

LOW CARBON FUEL STANDARDS

A Low Carbon Fuel Standard (LCFS) is a policy initiative to reduce the life cycle greenhouse gas (GHG) emissions associated with transportation fuels. In the absence of a federal LCFS framework, states have begun to advance their own LCFSs. While federal legislation or EPA regulation could limit the proliferation of state-based LCFSs, it is unlikely that a federal LCFS will contain a provision to preempt state LCFSs.

A requirement to lower the carbon intensity of diesel fuel could adversely impact the trucking industry. The most direct impact of the LCFS would be a potential increase in the price of diesel fuel stemming from the requirement to use higher cost alternative fuels. LCFS also have the potential to create operational challenges for fleets, especially if alternative fuels do not comply with existing diesel fuel specifications (*i.e.*, ASTM-D975). Finally, a LCFS could adversely impact U.S. energy security, as certain high carbon sources of diesel fuel are declared off-limits (*e.g.*, Canadian oil sands, petroleum derived from oil shale, coal-to-liquids fuels).

In most cases, the responsibility for ensuring reduced carbon intensity falls on the importer, refiner, blender or fuel distributor (*i.e.*, obligated party). Depending upon the legal requirements enacted as part of the LCFS, the potential tools available to the obligated parties for achieving the LCFS targets include:

- Vehicle Conversion (converting vehicles to natural gas or electricity);
- Fuel blending with lower carbon fuels (*e.g.*, renewable diesel/biodiesel); or
- Purchasing carbon credits or offsets.

Each of these alternatives is problematic for the trucking industry:

Vehicle Conversion – Currently, there is no alternative vehicle powertrain that is a viable replacement for the diesel engine. Electric trucks are far too expensive, lack the range necessary for most trucking operations, and add a significant amount of weight to the vehicle. Natural gas vehicles sell at a significant premium to diesel trucks, have a weight penalty and face significant refueling infrastructure hurdles.

Fuel Blending - Depending upon the feedstock used, biodiesel may be blended into diesel fuel to reduce its carbon intensity; however, biomass based diesel is generally more expensive than ULSD. The cost differential between biodiesel and ULSD depends upon the feedstock used, the production process employed, and the cost of transportation. In addition the use of biodiesel in blends higher than 5% may increase operating and maintenance costs for fleets. The required blend rate will vary based upon the carbon intensity of the alternative fuel that is added. In many cases, the resulting blend would not meet the ASTM-D975 fuel standard to which diesel engines were designed

Carbon Credits/Offsets – Obligated parties such as refiners could comply with an LCFS by purchasing carbon credits that are produced in other economic sectors. For example, the replacement of a coal-fired powerplant with a nuclear power plant could generate carbon credits that could be sold to refiners. Similarly, a re-forestation project could remove carbon from the atmosphere and generate carbon credits. The issue with the use of carbon credits to comply with an LCFS centers upon the availability of acceptable offsets/credits and the cost of those offsets. Clearly, the credits will not be free and the cost associated with refineries' purchasing those credits will be passed on to the trucking industry in the form of higher fuel prices.

ATA has opposed California's LCFS in comments submitted to the California Air Resources Board and is preparing to participate in a lawsuit challenging its implementation. ATA also has filed comments opposing NESCAUM's plan to implement an LCFS in 11 northeast states. Through the Consumer Energy Alliance, ATA has voiced opposition to federal LCFS that have the effect of artificially curtailing the supply of domestically-sourced petroleum.