

U.S. EPA & NHTSA 2017 - 2025 Final Light Duty Vehicle Rules for GHG and FE (August 28, 2012)		NGVAmerica Commentary	
	<u>EPA GHG Rules</u>	<u>NHTSA Fuel Economy Rules</u>	
2012 - 2015	<p><u>Previous Rules:</u> GHG emissions of bi-fuel vehicles based on 50/50 fuel-use (50% NG/ 50% gasoline) while dedicated vehicles based on 100% NG fuel-use. Both bi-fuel and dedicated vehicles apply 0.15 divisor that for purposes of regulatory compliance effectively reduces emission levels by 85% when operating on NG. <u>New rules:</u> continue with 50/50 fuel-use assumption for bi-fuel vehicles but allow optional SAE "utility factor" for fuel-use, which has potential to increase the ratio in favor of increased natural gas use (e.g., 90/10 instead of 50/50). This is beneficial because it also creates a "separate track" for NGV GHG credits. Utility factor use is based on 2 conditions: NGV must have 2/1 range on natural gas versus gasoline; and NGVs must operate on natural gas until they run out of NG.</p>	<p><u>Previous Rules:</u> Fuel economy of bi-fuel vehicle based on 50/50 fuel-use assumption and 0.15 divisor but credits are subject to limits or caps; dedicated vehicle assume 100% NG fuel-use and no limit on credits. <u>New rule:</u> retains current treatment; NHTSA and EPA rejected idea of creating a "separate" fuel economy track for bi-fuel NGVs. The SAE utility factors allowed for GHG purposes can not be use for fuel economy calculations until 2020.</p>	<p>Dedicated and bi-fuel NGVs are treated very well under current 2012 - 2015 rules. The EPA decision to allow bi-fuel vehicles to use the utility factors for 2012 and beyond is a BIG improvement, particularly since EPA in the initial 4 years of program allows use of the 0.15 divisor. NGVs will earn substantial GHG credits in the initial years of the program and these credits will have value because they are not capped. However, we are disappointed that the utility factors will not be used for the fuel economy credits until 2020 and also are disappointed that NHTSA did not set up a separate fuel economy track for NGVs. With no separate track, bi-fuel NGVs will likely earn fuel economy credits that are of little use to manufacturers because the total amount of credit an OEM can claim is capped and most credits will be taken by FFVs that are already planned (2 million per year). The inconsistent treatment may dampen OEM interest in offering bi-fuel NGVs. To recap, dedicated NGVs actually receive very favorably GHG and FE treatment for this timeframe. Bi-fuel NGVs receive favorable GHG treatment but the FE credits they earn are of questionable value.</p>
2016	<p><u>Previous Rules:</u> GHG based on actual fuel-use (not 50/50 default) and the 0.15 divisor is no longer used. <u>New rules:</u> GHG emissions for bi-fuel vehicles based on utility factor but the 0.15 divisor is no longer used. EPA rejected request that the 0.15 divisor be extended for dedicated and bi-fuel NGVs.</p>	<p><u>Previous Rules:</u> Fuel economy of bi-fuel vehicle based on 50/50 fuel-use assumption and 0.15 divisor but the cap on mpg credits continues to decline; dedicated vehicles assume 100% fuel-use, continued use of the 0.15 divisor, and no limits on fuel economy credits. Dedicated FE credits continue to be very favorable. <u>New Rules:</u> no changes in treatment.</p>	<p>The FE credit program continues to be a problem for bi-fuel NGVs because of the caps on credits (see above). The use of the SAE utility factors for purposes of the GHG calculations, however, will marginally improve the GHG credit production for bi-fuel NGVs. Dedicated NGVs continue to have sizable FE benefit but only marginal GHG benefit since the 0.15 is no longer used for GHG credits. As noted above, we are disappointed that EPA and NHTSA did not establish a separate fuel economy track for NGVs and extend the use of the 0.15 factor for GHG purposes.</p>
2017 - 2021	<p><u>Previous Rules:</u> GHG emissions based on actual fuel-use and 0.15 divisor is no longer in use. <u>New Rules:</u> GHG emissions based on SAE utility factor for bi-fuel vehicles and unadjusted tailpipe emissions. In addition, EPA adopted a sales or incentive multiplier that increases the value of bi-fuel and dedicated NGV GHG emission credits. The multiplier is: 1.6 for MY 2017 - 2019, 1.45 MY 2020, and 1.3 MY 2021. EPA also finalized a special credit program for pickup trucks that could potentially benefit NGVs if they meet the performance and sales percentage requirements.</p>	<p><u>Previous Rules:</u> Fuel economy of bi-fuel vehicles based on 50/50 fuel-use assumption and 0.15 divisor with the cap on mpg credits continuing to decline and phasing out completely after 2019; dedicated vehicles continue to get use of 0.15 divisor with no limit on fuel economy credits. <u>New Rules:</u> retain current rules through 2019 but in 2020 allows use of SAE utility factor for bi-fuel NGVs, or manufacturer can continue to use 50/50 fuel-use default for NGVs. In both cases, there are no longer any caps on FE credits starting in 2020.</p>	<p>Providing the sales multiplier for GHG emissions and the utility factors for fuel economy calculations could make NGVs very attractive to manufacturers. We would have preferred the 0.15 divisor for GHG credits but the sales multiplier is still advantageous to NGVs. With these new rules, dedicated and bi-fuel NGVs receive enhanced GHG credits for 2017 - 2021 due to the sales multiplier credits. Dedicated vehicles always receive enhanced FE credits. Starting in 2020, bi-fuel vehicles also will receive enhanced FE credits because of the ability to use utility factors and the fact that that fuel economy caps are no longer in place. The pickup truck incentives (not summarized here) also could prove to be beneficial to NGVs.</p>
2022 & Later	<p><u>New Rules:</u> GHG emissions based on SAE utility factor and unadjusted tailpipe emissions with no sales multiplier.</p>	<p><u>New Rules:</u> fuel economy calculations allow use of SAE utility factor or 50/50 fuel-use default for bi-fuel NGVs, and the 0.15 divisor. Dedicated vehicles also continue to use 0.15 divisor for fuel economy calculations. No caps or limits on NGV credits.</p>	<p>NGVAmerica wanted EPA and NHTSA to extend the use of the 0.15 divisor for both programs through 2025, or at least create an incentive based on total sales, similar to the incentive for EVs and PHEVs, which treats EV and PHEV emissions as zero until certain sales thresholds are attained. However, the ability to use the utility factors for bi-fuel vehicles for GHG and FE calculations and the removal of the caps on fuel economy credits should prove to be beneficial to bi-fuel NGVs.</p>