

Greenhouse gas markets ...emissions credit trading



The Chicago Climate Exchange is North America's only, and the world's first, greenhouse gas emission registry, reduction and trading system for all six greenhouse gases.

A greenhouse gas market is the buying or selling of credits that represent the reduction or offset of greenhouse gases. Emissions trading, such as acid rain credits, is a proven market-based system that provides companies with flexibility to meet their environmental goals at the lowest cost while still reducing emissions.

Market Mechanisms

Greenhouse gas credit trading

A credit represents an amount of emissions (one ton of CO₂) that has been successfully reduced. All participants establish a baseline of greenhouse gas emission levels and then reduce their emissions by a fixed amount over time. The company earns a credit for every ton of emissions reduction that exceeds their annual target, and can trade (sell) the credit to another participant who has fallen short of its target.

Read all details of the OEC's global warming study, Climate Road Map, Part 2 at www.theOEC.org.

the OEC'S Top Ten

1. Carbon bio capture
2. Carbon geological capture
3. Bio products
4. Methane emission reductions
- 5. Greenhouse gas markets**
6. Electric & heating efficiency
7. Vehicle efficiency
8. Wind & solar power
9. Low or no-carbon energy systems
10. Cleaner diesel

Two results from this strategy are:

1. investment in technologies that will reduce emissions
2. purchasing credits, and in effect investing in technology, from other participants that have exceeded their goals.

Examples of greenhouse gas credit trading are the Chicago Climate Exchange (CCX—voluntary) and the Regional Greenhouse Gas Initiative (RGGI, in the Northeast—mandatory).

Greenhouse Gas Registry

A greenhouse gas registry can assure the buyer of a credit that it is certified. It also aids in the tracking of emissions. Key issues that should be addressed when creating a registry for reductions are:

1. how to quantify and verify emissions reductions
2. which emission sources should or would participate
3. how to account for and verify carbon sequestration
4. who administers the registry
5. what is the cost to administer the registry
6. how will the administration of the registry be funded
7. how the voluntary emission reductions may be used



Recommendations for a better Ohio

Adopt a voluntary state registry

The Ohio EPA, Department of Natural Resources, Department of Development, Department of Agriculture should form a working group to develop a program for Ohio.

Participate in a voluntary GHG trading system

The state of Ohio, local governments, and civic organizations should participate in a greenhouse gas trading system. Currently, the only voluntary program is the Chicago Climate Exchange of which AEP and the Ohio Air Quality Development Authority are Ohio participants.

Develop a state aggregation program

The state of Ohio should develop a state GHG credit aggregation program to assist farmers, small businesses, and others that are potential sellers of GHG emission reduction credits. A credit aggregator removes some of the liability and transaction costs from individual farmers.

Establish a public GHG credit purchase program

Ohio should establish a public GHG reduction purchase program that would buy GHG credits through an auction. The program should be initially developed by directing a portion of the Ohio Energy Loan Fund to a program that pays for GHG reductions on a dollar-per-ton basis. A useful program could be launched for as little as \$1 million per year.

Work with other states to develop a Midwest regional GHG trading program

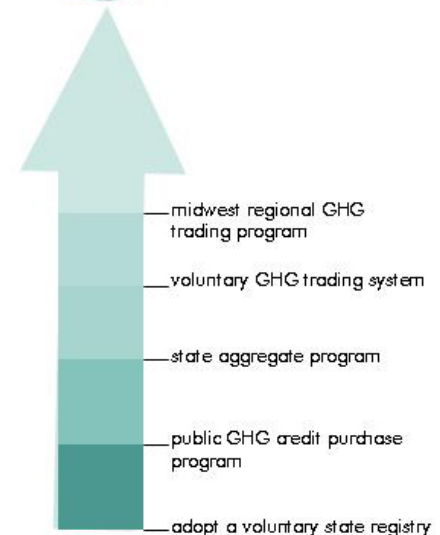
Ohio should work to develop a region-wide GHG trading program in the Midwest. Several states are involved in regional efforts to directly or indirectly address greenhouse gases. The program most applicable to a GHG market is the Regional Greenhouse Gas Initiative. Several Northeast states have agreed to mandatory limits on greenhouse gases from their power sector. The states must maintain 2005 emission levels between 2009 and 2015, and then reduce those emission levels 10% by 2019.

Foundation for Action

- The Ohio EPA is participating in an effort to develop a voluntary greenhouse gas registry through the Lake Michigan Air Directors Consortium (LADCO). The registry would be comprised of its five member states: OH, IL, IN, MI, and WI.
- The Ohio Air Quality Development Authority and AEP participate in the Chicago Climate Exchange, in which they voluntarily purchase offsets for their GHG emissions.



Several national, regional, state, and private organizations now offer greenhouse gas registries which track emissions and certify greenhouse gas credit purchases.



Toward a cleaner earth