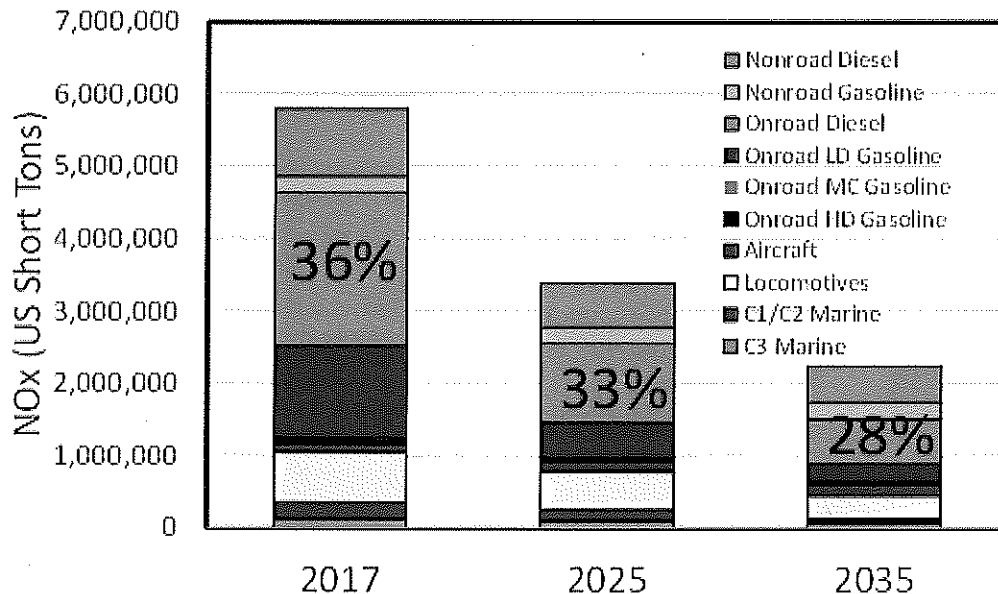


GLIDER KIT EMISSIONS PROJECTIONS UNDER PHASE 2

Under the Phase 2 Rule, EPA focused on the year 2025 for glider emission calculations. Assuming the Phase 2 glider provisions remain intact “as-is”, heavy-duty on-highway vehicles would account for roughly 33% of all transportation NOx in 2025. That information is from an EPA MOVES 2014b national run. A graph of the MOVES results are as follows:



If left unchecked, heavy-duty on-highway vehicles would account for 45% of all transportation NOx emissions by 2025, one-third of which would be attributed to gliders (gliders are estimated to comprise 5% of heavy-duty vehicles on the road).

Because of continued normal fleet turnover to newer 2010+ compliant trucks, gliders would continue to become larger and larger fractions of HD NOx and transportation NOx. That is how gliders would eventually become ~50% of HD NOx and ~20% of all transportation NOx in the 2030-2035 timeframe. ¹

¹FR 81 No 206 p.73943:

“The updated analysis used the same emissions modeling tool used to estimate the other emissions impacts of the rule, described in Section VII of the Preamble. The modeling of gliders assumed annual glider sales of 10,000 for 2015 and later, consistent with the comments received on the proposal. The modeling also assumed that these gliders emit at the level equivalent to the engines meeting the MY 1998–2001 standards, since most glider vehicles currently being produced use remanufactured engines of this vintage, and projects them to have the same usage patterns/lifetimes as similar new vehicles. (We did not attempt to account for any miscalibration of these engines). This analysis shows that without the new restrictions, glider vehicles on the road in 2025 would emit nearly 300,000 tons of NOx and nearly 8,000 tons of PM annually. Although glider vehicles would make up only 5 percent of heavy

duty tractors on the road, their emissions would represent *about one third* of all NOX and PM emissions from heavy-duty tractors in 2025. By restricting the number of glider vehicles with high polluting engines on the road, these excess PM and NOX emissions will decrease dramatically, leading to substantial public health-related benefits. Put into monetary terms using PM-related benefit-per-ton values described in Section IX.H, the removal of all unrestricted glider vehicle emissions from the atmosphere would yield between \$6 to \$14 billion in benefits annually (2013\$). It is clear that removing even a fraction of these glider vehicles with high polluting engines from the road will yield substantial health-related benefits.”