

Sustainable Mobility

– Dream or Reality?

You may have heard about hydrogen fuelled vehicles of the future and fuel cell technology. It is all in an effort to reduce what is becoming one of the largest sources of carbon dioxide emissions – vehicular transport. There are more than 740 million cars in the world, likely to be over 1 billion by 2010 contributing to an ever-increasing amount of carbon dioxide from burning of fossil fuels. When you talk to the automotive sector experts, they stress the importance of not simply measuring tailpipe carbon dioxide emissions, but ‘well-to-wheel’ emissions. By this they consider the carbon dioxide emissions resulting from making and distributing the fuel, as well as tailpipe emissions. This is important because a hybrid electric car (with zero tailpipe emissions) to a comparable sized turbo diesel compression ignition car could have the same ‘well-to-wheel’ emissions due to the energy required to convert hydrogen to fuel.

Like any sustainability issue, there are several players in the sustainable mobility debate. They include planners and transport agencies, regulators, consumers, oil producing nations and vehicle manufacturers. Without the impetus from all the relevant players, the issue will not move forward no matter how hard we ‘spin our wheels’. One of the key players is the automotive manufacturing sector, of which we have several large companies with their feet firmly planted in Australia. “...we have positioned the environment as our most important management priority and will continue to proactively tackle environmental issues throughout the life cycle of our vehicles..” says Fujio Cho, head of Toyota Motor Corporation. “....Our vision for the future is to take the personal mobility model we pioneered and make it sustainable for the next century and beyond. Sustainability issues are neither incidental nor avoidable – they are at the heart of our business...” says William Clay Ford, great grandson of Henry Ford, and Chairman and CEO of Ford Motor Corporation.

So what are these companies doing at ground level? In December 2002 Toyota launched the world’s first market-ready hydrogen fuel cell powered electric vehicle. Ford is about to launch its Ford Escape Hybrid, and is busy on a prototype that combines such fuel technology with use of green materials and processes ranging from a corn-based compostable roof and soy-based seat foam to sunflower seed engine oil. Ford calls it the Model U, and is proud of it – a vehicle with modular design that allows for on-going upgrades. Just imagine a car that is so clean in terms of emissions that you can not only eat off, but if you’re still hungry you can eat the car itself!

Previously published in an edited format in Engineers Australia – November 2003

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