

Full Speed Ahead for EU

Modern engines and fuels with a positive eco-balance to reduce pollution caused by truck traffic

Roads continue to dominate European freight traffic: Calculated in terms of ton-kilometers, trucks account for 44 percent of all traffic in the EU. The number of road vehicles transporting goods is more than 30 million according to EU figures – so the potential for relieving the environment by means of innovative technology is enormous.

Road transportation not only accounts for the lion's share of the market, but it is also growing at the fastest rate. This sector expanded by 38 percent between 1995 and 2005. EU statisticians attribute this development to the rising demand for door-to-door and just-in-time deliveries. And as the international division of labor continues to grow, experts believe that truck transportation will also continue to expand in the future.





Euro 5 and Biodiesel

to reduce environmental

Rhenus Fleet Refitted

“In our opinion, engines with lower emissions and making greater use of biodiesel are the important issues to make road traffic more environmentally-friendly,” says Sascha Hähnke, Road Division Manager at Rhenus Port Logistics. Rhenus is setting a good example and is refitting its own fleet of trucks with Euro 5 engines. The fleet that is used for bulk commodity transportation consists of some 160 vehicles in Germany and Poland. Almost three quarters of the fleet are equipped with GPS position finding systems and this helps the scheduler to manage the fleet, avoid empty runs and so reduce emissions. The Freight Logistics business area is implementing environmentally-friendly technology for mass goods traffic: Sub-contractors who wish to be hired on a regular basis must have modern vehicles with low emissions (see report on p. 36).

The Euro 5 standards stipulate thresholds for exhaust emissions and the discharge of particles and will apply to all new vehicles from the fall of 2009. Trucks that meet the new standards are already on the market now. The “Selective Catalytic Reduction” process (SCR) is the system used in most vehicles to ensure that they are kept within the limits. A harmless, synthetically produced carbamide solution is sprayed into the flow of exhaust gases. A ceramic catalytic converter breaks down most of the nitrogen oxides (NO_x) into steam and elemental nitrogen, which is a natural component in the air. SCR does not impair the engine’s performance and permits the discharge of particles to be reduced to levels set in the Euro 5 standards. Vehicles with the new engines are more expensive to purchase, but consume less fuel and toll fees are lower for them.

Light Semi-trailers Save Fuel

Rhenus is also taking into account the eco-balance for its truck fuel and uses biodiesel whenever possible. The semi-trailers are another area where energy-saving innovations can be introduced. Here is one example: Rhenus uses walking-floor semi-trailers made of light metal to transport wood chips from the saw mill to the chip board factory. These models weigh half a ton less than conventional designs and fuel consumption drops with the reduction in weight.

In the light of the variety of technical measures that are feasible, some people might draw the conclusion that people do not play a major role in the environmental impact of truck traffic any more. But Sascha Hähnke believes that the man in the driving cab can improve the eco-balance significantly: “We regularly organize fuel saving training courses for our drivers – the correct driving style can reduce fuel consumption by about five percent.”

Do you have any further questions?
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