

Young, Tracey

Subject: FW: Additional LCFS information

Attachments: LCFS Draft Recommendations 10-6.doc

-----Original Message-----

From: Konopacki, Larry
Sent: Thursday, November 20, 2008 2:17 PM
To: Young, Tracey
Cc: Stolzenberg, John; Pagel, Matt; Hilgemann, Luke
Subject: FW: Additional LCFS information

Tracey, would you please forward the following e-mail and its attachment to the Biofuels Committee distribution lists?

-----Original Message-----

From: Peter Taglia [<mailto:ptaglia@cleanwisconsin.org>]
Sent: Wednesday, November 19, 2008 5:19 PM
To: Konopacki, Larry; Stolzenberg, John; Pagel, Matt
Subject: Additional LCFS information

Larry, John and Matt,

I've compiled some of the pertinent information about the regional Low Carbon Fuel Standard (LCFS) developments that have occurred in the last few months, as well as a link to the recent draft Rule for the California Low Carbon Fuel Standard that is being developed. Please feel free to call or email if you want more information or to discuss anything herein. I apologize for the length of this email, but Senator Kreitlow was explicit at the meeting that you are expecting this sort of thing....

Regional LCFS policy status:

In addition to Wisconsin, Minnesota, and Illinois have all proposed a LCFS as part of the final recommendations as part of a Governor's Task Force on Global Warming. Iowa and Michigan also have included an LCFS in their Governor's Task Force process, but the policy documents have not been finalized yet. Additional state actions on LCFS in the region include the Michigan Renewable Fuels Commission's recommendation of a LCFS in June 2007 and Minnesota's NextGen Board's recommendation of an LCFS in February, 2008. On the legislative front, the following states in the region have considered an LCFS:

* Minnesota: The legislature passed an appropriation in 2007 for the University of Minnesota to study the feasibility of an LCFS. During the 2007-2008 legislative session, HF 2527 and SF 3830, both modeled after California's Executive Order creating that state's LCFS, were introduced and a hearing was held in April 2008 and a bill is expected to be heard in 2009.

* Illinois: SB 2220, the Global Warming Response Act was introduced in 2007-2008 legislative session that included a LCFS. The bill was ultimately scuttled, mostly over the auto-industry's objections to the tailpipe standards that were included in the proposal.

The process for implementing the recommendations of the Governor's Task Forces in the region are closely aligned with

the process of the Midwestern Governors Association's (MGA) Energy Security and Climate Stewardship Platform (a number of energy and climate initiatives including low carbon fuels) and the Midwestern Greenhouse Gas Reduction Accord (Midwest version of RGGI). WI Governor Doyle was the lead negotiator of the bipartisan MGA's Platform and Accord, which were officially signed by the MGA governors in Wisconsin in November, 2007 while Governor Doyle was chair of the MGA:

- * The MGA Energy Initiatives can be found at: <http://www.midwesterngovernors.org/EnergyInitiatives.htm>
- * The MGA Greenhouse Gas Accord can be found at: <http://www.midwesternaccord.org/>
- * The MGA platform included a section titled "Biobased Products and Transportation" that included the following policy (number 10 in the official report): "Create a uniform, regional low-carbon fuels policy- implemented at the state level as a standard, objective or incentive – and report annually on progress. Convene affected stakeholders to develop the common policy, including reporting mechanisms and other details."
- * The Advisory Group for the Biobased Products and Transportation has been actively discussing a Low Carbon Fuel Standard and the most recent notes are attached (from the 10/8/2008 meeting). Note that it is very similar to Wisconsin's Governor's Task Force LCFS recommendation (also note that despite the "do not distribute" heading, this attachment is publicly-available at the MGA's Energy Initiatives website). [Legislative Council edit - see the following link for the attachment reference above: <http://www.midwesterngovernors.org/MGA%20Energy%20Initiative/Bioeconomy%20and%20Transportation/mtg3/LCFS%20Draft%20Recommendations%2010-6.doc>]

Outside the Region:

The California Air Resources Board released a draft regulation for the LCFS and supporting documentation last month. These documents can be found at http://www.arb.ca.gov/fuels/lcfs/lcfs_meetings.htm under the October 16, 2008 meeting date. Of particular interest is the presentation on the Life Cycle Analysis and Land Use Change Effects and the Supporting Document. Note that the California Low Carbon Fuel Standard requires life-cycle analyses very similar to the requirement in the Federal RFS (as signed into law in the 12/2007 EISA). It is my understanding, from speaking with people at national organizations that are attending the CA meetings and are familiar with the EPA process, that the life cycle analysis in the Federal RFS will likely be very similar to what was used in California.

Of particular interest are the lifecycle analysis results for corn ethanol. There has been a significant amount of concern in the North Central Bioeconomy Consortium and in other venues in the Midwest that both the California LCFS and the Federal RFS would calculate total greenhouse gas emission values for conventional biofuels (e.g., corn ethanol and soybean biodiesel) that would exceed those of gasoline. The draft regulation for California is very positive with respect to providing a path for greater efficiency in the current generation of conventional biofuels for two reasons:

- * The calculation of the land-use emissions from crop-based biofuels were lower than some of the earlier data suggested (i.e., less polluting) and the result is that the average corn ethanol has a slightly-higher carbon footprint than conventional gasoline (on page 12 of the supporting document the baseline fuel has a Carbon Intensity value of 96.7 g/MJ, and average corn ethanol is 103.2 g/MJ). For ethanol produced in more efficient facilities and when the distiller's grains are used efficiently, the Carbon Intensity for corn ethanol drops to 90.0 g/MJ; the best estimates of the most efficient corn-based ethanol, which likely include biomass for heating, are as low as 77.3 g/MJ. A lower value means a lower carbon footprint.
- * The baseline proposed for California's standard is the California RFG (E10), so the baseline already includes 10% conventional ethanol.

The above referenced results are promising because the output of current corn ethanol plants are incorporated into the baseline. These producers will not be shut out of the California market. The estimates for more efficient ethanol producers (Wisconsin's fleet tends to be younger than the ethanol fleets in other Midwest states, and all of WI's corn ethanol plants are natural gas powered, not coal which would have a higher footprint) provide a path for greater participation in the program as well as an incentive to become a very low carbon footprint product by switching from natural gas to biomass. There are a couple of other issues that would play out differently in Wisconsin, including the fact

that our baseline is likely higher than California's because of the Canadian Oil Sands. While the specific design of a LCFS in Midwestern states will reflect our unique circumstances, it is clear that at a minimum we should be aware of how this process is playing out in California and all of the states that have pledged to follow California's lead since they have an enormous part of the domestic fuel market.

In addition, a question was asked at yesterday's meeting about our reliance on the Canadian Oil Sands and how that would impact any policy with a carbon metric being implemented in Wisconsin or our region. Because a LCFS requires an orderly reduction in the carbon intensity of fuels, over time, from a baseline, the important question about the oil sands is what the carbon emissions over time from this technology will look like? Fortunately, the Canadian government is committed to overall carbon reductions and the oil sands projects will be subject to strict carbon reduction targets. See the following news release from Environment Canada (their version of the EPA): <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=B2B42466-B768-424C-9A5B-6D59C2AE1C36>

Finally, to put the LCFS process into a broader perspective, nine Northeastern states have pledged to follow California's LCFS, President-elect Barack Obama has endorsed a Federal LCFS, the Canadian provinces of British Columbia and Ontario have pledged to follow California's LCFS (Manitoba signed onto the MGA process that also endorses a LCFS), and the European Union through the proposed Renewable Energy Directive and Fuel Quality Directive, will be following a similar process <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008PC0019:EN:NOT>

Thanks for your patience,

Pete

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Recommendations 10-