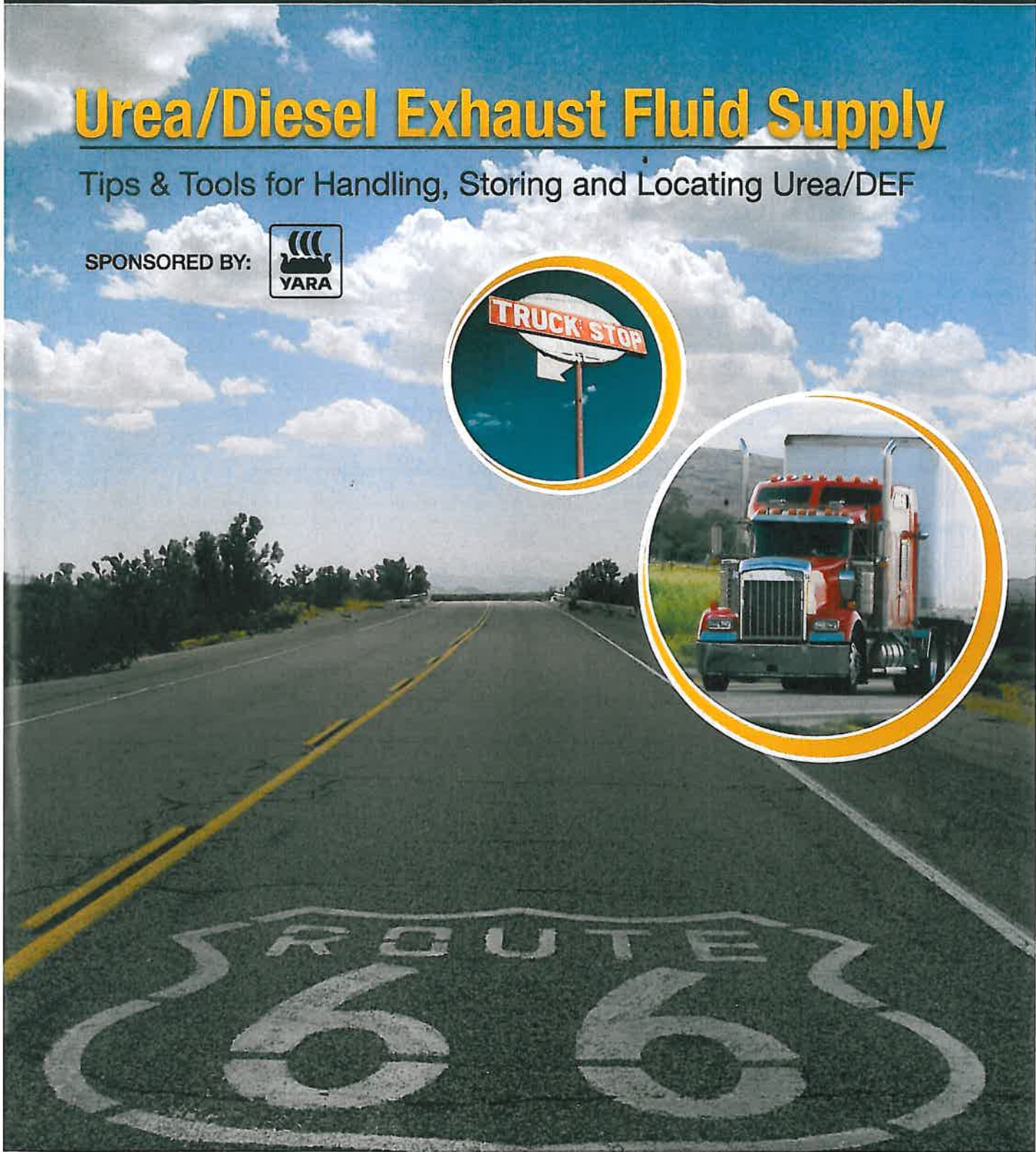


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# With Six Months To Go, New Study Benchmarks Truck Industry Preference For EPA 2010 Emissions Technologies

## Study Measured Purchase Consideration for SCR and Increased EGR Technologies

By Kim Doran, [www.factsaboutscr.com](http://www.factsaboutscr.com)

With just six months to go before the new EPA 2010 emissions standards for heavy duty diesel engines go into effect, a national research study conducted in May 2009 by Quixote Group Research indicates that purchase consideration for SCR (selective catalytic reduction) remains significantly higher than increased EGR. The online study was fielded among owners and operators of class 8 heavy duty trucks on behalf of the North American SCR Stakeholders Group and FactsAboutSCR.com, and the final sample of 1,603 responses has a margin of error of  $\pm 2.4$  percent.

More than half (51.2%) of all respondents are likely or very likely to consider SCR for their EPA 2010 engine purchase compared to 31.2% that are likely or very likely to consider increased EGR. Overall purchase consideration for the two emissions choices have remained statistically unchanged since the last survey was conducted in November 2008.

“With six months to go, the results show that the overall preference for SCR remains extremely strong, and that the heavy attack by the sole proponent of increased EGR has had virtually no impact on purchase consideration for SCR,” said Chuck Mattina, president of Quixote Group Research. “We would expect to see a shift toward SCR during the second half of the year as OEMs publish the results of their customer demo units and as more announcements are made about the build-out of the diesel exhaust fluid infrastructure.”

The ability of SCR to deliver increased fuel efficiency will likely have a strong influence on which emissions technology is selected for 2010 and beyond. Three-quarters (75.4%) of all respondents rated fuel efficiency as very important to the decision to purchase an EPA 2010 compliant engine, and nearly half (48.8%) of all respondents now correctly relate fuel savings of approximately 3% to 5% with SCR, which is up from 38.7% in November 2008. The fuel efficiency benefits of SCR will not only result in savings on a trucking company's fuel bill, but will also further aid the environment through reduced CO<sub>2</sub> emissions.

Proven technology (production trucks and engines have been proven on-the-road) was rated as very important to the purchase decision by 70.1% of all respondents. Engine optimization and scheduled maintenance required by the 2010 technology were rated very important by 59.6% and 59.0% of all respondents, respectively. The weight added by the 2010 emissions technology had a significantly lower level of importance (44.2%) to the decision making process. (Please see chart 1.)

“Fuel economy is the most important purchase driver relative to an EPA 2010 compliant engine, and OEMs that are committed to SCR have done a good job of communicating the fuel savings advantages of SCR over increased EGR since November,” said Mattina. “And with SCR-equipped customer demo units on the road in the U.S., SCR is also leading the way in proving that the technology is simple, reliable and convenient.”

Compared to November, a significantly greater percentage of respondents can accurately recall the key benefits of SCR technology, including reduced particulate matter output (47.4% now say SCR), less engine heat rejection (43.5%) and the need for fewer active regenerations (41.2%). (Please see chart 2.) Knowledge of what is included in the EPA 2010 regulations has also increased, with 62.5% of all respondents correctly identifying NO<sub>x</sub> as being specifically included in the standards, which is up from 59.6% in November.

The majority of suppliers of diesel-powered heavy duty commercial engines and vehicles, including Detroit Diesel, Daimler Trucks North America, Cummins, Volvo Trucks, Mack Trucks, Peterbilt and Kenworth, plan to utilize SCR to meet the EPA 2010 standards, which limit NO<sub>x</sub> levels to no more than 0.2 g/bhp-hr (grams per brake horsepower-hour). SCR emissions technology works after engine combustion, and uses diesel exhaust fluid, which will be available for sale at truck stops, to convert NO<sub>x</sub> emissions into pure nitrogen and water vapor, two natural components of the air we breathe. Navistar is the only non-SCR supplier. To comply with the 2010 standards, the company plans to utilize emissions credits combined with

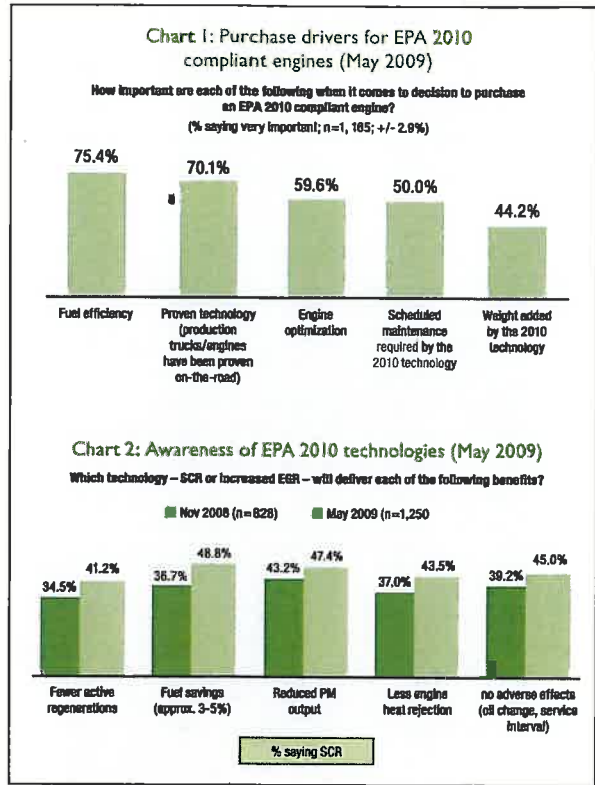


increased EGR, which is an in-cylinder approach that utilizes high-pressure fuel injection, air management and optimized combustion strategies to reduce NOx emissions.

**About the study:** The online study was developed by Quixote Group Research and was designed to support the efforts of the Communications Subcommittee of the North American Heavy SCR Stakeholders Group. Sample for the study, which was fielded in May 2009, was provided by Heavy Duty Trucking magazine. A total of 1,603 responses were collected, resulting in a margin of error of  $\pm 2.4\%$ . Final sample includes large fleet (101+ trucks) managers, small fleet (10-100 trucks) managers, owner operators of ten or fewer trucks and maintenance managers.

### About the North American SCR Stakeholders Group:

The Group represents more than 300 public and private organizations, including government agencies, automotive and heavy-duty engine and truck manufacturers and trade associations, fuel retailers and truck stop trade associations, chemical and oil companies, diesel exhaust fluid producers, distributors and dispensing equipment manufacturers. Creating awareness for SCR as the most fuel efficient and effective emissions technologies available is one of the primary objectives for the SCR Stakeholders Group. For more information, please visit [www.FactsAboutSCR.com](http://www.FactsAboutSCR.com) or [www.TruckSCR.com](http://www.TruckSCR.com).



Note: All differences in Chart 2 are statistically significant at the 95% confidence level!

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