technologies may deemphasize agricultural sequestration.
- Farmer will still no-till and recapture methane, etc. if it makes good business sense.