# GTL/BTL help Audi to third Le Mans win

#### by Alex Forbes

## Le Mans 2008 saw Audi and Shell triumph for the third consecutive year in what's reckoned to be the world's toughest endurance race. How do you feel about the race?

Absolutely spectacular – a thrilling race. What really did it for me was that, while the Peugeots were faster, the Audis compensated brilliantly through higher efficiency. As for the skills of the drivers, this was really Audi's top team – Tom Kristensen, Dindo Capello and Allan McNish. It's toe-curling stuff if after 24 hours there are only three minutes or so between the first two cars.

Another breakthrough is that not only was this the third consecutive year that gas to liquids (GTL) played a prominent role in the V-Power diesel fuel for the race, but this time a small amount of biomass to liquids (BTL) was added for the first time. BTL is the next-generation biofuel, made from waste wood clips.

The beauty of GTL and BTL is that the composition of both fuels is identical. The automotive industry loves this because you have real continuity, a homogeneous fuel. Maybe I can quote a former R&D director from VW, Ulrich Eichorn, who made a statement that I used to have pinned to my wall: the next breakthrough in engine design will only come when there is a really homogenous fuel. This is exactly what a synthetic fuel like GTL could provide. Le Mans is a fabulous party, an amazing race, and a lot of fun. But there's a very serious side, isn't there, to Shell's involvement? Expand on why you were there, apart from the fact that it's so much fun. It is a fantastic example of the cooperation between VW-Audi and Shell in developing fuels for the future, with advanced drive trains for the future. These are then tested, as you said, in the most difficult race on the planet.

V-Power Diese

This is also a way of further strengthening the relationship between VW-Audi and Shell, which bodes well for a future that looks increasingly challenging. A prerequisite for creating a future which is acceptable to all is cooperation between industries, government entities, and so on.

## It was difficult to go anywhere at Le Mans without seeing the words "Shell V-Power" plastered in big letters. How important a product is that to Shell?

Shell V-Power diesel has been a great success. It demonstrates that you really can differentiate a fuel, and the role that GTL has played in that is something that gives me significant pleasure. The appreciation by the public at large for these types of performance fuels has been very significant, not just the V-Power Diesel but also the V-Power petrol version.



When the Audi R10 triumphed at Le Mans in 2006, it was the first diesel-engine car ever to win the world's toughest endurance race. It went on to win again in 2007 and 2008. EER interviewed Shell's Future Fuels specialist Jack Jacometti about the role new fuels played in those successes.

You have a new job title, don't you? Tell me again what it is. The job title is Vice-President Future Fuels and  $CO_2$ . I'm engaging with the outside world on a broader spectrum than GTL and BTL, which includes other types of biofuels and other future fuels such as hydrogen. We are also actively thinking about electric vehicles.

Again, these dialogues take place in close cooperation with the automotive industry. In addition to our strong cooperation with VW-Audi, we have, for instance, together with the Japanese government, developed a relationship with Toyota Hino. There's a particular emphasis there on the heavy-duty side, pointing in this case in the direction of advanced GTL hybrid buses. So Future Fuels and  $CO_2$  is about focusing on the widest possible spectrum of options for the future, and picking the right options at the right time so we find the most cost-effective solutions as quickly as possible.

Why do we need different fuels than the ones we have now? There are a number of reasons. One is that we are confronted with the reality that demand for energy is accelerating while supply cannot keep up. So you have to look for alternatives beyond conventional hydrocarbons. Another is that we are confronted with a serious environmental challenge, particularly climate change.

To come up with alternative fuels beyond the conventional hydrocarbons requires cooperation with the automotive industry, so that you develop the right ones. Likewise there needs to be cooperation with governments and academia, particularly on the government side, to ensure you can launch such fuels within the right type of regulatory framework.

#### One of the things that Shell has been working hard on is persuading local authorities worldwide to explore the possibilities of new fuels for urban bus fleets. How's that going?

More than 50 percent of the world's population now officially lives in cities. And of course those are the places that have the highest need for very low emission fuels. So we have been working with a number of governments in China, Japan, Europe and the US. The application of GTL fuels in hybrid buses is amongst the most advanced transport concept for bus fleets that will be achievable in the foreseeable future, when more GTL production capacity comes on-stream. So it's a very exciting development.