

Low Carbon Transportation Framework

Canadian Petroleum Products Institute

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Opening Remarks

- Low Carbon Fuel Standard (LCFS) is defined in simple terms as reducing the levels of fossil fuels (carbon) in the transportation fuels of the future. For example solar powered vehicles eliminate the carbon, whereas gasoline/electric hybrids reduce the carbon content.
- A LCFS is a program designed to lower GHG emissions from transportation fuels. Analyzing the fuels' lifecycle, including production, transport and consumption, the fuels can be measured and compared with respect to carbon intensity.
- Potential impact on the petroleum products industry is increasing biofuels content and potentially increasing diesel demand in a tight supply market.
- Currently the British Columbia Government has developed a regulatory framework regarding a Low Carbon Fuel Standard and incorporated into their RFS. Ontario has slowed their pace of any development and appear to be in an exploratory mode.

- BC has stated that they plan to follow the California model for LCFS with some modifications to meet the Provincial needs:
 - Renewable and Low Carbon Fuel Requirements Regulation (RLCFRR) to commence on Jan 1, 2010 (reporting only), with reductions required in 2011. Reductions will be smaller in beginning years with larger reductions post 2015.
 - Requirements for carbon intensities on all transport fuels –on-road, off-road except marine bunker fuel, jet fuel and fuel for military vehicles to achieve a 10 % reduction in average carbon intensity by 2020.

BC LCFS (Cont'd)

- BC recognizes the “three legged stool” approach to dealing with carbon based fuels
 - 1. Vehicle usage – covered by BC’s carbon tax (impact???), public transit infrastructure, higher density neighborhoods;
 - 2. Vehicle efficiency – covered by vehicle emission standards Reg being developed by Environment Ministry
 - 3. Fuels with lower carbon content.
- Carbon intensity tables are provided but do not distinguish on crude oil types. They refer to an “average crude oil” delivered to refineries.
- Carbon intensity did not incorporate ILUC (at this time) in the life cycle analysis and will be based on GHGenius (vs California GREET).
- BC is planning to review implementation (similar to California) in 2012, 2015 and post 2020.

LCTF – An Alternative

- CPPI members are suggesting an approach that Governments could consider:
 - Migration from current conventional renewable fuels
 - “Smart Renewable Fuel Standard”
 - Encourages the development of Low Carbon Transportation Fuels (LCTF)

- Daunting challenge given 3 key stakeholder groups
 - Providers of energy
 - Vehicle manufacturers
 - Consumers

LCTF – An Alternative (cont'd)

- Fundamentals of LCTF:
 - Must fit into broader energy use policies in Canada to address GHG's
 - Comprehensive approach to change consumer behavior – must include fuel suppliers, vehicle suppliers and governments.
 - When addressing road transportation fuels, objective should be a carbon intensity reduction of the fuel mix on a well to wheels basis.

- Ultimately it will be consumer behavior and decisions that directly have an effect on all three elements.
 - Reductions in unit GHG emissions by just one or two of these elements can easily be negated by lack of progress in the other.
 - Policy must approach all 3 elements as a comprehensive system involving simultaneous actions.