



Dreaming of

Beyond responding to mandatory staggered reductions in CO₂ emissions over the coming months and years, there is plenty of potential for operators to clean up their fleets of both light and heavy duty vehicles. Keith Read assesses the options

“People used to think that being green costs money. But being green and reducing emissions actually saves you money...” Those are the words of Bill Henry, CEO of telematics provider Masternaut, and a man who has the evidence to support his assertion. “Our customers are saving more than they spend with us,” he insists. “Depending upon the customer and how they’re using the system, many are saving three to five times what they spend with us each month.”

It’s not just about telematics: with winter coming, Henry warns not to start up the engine of a vehicle and leave it idling for an hour, because it is so costly. “We had a customer who, by stopping the practice of letting vehicles warm up on idle, was able to fund his entire telematics bill through the reduction in fuel used.”

And the Masternaut man continues: “I also often see vans with corporate identity all over them, screaming past on motorways,” states Henry. “That’s not safe and it’s not a good image for the business. And it is burning a lot of excess fuel that creates additional emissions. But telematics give you tools to manage all that.”

Meanwhile, another illustration of Henry’s low-cost green assertion comes from Shell’s product application specialist Frank Machatschek, based at

the oil giant’s Hamburg R&D centre. “We have made the calculations, in terms of fuel consumption, that the higher cost of our [lubricant] products is quickly offset by the fuel economy benefit,” he says. “With our Rimula LME R6 5W-30 oil, you don’t need to make compromises. We have a very robust formulation, providing excellent wear protection – but you also benefit from lower consumption to cut your annual fuel bill and reduce CO₂ emissions.”

Well oiled machine

“We have done lots of field trials to demonstrate that the products will deliver the benefits we claim, whether it’s extended oil-change intervals, reduced fuel consumption or extending the cleaning intervals of the DPF [diesel particulate filter],” continues Machatschek. “We have the proof that our products really work.”

He also says there is now a clear move from lower tier lubricants to top-tier. But how much more must operators pay? “There’s no easy single answer,” he admits. “For example, in Brazil there is a factor of two to three between the lower mineral oil and the [top-tier] synthetic alternative. But, in Europe, you will not see this big increase. I’d say that from the medium tier to the top, there is a factor of 1.3 or 1.4. It’s not double or even 50% more expensive.”



Bill Henry, CEO, Masternaut

What about vehicles themselves? Before you buy, operators have a golden opportunity to go greener. As Scott Michael, Citroën's commercial vehicles operations manager, puts it: "How many operators buy a new long-wheelbase, high-roof 3.5-tonner, because their last vehicle was also a LWB, high-roof 3.5-tonner and possibly the vehicle before that? Are they using its full carrying capabilities – or could a smaller, more economical vehicle, with lower emissions, do the same job? These are questions that need to be asked before a purchase is made."

For Michael, even if you do need an LWB, high-roof 3.5-tonner, the next question should concern payload. "Today, some large 3.5-tonne panel vans can't legally carry much more than a tonne. So the vehicle specification and its carrying capabilities

green

must be very carefully researched." He does, however, accept that, when cubic capacity is critical, opportunities to downsize might be limited. "But there are options – and they should always be considered. What the operator has to achieve is the optimum size and specification for the job. The key is to operate the vehicle at maximum efficiency."

And, as Citroën prepares to launch a six-seat crew Dispatch to complement its five-seat Berlingo crew van, he asks: "What's the point of running two vehicles – one for manpower and another for materials – when one van with the right specification could fit the bill?"

Attention to detail

Moving on, operators are advised to look at all variables – including tyre pressures – to help boost efficiency and their green credentials. Research by Michelin, for example, shows 10% under-inflation of tyres on a 44-tonne artic covering 80,000 miles a year results in 0.88 tonnes of unnecessary CO₂ – not to mention adding almost £350 to the operator's fuel bill. Similarly, a 1° misalignment on the steer axle increases the rolling resistance of a tyre by around 5%, leading to a 3% cut in fuel efficiency. Result: 2.94 tonnes of unnecessary CO₂ pumped into the atmosphere – and £1,250 added to the fuel bill.

"It's no secret that correctly inflated and aligned tyres reduce rolling resistance," comments Simon Tattersall, head of national truck at ATS Euromaster. "That's why we've introduced our Carbon Cutter mobile service to help companies save on fuel costs and reduce carbon emissions. In many cases, we're

also finding potential for fleets to further improve the accuracy of their pressures and alignment. This, in turn, helps to make large fuel savings and reduce CO₂ output, as every litre of fuel an articulated truck burns creates approximately 2.63kg of CO₂."

Fleets signing up to Carbon Cutter receive a detailed report following a site inspection, covering the percentage of tyres over- or under-inflated, pressure variance per asset, average pressure variance by location and much the same for wheel alignment. Updates then allow fleet managers to monitor individual vehicle performance and illustrate the fleet's increasing efficiency. "Carbon Cutter can help operators to drive significant environmental, financial and operational benefits. What's more, we'll prove it," insists Tattersall.

A good move


And there is another way: simply eliminating unnecessary vehicle movements can save huge quantities of fuel and emissions – a fact that wasn't lost on Bullwell Trailer Solutions. The company, which has invested nearly £1.5 million over the past in green policies, has launched a mobile trailer maintenance service that it reckons can save thousands of tractor miles every year.

Managing director Gary Bulley says that carrying out regular trailer maintenance at clients' premises, rather than the client bringing the trailer to Bullwell's depot, is the way forward. The company is investing £980,000 in 28 new vans, each the latest Euro 5 specification and kitted out with £15,000 worth of equipment, to undertake the work.

"We have mobile engineers located across the UK, which reduces carbon emissions incurred from a typical trailer service journey by 95%," asserts Bulley, who reveals that the company maintains and repairs more than 5,000 trailers. Typically, HGVs use 100 litres of fuel for six return journeys and produce 263kg of CO₂, whereas our mobile service will use less than five litres, creating only 13kg of CO₂."

Nigel Base, commercial vehicle development manager at the SMMT, agrees that there are many options for becoming more environmentally responsible. "Investing in a new vehicle can have long-term efficiency benefits.

The latest fuel-efficient engines, gearboxes and advances in load carrying abilities result in savings for operators over the life of a vehicle.

"In addition, making appropriate use of vehicles, closely managing logistics and capitalising on telematics can introduce further savings. And new vehicles are also often lighter and feature better aerodynamics. Finally, a programme of regular maintenance is a sure-fire way to retain any vehicle's efficiency and economy credentials, with everything from the oil used to the state of a filter impacting on the performance of a vehicle." 



**Gary Bulley, Bullwell
Trailer Solutions**



**Nigel Base, CV
manager, SMMT**