

The War on the Car James Rüppert

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About the author

James Rüppert is an award-winning automotive author, editor and columnist. He once sold cars for a living, invented the word 'Bangernomics', and drives a Series 3 Land Rover.





Introduction

Choosing a car was once great fun. Picking the colour, and deciding whether to have a cassette player or go-faster stripes were pleasures that now belong to simpler, brighter and more tolerant times. These days, there are all sorts of complications involved, from worrying about everthing from CO_2 emissions to what the EU engine rating is. It's almost as if the local and national rule makers don't want us to drive anymore. The interpretation has to be that Net Zero means absolute zero access to personal transportation.

That's indeed the point: keeping the plebs in their rightful place, namely the bus stop.

As early as November 1973, the Marquess of Hertford argued in the House of Lords: 'It is painfully obvious that petrol will increase in price so that, even if there is no shortage or rationing, the idea of driving for pleasure will become as extravagant as it is eccentric'.

In February 1974, the chairman of the Transport 2000 study group, (now known as The Campaign for Better Transport), Tony Blackburn, proclaimed: 'if the energy crisis means anything, it means a complete change in transport priorities, with less emphasis on private motoring.'

It was, of course, The House of Commons Science and Technology Committee in 2019 that helpfully highlighted the lack of Government policies in place to deliver the Net Zero carbon emissions target by 2050, and recommend the 10 steps the Government should take to rectify the situation.¹ One of the most significant targets was reducing consumer choice, by banning the sale of diesel and petrol cars in 2030, although the powers that be have since relented a little (how gracious of them!), and put the date back to 2035.

Not only that; the motor manufacturers aren't making our lives any easier, with nannying, intrusive electronics that bully drivers to stick by the rules.

So how did we get here?

Junk Science: The root of all our problems

Reaching Net Zero targets has always been about finding science to justify desired policies. There is often little questioning as to whether claims are actually correct, or at the very least open to question. Never has 'the' science been so 'settled' as it is now.

The decarbonisation agenda first touched on the motorcar after the Kyoto Protocol of 1997. That's when governments, particularly European ones, signed up for what amounted to a 'diesel new deal'. It was an easy way to meet their emissions-reduction targets; politicians believed that because diesel cars produced less CO_2 than petrol ones, they must be better for the environment. In the 2000 budget, Chancellor Gordon Brown brought in a sliding scale for car tax, with lower rates for cars with lower emissions of carbon, and lower rates across the board for diesels. Ultimately, billions were spent subsidising diesel and fiddling with the tax rates, trying to 'nudge' people into 'behaviour change'.

At the time of Brown's budget there were just 3 million diesel cars registered in the UK, but by 2016, as a direct result of those Government incentives, the total had risen to 12 million. Suddenly, diesels were half the car market.

Then the so-called 'Dieselgate' scandal happened.

There are a series of official tests to establish vehicle emissions and overall fuel economy. These vary from country to country, but they all work in roughly the same way. Cars are put through a set of procedures involving acceleration and braking regimes, designed to mimic driving in town and on a motorway. It is all rather artificial, especially as it is conducted in a controlled environment. Not surprisingly, all manufacturers have routinely cheated to make their figures look better.

Volkswagen's software, for example, was programmed to detect steering, throttle, and other inputs used in the test, so that it could switch seamlessly between two distinct operating modes. In normal driving, the car chooses performance and fuel economy over emissions. But if the software believes it is being tested, it would significantly change the fuel pressure, injection timing, exhaust-gas recirculation, and, in models with AdBlue,* the amount of that fluid sprayed into the exhaust. While this mode delivers higher mileage and power, it also permits heavier nitrogen-oxide emissions (NOx).

Eventually this deception was exposed, and, after unrelenting pressure, VW had to admit that they did indeed fit defeat-device cheat software. Some half a million vehicles were fitted with the dodgy program in America, but worldwide the total was a much more considerable 10.5 million. Dieselgate led to resignations and fines, though precious little compensation found its way to British diesel drivers for having been misled.

Surely environmental information designed to mislead the vehicle buying public would never happen again?

^{*} A common diesel additive, which reduces emissions of NOx.

EVs: The answer to a question no one asked

Politicians have always viewed electric cars as being 'zero' emission vehicles. 'No tailpipe, no pollution', seemed to be the attitude, completely ignoring the manufacturing process. After the dash for diesel came the charge for electric cars (EVs), and unfortunately the environmental issues associated with them are just as bad as the diesel engine fiasco.

Simply getting the materials needed to make the number of batteries required to meet the 2035 deadline for phasing out new petrol and diesel cars might well be impossible. It might also be pointless; in June 2021, natural resource investors Goehring & Rozencwajg produced a blog entry called 'Exploring lithium-ion electric vehicles' carbon footprint'. In it, they detailed the huge amount of energy (and therefore CO_2) needed to manufacture a lithium-ion battery. As most EVs are 50% heavier than their conventional equivalents, the 'embedded carbon' in an EV is around 20–50% higher, and, they said, it would take the vehicle's entire life cycle to earn back the emissions. Consequently, EVs might never become affordable, even when used, or even practical for most car buyers.²

Despite greens' rejection of exploration for hydrocarbons, such as oil and gas, mining for battery ingredients is not environmentally friendly either; nor is it ethical. In June 2020, the UN declared that the EV boom was problematic because the raw materials used to make their batteries are being produced in only a small number of countries, all with weak regulatory regimes. The extraction and refinement of these materials therefore poses a serious threat to the environment. Worse, the UN Children's Emergency Fund (UNICEF) reported that about 20% of cobalt supplied from the Democratic Republic of the Congo comes from mines, 'where human rights abuses have been reported, and up to 40,000 children work in extremely dangerous conditions in the mines for meagre income.'³

In 2020, an unsurprisingly controversial report appeared. Sponsored by Honda, Aston Martin, parts manufacturer Bosch, and McLaren, it was entitled *Decarbonising Road Transport: There is no silver bullet*, and stated that it took some 50,000 miles for EVs to earn back their embedded CO₂ content. Specifically, they found that the production of an all-electric Polestar 2 generates 24 tons of carbon dioxide, compared with 14 tons for a petrol-engined Volvo XC40.

In a statement, the boss of Polestar, Thomas Ingenlath, was honest enough to say: 'Electric cars are not clean.' He admitted that the whole Dieselgate scandal had shattered people's trust in car manufacturers: 'Families bought diesel cars because they wanted to help protect the environment; they were lied to.'

Nor are EVs cheap. At the lowest end of the market, a brand new Vauxhall Corsa 'Design' Electric is £31,490, whereas a petrol one, in the same Design specification, is currently £18,070. Electric car owners suffer from plunging resale values. A 2022 Vauxhall Corsa E SRi Premium, with just 91 miles on the clock, which cost £27,055 new, is, at time of writing, currently being advertised at £17,298, suggesting that short-

term they are not a great investment.

If, as seems likely, there are no affordable new electric (or other 'zero-emission') cars for the motorist to buy and use from 2035, yet again, they will have been lied to and ripped off.

In order to hammer home the 'Zero Emissions good' mantra, Parliament is currently considering secondary legislation that will introduce an emissions trading scheme for cars. This has the backing of the Green Alliance, which seems to please the Government hugely because it's mentioned repeatedly in the draft. The scheme would restrict the number of petrol and diesel vehicles that major manufacturers could sell, and for each vehicle sold over the limit, they will be handed a fine of £15,000. This cost will inevitably be passed on to consumers through higher vehicle prices. However, the sting in the tail is that manufacturers who don't use all their quota (or who sell BEVs) can sell the surplus quota to others. The net result will be that poor people, who can't afford a Tesla, will end up subsidising rich people, who can.

The scrappage scheme con job

Imagine being able to convince (or bribe) motorists to change their old cars in order to further your own environmental and ultimately Net Zero agenda. Here is one surefire way of doing just that. It has worked before and will do so again.

The 2009 scrappage scheme was introduced as a result of the car industry begging the Government for help, after recession had led to new car registrations dropping by almost 37%. The scheme was introduced on 18 May 2009 and ran until 28 February 2010, offering a £2,000 discount on a new car or light commercial vehicle. It was underwritten by £300 million in taxpayer funds, with that amount matched by the manufacturers, so, in all, £600 million was up for grabs. This was effectively 'Year Zero' for responsible car buying.

As well as drumming up business for the car trade, the policy was also justified on the grounds of cleaning up the air, with more 'environmentally friendly' (their words) and safer cars being put on the roads. Officially, the Government used data from the Society of Motor Manufacturers and Traders (SMMT), which suggested that 85% of a car's lifecycle CO₂ emissions come from the use phase of a vehicle. Taking an average mileage of 12,000 miles per year, and exhaust pipe emissions of 165 g/km, apparently it would take one year to pay back the pollution created through production, which accounts for 10% of the lifetime total.

These figures were misleading. New vehicles sold at the time featured engines manufactured to the exacting Euro 4 standard, rather than the Euro 2 assumed by the SMMT. The stats revealed that those newer engines delivered more than a 50% improvement in terms of emissions.

However, the scrappage scheme had the desired effect. A total of 396,000 new cars were sold in the months over which it operated, with eight consecutive months of growth, and car production up 62.7% by

the time it closed. It was calculated that 20% of sales were attributable directly to the scheme.

However, the timing of the introduction of the scheme also meant that many of the brand new cars were actually the less-than-clean environmentally unfriendly diesels, producing all the emissions that led to the introducion of the ULEZ (Ultra Low Emission Zone) schemes years later.

Overall, the scrappage scheme cleared the roads of perfectly usable, roadworthy vehicles by the hundreds of thousand, as their owners cashed in. Indeed, older cars were now under fullscale attack from the local authorities, determined to charge them for simply being used.

'Papers please': welcome to ULEZ

One surefire way of reaching Net Zero goals, or at least give the illusion of doing so, is to police and penalise movement in designated areas. This is a slow and expensive way of conditioning drivers to accept that the world around them is changing and that they need to pay up, stop complaining, change their car or ideally refrain from driving altogether.

In theory, ULEZs mean cleaner local air, but in practice pollution just gets shifted somewhere else or, if the wind blows in the wrong direction, comes straight back. ULEZs are merely the latest manifestation of a new tendency to taxes on movement.

You can't see pollution, but you can see congestion, which is where the first charge was applied in London. In February 2003, the then Mayor, Ken Livingstone, introduced the congestion charge within a designated zone at a bargain rate of £5 a day. But as well as unblocking London, the charge was also designed to raise revenue to improve public transport; the proceeds were transferred by law to Transport for London. The stated aims included reducing the length of journeys within the congestion zone, improving bus services, and encouraging motorists to use public transport instead of their cars.

The Low Emission Zone (LEZ) was the first of London's charging-based emissions reductions schemes. It was introduced in February 2008 and specifically targetted HGVs over 12 tonnes, but was extended to include HGVs over 3.5 tonnes and buses and coaches too, in July of that year. Without getting lost in the rules and regulations, what Londoners had to deal with in reality was another revenue-raising ruse.

In 2017, in response to some high recorded levels of pollution, another London Mayor, Sadiq Khan, who, as transport minister, had encouraged diesel engine use, introduced an additional £10 'toxicity charge' (T-charge) on pre-2006 diesel and petrol cars. That added an extra £10 on top of the existing £11.50 daily charge. However, it did rather beg the question that if things were so bad, why he didn't just ban such polluting vehicles outright rather than taking the money and letting everyone (allegedly) continue to cough.

The reason has become clear as the 2019 ULEZ has expanded to the outer edges of the M25, and as it has started to be reproduced in major cities across the UK. Get caught by the camera in the wrong car and there's a £120 fine, so motorists need to know whether they have a petrol Euro 4, usually from January 2006 or later, or a Diesel Euro 6 from September 2015. A whole class of relatively recent and very roadworthy vehicles from the 1990s and 2000s, including motorcycles, are now chargeable or have been scrapped in exchange for up to £2000.

It's a good job then that motorists are not additionally being charged to drive by the mile.

Hold on, what's this? A job advertisement at Transport for London, to be involved with their Project 2030, declaring that 'London was first with Contactless and the Congestion Charge and is now looking to lead the way in introducing a new, more sophisticated type of road pricing.' Oh dear.

Obviously, when implementing charge by the mile, the authorities will need to make use of all those ANPR (Automatic Number Plate Recognition) cameras, or at least the ones that are still operational.

Toll roads and pay-as-you-drive penalties

If driving in a Net Zero world means owning an EV, then the mystery of just how to charge drivers for using the road can be solved by implementing a system that is as old as the hills.

Although road pricing is not yet widespread in the UK, charging to use a particular stretch of road has been around for some time. Turnpike roads were named after the gate of spikes that could be turned to allow those who had paid to pass through. At their height, in the early 1800s, about 1000 trusts controlled 18,000 miles of road in England and Wales, although not everyone was a fan; there were often protests by farmers, whose livelihoods were threatened by the way turnpikes restricted their movement. Thank goodness the Local Government Act of 1888 handed responsibility for roads back to councils.

There are just 23 tolls roads today. The best known is the M6 Toll, just outside Birmingham, which takes traffic around the jams on the actual M6, and provides a handy shortcut. Eighteen of our toll roads take you across a river. The Dartford River Crossing is a familiar example. Under the original agreement when the bridge was built, tolling was supposed to stop once it had paid for itself. Indeed, back in February 1999, the government announced that it would be toll-free by the end of 2003, although the Transport Act 2000 allowed the charges to continue. Then, in 2014, the tollbooths were removed, but not so that drivers could travel for free, but because it was possible to make payment automatic, with the potential for levying fines with the same ease.

Back in 2005, Sir Rod Eddington reported to the Labour government of the day that road pricing could help tackle congestion. A subsequent government study recommended a sliding scale of charges, rising from 2p per mile to a maximum of £1.34 per mile for the most congested roads.

The report was probably just a metaphorical finger in the air, testing which way the wind was blowing, but things progressed as far as some local authorities proposing road-pricing schemes. That resulted

in more than £14 million of funding being split amongst ten areas to fund further research and reports on the subject, including Bristol, Cambridge, Tyne and Wear, and the West Midlands. In 2006, funding was extended to Reading, Norwich and Nottingham, Leicester and Derby.⁵

Motorists didn't just sit back meekly. In 2007, over 1.8 million people signed a petition to protest the moves, and 'scrap the planned vehicle tracking and road pricing policy'. The quotation below succinctly sums up how drivers felt:

The idea of tracking every vehicle at all times is sinister and wrong. Road pricing is already here with the high level of taxation on fuel. The more you travel - the more tax you pay. It will be an unfair tax on those who live apart from families, and poorer people who will not be able to afford the high monthly costs.

Tony Blair, responding to the petition, indicated that motoring taxation as a whole might be reformed as a consequence of any future road pricing scheme being introduced, and he also acknowledged concerns about privacy. However, although the commitment to road pricing was confirmed in the 2008 Budget, a later policy paper entitled 'Roads – delivering choice and reliability' failed to detail an implementation timetable. Then, finally seeming to have grasped how unpopular the policy would be with the electorate, ministers started to become evasive on the issue, and by the time Lord Adonis became Secretary of State for Transport it had been quietly dropped and no longer formed part of Labour's 2010 election manifesto. It was an unacknowledged, if delayed, victory for people power.

However, nowadays road pricing is very much back on the agenda, as politicians wonder where their tax revenue will come from when EVs take over the roads. There could well be pay-per-mile charging, enabled by GPS data loggers, which have been a standard feature of new cars since 2022. That means that the UK's ANPR camera monitoring network could be used to charge drivers based on the length of their journeys, as well as checking how fast they are travelling.

Of course it would not stop there. ANPR cameras have the potential to record much more information. In 2022, Mayor Sadiq Khan authorised Transport for London to give the Metropolitan Police access to the data collected. This idea met with some pushback: Sophia Akram, policy manager at the Open Rights Group, talking to the Mail Online said: 'Sadiq Khan chose to push through his decision to grant the Metropolitan Police access to ANPR data without public consultation, playing with the privacy of London's inhabitants.'

Unsafe at any speed (according to ANPR)

Enforcing a blossoming Net Zero economy is easy if you have the right equipment and, thanks to a generation of fairly intense traffic enforcement, the United Kingdom is a surveillance state waiting to rise to the challenge.

Historically, it all started very slowly. Victorian and Edwardian roadgoing pioneers were limited to 4 mph, or just 2 mph in residential areas. By 1903, the limit had been raised to a heady 20 mph, but in 1930 the Road Traffic Act abolished speed limits for cars altogether.

It did not last long. In 1934, a new limit of 30 mph was set for builtup areas, to calm things down a bit. Still, provided drivers did things safely, they were trusted to go about their business without too many restrictions. Indeed, the new-fangled motorways from the late '50s were derestricted. However, a number of car crashes during the foggy autumn of 1965 led the Conservative government to hold consultations with the police and the National Road Safety Advisory Council. They concluded the crashes were caused by vehicles travelling too fast for the conditions.

As a result, British motorists got an unwelcome early Christmas present when, on 22 December 1965, a temporary maximum speed limit of 70 mph was introduced on Britain's motorways. The experiment was initially to last for four months, but was extended, then made permanent in 1967, and it remains in place today.

To make a conviction stick, the police originally had to catch the speeding motorists in the act, but the Road Traffic Act 1991 changed all that. From then on, evidence from approved automatic devices could be used as the sole evidence that a motoring offence had been committed: speed cameras had arrived. A Home Office study in 1996 claimed that areas covered by the cameras had seen a 28% reduction in injury-causing crashes and an 18% reduction in crashes at traffic lights meant they were here to stay. Effectively this was hands-off policing conducted by the Royal Mail.

However, from the official perspective, cameras did seem to be meeting their primary purpose, namely earning money. Home Office figures showed that by 2000 the cameras had caught around 600,000 motorists in England and Wales. To counter public criticism and suspicion, fresh guidelines were issued by the Safety Project Camera Board in 2002, requiring cameras to be painted yellow, rather than hidden (behind trees for instance), and clearly signposted.⁶

The motorway top speed came under scrutiny back in 2011, when then Transport secretary Philip Hammond said the existing 70 mph limit was 'out of date'. The Climate Change Committee, the Government's official advisers on all things Net Zero, warned that continuing with a pilot scheme to test an 80 mph speed limit would generate an extra 2.2 million tonnes of CO_2 a year. Unless of course only EVs were allowed to go faster. Remarkably, this idea was seriously considered in 2019, Transport Minister Grant Shapps saying:

When it was looked at in 2011, it was thought the carbon emission addition would be too great...I think there is an argument that once you have increased the level of electrification and therefore decreased or entirely removed carbon, that you might look at those things again.

Speeding tickets are not just an important revenue source for the bureaucracy. The technology involved to 'prevent' it also represents

an important means of social control. In 2019, Transport for London revealed a programme to lower the central London speed limit to 20 mph as part of wider plans that they suggested would eradicate death and serious injuries on the transport network by 2041. Their Travel Safe Priority Areas were trialled 'to combat community concerns in certain inner London areas with high visibility and covert policing'.

Slowness has now become a way of driving life in parts of the country. The Welsh Government has passed a law which means the speed limit on restricted roads in Wales – mainly residential ones – will reduce from 30 mph to 20 mph. Meanwhile, Scottish Green party plans to cut the speed limit on part of the M8 to 30 mph – not much more than walking pace, on a motorway – has been passed by Glasgow City Council.⁷

However, slowing down traffic is not necessarily helpful. A study by researchers from Queen's University Belfast in November 2022 found that while 20 mph limits lead to quieter streets with fewer cars, they 'don't even cause drivers to slow down'. The university looked at data on road traffic collisions, casualties, driver volume and traffic speed in Belfast city-centre streets, before and after the introduction of 20 mph speed limits, and comparing them: with city-centre streets lacking such restrictions, streets in the surrounding metropolitan area, and similar streets elsewhere in Northern Ireland that had retained 30-40 mph limits.⁸

According to the authors, 20 mph speed limits were associated with 'little change in short or long-term outcomes for road traffic collisions, casualties or vehicle speed'. There were reductions of 3% and 15% in the number of crashes in the one to three years short term, but the researchers say there was 'no statistically significant difference over time'.

Moreover, not only are lower speeds less safe, they may also be less environmentally friendly, creating more pollution, and thus doing away with the principal alleged benefit of a ULEZ. In fact, Transport for London's own *London Exhaust Emissions Study* suggests that travelling below 20 mph requires the selection of lower gears, which means higher engine revolutions and increased NOx emissions.

However, fortunately for Mr Khan, Imperial College then produced a report, Evaluation of the estimated impacts on vehicle emissions of a 20 mph speed restriction in central London, backed Transport for London, which reported that speed restrictions reduced particulate matter emissions for both petrol and diesel cars, and NOx and CO₂ emissions for diesel cars.

However, keeping to a set speed is very difficult; unless, that is, your car can assist you.

In-car control

If Net Zero is about control, then car makers are fully on board with the legislators. Reducing harmful emissions through the use of technology, such as sophisticated engine management systems, is certainly part of

their remit. However, controlling the way drivers make decisions in a Highway Code context could be regarded as a step too far.

The General Safety Regulation applies to cars made to be sold in the EU from 2022, and ordains that they now come with many extra exciting features, a speed limiter being just one of them. Others include automated emergency braking, electronic data recorders, and allround cameras. The important point is that while these systems are fitted, or capable of being fitted, to all brand new cars from 2022, there is no obligation to activate or use them. The trouble may occur with an automatic speed limiter which prevents exceeding a legal limit. However, an inability to accelerate and exceed the speed limit in an emergency could be a problem. Especially if the driver is unaware that 'hard-acceleration' may get them out of trouble.

The General Safety Regulation isn't just about speed devices. Manufacturers will also need to equip their vehicles with a 'driver drowsiness and attention loss warning' system, a souped-up version of the existing lane-departure warning features, which beep and shake the steering wheel at you. Drivers that take their skills only moderately seriously will soon be looking for a way to permanently turn them off, but this is difficult, as so many are default settings when the vehicle is started.

Distinguishing between the irritating and the dangerous is sometimes tricky. Emergency Brake Assist is supposed to know better when to slam the anchors on than the driver. Whereas beeping at you because something is ajar or left on is something many can just about cope with.

Rather more controversial is the 'event data recorder', effectively a black box. In theory it is there to log all the relevant circumstances of an accident. It is sold to motorists as making their lives simpler, and maybe the insurance cheaper. However, this has already been called out by the 'Ligue de Défense des Conducteurs', a French pro-car action group, who have said that once these devices are installed, the authorities can check driver data in real time, or retrospectively and quite possibly punish them for motoring offences.

The EU clearly can't stop interfering with the way cars are made, operated and used.

Killing small cars

The key to Net Zero motoring has been constantly reducing the $\rm CO_2$ output of combustion engines and this particular aspect has been enthusiastically embraced by European Union legislators. The consequences of these reductions is only now being felt by consumers in new car showrooms, who now have fewer affordable models to choose from.

Ford recently cancelled one of the most popular models of all time, the Fiesta. They are not the only ones. It is becoming increasingly difficult to buy internal combustion engine powered cars, because manufacturers are finding it impossible to meet existing and projected



emission regulations.

Just take a look at the amended Regulation (EU) 2019/631. Its stated aims are to 'contribute to reaching at least 55% net greenhouse gas emission reductions by 2030 compared to 1990 and to achieving climate neutrality by 2050, in line with the European climate law, and 'provide benefits to EU citizens and vehicle users from a wider deployment of clean and affordable zero-emission vehicles."¹⁰

Clearly those benefits are going to be illusory. The EU fleet-wide CO₂ emission target for 2020–2024 is 95 gCO₂/km for cars. There will be a 15% reduction for 2025 to 2029, rising to 55% by 2034, after which the level will be set at zero. This is simply impossible to meet with internal combustion engines, so cheap petrol cars will become a thing of the past, replaced with expensive, resource-hungry, and inconvenient EVs. There will be no room for the Fiesta or other small petrol-powered cars, but two-tonne electric SUVs will still be available for the wealthy.

I suppose we should be grateful that we can still use our older petrol- and diesel-engined cars.

Are they messing with our fuel?

Tackling Net Zero from every angle also means that fuel composition needs to be examined closely and if necessary modified. For motorists' own good of course.

Just in case you missed it, vehicle fuel has, for the last decade, 'benefitted' from a renewable element, in that biodiesel and ethanol are blended with petrol and diesel. The idea is that this leads to a reduction in overall carbon dioxide emissions, thus helping the country meet its climate change targets. Apparently, blending renewable fuels in this way contributed to a $\rm CO_2$ emissions reduction equivalent to taking over 1 million cars off the road. The labelling isn't terribly clear, but the petrol badged E5 has ethanol up to 5%, whilst diesel has a B7 tag, representing 7% biofuel.

Then there is E10, a biofuel made up of 90% regular unleaded and 10% ethanol. As of 2011, all new cars sold in the UK must be E10 compatible, but the fuel is problematic because it is corrosive to rubber parts on older cars. The SMMT estimates that 92% of the petrol-engined vehicles in the UK are compatible with E10. The remainder are not. As a result, drivers of cars registered prior to 2002 have now been advised not to use E10 in their vehicle.¹¹

The other problem with E10 is that it doesn't work very well. Research carried out by *What Car?* magazine revealed that it is potentially less efficient than the current E5 blend of fuel,¹² with the problem being worse in smaller-engined cars. So drivers of shopping cars would end up filling their cars more often, which is not the point of owning a small car with a tiny engine.

And to make things worse, it is possible that E5 will be phased out. The Petrol Retailers Association have confirmed that E5 is legally required to be available for five years from September 2021, when E10 came in, and they believe that period is likely to be extended. We had

better hope so.

At least we still have a two-wheeled option.

That post-pandemic pedal power push

The Net Zero agenda can only be accelerated by getting drivers out of their cars completely. This is no easy task when the alternatives are so uncomfortable and impractical.

The Climate Change Committee regard the alternatives as 'Smarter Choices'. They were even specific about what this entailed in their 2011 Surface Transport Factsheet,¹³ talking of 'a range of measures such as car clubs, teleworking, and travel planning, to reduce car use', as if there would be a set of circumstances that might completely rearrange everyone's working life.

Remarkably, just such a set of circumstances appeared in 2020, when lockdown and the need for exercise resulted in bicycle sales rising over 20%, to an estimated 3.3 million units.

However, there was a price to pay for that brief upward blip in sales during the pandemic: suddenly, those in power wanted more cycle lanes and more Low Traffic Neighbourhoods.

As the pandemic ended, Transport Minister Grant Shapps said:

Active travel is affordable, delivers significant health benefits, has been shown to improve wellbeing, mitigates congestion, improves air quality and has no carbon emissions at the point of use. Towns and cities based around active travel will have happier and healthier citizens as well as lasting local economic benefits.

The government therefore expects local authorities to make significant changes to their road layouts to give more space to cyclists and pedestrians. Such changes will help embed altered behaviours and demonstrate the positive effects of active travel.

As a result, bizarre cycle-lane schemes sprung up in urban centres across the country, often concocted and built within a matter of weeks. The result was often extreme hardship for shopkeepers, with footfall declining dramatically as soon as a cycle lane opened. Shapps soon learned this to his cost. In July 2021, he was forced to intervene, when shopkeepers in his own constituency of Welwyn Garden City revolted after the introduction of disruptive cycle lanes and a one-way system. Some of the schemes have been dismantled just as quickly as they were installed, but new ones are appearing just as frequently.

If only there was something the ordinary man and woman in the street could do to stop all this.

The fightback begins in Paris, not Peckham

There has been little physical resistance to Net Zero. Ordinary people, who will be most affected by the policy, usually continue going about their daily routine to earn a living and look after their families.

Nevertheless, it is possible to fight back in this war against the

motorist, and the French have shown us the way, donning their high visibility jackets to become the *Gilets Jaunes* ('Yellow Vests').

Their origins were rooted in principle and rebellion. It all began with a proposed fuel tax rise, again justified by the decarbonisation agenda. The revenue was apparently to be used to finance renewable-energy projects and discourage the use of diesel and petrol cars.

Incredibly, the price of diesel had already risen by 23 per cent in the space of a year. Firstly the price of crude oil rose in October 2018 to just over €80 a barrel, with the cost quickly passed on to consumers. Fuel tax also went up in 2018: diesel by 7.60 cents and petrol by 3.90 cents per litre. Then there was the Carbon Tax, first introduced in 2014 under Francois Hollande's government, allegedly to help limit greenhouse gas emissions. The objective was to increase it progressively, so from €39 per tonne in 2018 to €47.5 in 2019.

These measures all hit hard at rural dwellers, who rely heavily on their cars. They also hated the cut in the speed limit on rural roads from 90 km/h to 80 km/h. Many believed the policy was just a way to make money from speeding tickets. No wonder then that the Gilets Jaunes targeted the country's speed cameras, taping them up, burning them, and knocking them over. As many as 60% may have been 'retired' in this way.

This was the French working class versus their intellectual elite, but eventually the British caught on. After all the logical arguments against ULEZs failed, and the scheme was implemented anyway, the direct actions of the so-called 'Blade Runners', a group who took to cutting the cables on ANPR cameras across London, seemed to be more effective.

Equally, there are cogent and effective objections to the enforced adoption of electric cars, just as there were against diesel ones, yet no one in positions of power is listening. The question is: could we end up in the same ideological and transport pickle as before because of the governmental obsession with Net Zero?

Meanwhile, Chancellor Jeremy Hunt has opened an EV charging hub at the NEC campus in Birmingham as part of a £381m funding scheme. The official statement makes it clear that: 'The site supports the government's electric vehicle infrastructure strategy and commitment to decarbonising transport, backed with more than £2 billion to support the transition to zero emission vehicles including accelerating the rollout of charge point infrastructure.'

How might that look in a few years' time?

Notes

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