

Climate Change and Nebraska Agriculture

The US Environmental Protection Agency's jurisdiction over greenhouse gas emissions was established under a 2007 Supreme Court ruling which was not a favorable outcome for agriculture. Now, climate change legislation is the only way to reign in the power of the EPA and prevent them from issuing whatever regulations they might choose without regard to the effects on agriculture and local economies.

Conventional agricultural practices contribute significantly to carbon sequestration and greenhouse gas emission reduction; it is your job to help us make sure that Washington, DC understands that.

Ethanol is already feeling the effects of negative "green" legislation and policy makers that don't understand agriculture. The idea that corn-based ethanol causes deforestation in Brazil, while prevalent, remains unproven, and assumes corn yields do not increase. Regardless, corn-based ethanol is often assigned the penalty for the indirect land use while the potential indirect land use of other fuels is completely disregarded. This puts ethanol at a disadvantage when competing with other fuels in a "green" regulatory environment.



Climate Change Timeline

- ♥ **In April 2007, the Supreme Court ruled that the EPA had the authority to control carbon dioxide and greenhouse gas emissions.**
- ♥ **November 2008, the Obama administration set climate change as one of its major priorities.**
- ♥ **In 2009, Congress set climate change as one of its top priorities, as well.**
- ♥ **Spring 2009, the Waxman-Markey Bill, also known as the American Clean Energy and Security Act, offers agriculture nothing!**
- ♥ **Summer 2009 - Ag Committee Chairman, Peterson, ammends Waxman-Markey Bill to improve it for agriculture.**
- ♥ **No matter what, there will be a regulation of greenhouse gases, whether under a new law from Congress or by the EPA under current Supreme Court law.**



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A Quick Guide To

Climate Change

What is it and how does it affect you?



Carbon Footprint [kahr-buhn] [foot-print]

The amount of
greenhouse gas
emissions an
individual produces
in his or her daily life.

What is Climate Change?

Climate change is the change in long-term weather patterns. These changes could be an increase or decrease in temperature or precipitation. It is believed that the main cause of climate change is the increased emission of greenhouse gases—especially carbon dioxide. This gas traps excess heat in the atmosphere and is believed to be the cause of climate changes.



Carbon Footprint

A carbon footprint is the amount of greenhouse gas emissions an individual produces in his or her daily life. It measures how the activities in our daily lives will affect climate change. Everything from heating your home, to driving to work, to what you buy and consume is measured as part of our carbon footprint. The larger your carbon footprint, the more greenhouse gases you release into the atmosphere.

Farmers are already reducing greenhouse gas emissions by:

- ♥ Planting crops that sequester carbon.
- ♥ Transporting their products by barge and rail which have lower greenhouse gas emissions than trucks.
- ♥ Reducing fertilizer and pesticide applications, resulting in fewer trips over the field.

Carbon Sequestration [kahr-buhn] [see-kwes-trey-shuhn]

Trapping and using carbon from the atmosphere; reducing carbon in the air that traps heat.

Greenhouse Gas Emissions

[green-hous] [gas] [i-mish-uhn]

Gases released into the atmosphere that trap heat and potentially cause changes in the climate.

Indirect Land Use

Land use change occurs when land that has historically been used for one purpose is put into use for another. An example of direct land use change occurs when an acre of soybeans is converted to corn production due to a new ethanol plant. Indirect land use change then describes the concept that soybean acres displaced in the US are replaced in Brazil by acres that used to be rainforest thus releasing more greenhouse gas emissions. This concept creates a negative impact on the carbon footprint of that corn acre, and also of that gallon of ethanol. *But most importantly, this idea is completely unproven!*

