

Additional Resources

Agriculture and Forestry in a Reduced Carbon Economy, Solutions from the Land

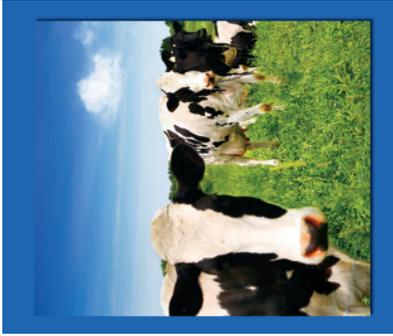
http://www.25x25.org/storage/25x25/documents/Carbon_Subcommittee/carbon_policy_discussion_guide_april_1_2009.pdf

Global Change Impacts in the United States

<http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts>

25x'25 Website

<http://www.25x25.org>



About 25x'25 and the Carbon Work Group

25x'25 is a diverse alliance of agricultural, forestry, environmental, conservation and other organizations and businesses that are working collaboratively to advance the goal of securing 25 percent of the nation's energy needs from renewable sources by the year 2025. 25x'25 is led by a national steering committee composed of volunteer leaders. The 25x'25 Carbon Work Group is a select panel of more than 50 nationally-recognized leaders, including producers, economists, agronomists, soil scientists, and conservation and business partners, brought together to examine the role of agriculture and forestry in a reduced carbon economy. The Work Group serves in an advisory role to the 25x'25 national steering committee.

The 25x'25 goal has been endorsed by nearly 900 partners, 34 governors, 15 state legislatures and the U.S. Congress through the Energy Independence and Security Act of 2007. 25x'25 is a special project of the Energy Future Coalition (EFC). The EFC is a broad-based non-partisan public policy initiative that seeks to bring about change in U.S. energy policy to address overarching challenges related to the production and use of energy.



25x'25
AMERICA'S
ENERGY FUTURE

For more information, please visit:

www.25x25.org

Agriculture and Forestry in a Reduced Carbon Economy

Solutions from the Land

Carbon Basics

The 25x'25 Carbon Work Group has concluded that the agriculture and forestry sectors are well positioned to offer solutions to counter climate change and that farm, ranch and forestland owners have much to gain.



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25x'25 believes it is critically important for the agricultural and forestry sectors to understand and become engaged in climate policy discussions and to proactively advocate for the enabling legislation that will be necessary to deliver and be compensated for the lower cost GHG reduction services they can and will provide. The following are key findings and recommendations of the 25x'25 Carbon Work Group.

- A new energy future is evolving; one that will result in significant reductions in carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions.
- The burning of fossil fuels to meet power and transportation needs is the primary source of GHG emissions.
- The scientific community has concurred that the warming of the world's climate is unequivocal and that increased concentrations of GHGs in the atmosphere are the primary cause.
- The agriculture and forestry sectors will be major players in our nation's energy future and a reduced carbon economy.
- According to the U.S. Environmental Protection Agency (EPA), the agriculture and forestry sectors are responsible for approximately 7 percent of total U.S. GHG emissions.
- EPA also estimates that the agriculture and forestry sectors have the potential to reduce 10-25 percent of total U.S. GHG emissions.

- Agriculture and forestry can reduce emissions directly; sequester or lock up CO₂ in soils and trees, and avoid other emissions via the use of biomass for biofuels and biopower.

- Under climate change legislation currently being considered by Congress, emissions from most energy-intensive industries would be capped and reduced between now and 2050.
- The goal of the legislation is to reduce U.S. GHG emissions by 2050 to 83% below 2005 levels.
- Because their emissions are diffuse and small compared to emitting industries, agriculture lands and forests are explicitly exempted from being regulated as capped entities.
- Under cap-and-trade, regulated entities must reduce emissions or purchase offsets to cover them.
- Offsets are reductions generated by uncapped sectors such as agriculture and forestry.
- U.S. agriculture and forestry's main opportunity for contributing to climate solutions is through the production of offsets for carbon markets.
- Under the American Clean Energy Security Act (ACES) of 2009, 2 billion tons of offsets are to be used to meet the cap. Half of the offsets can be sourced through domestic projects and half through international suppliers.
- Under current voluntary carbon markets, producers trade carbon at \$1-2 per ton. EPA predicts that a mandatory system will result in carbon selling for \$15-20 per ton.

- The U. S. Department of Agriculture's (USDA's) preliminary analysis of ACES reveals that gross domestic agricultural and forestry offset revenues could approach \$28 billion in the long term.

- USDA found that the agricultural sector will have modest costs in the short-term and net benefits—perhaps significant net benefits—over the long-term.
- Costs and benefits of cap-and-trade will not be uniformly distributed across all sectors. USDA found that the potential impacts of higher energy prices on production costs are greatest for feed grains and wheat producers where energy costs account for over 50 percent of total operating costs.
- Much about the ultimate outcomes of costs and benefits remains unknown today.
- Whether climate change legislation passes or not, agriculture and forestry will still need to deal with the effects of global warming.
- The U.S. Global Change Research Program has concluded that projected climate changes will increasingly challenge U.S. capacity to efficiently produce food, feed, fuel and livestock products.
 - Extreme events such as heavy downpours and droughts are likely to reduce crop yields because excesses or deficits of water have negative impacts on plant growth.
 - Weeds, diseases and insect pests benefit from warming, increasing stress on crop plants.
 - Increased heat, disease and weather extremes are likely to reduce livestock productivity.