

The Advent of

Carbon Credit Trading in Michigan



Fringed Gentian in bloom at Six Rivers' Golden Preserve in Springfield Township.
Photo by Susanne Greenlee

Out of Chaos Comes Opportunity

By Anna M. Maiuri and Mark J. Bennett

Carbon credit markets in the United States will experience significant expansion and turbulence in the near term. Global economic recession and credit market challenges are intersecting with an emerging carbon regulatory infrastructure at multiple levels of government. Michigan will see rapid growth in this area with the passage in late 2008 of the Clean, Renewable, and Efficient Energy Act.¹ This law created the Michigan renewable energy credit (REC), a tradable commodity that is a means of compliance under the state's renewable portfolio standards (RPS). An

RPS obligates regulated utilities to transition their fuel mix to approved forms of renewable energy by certain dates. Michigan joins more than 30 states attempting to juxtapose state REC trading markets with voluntary national and regulated carbon credit markets.²

Kyoto and Copenhagen

The Kyoto Protocol, which set binding emissions targets for greenhouse gases (GHGs), was adopted by 182 nations

in 1997 and took effect in 2005 to minimize the adverse effects of climate change.³ The United States signed the Protocol in 1998, but was not bound by it because of lack of Senate ratification.⁴ Kyoto's emissions trading scheme (ETS) allows affected countries to trade on a carbon market to comply with emissions targets.⁵ Alternatively, Kyoto's clean development mechanism allows countries to implement carbon reduction projects, referred to as offset projects, in developing countries in exchange for emission reduction credits. With the Kyoto Protocol expiring in 2012, international focus has turned to the United Nations' December 2009 meeting at the UN Framework Convention on Climate Change to establish a climate change regulatory infrastructure to replace the Kyoto Protocol.⁶ The international community has been watching the progress of the American Clean Energy & Security Act of 2009 (a.k.a. the Waxman-Markey bill), which was adopted by the U.S. House of Representatives in June 2009.⁷ If the U.S. does not have cap-and-trade legislation in place by December 2009, it will probably be less likely to commit to an aggressive international response plan. As of September 8, 2009, even though health care reform has consumed Congress, the White House still expects the Senate to pass climate change legislation. If the Senate will not pass climate change legislation, then the president may direct executive branch offices to go ahead with carbon regulation.⁸

European Union (EU) Cap-and-Trade System

The EU's ETS has been in operation since 2005 as mandated by the Kyoto Protocol and allows 30 countries to trade on a carbon market to address carbon dioxide (CO₂) emissions.⁹ The ETS regulates 12,000 facilities in the 27 EU states, including power plants and five major industrial sectors (oil, iron and steel, cement, glass, and pulp and paper).¹⁰

Fast Facts:

In 1997, the Kyoto Protocol was adopted by 182 nations (not including the United States) to minimize the adverse effects of climate change. With its expiration in 2012, international focus has turned to the United Nations December 2009 meeting in Copenhagen to determine the post-Kyoto Protocol course of action.

The Environmental Protection Agency's proposed finding that greenhouse gases are "an endangerment to public health and welfare" will accelerate the establishment of a federally mandated greenhouse gas cap-and-trade market.

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The U.S. Government Accountability Office (GAO) examined the ETS and prepared a report for Congress on the lessons learned from the first few years of operation.¹¹ The GAO's findings regarding the structuring of a cap-and-trade system include:

- It is important to ensure that there are reliable historic emissions data for all regulated entities before program start-up.
- There is a need for long-term certainty to encourage investments in technology.
- It is important to understand how allowance distribution may create and redistribute substantial wealth.¹²

Federal Actions

In April 2009, the Environmental Protection Agency issued its proposed finding that GHGs are "an endangerment to public health and welfare."¹³ This is likely to accelerate the establishment of a federally mandated cap-and-trade market. The Waxman-Markey bill was adopted by the U.S. House of Representatives in June 2009 and would establish a comprehensive, market-based system for reducing GHGs from oil companies, electric utilities, large industrial sources, and other GHG-producing entities.¹⁴ It also includes a national RPS, which would coalesce the several existing state programs. Among the bill's highlights are:

- Establishing a GHG cap that reduces carbon emissions from major U.S. sources by 17 percent by 2020 and more than 83 percent by 2050 compared to 2005 levels.¹⁵
- Requiring electric utilities to meet 20 percent of their electricity demand through renewable energy sources and energy efficiency by 2020.¹⁶
- Mandating new energy-saving standards for buildings, appliances, and industry.¹⁷

Regulated industries that exceed the GHG cap would have the flexibility to implement new technology to reduce their emissions or purchase carbon credits from other entities to meet the cap, similar to the Kyoto system. If the credits are auctioned, regulated industries could purchase the credits in the carbon markets or acquire them by trading. If allocated by free distribution, regulated industries would be given credits to use or trade.

U.S. Regional Cap-and-Trade Systems

Despite the lack of a federally mandated carbon regulatory system, three U.S. regional initiatives—the Regional Greenhouse Gas Initiative (RGGI),¹⁸ the Midwest Greenhouse Gas Reduction Accord (MGGGA),¹⁹ and the Western Climate Initiative (WCI)²⁰—provide the basis for the structure of a possible federal scheme. RGGI was the first market-based CO₂ emissions reduction program in the U.S. It was formed in December 2005, with its first auction held September 2008.²¹ Connecticut, Delaware, Maine,

Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont participated, with Pennsylvania and the District of Columbia observing the process.²² RGGI affects electric power plants 25 megawatts or greater in size fired by fossil fuels, which comprise approximately 225 facilities in the region.²³ As of June 2009, RGGI auctions have raised more than \$250 million, which has been distributed to participating states for commercial energy efficiency and renewable energy projects.²⁴

WCI was formed in February 2007 and consists of Washington, Oregon, California, Arizona, Montana, Utah, New Mexico, Manitoba, British Columbia, Ontario, and Quebec, with several U.S. states, Canadian provinces, and Mexican states observing.²⁵ “WCI was created to identify, evaluate, and implement collective and cooperative ways to reduce greenhouse gases in the region, focusing on a market-based cap-and-trade system.”²⁶

MGGA was adopted in November 2007 by Iowa, Illinois, Kansas, Michigan, Minnesota, and Wisconsin and the Canadian province of Manitoba.²⁷ Member states have agreed to establish regional GHG reduction targets and develop a multi-sector, cap-and-trade system to help meet the targets.²⁸ The reduction targets and dates for compliance are not yet definitively determined.²⁹

In addition, the Chicago Climate Exchange, a U.S. corporation, exists as a carbon credit commodities exchange not tied to any geographic area (projects may be global) based on the voluntarily accepted contractual commitments of the participants.³⁰

Renewable Portfolio Standards

Not only are there multiple GHG emission market-based programs, but states have also enacted their own RPS as well, including Michigan.³¹ An RPS is a regulation that requires a certain percentage of energy supplied by utility providers be derived from renewable energy sources.³² As of June, 30 states and the District of Columbia have adopted RPS.³³ Regulations vary among the states regarding the required percentage of renewables, target dates, and the technologies that qualify as renewable energy.³⁴ While RPS regulations focus on electricity production as opposed to direct regulations of GHG emissions, several areas of potential overlap between the systems require careful examination in transactional settings.

In October 2008, Governor Granholm approved the Clean, Renewable, and Efficient Energy Act (Public Act 295), which created tradable carbon assets in the form of renewable energy credits (RECs) and advanced renewable energy credits (ARECs).³⁵ Under the act, Michigan energy suppliers are required to produce 10 percent of their energy from renewable sources by 2015.³⁶

RECs may be traded, sold, or otherwise transferred.³⁷ Each REC is the equivalent of a megawatt hour of electricity generated from a renewable energy system.³⁸ Renewable energy can be derived from a number of sources, including biomass, solar, wind, kinetic energy, geothermal, municipal solid waste, or landfill gas.³⁹

Credits may be purchased by utility providers if they cannot meet the mandated mix of energy from renewable sources as required by the RPS.⁴⁰ Energy companies also have the mandate to meet energy optimization requirements, which focus on reducing future costs of service to customers.⁴¹

In an effort to provide uniformity for RPS among the multiple state programs, the Waxman-Markey bill proposes a federal RPS requirement. While some states could have higher requirements of renewable energy, a national RPS would create a floor for compliance. Under the proposed bill, states may choose to meet one-fifth of their requirements with energy efficiency measures.⁴²

Emerging Issues

The intersection of emerging carbon regulations and RPS at multiple levels of government has created some challenging issues.

One emerging issue is double counting. RECs are market-based commodities designed to facilitate transactions between buyers and sellers of renewable energy.⁴³ Carbon offsets are a measurable reduction in GHG emissions from an activity or project in one location that is used to compensate for emissions occurring elsewhere.⁴⁴ Generally, offsets are derived from industries that would not be covered under a cap-and-trade system, such as landfill methane recovery systems or reforestation projects.⁴⁵ The overlap arises because a REC is derived from renewable energy, which also produces a measurable reduction in GHG emissions, so it may be considered a carbon offset in certain circumstances. Many state RPS programs do not specify whether displaced emissions are embodied in the definition of the REC unit, thus leaving open the

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question of whether RECs can also be counted as carbon offsets. As state, regional, and possible federal carbon markets develop, ambiguity and differing legal requirements and definitions will create complex energy and business transactions.

Counseling Clients

The environmental law arena is on the precipice of significant change. Global climate change and renewable energy will shape our national, state, and local agendas for years to come. The key is to stay informed in these evolving areas. A few practice tips follow:

- Avoid oversimplification in advising clients involved with RPS and carbon regulatory-related matters as relevant regulations are rapidly evolving.
- Do not overstate environmental benefits; make claims that match the scope of the carbon asset purchase and focus on the risks in actually realizing the economic value of the asset.
- Consider the tax treatment of carbon assets: Are they income? Can they be depreciated? How can lenders establish lien priorities against these new assets?
- Add value to client needs by exploring tax incentives (to encourage the use of alternative energy sources and efficiencies) and carbon markets (as a potential source of income). ■



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FOOTNOTES

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