Passed LCFS Working Group – January 5, 2009
Passed MGA Bioeconomy and Transportation Advisory Group – January 15, 2009
Approved by MGA Steering Committee – March 23, 2009

MIDWESTERN LOW CARBON FUEL STANDARD WORKING GROUP

FINAL RECOMMENDATIONS

INTRODUCTION

Low carbon fuel standards (LCFS), typically modeled after California's LCFS, are being considered in several states in the Midwest, in jurisdictions outside the region, and federally as a potential policy for reducing greenhouse gas (GHG) emissions in the transportation sector. The Midwestern Greenhouse Gas Reduction Accord commits six Midwestern governors and one Canadian premier to establish GHG reduction targets and develop a multi-sector GHG cap and trade program. It also commits this group of jurisdictions "to develop and implement other associated mechanisms and policies as needed to achieve the GHG reduction targets, such as a low-carbon fuel standard and regional incentives and funding mechanisms." Another regional agreement, the Midwestern Governors Association (MGA) Energy Security and Climate Stewardship platform, as endorsed by [ten] governors and [one] Canadian premier, also commits to "create a uniform, regional low-carbon fuels policy – implemented at the state or provincial level as a standard, objective or incentive – and report annually on progress."

This task of recommending how a LCFS should be structured for the Midwest was given to an advisory group, composed of participants in the Midwestern Greenhouse Gas Reduction Accord Advisory Group, the MGA Bioeconomy and Transportation Advisory Group (under the MGA Energy Security and Climate Stewardship Platform), members of the North Central Bioeconomy Consortium, and other stakeholders in the Midwest.

The goal of this advisory body was to:

- Articulate a Midwestern position on the development of state and federal low-carbon fuel policies;
- Make recommendations on how to integrate state efforts towards a common LCFS framework based on the best available science and techniques;
- Assure that Midwestern interests have a voice in the development of low-carbon policies at the national level and in other states;
- Learn about the issues and increase common understanding regarding the scientific and technical issues with life-cycle assessment of fuels; and
- Understand how implementation of LCFS's will impact the Midwestern economy.

To accomplish these goals, the Advisory Group held a series of online webinars and an in-person meeting in Des Moines, IA on August 4-5, 2008.

Following the Des Moines meeting, the working group continued to convene by web meeting to develop recommendations for a Midwestern LCFS. An editing committee was also involved in drafting recommendations for consideration by the group.

Participants in the working group are listed on page 6. The group's recommendations are as follows.

OBJECTIVES OF THE POLICY

The Advisory Group agreed that the following objectives should inform the design of a low-carbon fuel policy for the Midwest:

- Create a framework and incentives for development of, and demand for, low carbon fuels in the Midwest;
- Decrease the GHG intensity of transportation fuels;
- Take advantage of our agricultural and industrial strengths to benefit our regional economy while protecting our natural resources; and
- Complement other policies focused on improving transportation efficiency and reducing GHG emissions in the region.

DESIGN RECOMMENDATIONS FOR A MIDWESTERN LOW CARBON FUEL STANDARD

1.0 FUELS COVERED

1.1 The LCFS should apply to providers of liquid and non-liquid ground transportation fuels consumed in the participating jurisdictions.

2.0 ADMINISTRATION AND IMPLEMENTATION

2.1 A Regional Coordinating Body (RCB) should be established to assist jurisdictions in the development, implementation and operation of the regional low carbon fuel policy.

2.1.1 The RCB should be nominated by Governors and made up of representation from the relevant regulating entity in each participating jurisdiction. The RCB may or may not be the same group that assists the jurisdictions in implementing the regional Cap–and-Trade program.

2.1.2 Among other duties, the RCB should serve as a liaison with federal and other regional programs, coordinating with such programs to assure uniformity, lack of conflict and redundancy, and potential trading across programs.

2.1.3 The RCB's function is to facilitate collaboration between states in agreeing on common features for a regional system, but the authority for implementing that system ultimately rests with the

states. The RCB is a vehicle for better coordination between states that have an LCFS, rather than a replacement for state authority.

2.1.4 Other roles for the RCB are specified elsewhere in this document.

2.2 The jurisdictions, with the assistance of the RCB, should establish a cross-functional Scientific and Technical Committee (STC) including experts from academia, agriculture, government, industry, and non-governmental organizations, reflecting a broad range of perspectives and knowledge.

2.2.1 The STC should act as a resource to provide input on any scientific and technical issues requiring additional expertise.

2.2.2 The STC should assist the jurisdictions in establishing rules for full life-cycle GHG assessment of all applicable transportation fuels

2.2.3 The STC should assist the jurisdictions in developing model regulations or legislation for the design, implementation, and monitoring of a regional low carbon fuel standard.

2.2.4 The STC should assist the jurisdictions in developing a mechanism for conducting periodic reviews on a timeframe consistent with the regional cap-and-trade program, of the LCFS program and its impacts in major areas, including lifecycle analysis, land use change, policy design, compliance and regulatory process, and economic impact.

2.2.5 The STC should work in partnership with the jurisdictions to investigate potential environmental impacts beyond greenhouse gas impacts for all transportation fuels and make recommendations on any additional safeguards that should be created to address them.

3.0 GHG INTENSITY REDUCTION TARGETS

3.1 Baseline: The program should use the average carbon intensity of the 2005 fuel supply as the baseline for future reductions, the same year recommended as a baseline for the regional cap-and-trade system.

3.2 Reduction targets:

3.2.1 The overall intensity reduction should be at least 10 percent within 10 years after implementation by Midwestern jurisdictions. Pending future modeling, jurisdictions may choose to adjust the target and timeframe.

3.2.2 Yearly reduction levels should be set by the jurisdictions. Jurisdiction should take into consideration the overall timeline for reduction and adjust for other factors (i.e., more availability of very low carbon fuels). The RCB may assist in establishing reduction

levels consistent with modeling. Jurisdictions should strive for a uniform pace of yearly reduction levels.

3.3 Commercialization and adoption of very low carbon fuels: The STC should recommend mechanisms for encouraging the commercialization and deployment of very low carbon fuels. Very low carbon fuels are defined as fuels having life-cycle greenhouse gas emissions meeting at least a threshold of 50 percent lower than the baseline. Possible mechanisms may include specific carve-outs for very low carbon fuels, incentives in proportion to the GHG reduction performance of all fuels, separate incentives for very low carbon fuels, or setting the overall target sufficiently low that there is a place in the market for very low carbon fuels.

4.0 Life-cycle Assessment

4.1 The STC should review and evaluate the best available science and existing governmental rule-making efforts in recommending an LCA methodology and carbon intensity values for fuels.

4.2 Because not all regulated entities have the resources to do site-specific life-cycle assessment, the STC should recommend default values for fuels based on their unique life-cycle characteristics. There should be a sufficient number of default values to capture a variety of production practices that result in different potential GHG intensity values for the same fuel type. The default values should be as reflective as possible of current performance across the life-cycle of each fuel, capturing any recent efficiency improvements.

4.3 Firms should also be able to provide their own GHG values based on a site-specific life-cycle assessment incorporating unique processes or characteristics for their product that differ from the default assumptions, using the same LCA methodology as established by the RCB. Firms' assessments should be verified either by the RCB, participating jurisdictional government entities, or by approved third party certifiers.

5.0 COMPLIANCE

5.1 Point of regulation: The RCB should recommend to the jurisdictions the best point of regulation for compliance with the LCFS, with the goal of including all liquid and non-liquid fuels, and optimizing the number of regulated parties to incent market participation while minimizing the compliance burden.

5.2 Tracking and reporting:

5.2.1 The RCB should rely on a modified version of the existing system of Renewable Information Numbers (RINs) to track information about GHG emissions. The RINs system would need to be modified

to tag batches of fuel with a life-cycle greenhouse gas emissions score.

5.2.2 Reporting Requirements: The RCB should help jurisdictions determine an appropriate set of reporting requirements for obligated parties, including how often reports should be submitted. They should also determine what part of the reported data can be made public, balancing public transparency with the need to protect proprietary information.

5.3 Violations and penalties: The RCB should help jurisdictions to determine an appropriate way to handle violations and penalties.

5.4 Credit Generation and Trading: The RCB should make recommendations to the jurisdictions on creating an equitable system for managing credits and deficits that may include credit acquisition, banking, borrowing, and trading.

5.5 Interaction with other programs: The RCB should study potential interactions with programs such as the Midwestern Cap and Trade system and any future federal climate regulation to avoid double counting of emissions and to facilitate continuity between programs.

Participants in the Midwestern Low Carbon Fuel Standard Working Group:

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