

Extreme Energy Solutions' SMART Emissions Reducer

Extreme Energy Solutions (EES), a New Jersey company whose founders have an expertise in automotive racing, has adapted its proprietary racing and performance engine innovation that decreases exhaust emissions and improves fuel mileage for use in passenger and commercial vehicles. This device, if widely deployed on fleets, can substantially reduce pollution and improve fleet fuel economy cost effectively.

The device is called the SMART Emissions Reducer (SMART-ER). It works by addressing incomplete fuel burn in the engine, which is the source of many emission problems. When crankcase emission gasses pass through the SMART-ER, the unburnable gasses are broken down into lighter burnable gasses. Those burnable gasses then re-enter the vehicle air stream mixing with primary fuel. This creates a fuel mixture that has a much better rate of combustion, resulting in lower emissions and better fuel economy.

The device has been independently tested by Roush Industries, Inc. Those tests suggest a potential of up to 7.23 percent increase in fuel economy and emissions reductions as follows:

- 65.42 percent reduction in Total Hydrocarbons (THC)
- 80.62 percent reduction in Carbon Monoxide (CO)
- 6.44 percent reduction in Carbon Dioxide(CO₂)
- 26.54 percent reduction in Nitrogen Oxides (NO_x)

The SMART-ER is easily retrofit on the crankcase ventilation tube on an engine by a service station in about 15 minutes or installed on new vehicles at the factory or in dealerships. The device requires no additional engine or electronic modifications. The device has no moving parts and is not itself electronic, so is not harmful to engines and should not affect engine warranties under federal law (15 U.S.C. 2302(c)). In fact, EES trials have shown EES that the device reduces engine burn temperatures and cleans carbon buildup from inside the engine. The SMART-ER is effective on internal combustion engines that are powered by gasoline, diesel, propane, natural gas and bio-fuel.

The SMART-ER was tested in several public and private sector pilot programs to verify the utility of the device under real time, real world circumstances. These tests include:

- UTZ Quality Snack Foods (6-15 months trials)
- American Passenger (two year trial for buses)
- Ajax Turner (6 month test for tractor rig)
- Winnebago County (90 day test for part of the fleet)
- Andover Township, New Jersey (5 month test on 6 vehicles)
- Boone County, West Virginia, Schools (9 month test)
- California Yellow Cab (90 day test on 4 vehicles)

In each of these tests, fuel economy increased between 2 percent and almost 29 percent. Emissions of CO, CO₂, NO_x and THC showed mostly appreciable declines. These tests confirm that over time the SMART-ER device can pay for itself through fuel savings and that improved vehicle emissions are obtainable. Thus, the device offers solid public policy benefits.