

You know it never fails to make me amaze me how the best of project plans can move away from the original intent to a new one without any reaction from those it burdens down on.

Taking on the Politicians!



I'm talking about the London Congestion Charge. My point, in that mouthful of a heading, is that after 5 years the political debate has changed, the original goal has veered off slightly and very few people have stood up to challenge or question this. We call it 'client' or 'mission' creep in our software world but I'm not sure of the equivalent in politics. Actually, I'm a supporter of the original intent and applaud the 'risk taking' of the London Mayor* for being the first to step up to the plate. He started the project in Central London on 17th February 2003 and expanded to West London on 19th February 2007. The project, in all but name, has been geographically expanded as the Low Emission Zone. This has altered the intent and agenda subtly as now the London Mayor is talking 'particulate matter' not 'CO₂'; and 'trucks' not 'cars'.

However now I have a tad of a feeling, and some evidence, that politicians, cartels and pressures groups somewhat unduly influence the whole original rationale. Part of the debate has actually got nothing to do with vehicle emissions. Mr. Livingstone himself mentions 'stakeholders' in his consultation papers. In truth one feels that there's a hidden, difficult to penetrate, agenda even if you have something to say or a valuable contribution. I cannot help but think that the taxes based on CO₂ have almost become an oxymoron - a 'negative impact' you might say. The truth is that the vast subject matter of vehicle emissions has yet to see the emergence of a planet saviour or the transport equivalent of a Bill Gates.

I accept the project is also to do with London traffic congestion and incentives for Londoners to walk, ride and use public transport but I cannot help wondering if dogma isn't getting in the way of solving the problem.

Inevitably, none less than one of the vested interests is challenging the whole concept of the 'polluter pays', a bastion of the vehicle industry, Porsche.

Porsche feels the congestion charge is unfair and has complained and threatened a legal challenge to the London Mayor as he plans to demand a £25 congestion charge from drivers of high powered sports cars and 4x4s entering the capital. The German luxury car company's British division recently cited an "unjust" increase and announced plans to make an application for judicial review on Livingstone's plans.

My only comment is that Porsche should pick their words carefully as they may lose public sentiment. It's clearly 'just' for Mr. Livingstone to mandate punitive taxation on such cars but actually totally 'unfair' and probably unwarranted and disproportionate. He estimates that under his "polluter pays" principle around 30,000 of the worst polluting vehicles will face the threefold price rise for driving into central London from October. The most environmentally friendly cars will be able to enter the congestion zone free of charge. The mayor has included the new charge in a package of measures, including the introduction of a "clean air zone" and a £500m investment in walking and cycling, to help London reduce its CO₂ emissions by 60% by 2025.

Another industry bastion Bentley have taken a different approach and have announced that on a 'well-to-wheel' basis, the entire Bentley model range will become capable of delivering less than 120 g/km of CO₂ by 2012. These efficiency improvements will be achieved first through the application of innovative technology to the 8 and 12 cylinder engines, including enhanced engine management, and new, improved transmissions and drivelines, as well as through weight reduction. This is part of Bentley's commitment to reduce CO₂ output on every new model. Secondly, a new powertrain will be introduced by 2012, delivering a 40% reduction in fuel consumption, while maintaining current levels of performance. Thirdly, all engines across the entire range will become compatible with the use of renewable fuels by 2012, with the initial rollout starting next year. This fuel change has the potential to offer massive savings in CO₂

All this is another debate from the one I'm trying to create. As a product developer specialising in vehicle software and vehicle diagnostics I find that it's almost impossible to have any influence on the vehicle concessions or exemptions debate. Accepted, officers of the various Quango's and non-departmental public bodies - (NDPB) as now used to describe many of the organisations with devolved governmental roles - are happy to chat to me but it ends there. Only this week I spoken to a junior officer from the Cleaner Vehicles Task Force, part of the Department for Transport, (DfT) and explained our method of reducing CO₂. I was told that the fairest way to treat so-called garden shed inventors and smaller innovative companies like mine was to treat them the same and the best way to do this was to ignore them. 'Go and find yourself a manufacturer to sponsor your idea', or 'talk to the SMMT and the Foresight Built Environment and Transport Panel'.

So to remind you, my mission is: What do I have to do to reduce the CO₂ footprint of a vehicle with the consent of the vehicle manufacturer and have the registered benefits of lower taxation?

It appears that this is very complicated, unless you are a vehicle manufacturer, but we all like a challenge. I cannot help but believe that government is not paying attention to the wealth of expertise and inventiveness out there. I'm voting for the small man here and being blocked. This is truly a sinful act and must be pushed against.

It's our favourite national conceit. A few years back, a study by MITI - Japan's equivalent of the Department of Trade and Industry (DTI) - concluded that 54% of the world's most important inventions of the past 100 years were British. Of the rest, 25% were American and 5% Japanese. "The Americans aren't so good at invention because they think everything's just great," said Mandy Haberman, millionaire inventor of the Leakproof, Any-way-up Cup for toddlers. "They're not nearly critical or bloody-minded enough." As for the Japanese, they appear too thoroughly conformist to be capable of off-the-wall thinking. A clockwork radio, I ask you! Its inventor, Trevor Baylis, who lives in a chaotic house he built himself on Eel Pie Island, in the Thames, is now trying to generate electricity from shoes as you walk along, for re-charging the mobile and what-not.

The other part of the national conceit is that those damnable foreigners always pinch our inventions. Witness Japan's estimate that £8bn's worth of UK intellectual property (IP) is lost abroad annually. What's closer to the truth, however, is that we've been so inept at managing inventions that we as good as hand them over. When Hovermarine Ltd was eventually snapped up by the Americans, the incoming boss, William A. Zebedee, got us banged to rights: "You guys sure have some hot technology but you couldn't market your way out of paper bag."

"That was thirty years ago, but it's not a time-sensitive point," said Nicholas, who once worked alongside Cockerell developing, and later selling, the Hovercraft. "In the UK, we still tend to put a small ad' in the paper, sit back and wait. We don't do nearly enough aggressive marketing of what - let's not be coy about it - is our national genius."

To date, the list of British inventions that "got away" might well appear endless. Right now, by way of just one example, the MP3 solid-state music-player is the fastest selling piece of electrical equipment of all time. It's already in the Guinness Book of Records. But who invented it? Stand up, Kane Kramer. He did it, age 23, in 1979, patent number GB2115996A, filed on November 2nd, 1981. But is that "his" player that the world is buying? Of course not! He couldn't get the business done in this country, for rank amateurism, lack of an invention-savvy infrastructure, not to mention boardroom greed, fighting and craziness. In the end, Kramer walked away and let the patent lapse. Today, if you can believe it, he builds kitchens, in Hitchin,

Herts. Of course, he's got a few hot inventions on the go, can't help himself. But as he says, "Never give up the day job."

The Greater London (Central Zone) Congestion Charging (Variation and Transitional Provisions) Order 2007

So away from my ramblings: On 12 February 2008, following public and stakeholder consultation, the Mayor of London confirmed the Variation and Transitional Provisions Order 2007.

He claims the new CO₂ charges are designed to:

- Encourage drivers within the charging zone to travel in vehicles which produce lower levels of CO₂
- Discourage the use of vehicles with high CO₂ emissions

The primary aim of Congestion Charging remains to tackle congestion and encourage drivers to shift from private vehicles to public transport, walking and cycling.

Tackling climate change is a key priority for the Mayor. In order to tackle climate change it is necessary to reduce the levels of greenhouse gases which are emitted, of which CO₂ is the most significant.

The majority of cars (around 80 %) within the Congestion Charging zone will not be affected by the Variation Order and will continue to pay the £8 standard charge or be eligible to apply for another discount or exemption.

The boundary of the Congestion Charging Zone, and charging hours, 7:00 to 18:00 Monday-Friday excluding bank holidays, remain the same.

The key changes introduced include:

- A 100 % low CO₂ discount for cars that:
- Produce less than 120g/km CO₂ and meet the Euro 4 standard for air pollution emissions or
- Produce no more than 120g/km of CO₂, and appear on the PowerShift register
- The introduction of a higher charge (£25) for cars and certain pickups with two rows of seats that produce high levels of CO₂. Vehicles liable for this charge are:
- Cars first registered with the Driver and Vehicle Licensing Agency (DVLA) on or after 1 March 2001 that produce above 225g/km of CO₂
- Cars first registered with the DVLA before 1 March 2001 with engines greater than 3,000cc
- Pickups with two rows of seats (extended-cab dual-purpose pickups) with CO₂ emissions of greater than 225g/km or with engines greater than 3,000cc in size
- The removal of the 90% Residents' Discount from the Congestion Charge for residents who continue to drive cars liable for the CO₂ charge
- The closure of the 100% Alternative Fuel Discount (AFD) to new registrations, and the phasing out of the AFD by January 2010
- A change to the NHS reimbursement scheme. Reimbursement is only for patients travelling in those cars that are liable for the higher charge a maximum of £8, not the full £25
- The introduction of the Euro V incentive - a time-limited reduced Congestion Charge of £6 for lorries and heavier vans that meet the Euro V standard for air pollution emissions.

All very fine but what if you modify a vehicle that produces less than 120g/km? It would appear that unless its OEM equipment or you appear on the Powershift register there is no way to benefit from the expensive and the individual statement you may make to reduce emissions. Putting a new steam engine in your 4x4 would be lost under the current process and regime.

Perhaps we should look to California where drivers can opt to participate in a scheme where their vehicles remotely report via GSM continuous data on emissions. Any failures with in the car are alerted and vehicles are prompted to be repaired. Given that all new cars are fitted with an on board diagnostics port (EOBD) as standard, which allows such technology, why don't we use it when entering the congestion zone? Come on Ken where's your joined up thinking.

The (US) model for emissions control / regulation, via real-time vehicle monitoring is potentially far more pro-active, however the authoritarian "Livingstone" approach, that almost requires official approval for every vehicle movement in London, will keep an army of civil servants in work at the expense of the tax payer.

Well there is hope by talking to a division of the SMMT known as foresightvehicle.org.uk has given me renewed hope and a defined route and methodology for testing a vehicle and achieving my goal. I can't believe I just said that.

We will submit an individual vehicle loaded with the new CO₂ saving software and test it officially and obtain an amended emissions certificate. The results will be a forgone conclusion but the politics will be interesting. Essentially if you buy a car from a dealer with manufacturers settings then you will pay congestion charges and no doubt personal tax based on your CO₂ banding. If however you convert it or buy it elsewhere with the new settings then you won't. However I cannot but believe that this theory will be blocked somehow and the vested interests will prevail.

* Article written before the recent London Mayor election



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