

Issues related to vehicle eligibility

Background

Under Section 136, loan funds are available for certain costs incurred to manufacture “Advanced Technology Vehicles” (ATVs). Among those, an ATV must have “at least 125 percent of the average base year combined fuel economy for vehicles with substantially similar attributes.” Section 136 does not define “base year” and “substantially similar attributes.” Several automobile manufacturers have suggested that the 2005 model year should be the base year, and that vehicle classification and inertia weight class be the attributes that are deemed substantially similar. The reasons supporting these choices are set forth below.

2005 as a base year makes sense.

There are several reasons for the selection of 2005 as the base year. First, a single, fixed base year is needed so manufacturers have clear, fixed fuel economy targets. Throughout the industry, developing a vehicle takes anywhere from three to seven years, even with proven technology. Because the process encompasses several years, it is crucial that manufacturers have certainty in their planning processes that a vehicle to be produced years in the future will, in fact, qualify as an advanced technology vehicle.

If the baseline changed over time, a vehicle that once would have qualified might no longer qualify simply because the comparison yardstick had changed. Such changes are incompatible with the automobile manufacturing process. Also, the section 136 statute refers to a single base year, and the 2005 data is widely available and easily accessible.

Many of the vehicles that will become advanced technology vehicles are already under development. In 2005, NHTSA began increasing corporate average fuel economy regulations for non-passenger automobiles (i.e., trucks). Concurrent with those CAFE increases, manufacturers began deploying advanced technologies for fuel economy improvement, such as 6-speed automatic transmissions, higher efficiency engines, and hybrid technology. Thus, a 2005 base year is best because it is the year that manufacturers began planning vehicles that will one day become advanced technology vehicles.

Second, 2005 is the appropriate base year because Congress has already selected that year as a benchmark year. Section 136(e) contains a requirement that in order to be eligible for a loan, a manufacturer’s fleet must have a fuel economy not less than the manufacturers’ average fuel economy in model year 2005. Accordingly, model year 2005 is the appropriate base year.

Vehicle Classification and Inertia Weight Class are the appropriate attributes.

Several automobile manufacturers have suggested that vehicle classification and inertia weight class as the attributes that are deemed to be substantially similar. First, whether a

vehicle is a passenger automobile (i.e., car) or a non-passenger automobile (i.e., truck) is an important attribute. Cars and trucks serve different purposes and, as Congress recognized when it preserved this distinction in the Energy Independence and Security Act of 2007, they should be regulated separately for fuel economy purposes.

Within the car and truck fleets, the appropriate attribute to use in comparing vehicles is inertia weight class (IWC). First, IWC is the attribute that correlates most closely with fuel economy, the central metric in the ATVMI program. Second, IWC is the attribute used in Section 30B of the tax code (26 U.S.C. 30B), related to consumer tax credits for the purchase of advanced technology vehicles such as hybrids, fuel cells, clean diesels, etc. This provision is also aimed at encouraging the development of advanced technology vehicles. Third, the use of IWC reinforces the notion that the development of advanced technologies – not simply vehicle weight reductions -- are the objective of this loan program.

The use of IWC as an attribute, along with a 2005 base year, will enable manufacturers to quickly determine whether a vehicle is an advanced technology vehicle. A manufacturer would simply compare the expected fuel economy of a model (based on powertrain, body and transmission) to the industry average base year fuel economy for cars or trucks in the same IWC to ascertain that the ATV is at least 125 percent of that value. (Of course, an Advanced Technology Vehicle also must meet the emissions standards set forth in Section 136(a) (1) (A) (1) and (2).)

Further, the calculation of the industry average fuel economy values for the inertia weight classes should exclude diesels and hybrids. Those vehicles were not common place offerings among the light duty vehicle fleet in 2005 MY, and their inclusion would skew the averages – making it harder for these advanced technology vehicles to be eligible under the Section 136 program.

Additional Comments on Use of Inertia Weight Class. A question arises as to whether the use of inertia weight class as an attribute would inhibit the use of weight reduction as a fuel economy-enhancing approach -- because significant weight reduction could move a vehicle to a lighter weight class where its fuel economy base would likely increase to a higher level. Some may argue that this is a concern because its 25 percent fuel economy improvement target would likely result in a greater task than would be the case of the vehicle's weight were not reduced.

This concern should not be a focal point of this program. First, in the context of the broader CAFE program, automakers will continue to make decisions about the use of weight reduction as a strategy for meeting its CAFE obligations. That program will require significant fuel economy improvements of *every* vehicle a manufacturer offers for sale in the future. As such, manufacturers will consider all available options when designing the powertrains, weight, size, and other major attributes of its passenger cars and light trucks. NHTSA has chosen “footprint” (essentially the product of a vehicle's wheelbase (length) and track width) as the attribute upon which fuel economy will be regulated. In its deliberations, NHTSA considered the issue of weight reduction. Its

conclusion was that “by using vehicle footprint...we are facilitating the use of promising lightweight materials...In Reformed CAFE, lightweight materials can be incorporated into vehicle design without moving a vehicle into a...category with a more stringent average fuel economy target.” (71 FR 17596, April 6, 2006)

Vehicles for which Sec. 136 direct loans may be requested will be a small subset of the fleets that must comply with CAFE. The focus of the Section 136 activities is the development of advanced technology components and vehicles. In this regard, the use of a weight criterion to compare vehicles is beneficial – putting the emphasis on the technologies that a manufacturer chooses to use in its future products. Since the CAFE program does not penalize manufacturers for utilizing weight reduction, there is no reason to assume that manufacturers would abandon that approach because of the use of inertia weight for vehicle comparative purposes in the vehicle loan program. When viewed in the context of CAFE, use of inertia weight class in Sec. 136, or other Federal programs, does not significantly affect company technology decisions.