

*Advanced Biofuels USA, a nonprofit educational organization, advocates for the adoption of advanced biofuels as an energy security, economic development, military flexibility and climate change solution.*



**Comments from Advanced Biofuels US  
on the  
Transportation & Climate Initiative (TCI)  
TRANSPORTATION AND CLIMATE INITIATIVE PROGRAM DRAFT Model Rule**

Having participated in many of the in-person and online meetings and stakeholder events related to developing the Transportation and Climate Initiative Program, Advanced Biofuels USA is pleased to see that the proposed TCI-P emissions calculations focus on the **fossil fuel component** of fuel in the Emissions and Allowance Tracking System (EATS)

*(Emissions and Allowance Tracking System (EATS). A system comprised of the Allowance Tracking Sub-system, by which the REGULATORY AGENCY or its agent records allocations, deductions, and transfers of CO<sub>2</sub> allowances under the TCI-P, and the Emissions Tracking Sub-system, by which a JURISDICTION fuel supplier or reporting-only entity **reports CO<sub>2</sub> emissions from the combustion of fossil fuel** and other data as required in Subparts XX-8 and XX-9.)*

We note that the initial focus is on-road fuel use; however, the immediate benefits of transitioning away from fossil power for existing planes, trains, automobiles and equipment can be realized by expanding this approach and the limited application in the TCI-P should not only be retained, but broadened.

The TCI-P clearly recognizes that use of non-fossil fuels should be encouraged as a beneficial substitute for fossil fuels in transportation. They are the quickest, least expensive, most effective way to reduce GHG emissions and other pollution for the greatest number of people and with the most immediate environmental justice impact.

However, the TCI-P only covers “motor gasoline or on-road diesel fuel” defined as:

**Motor gasoline.** Any fuel, except for aviation gasoline, that:

- (1) Is commonly or commercially known as gasoline, including blendstocks CBOB and RBOB;
- (2) Is intended or used to power a vehicle or engine designed to operate on gasoline; or
- (3) Conforms to the specifications of ASTM D4814 and is made available for use in a vehicle or engine designed to operate on gasoline

**On-road diesel fuel.** Any fuel that is delivered to a filling station for use in a diesel-powered highway vehicle and:

- (1) Is commonly or commercially known as diesel fuel;
- (2) Is intended or used to power a vehicle or engine that is designed to operate using diesel fuel; or
- (3) Conforms to the specifications of ASTM D975 and is made available for use in a vehicle or engine designed to operate using diesel fuel.

It is especially egregious that the TCI-P specifically excludes “aviation gasoline” defined as “A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines and meeting ASTM Specification D910 or Military Specification MIL-G-5572.” Not only should D910 fuel be included in the TCI-P to encourage transition to renewable fuel, but also because it is a leaded fuel (for which there exist alternatives). Environmental justice benefits would also accrue to communities located near airfields that sell and use this fuel to prevent lead poisoning.

In addition, there is no mention of aviation fuel that meets the standard of ASTM D1655-20d, the Standard Specification for Aviation Turbine Fuels. With many airports both large and small in the region, it seems that incentives to convert away from fossil fuel for air transport should also be a part of the TCI-P.

Another sector left out of this program is the agricultural sector. Diesel-powered farming equipment should not be overlooked as a source of GHG emissions. The carbon footprint of farming could be reduced with use of renewable fuels such as drop-in renewable diesel, biodiesel blends and renewable natural gas.

It appears that fossil diesel use in trains has also been omitted from this program. Some train systems are in the process of converting to renewable fuel. Such conversion should also be encouraged by the TCI-P, especially for the non-electric commuter train systems.

In addition, use of fossil compressed natural gas and liquid natural gas are omitted from the program and should be included.

Of greater import, marine/maritime fuels are also left out of this program. For a region that is situated along the East Coast of the US, transition to renewable fuels for the shipping sector should be encouraged as a way to also motivate using renewable fuels to comply with International Maritime Organization standards.

Also, the region has space launch facilities and the greenhouse gas emissions from fossil fuel used in missiles and rockets should also be included in the TCI-P in order to provide incentives for transition to renewable or otherwise low GHG emission missile/rocket fuels. Investment in research conducted in this area would benefit from recognition of the need for this sector to transition away from fossil fuel.

In addition, it might be a good idea to use a term like “non-fossil-derived fuel” instead of “biomass-derived”. For example, in “Biomass-derived content as a percent (i.e., percent of the total fuel volume that is not derived from any fossil fuel).” This would accommodate future fuels that are made from recycled carbon such as industrial waste gases and from green/renewable hydrogen and captured carbon dioxide or other non-biomass substances.

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**XX-8.2 CO<sub>2</sub> emissions data report contents and mechanism for JURISDICTION fuel suppliers.**

(c) *Content of monthly CO<sub>2</sub> emissions data report.* Each CO<sub>2</sub> emissions data report for a month shall contain the following information in a format prescribed by the REGULATORY AGENCY:

(1) If the fuel is specified in the applicable fuel shipment data report to include only fuel that is derived from any fossil fuel, the fraction shall be 1.0.

Metric tons of CO<sub>2</sub> emissions from combustion of all transportation fuel disbursed or delivered to JURISDICTION during the month, as specified for the JURISDICTION fuel supplier in subdivision XX-8.1(b), including:

(i) Total monthly CO<sub>2</sub> emissions from the combustion of fossil fuel, with CO<sub>2</sub> emissions calculated for each fuel shipment as the product of the number of net gallons of transportation fuel, the fraction of the fuel that is derived from any fossil fuel, and a CO<sub>2</sub> emissions factor.

(ii) Any inputs used to calculate CO<sub>2</sub> emissions including, for each fuel shipment, as specified under subdivision XX-8.1(b):

(a) Product code. If the product code is not specified in the applicable fuel shipment data report, a conservative missing data parameter of the diesel fuel product code shall be used, and the fuel shall be treated as diesel fuel in clauses (c) and (d) of this subparagraph.

(b) The number of net gallons of transportation fuel. If the number of net gallons is not specified in the applicable fuel shipment data report, a conservative missing data parameter shall be used.

(c) The fraction, by volume, of the transportation fuel in the shipment that is derived from any fossil fuel (which equals 100% minus the biomass-derived content as a percent reported under paragraph XX-8.3(c)(7)), determined as follows:

(1) If the fuel is specified in the applicable fuel shipment data report to include only fuel that is derived from any fossil fuel, the fraction shall be 1.0.

(2) If the fuel is diesel fuel and the fraction of the fuel that is derived from any fossil fuel is not specified in the applicable fuel shipment data report, or is specified to be greater than or equal to 0.98, the percentage shall be 0.98.

(3) If the fuel is motor gasoline and the fraction of the fuel that is derived from any fossil fuel is not specified in the applicable fuel shipment data report, or is specified to be greater than or equal to 0.90, the percentage shall be 0.90.

(4) If the fraction of the fuel that is derived from any fossil fuel is specified in the applicable fuel shipment data report to be less than 0.98 (for diesel fuel), or 0.90 (for motor gasoline), a lower percentage than 0.98 or 0.90, respectively, may be used only if that specific lower percentage is specified in such report.

(d) The CO<sub>2</sub> emissions factor applied to the fraction of the transportation fuel in each shipment that is derived from any fossil fuel, which shall be:

(1) For motor gasoline, 0.00878 metric tons of CO<sub>2</sub> per net gallon.

(2) For on-road diesel fuel, 0.01021 metric tons of CO<sub>2</sub> per net gallon.