

NanO₂[®] Combustion Catalyst



Commonwealth of Virginia

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Who Can Use It to Reduce Emissions and Fuel Consumption in Power Generation.

- Power Generators (Standby and Full Time)
- Peaker's
- **Mining Operations**
- Railroads
- Dredgers
- Tugs
- Off Road

Maintenance Equipment – Trucks, Cars, etc.



Challenge

Reduce the Consumption of Diesel Fuel

- -- Most Varieties ULSD, JP-8, Bunker, Others
- -- With a Mobile or Stationary Engine

--And That Reduction saves AT Least the same amount of; --CO, CO2, NOx, Soot, PM,

Meet the Fuel Standards of Caterpillar

WITHOUT CAPEX

DIESE NOT GOING AWAY!

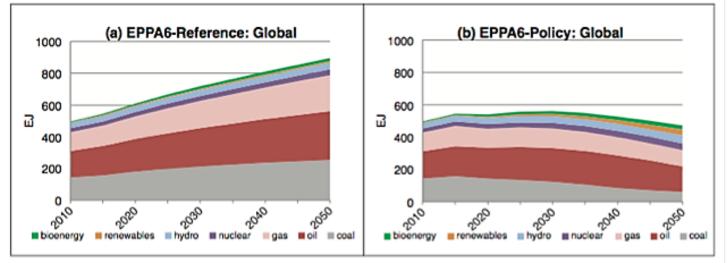


Figure 8. Total primary energy demand: BAU vs. Policy.

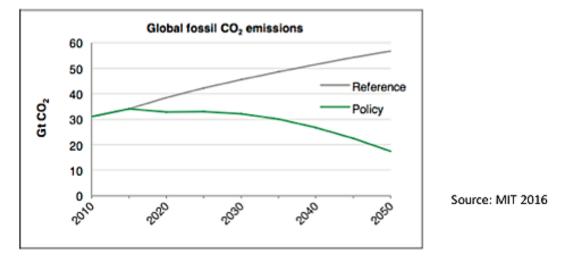


Figure 9. Global fossil CO2 emissions.



Why it Works

- Three Legs of the Solution Science Based
 Over 150 Pier Reviewed Papers
- Cetane Booster
 - Extends the length of the combustion
- Light Oil's
 - Solves the "dryness" of ULSD
- Nano Cerium Oxide
 - Adds Oxygen to Combustion



Goals

- Reduce Fuel Consumption 7%
- Reduce Emissions by AT least 7%
- Upper Goal COE2 Value
 - CO 15% 1 for 1
 - CO2 17% 1 for 3
 - Nox 30% 1 for 298
 - Soot 40% 1 for 25
 - PM 40% 1 for 12
 - CEO2 20% Total



Questions