

**Fuel Savings,
Control,
Emissions Reduction**

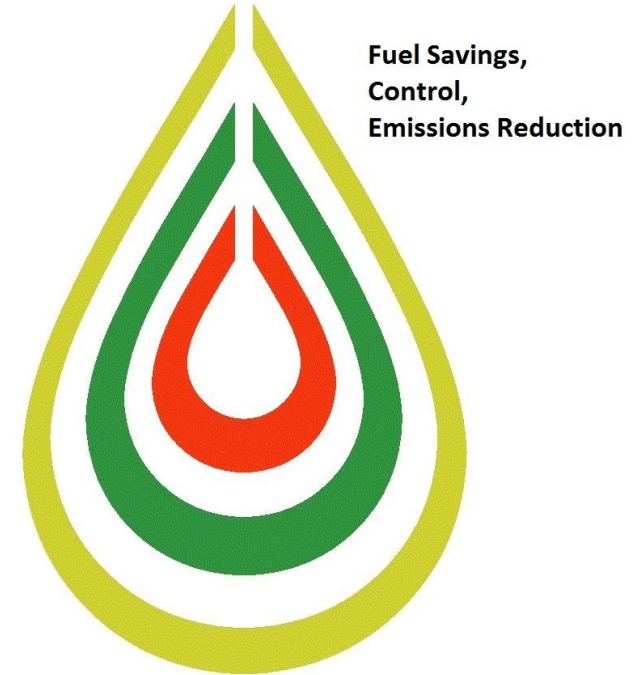


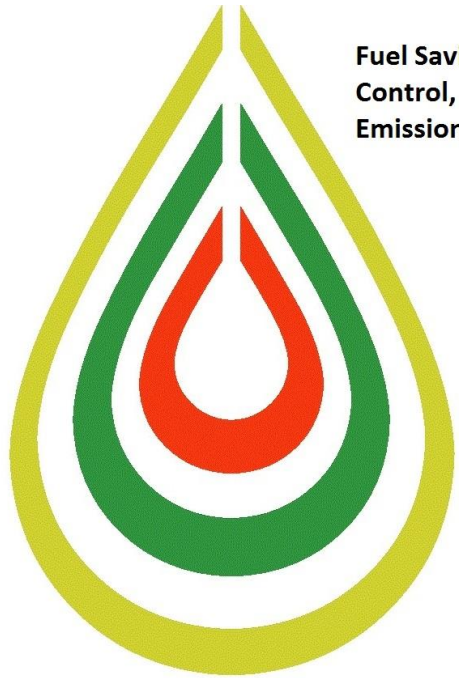
Clean Mobility Innovations

Fuel Combustion Efficiency with CM⁴

Clean Mobility Quatro (CM4)

- Brandstof catalyst
- Beter verbranding:
 - Verhoging brandstofverbruik
 - Verhoging emissies
 - Verhoging onderhoudskosten
 - Verhoging vermogen van de motor
- Geen aanpassingen aan de motor





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BENEFITS

- ◆ field tests have shown a reduction in fuel consumption from 8% to 16%.¹ Clean Mobility commits to delivering a resulting net financial benefit in excess of 5%²;
- ◆ engine performance improvement;
- ◆ recorded range of reduction in emissions:

Emissions	Reported Reductions
NO	47% – 99%
NO ₂	55% – 100%
NO _x	51% – 91%
CO	10% – 75%
CO ₂	30% – 33%
Hydrocarbons	> 80%
Particulate matter	> 45%

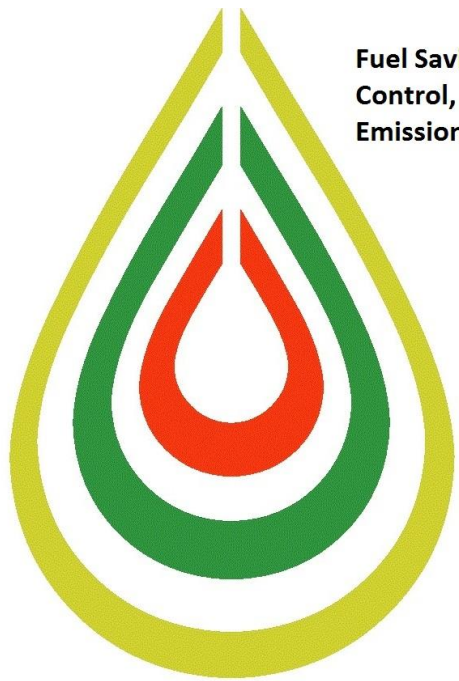
- ◆ access to a fully customisable Business Intelligence System;
- ◆ provision of scientifically verifiable data for reporting purposes;
- ◆ CM⁴ has one of the lowest hazard ratings of fuel catalysts and additives, negating the need for hazardous chemical installations and licensing requirements.

¹ based on specific fuel consumption (SFC) or Load Based Economy (LBE).

² being the net savings realised after the cost of the CMS has been deducted from the gross savings achieved, as calculated using prevailing fuel prices and exchange rates at the time of POC feasibility assessment.



Letter of no harm



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Performance Specialties Technical Note

Customer Technical Service

TO WHOM IT MAY CONCERN

Use of Clean Mobility Quattro (CM⁴)

Innospec have undertaken a series of no harm testing using the additive CM⁴. When dosed into diesel fuel at up to four times its recommended treat rate, testing has confirmed that CM⁴ has no impact on;

- ☒ EN590 fuel quality
- ☒ Injector nozzle fouling when measured using the industry standard CEC F-23-01 Peugeot XUD9 nozzle fouling test procedure.
- ☒ Emulsion forming tendency of diesel fuel when tested using the industry standard ASTM D7451 test procedure; Standard Test Method for Water Separation Properties of Light and Middle Distillate, and Compression and Spark Ignition Fuels.
- ☒ Diesel fuel cetane number when measured using the industry standard Ignition Quality Test according to IP 498 Derived Cetane Number test method.
- ☒ Diesel fuel oxidation stability when measured according to the industry standard EN ISO 12205 test method.
- ☒ Stability of biodiesel (FAME) containing diesel fuel blends when tested according to the industry standard EN 15751 test method.
- ☒ Diesel fuel lubricity when measured according to the industry standard ISO 12156-1:2006 High Frequency Reciprocating Rig (HFRR) test method.
- ☒ Corrosion when tested according to the industry standard ASTM D665(A) test method.
- ☒ Diesel fuel cloud point when measured according to the industry standard test procedure ISO 3015.
- ☒ Filter Blocking Tendency (FBT) when tested according to the industry standard test method IP 387 (Procedure B).

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Innospec Fuel Specialties

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