

EcoDriver project aims to help drivers improve fuel efficiency

13 October 2011 | By Andrew Czyzewski



Motorists could soon be provided with real-time interactive feedback about their fuel-efficiency performance.

The £13m pan-European EcoDriver initiative led by Leeds University will consider a suite of potential add-on devices over the next four years.

These will be tested at Leeds' advanced simulator, with the best ones incorporated into a full prototype vehicle designed to improve overall fuel efficiency by 20 per cent.

Some current production vehicles provide a dashboard display of fuel efficiency. However, these are generally day-by-day estimates that don't take into consideration real-world driving situations.

'What we're trying to implement in the project is a calculation engine, a behind-the-scenes function that observes what you're doing and how much worse you're doing than the best driver could do in the situation,' EcoDriver lead Prof Oliver Carsten of Leeds told *The Engineer*.

The team hopes to come up with new ways of feeding back this information to the driver. This could involve various forms of human-machine interface or more tactile solutions, such as making the accelerator pedal stiffer to encourage drivers to ease off or change to a higher gear. A key requirement will be for feedback to be in real time and, to a degree, intelligent, as Carsten pointed out.

'In many situations you can save fuel by not braking, but we don't want to encourage people not to brake around a zebra crossing, so we can perhaps use the digital road map at that point to detect the crossing and not be advising the person about braking style at that point.

Carsten added that they will be applying the same concepts in a small fleet of electric vehicles. 'Clearly, if we can find ways to boost range that would be extremely useful,' he said.

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JG | 13 Oct 2011 8:32 pm

..."not breaking"!!

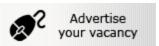
The best fuel saver is the right foot, on the gas pedal. As we were taught long ago, there is a way of saving fuel by careful driving. And, remembering that the speed limit is a maximum rather than minimum, and fuel is consumed vastly quicker for a small increase in speed beyond 50-55mph. Until we have true regenerative braking, electric or flywheel, that's where we are still. And we are invited to discuss whether the speed limit on Motorways should be increased, about the least carbon-friendly action to take at this juncture, not to say promoting longer queues and more accidents. ..

Keith Nuttall | 20 Oct 2011 3:02 pm

Anything that can save fuel must be investigated whilst we wait for EV's to become affordable for the masses.

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