

# Cost cutting

There's a whole bunch of fuel-reducing aids out there, ranging from telematics to aerodynamics and low rolling resistance tyres. Brian Tinham reviews the evidence

“**Y**ou can invest as much as you like in aerodynamic trailers, telematics and everything else, but if you don't engage your drivers, it's a waste of money. They will wreck your project.” So said Paul Allera, outspoken head of fleet at Fowler Welch, opening the session on fuel-reducing aids. Why? “Trucks are unbelievably clever: today, the driver only has to ‘see’ for them. But his right foot is still the device that sends the message to the engine management system, which tells the fuel what to do.” Hence, his starting point has to be the drivers, not just the technology suppliers. “We have driver development managers, and driver trainers and assessors now,” he explained. “And we recognise drivers with incentives. There are safe driver awards and we also reward them for reporting incidents.”

That said, Allera singled out two systems that have been delivering worthwhile savings across his fleet of 898 trailers and 346 tractors, operating from 11 sites. They were aerodynamics and, most important, a significant focus on telematics.

“We don't have fancy teardrops, but we do, for example, have front farings on fridges, Airtabs [counter-rotating vortex generators] and adjustable Hatcher roof farings,” he said. “Not all of them work on all vehicles. Airtabs have been better for us on Scania and MAN trucks than Volvos. They're better on Volvos if you use something else as well. But they're not expensive so it's worth playing around. What have you got to lose?”

What about telematics? “We started about two years ago. We stick with the truck manufacturers' [offerings], so we have MAN Microlise, Volvo Fuel Advice or Dynafleet, Mercedes Fleetboard and Scania Fleet Management. DAF don't have one, so you can pick what you want. Whatever you choose, though, if you just fit it and don't train the drivers, it won't work. When MAN put their system in, our drivers averaged ‘D’,

which is ‘amber’ for us. But we [invested in] training to get them up to ‘green’.”

And the results? “In 12 months we saw a saving of 6% on carbon – and mpg up by 6%. That's massive for a fleet of our size, and we're still climbing.” Allera conceded it's not just about the telematics, but told delegates that this is a key tool for improvement.

It's worth talking to your insurer, too. “If you can show you're reducing acceleration and deceleration, improving anticipation and speed, the by-product is reduced premiums,” said Allera. “That's one of the reasons I fit Lane Guard to all my vehicles. Every time a truck goes over a line and sets an alarm off, I can monitor that. So my insurer can see I'm managing my drivers.”

## Common sense

Beyond that, there needs to be some common sense. Allera cautioned the audience not to lump all drivers' scores together, when they're dishing out awards – because it's not realistic to compare long-haul, short-haul and construction duty cycles. And the next speaker, Sainsbury's operations support manager Gary King, added that the seasons make a difference. “I can match the fuel curve of tractor units with the temperature. The colder it is, the more fuel we use. So we target fuel reductions by period.”

King, who is also responsible for driver training, also agreed that driver engagement must be an integral part of any fuel-saving initiative, commenting that Sainsbury's approach includes making Driver CPC and the truck OEMs part of the process. “We work with all of the manufacturers so that our drivers drive their trucks as they deem we should.”

Beyond that, though, he revealed that Sainsbury's is open to most fuel-saving ideas – with the most impressive returns to date being through careful fit-for-purpose vehicle selection, aerodynamics and

Gary King



Paul Allera



moving to dual-fuel (diesel and biomethane) – together returning a 9% improvement since 2005. His only caveat: “If it works that well, then the manufacturers would probably be fitting it.” Although, to be fair, truck manufacturers admit that most of their R&D has gone into meeting emissions regulations.

So what works best? “We’re using Hatcher Components’ ActiveFreddie system [which automatically adjusts the deflector to optimise for yaw angle and trailer height] on one of our tractors. We’re also using the [Solomon] Slipstream system on our rigids and getting 10.67% improvement on trials – although how often we’ll be travelling at 56mpm is an open question,” he observed.

“Then on trailers, we’re fitting radius cappings and vortex generators on the rear, to reduce drag. They’re saving 6% fuel at 30mph but, again, we have a network of trailers connected to a lot of tractors. You would need to check that it works for your operation. But we’re also trialling the new [Lawrence David] Airbox trailer. That has vortex generators and is profiled along the side, but it hasn’t gone through MIRA yet. We’ll have to see how it performs.”

Moving on to dual-fuel though, King was very positive. “This has been a key area for us in the last few years. It’s about how can we replace diesel for the future? We now have 51 tractor units running on dual-fuel and, to date, we’ve saved over 600,000 litres of diesel and reduced our carbon footprint by 25% on those vehicles. In the right application dual-fuel definitely works.”

And that analysis holds true for all operations, large and small, as Dave Ashford, director and transport and compliance manager at KBC Logistics – the next speaker – confirmed. For him, the top scorers have been telematics, forward-facing cameras, a HAWEKA laser wheel alignment system

and, again, dual-fuel – in his case, seven Mercedes-Benz tractors converted by Hardstaff to LNG (liquefied natural gas) and diesel.

“But it’s not just about fuel saving,” he said, explaining that, with Greenroad telematics, the real deal has been improving driver behaviour to cut accident damage and insurance premiums, while

Dave Ashford



improving corporate responsibility – and then saving fuel on the way.

“With Greenroad, drivers get a simplified traffic light system on the dash. If they accelerate, break or corner too hard, or they’re speeding, the light goes amber. If they don’t improve, it goes to red.

That’s all transmitted to the cloud and transferred to my computer, so I can see their driving performance live. I can see right now and yesterday. So drivers do change.”

How fast? “When Greenroad first installed the system ... we scored 51 for the first month, which is just in the red. Our average now, 12 months later, is 10.4, which is well in the green.” Getting there has required a carrot and stick approach, with stringent induction programmes, and driver training and mentoring – assisted by a lead driver, enhanced Driver CPC and Ashford’s very hands-on style of management– alongside Greenroad and his Smartwitness accident recording cameras. “My top 10 drivers get a cash bonus every week and obviously I have a name and shame board,” he said.

The result: “In 2011–2012, our accident claims exceeded £160,000 with 20 vehicles. Renewal premiums were in excess of £220,000. For 2012–2013, despite increasing the fleet by 50%, claims are now £50,000 and our premium is £186,000.” Meanwhile, fuel wastage through idling has reduced from 12 hours per vehicle per month to seven, again through driver training. “That’s not perfect, but it saved £6,000 per year, which paid for Greenroad.”

But finally, Terry Brown, fleet engineer with fuel delivery operator WP Group, urged delegates to reconsider their lubricants. “Two of my tankers, both Scania’s, were returning 6.2mpg, which I wasn’t very happy about, whereas our MAN trucks were good. So I converted them to fully-synthetic [Mobil Delvac] oils throughout the engine and drivetrain.”

Brown said that, over a three-month trial period of normal operations, with the same drivers, routes and trucks, he saw significant improvements. “The drivers were not aware of the trial, but measurements showed a 6.67% saving, just by changing the lubricants. No telematics, no wheel alignment, no cameras, no dual-fuel. Those will come next.” **TE**

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