

Transport Policy and Transport Tax Reform

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We are now entering a new phase of transport policy fiscal instruments. Rather than reforming existing measures, the UK and several other countries are moving towards replacing the whole transport taxation regime. This article reviews the ways that car taxation is used internationally to promote fuel economy, cleaner fuels and reduce traffic growth. Fiscal measures to manage traffic growth in the UK have faced political difficulties and, since 2000, have given way to a somewhat random set of policy decisions, together with a shift in focus towards the dominant issue of congestion reduction. An eventual replacement of existing car taxation measures with a new national road user charging regime is now contemplated, but there is a danger that the confusion in purpose that now characterizes transport taxation policy could be carried over to the new regime.

The Transport Policy ‘Bed of Nails’

Transport has never been an easy portfolio for a UK government Minister. In 1981 the development of an ‘integrated transport policy’ was the subject of an episode of the political comedy *Yes Minister* entitled ‘The Bed of Nails’. The plot was that, because transport involved so many irreconcilable desires and interests, the only politically-viable transport policy was not to have a policy at all, least of all an integrated transport policy. The last thing Sir Humphrey wanted was for his Minister to become embroiled in such a bed of nails.

Nearly a quarter of a century later, transport policy has not simply remained a bed of nails—the nails are sharper and there are more of them! The list of seemingly irreconcilable desires has grown. Car use on our densely populated island is high and the UK is arguably the most car-dependent state in the EU. We have around 60 million people and 30 million vehicles, and every year more cars are driven further than before. We have the worst road congestion in the EU (Commission for Integrated Transport, 2001), which not only frustrates private motorists, but also imposes a cost burden on the economy. Building more roads, though often advocated, is now viewed as futile. Since the early 1990s research has shown that roadbuilding largely results in yet more traffic, congestion and economic inefficiency, as well as it simply being economically impossible to accommodate the pent up desire for car use growth (Goodwin *et al.*, 1991; Goodwin, 1994). The only way limited

additional road capacity can help is if it is coupled with measures to manage transport demand. Thus we have a key contradiction between the deeply-rooted desire for car use and the practical reality that this desire cannot be physically or economically fulfilled.

Yet, while car use is rising, around 30% of UK households do not have a car. As a result of planning policies which allowed the decentralization of key facilities, destinations such as employment, supermarkets and educational establishments can be hard to reach for these people. Transport has become a key factor in social exclusion.

Added to this web of contradictions is the ever more urgent environmental agenda. Road traffic is a major source of nearly all air pollutants. It accounts for half of emissions of oxides of nitrogen, 62% of carbon monoxide emissions, 32% of volatile organic compound emissions and 56% of black smoke (DfT, 2003a). Technical measures, imposed by regulation (for example catalytic converters and fuel quality directives), have significantly cut pollution from vehicles, although ambient concentrations of nitrogen dioxide and fine particulate matter remain a persistent and important health problem. In the longer term, traffic growth is set to erode the improvements achieved but, more immediately, there has been little progress regarding transport’s global environmental impacts. The amount of carbon dioxide (CO₂) generated by transport in the UK has doubled in the past 25 years and transport is the fastest growing source of all emissions (DETR, 2000);

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it is the only major sector where CO₂ emissions have risen since the Kyoto base year of 1990.

Regulation and voluntary agreements have led to improvements in new car fuel economy, but these have made remarkably little difference to the actual 'on the road' fuel economy of the UK car fleet. 'Rebound effects' have emerged, such as changes in drivers' and car buyers' behaviour, compensating for the vehicle improvements. It even seems unlikely that the UK will meet the EU target for new cars to meet a laboratory test average of 140g/km of CO₂ by 2008/09. The DfT progress report (DfT, 2004a) admits that 'it is unlikely that the UK itself will reach the 140g/km figure by that date'. This is because the improvements in fuel efficiency are being 'at least partly counteracted by a trend for consumers to buy larger, less fuel efficient cars' (Thomas, 2004).

Fiscal Instruments and Transport Policy

Since the early 1990s, transport policy in the UK has shifted from a demand-responsive approach, involving enlarging road capacity, towards one of managing demand in order to match it to existing road capacity. This policy shift has involved a range of measures including the promotion of vehicle fuel economy and cleaner fuels, coupled with reducing road traffic growth, increasing public transport use and encouraging walking and cycling. The intention has been to cut congestion, improve accessibility and social inclusion, and reduce negative environmental impacts. This policy was initially pursued through the Conservative administration's 1995 transport green paper (DfT, 1995) and then the Labour administration policies in the 1998 transport white paper (Deputy Prime Minister *et al.*, 1998), the 10-year investment plan (DETR, 2000), and subsequently the 2004 transport white paper (DfT, 2004b).

Although there have been successes in the use of cleaner fuel formulations, progress on fuel economy has been limited, and the historical trend towards higher car use continues unabated. At the core of both these trends is a long-term decline in real motoring costs, coupled with a long-term rise in public transport fares. Real-terms fares for public transport have risen significantly, despite government subsidies to rail and non-commercial local bus services. In the past 25 years, the rise has been by 33% for bus and coach and 38% for rail.

Looking at the past decade only, fuel costs have increased (until 2000 as a result of the fuel duty escalator, more recently due to the rise in oil prices), but car insurance has also driven up

costs. In contrast, the cost of vehicles themselves has fallen, in particular due to European Commission intervention to end price distortions affecting the right-hand drive markets. Competition has also been important, with particular pressures being over-capacity in European car production facilities and low-cost imports from the Far East.

The overall structural situation of car costs declining and public transport fares increasing created a problem in promoting the latter and has led to fiscal measures emerging as increasingly important instruments of transport policy. Cars and their fuel have for long been a source of general taxation revenue, but in the past decade some existing transport taxation measures have been reformed to address new policy concerns as well as simply raise money. Thus transport taxation is now expected to address three goals:

- Raise revenue.
- Discourage growth in car use.
- Promote the purchase of cleaner and more fuel-efficient cars.

Tax Reforms in Practice

The UK's four most important national taxation measures affecting road transport have been:

- High fuel duty rates on petrol and diesel.
- Varying vehicle excise duty (VED) by vehicle CO₂ emissions.
- Discounted fuel duty rates for alternative road fuels, including natural gas, liquefied petroleum gas (LPG), electricity and biofuels.
- Varying income tax levied on company cars by vehicle CO₂ emissions.

Fiscal measures can be placed at three crucial points in the life-cycle use of cars. These are:

- Tax on the initial purchase of a vehicle.
- Tax on the ownership of a car (annual registration tax and company car taxation).
- Tax on the use of vehicles (fuel, road space and parking).

It is useful to review the UK's practice in these three categories compared to the car taxation regime of other EU states.

Initial Purchase

In addition to VAT, most EU states have a car purchase tax, with the UK and Germany being notable exceptions. The UK used to have a 10% car purchase tax, but in 1992 it was replaced by the UK policy for high fuel duty.

In Belgium, car purchase tax is graded finely according to the power of the car, and in Finland there is a reduction for low emission vehicles. In the Netherlands, car purchase tax is 45.2%. This may seem high (although at 105% Denmark's is higher), but there are counterbalancing fixed allowances of 1,540 euros (£1,060) for petrol and LPG cars, 580 (£400) euros for diesel cars and other allowances for cleaner vehicles. This fixed allowance cuts the charge significantly for smaller and more fuel-efficient cars and raises the price of larger and less fuel-efficient vehicles. In June 2004, France announced proposals to reform its car registration tax into a 'feebate' scheme. Cars emitting over 180g/km of CO₂ or diesels without a particulate filter will face a surcharge of up to 3,500 euros (£2,400), whereas cars that emit under 140g/km of CO₂ and diesels with particulate filters will receive a rebate of 200 to 700 euros (£140 to £480) (Henley, 2004). Cars emitting between 140 and 180g/km of CO₂ will be liable to neither a surcharge nor rebate.

Annual Registration Tax

All EU countries have a graded annual registration (or 'circulation') tax entitling owners to use the public highway. It is often varied by engine size or the power of a car, but some nations have implemented an eco-reform to this tax. In Denmark, the tax varies with fuel consumption, whereas Germany links tax liability directly to the European emission standards, with the least polluting car paying only 20% of the rate of the most polluting car. However, the overall tax is so low (about 50 euros or £35 per car) that its impact on car choice is negligible.

For cars registered from 2001, the UK has adopted a CO₂ emission-based system in four bands (A–D). In 2003, two further bands were added for very low CO₂ emission vehicles (see table 1), with a charge range of £55 to £165 (81–243 euros). The slightly different diesel and alternative fuels charges are to reflect air quality differences. A similar system has also been

introduced for lorries, with seven charge bands according to emissions and amount of road wear imposed.

Taxes on Car Use

Between 1992 and 1999, the UK governments operated the 'fuel duty escalator'. Linked to the abolition of car purchase tax, fuel duty was increased above the rate of inflation, initially by 5% per annum and, from 1997, 6% per annum. This policy was justified as a major contribution towards the reduction of CO₂ emissions from the transport sector. Fuel demand elasticity studies (for example Glaister and Graham, 2000; Goodwin, 2002) suggest that the tax increases resulted in 10% less demand for fuel in 2000 than if the duty rates had increased only at the same rate as inflation. Department for Transport statistics show that road traffic grew by 18% in the six years 1987 to 1993 and by 13% in the six years between 1993 and 1999 when the fuel duty escalator was operative (DfT, 2004c).

Many factors affect traffic growth, particularly the strength of the economy, so it is hard to draw firm conclusions. However, it is reasonable to state that traffic growth would have been higher in the absence of the policy. Certainly, the UK government (cited in Marsden, 2002) believes that the fuel duty escalator 'saved' between 1 and 2.5 million tonnes of carbon emissions. This would have occurred as a result of a range of behavioural responses, including the suppression of some travel demand.

Following blockages of oil refineries by lorry drivers and farmers in 2000, petrol and diesel duty was cut and the fuel duty escalator policy abandoned. Most EU states have had a version of the escalator, if generally somewhat slower and less steep. In consequence, by 2003, the UK was not alone in having high fuel duties, with the Dutch, Finns, Swedes and Germans, as well as the British, paying more than 1 euro per litre for unleaded petrol.

The use of road fuel gases (LPG and natural

Table 1. UK vehicle excise duty (circulation) tax rates in pounds sterling in 2003.

<i>Band</i>	<i>CO₂ (g/km)</i>	<i>Diesel</i>	<i>Petrol</i>	<i>Alternative fuels</i>
AAA	Up to 100	75	65	55
AA	101 to 120	85	75	65
A	121 to 150	115	105	95
B	151 to 165	135	125	115
C	166 to 185	155	145	135
D	Over 185	165	160	155

Source: Inland Revenue.

gas) is not as extensive in the UK as in some other European countries, notably the Netherlands and Italy. Discounts on fuel duty have increased in recent years and are now equivalent to 75% of the duty paid on petrol (Parkhurst, 2002). The cost of the fuel itself is higher, which means the cost to the consumer of gases is about half that of petrol. The fuels are now available in around 10% of filling stations, and use is increasing.

Charges on using road space within the EU include bridge and tunnel tolls, road tolls and cordon or congestion charging in city centres. Bridge and tunnel tolls are commonplace, and road tolls (usually only for motorways) exist in Austria, France, Germany, Greece, Italy, Portugal, Spain, and Norway. City centre congestion charging is one of the new car tax measures designed to manage traffic, raise revenue (usually hypothecated), and address environmental aims. It has been introduced in three Norwegian cities and recently in Durham and London in the UK.

Company Cars

Company car taxation is a sector-specific circulation tax. In the UK, around half of cars are purchased by commercial organizations for their employees for both business and private use. Until 2002, income tax was charged on 35% of the car's value per annum, with discounts for high business travel. For many years the Government was criticised for this taxation method, as the reductions for high business use encouraged employees to drive more in order to cut their personal tax bills.

A major reform in UK company car taxation took effect from 2002, when the tax charge was related to a car's CO₂ emissions. The charge rises from a base level of 15% of a car's purchase price, for cars emitting 165 grams per kilometre (g/km) of CO₂, in 1% steps for every additional 5g/km over 165g/km. The maximum charge is 35% of a car's price. Diesel cars not meeting European emissions standards incur an additional charge of 3%, up to the 35% ceiling. There are further reductions for company cars using cleaner fuels and technologies. Bi-fuel cars (gas/petrol) and hybrid-electric cars receive a 1% and 2% discount respectively, plus a further 1% discount for every 20 g/km below the minimum percentage level. Cars solely powered by electricity (battery electrics and fuel cell cars) are charged at 9% of their list price. Significantly, discounts for high business mileage were abolished, together with most age-related discounts, which had provided an incentive to drive further and to use older,

more polluting cars. ('Classic' cars are excluded from these provisions, and a minority effect has been to encourage the ownership of such cars as company vehicles. They are by definition old, and generally produce high levels of emissions.)

An initial assessment of the impact of this tax change (Inland Revenue, 2004) shows that, in the first year of the new system, average CO₂ emissions of new company cars decreased from 196 g/km in 1999 to 182 g/km in 2002. The number of business miles has reduced by over 300 million miles per year and the overall effect has been to reduce the emissions of carbon from the company car fleet—by around 0.5% of *all* CO₂ emissions from road transport in the UK. However, the company car tax reform has not stimulated demand for cleaner-fuelled cars by the company car sector, nor have they encouraged car manufacturers to develop new low-emission designs, which was also an objective of the reform.

This policy has proved influential due to the large changes in tax liability produced. A car costing £20,000 used mainly for business purposes under the old system would have cost an employee paying the standard rate of tax £690 a year. If the car is a fuel-efficient one then the new tax bill will be similar. If it is an inefficient one, the bill is more than doubled to £1,600 per annum. This is in contrast to the relatively small tax gains of the VED reform. The latter saves users only about £100 per annum, which for most purchasers of new cars is arguably too little to influence car choice.

Tax Reform and Tax Regime Change

Over the past ten years there have been significant reforms to the UK's car taxation regime. This has met with varying degrees of success and very variable degrees of political support or opposition.

By 2000, the policy to redirect tax from the purchase of cars to the use of cars through the fuel duty escalator was starting to achieve results. In this context the reform to VED could have provided a useful supporting measure. However, with the fuel duty escalator put into reverse in 2000, the VED reform alone stood no chance of having any impact. Because company car tax was a major cost to users, its reform has been effective in influencing vehicle choice.

Overall, the Government has increasingly retreated from tax measures on car use, even to the extent of distancing itself from London's congestion charge. Regulations and ownership measures to improve fuel economy and

encourage cleaner fuels have been maintained but, with the notable exception of the company car tax reform, have proved ineffective in the absence of strong complementary car use measures.

The transport policy white paper, published in July 2004 (DfT, 2004b), made official the retreat from car use tax measures. Despite a certain amount of rhetoric, the 2004 white paper contains little on managing transport demand. It focuses on the competent management of the Government's transport investments and cutting costs (of the railways in particular). The word 'environment' is there, but in reality is relegated to the sidelines. The central thrust concerns cutting traffic congestion and facilitating mobility. Road traffic is set to rise with no expansion in rail use, there is little to reverse the decline in bus patronage outside London and the target to grow bicycle use is abandoned.

Steps to rebalance the decline in car use costs and the parallel rise in the cost of public transport are totally absent. In practice this policy was abandoned with the collapse of the fuel duty escalator in 2000, coupled with the disastrous financial consequences of rail privatization. A strategic fiscal principle of transport policy of successive governments has given way to pragmatic and fragmented *ad hoc* decisions. The 2003 rail fares review replaced the policy of regulated rail fares rising by 1% less than inflation with rises of 1% more than inflation. With cost savings prioritized under the new transport policy, rail fares are set to rise even more, typified by the decision to raise London bus and Underground fares above inflation. Outside London, public transport fares are unregulated and have risen above inflation anyway. The net result has been the widening of the cost gap between public transport and the car. Indeed, government projections predict car costs dropping by a further 5% per annum.

This produces a dilemma. The intellectual and research case for transport demand management is well proven. Even if energy and environmental considerations are discounted, trying to tackle congestion without strong demand management measures would be futile. Politically this truth is unpalatable, so the white paper ends up arguing for demand management measures, but relegates them to politically less sensitive (and less effective) areas. Therefore motorway capacity enlargement is proposed, but tolled to 'lock in' the benefits of new capacity. No comparable demand management charges feature, for the moment,

for *existing* transport infrastructure. The resolution of this paradox is that eventually (in 10 to 15 years) an effective fiscal measure is proposed. Linked to the white paper was a report on the radical concept of changing our entire road tax regime (DfT, 2004d). This proposed replacing fuel duty and VED by a *National Road Pricing*. All cars would carry equipment to permit a mileage charge varied according to whether motorists drive on congested roads, at peak times, or on uncongested roads in the off-peak.

The 2004 white paper therefore contains a somewhat remarkable dichotomy. On the one side is the retreat from pricing measures on car use, while at the same time accepting that transport demand management is inevitable and that simply reforming existing tax measures is not enough. The need is so great that a different transport taxation regime is advocated.

National Road User Charging

What led to the rapid emergence of such a radical concept? The official stimulus is simply that the need for demand management will not go away and so the new tax regime is needed in the long term to manage congestion, as well as CO₂ emissions. With the Government afraid to increase tax within the existing regime, introducing a different one seems an astute ploy.

However, such a cynical view is not entirely justified. The Treasury has become concerned about a significant consequence of policies to stimulate use of cleaner cars. If successful (as in the case of company car taxation), tax yield drops. In addition, the diversity of transport fuels produces administrative difficulties and tricky equity issues. How does one justify and enforce the taxation of gas or electricity at one rate for domestic use and at a much higher rate for road transport use?

This combination of factors was the focus for a project undertaken by the authors, Barry Ubbels (Free University, Amsterdam), Marcus Enoch (Loughborough University) and James Warren (Open University) for the Economic and Social Research Council (ESRC). This project included an estimate of the effect of the UK's existing policies to 'clean up' cars on tax revenue (Potter *et al.*, 2004). Incentives to promote cleaner fuels and fuel duty tax cuts have reduced road fuel tax revenue by 13% since 2000 (DfT, 2003b). However, the full range of UK tax reforms documented here will cut government taxation revenues even further. On top of the £2 billion revenue loss since 2000,

government revenues from car taxation are set to drop from £22 billion per annum by up to one-fifth over ten years, depending on traffic growth (see Parkhurst, 2002 and 2005 for details). These projections assume maintaining duty rates at current real levels, which in practice the Government has not been able to manage, and will probably not do so in future if oil prices continue to remain high*; high crude prices could have the 'double revenue whammy' of restraining traffic growth while cutting the proportion of pump price which is tax.

Furthermore, Lane and Potter (2003) estimate that further tax losses will be incurred as new fuels emerge. Because of inherently high costs, zero fuel tax would be needed on hydrogen for fuel cell cars to be an economic reality. This would produce a £100M tax loss by 2012 if fuel cell cars take a 10% share of new car sales, but if they were to be 10% of the total car fleet, the tax loss would rise to £750M.

All the signs are that shifting price signals within the existing tax regime to favour cleaner vehicles has started to undermine the basic function of taxation—to generate government revenue. Despite accusations of 'stealth tax rises', tax revenues from cars and fuels have dropped significantly. The reality has been of 'stealth tax cuts'! Furthermore, tax revenue will dramatically decline further with the introduction of cleaner, low carbon vehicle technologies. Road fuel tax is simply going to become a declining, and difficult, revenue source. This begs the question whether a different form of road vehicle taxation would be more appropriate to 21st-century environmental, transport and fiscal needs, than the 20th-century regime of taxing road vehicle purchase, ownership and fuel. Instead of taxing fuel, then taxing the actual use of roads would obviate the problem.

The first steps are already under way as the UK is due to introduce a GPS-based distance charging system for heavy goods vehicles in 2008, including a differential charge for motorways and other roads. This will not replace fuel duty, but VED on lorries, and follows a trend set by Germany, Austria, New Zealand and Switzerland for distance/weight based systems to replace circulation taxes.

The first major UK study to advocate

national road user charging was a report by the UK Commission for Integrated Transport on *Paying for Road Use* (Dodgson *et al.*, 2002). This report was quickly followed by the Independent Transport Commission's report, *Transport Pricing* (Glaister and Graham, 2003), which showed how taxes on road use would produce substantial user benefits and significant cuts in congestion. An earlier study in the Netherlands explored the car use and environmental impacts of replacing car purchase, annual, and fuel taxes with four variations of a fiscally neutral kilometre charge (Ubbels *et al.*, 2002). Their results suggest that a different tax regime would be more effective in stimulating behavioural change than reforms to existing car taxation measures. Redistributing fixed taxes to a kilometre charge resulted in a modelled reduction in car traffic for the four alternative charging systems of between 18% and 35%, compared with the 'business as usual' base case. Additionally, this study indicated that growing frontier effects in the EU were reducing the effectiveness of traditional car taxation measures.

Oregon, USA, is in the process of developing a road user fee for introduction in 2007. Neighbouring states are also interested in using the system. The main motivation for Oregon's action is the decline in fuel tax revenues. It includes a novel 'opt-in' charging method, although the road user fee will eventually totally replace fuel tax. Drivers can choose to have an on-board distance-charging unit fitted to their cars. Fuel tax is substituted by the distance charge if a charging unit is detected at filling stations (Oregon Department of Transport, 2004). The Oregon example shows that the replacement of the current car taxation regime has long-term structural causes. A tax regime change to a car road user charge is occurring, or being seriously considered, in societies as contrasting as a rural state in the USA, the Netherlands, Switzerland and the UK.

Designing a National Road Pricing System

We are now entering a new phase of transport policy fiscal instruments. Rather than reforming existing measures, the UK, and several other nations, are moving towards replacing the whole transport taxation regime. Yet there remains some confusion as to what policies this new tax structure should serve. The 2004 white paper indicates that, sometime after 2015, all cars would be fitted with GPS-based charging instrumentation. VED and road fuel duty would be replaced by a mileage charge, varying from 3p per mile up to £1.50 for exceptionally

*In March 2005, Brent crude was trading in excess of \$50 a barrel: more than three times higher than the long-term price assumption used in preparing the Government's ten-year plan for transport.

congested places.

This design for a national road user charge suggests that congestion reduction is the dominant criterion in mind. If congestion is the principal criteria for varying the charge, we will sweep away the existing incentives for fuel efficiency and promotion of new cleaner fuels. Fuel duty promotes fuel-efficient vehicles, and a lower tax on cleaner fuels provides a further incentive. This is reinforced by the CO₂ charging bands for VED. But if a new clean fuel car faces the same congestion charge as a large gas guzzler, what incentive will there be for 'going green'?

A second major point is that any action is many years away because, to address congestion, a highly sophisticated GPS system is needed. Other nations have opted for more quickly-implemented interim schemes. These are simpler, and currently charge only by distance driven but could be upgraded later to incorporate congestion. Staged measures allow for adjustments and corrections. A 'big bang' introduction of a substantial technical and highly political measure is risky. In the meantime, all the transport trends continue to head in the wrong direction, making an even more difficult task when the tax reform is eventually introduced. It is as if there is no urgency to address congestion in Britain.

The problems described here can be addressed. The Transport Taxation Futures project included modelling alternative national road pricing systems and examined the use of a banded distance charging system. Banded tax systems have proved to have a strong, if not stronger, psychological effect upon car users (for example the CO₂ bands in the company car tax reforms).

One scenario in the ESRC study involved a simple distance charge (which does not require GPS technologies and so could be introduced quickly) with a three-band kilometre charge system for cars of 4p, 7p and 14p/km. The bands were based on the UK's existing VED 'A-D' system. This is not a particularly steep grading, but was used as there were data available in these categories so we could explore what could be done using a simple system. The modelling exercise estimated this would cut CO₂ emissions by around 10% compared to retaining the existing tax system and reduce car traffic by 14%. In practice, a more strongly-differentiated banded system (with much higher charges for high emissions) would be involved.

A congestion charge could be added on top of these rates, which would take the highest rate up to £1/km for driving the least

environmentally-friendly car in highly congested conditions (for example city centres in peak hours).

Dilemmas of Regime Change

As is apparent in at least one other important area, it is vital not just to have regime change, but to get that regime change right. The role of demand management in UK transport policy seems to be at a crossroads. There remains a rhetoric and acceptance of the need for effective demand management, yet the political agenda is shifting towards the safer ground of prioritizing congestion relief. But it is not only impossible to address congestion without demand management, there is a real danger that a congestion-centric transport policy will jeopardize a decade of environmental transport policy reforms. This is well illustrated by examining the proposed development for national road pricing.

The ESRC Transport Taxation Futures study suggests that an approach integrating environment and congestion concerns is possible. A phased introduction of a road pricing system could be developed, retaining and enhancing the current incentives for cleaner vehicles and fuel as well as encouraging a shift to shorter trips and travel by more environmentally-friendly forms of transport. Such a phased eco-reform could start modestly and quickly, to allow motorists to adjust to the idea of a general road user charge, and then proceed via incremental changes as technology and policy needs evolve. The trouble with a 'big bang' introduction of a perfect system in 10 to 15 years' time is that, given the politically problematic nature of transport policy, effective action may well always remain 10 to 15 years in the future. ■

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