

## Fourth Castle Debate 2011 – Sustainable Transport

### Fourth Castle Debate

The Fourth Debate addressed the issue of what changes are necessary in order for the UK to meet its obligations to achieve a more sustainable transportation system. The Debate was held at the Law Society in London on May 24<sup>th</sup> 2011. The event was fully booked beforehand, with 60 people attending on the day.

Our speakers were **Norman Baker**, MP for Lewes, as Parliamentary Under-Secretary of State for Transport; **Professor Julia King**, Vice-Chancellor of Aston University, Low Carbon Business Ambassador for the UK and member of the Government's Committee on Climate Change; and **Robert McCracken QC** planning and environmental lawyer.

### Comments from the Chair, Pamela Castle

To set the background to the Debate, the Chair highlighted the following matters:

- i. The EU Renewable Energy Directive (and hence the UK's renewable energy strategy) requires that our transportation sector uses 10% of its energy from renewable sources by 2020.
- ii. In March the EU Commission produced its White Paper on Transport entitled **"Roadmap to a Single European Transport Area for Competitive and Resource Efficient Transport"**. This outlines 40 initiatives aimed at reducing Europe's dependence on imported oil and aims for a 60% reduction in carbon emissions from transport by 2050. This would involve a cut of 50% in the use of conventionally fuelled cars in cities by 2030, and a complete phase out of these cars by 2050, with replacement by electric, hydrogen powered cars.
- iii. We also have a new sustainable transport fund announced by the Minister in January which we will hear more about shortly.
- iv. According to April's ENDS report and citing statistics from the Department of Transport and DECC, it would appear that the number of journeys by road and air started to fall at the commencement of the recession.
- v. The only sector to experience continual growth over the past few years has been rail. We heard last week that our railways will be facing a radical overhaul.

### Norman Baker, MP for Lewes, as Parliamentary Under-Secretary of State for Transport

Sustainable transport is a big topic. The Minister was asked to speak about biofuels, but was keen to provide some general comments to explain what the Government's policy is in relation to sustainable transport. There are two objectives for the Government's transport policy:

- i. **First, to use transport to help to create growth; and**
- ii. **Secondly, to use our transport in a way that reduces carbon emissions.**

Everything that the Government is doing is attempting to hit these two objectives.

---

<sup>1</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011DC0144:EN:NOT>

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

If the Government is going to make an impact quickly we have to see where we should put our efforts in short term. That is one of the reasons why the Government has published the Local Sustainable Transport Fund details (see below) in the White Paper (***Creating Growth: Cutting Carbon – Making Sustainable Local Transport Happen***<sup>2</sup>) because the Government believes that tackling transport at a local level is the way to get the quick wins. That is the way that we can reduce carbon emissions quickly, and it is the way that we can help growth quickly.

The first part of the Government's timeline (i.e. over the **shorter term**) for its sustainable transport policy is as follows:

**To achieve a modal shift for local car journeys of under 5 miles.** These journeys lend themselves most readily – being, by and large, urban journeys – to a modal shift: cycling, walking or public transport. Two thirds of car journeys are less than 5 miles.

**To encourage local transport initiatives by setting up a Local Sustainable Transport Fund**<sup>3</sup>. The fund has been set at £560M. This is an unprecedented sum of money. Despite the difficult economic circumstances, this represents an increase in funds for this sort of area compared with what was hitherto provided. That is because the Department of Transport recognises that there is a hard-nosed economic case for investment in these areas. The payback (i.e. the cost benefit ratio) is good for investments of this nature. If you spend money on dealing with transport pinch points, and transport around the town centre, enabling people to get safely from A to B by means of say cycle routes and so on, these will have a quick and good payback.

The Department of Transport's own analysis, perhaps surprisingly, shows that people who access town centres by bike or on foot can spend up to 15% more in shops than those who come by car. It is not clear why this is the case – perhaps it is due to drivers curtailing their shopping trips so that they don't exceed their allotted time on parking meters. It is important to understand therefore that civilising our town centres can be very beneficial in terms of the economic impact that has, as well as the air pollution and carbon impact.

In parallel with this the Government is also taking significant action to try to make sure transport policy over the **medium and longer term** also result in economic growth and carbon reductions.

One of the great success stories of recent years has been the **railway system** which has now seen growth despite the recession that has taken place. The Minister believes that the trend of more and more people opting to travel by rail will continue, not least because of the volatility of oil prices. The Minister would imagine that oil prices will now rise above the rate of inflation for the trajectory ahead given the increasing difficulty of extracting oil and moving it around the world. That being the case, electric forms of transport will become relatively more attractive than those based on fossil fuel. That is good news for rail.

---

<sup>2</sup> <http://www.dft.gov.uk/pgr/regional/sustainabletransport/>

<sup>3</sup> 72 bids have come in for funding, and these are being analysed now.

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

Over 60% of train journeys in the country are already by electric rail. The Government intends to increase this percentage further. The Secretary of State for Transport announced last year a programme for the **electrification** of some of the UK's key rail lines. The Government will do what it can to increasingly electrify the network e.g. in the North West. The Government are also looking seriously at the commuter lines into Cardiff because the South Wales commuter lines are actually the most heavily used sections of diesel track in the country, so dealing with these would make a significant difference.

The UK is also moving towards **high speed rail**. The predominant reason for that, it is fair to say, is dealing with congestion. There is a lack of capacity north – south which is going to get much worse in the next 10 years. We need more capacity north – south. High speed rail will also have a carbon benefit – albeit not a gigantic one – as we increasingly see people move from air to rail.

Some recent research showed that for journeys from, say, Newcastle to London (3 hours by train), Glasgow and London and Manchester and London there has been a significant shift, even now (i.e. before high speed links have been developed) from air to rail in recent years. That is partly because trains are more reliable, quicker and more frequent. This shift is also due to the hassle associated with air – getting to airports, getting through security and so on which puts people off flying (between UK cities with good rail connections). So rail is in a good position to compete.

Even if rail grows significantly, it is only part of the transport mix. If we are to make a difference in the way transport is undertaken in terms of carbon emissions in this country we have to deal with road transport. This is – and will remain – the predominant form of transport in our country. That is why the Government has taken a number of steps to try to address this issue:

Supporting the roll out of 'Plug-in-Places' around the country – providing recharging points for electric vehicles;

Spending money from the Department for Business Innovation and Skills and the Department for Transport's budgets in developing R&D for electric vehicles;

Giving grants to encourage the take up of new electric vehicles and to kick start the market for them<sup>4</sup>;

Allocating money for the Green Bus Fund<sup>5</sup> to encourage bus companies and operators to move to lower carbon buses (an initiative which has been oversubscribed and very well received by the industry).

Decarbonising road transport has got to be the key to changing the carbon emissions total from transport as a whole.

---

<sup>4</sup> <http://www.dft.gov.uk/pgr/sustainable/olev/grant1/>

<sup>5</sup> <http://www.dft.gov.uk/pgr/regional/buses/greenbusfund/>

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

That leads the areas where it is more difficult to make progress – **HGVs**, and **air transport**. This is perhaps where **biofuels** comes in.

**Biofuels** have a role to play in making sure that we address our carbon problems. But biofuels are not a silver bullet and have a number of difficulties associated with them.

When they first came on the scene – 10 to 15 years ago – they were seen by many, including the pressure groups, as some sort of magic solution which everybody ought to be adopting. The Minister recalls being lobbied by pressure groups wishing to know why biofuels were not being promoted further. The then Government responded to that pressure and encouraged biofuels, only to be told later by the pressure groups *‘what do you think you are doing – look at all of these consequences you have caused by adopting biofuels?’* There was a sudden shift in opinion from external stakeholders who were in favour of biofuels unreservedly to being much more critical. This 180 degree turn has not been very helpful and the truth about biofuels is somewhere in the middle.

What Mr Baker has been quite keen to do, as Minister, is to ensure that when the Government’s policy on biofuels is finally settled, it stays settled, based on good scientific evidence and an understanding of the environmental and social consequences of biofuel production. The Minister is keen to ensure that Government doesn’t have to change its policy in a drastic way thereafter.

That is probably taking a little more time than the Minister would have liked to set out policy on biofuels. It is proceeding at pace, and there are discussions are ongoing, and the Minister is chairing a meeting of Ministers on biofuels policy later in the day to try to ensure that each department is facing the same way on this important issue.

The Government is consulting on proposals at the moment to implement the **Renewable Energy Directive** (RED) which requires the UK by 2020 to source 15% of its energy – and 10% of its transport - from renewable sources. The Government is also consulting on the related but different **Fuel Quality Directive** (FQD) which requires fuel suppliers to reduce greenhouse gas emissions by 6% by 2020. It is unhelpful that there are two overlapping – but not entirely overlapping – directives from the European Union to deal with. They slightly point in different directions.

There are challenges and opportunities presented by the RED and FQD which will depend on the supply and availability of biofuel and its effective deployment.

The word ‘sustainable’ is thrown in by people to give credence to what is proposed – “if the use of biofuels is sustainable, then it is alright isn’t it?”. Advocates of biofuels have to be very clear indeed that sustainable actually means sustainable. They have to be able to stand up and justify where biofuels have come from, the methods used to produce them, the consequences for those who live on the land where biofuels are produced. That is quite a challenge, but it is one that needs to be met if we aren’t going to run into trouble in the years ahead.

Public concern about biofuel effects, and in particular the issue of indirect land use change (which is taken very seriously by the Minister), was addressed by the **Gallagher Review into**

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

**the Indirect Effects of Biofuels Production**<sup>6</sup>. The UK is continuing to lead the way on this and much work is under way to better understand the indirect land use effects. The Government's approach to implementing the RED and FQD will include certainty and mandatory sustainability criteria for biofuels.

Another issue is how do you use the limited supply of biofuels – limited at the moment, certainly - across the transport sector, and how that competes with other sectors of potential use? So, we need to prioritise the use of biofuels in a sensible way. That means we're developing an evidence base for making decisions about how biofuels should be used across transport modes. In the Minister's view, we should be seeking, in the medium and longer term, to use biofuels in a place where there are no other solutions, rather than displacing for transport electric transport.

The Government is not proposing substantive changes to the biofuel supply set out the **Renewable Transport Fuels Obligation Order**<sup>7</sup>, nor to propose a new trajectory of intermediate greenhouse gas emissions targets at this stage. There is a legal obligation on the Secretary of State to keep this issue under review, and to consider what additional measures we require to meet the requirements in the RED and FQD. This will enable the Government to establish a sustainable biofuels policy that allows industry to plan robustly for the years from 2014 to 2020.

This is an issue which cuts across Government, and there are obviously issues which relate to different departments: e.g. how does the use of biofuel interact with the Waste Framework Directive which DEFRA is in charge of? What is the consequence of biofuel production in other countries (a matter for the Department for International Development)? What is our relationship with importing countries – a matter which the Foreign Office may be interested in. Clearly the wider issue of the carbon reduction challenge we face is a matter which is central to the work of DECC. Whether domestic businesses can benefit from the production of biofuels or whether we hand over to importers is a matter which the Department for Business Innovation and Skills is interested in. How much money comes in is a matter for the Treasury.

These are all matters which are very complicated both in terms of science and the environment, but also complicated in terms of making sure we have a sensible policy that marries up the legitimate aspirations and expectations of different Government departments. This is a process which the Minister is actively engaged in.

### **Questions for Norman Baker**

**Question 1 – James Skinner** asked whether it would be a good idea to give top priority to the use of bio methane as a fuel resource which is available in urban areas? A Report by

---

6

[http://www.renewablefuelsagency.gov.uk/sites/renewablefuelsagency.gov.uk/files/documents/Report\\_of\\_the\\_Gallagher\\_review.pdf](http://www.renewablefuelsagency.gov.uk/sites/renewablefuelsagency.gov.uk/files/documents/Report_of_the_Gallagher_review.pdf)

<sup>7</sup> <http://www.dft.gov.uk/pgr/sustainable/biofuels/rtfo/>

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

Environmental Protection UK for the then DETR showed that a large percentage of transportation fuel (and an amount sufficient for all urban transport) could be met from this source by diverting food and farm waste and using sewage as well.

**Norman Baker MP** objected to the use of the word ‘waste’ because it reinforces the idea that it is something which has no use. It can be an asset, a resource, and we should be thinking how we can use it. DEFRA is the lead department for managing waste matters, and dealing with the ‘waste hierarchy’ which incentivises reduction of waste in the first place, followed by reuse and recycling etc, with landfill as the last resort. Hence, the Minister agreed with the questioner that putting a lot of waste into landfill (which we are still doing, despite the Landfill Directive) is a poor outcome. Diverting the material (which is classified as waste) for a purpose is all to the good.

There is a genuine debate as to whether waste is best used for transport fuel, or used to produce, for example, soil or renewable heat. There are competing outcomes from the material that we have got. This issue interests other departments, and the challenge is to ensure that everyone is pulling in the same direction to achieve the best sustainable and scientific outcome.

Biofuels is a ‘halfway house’ whereby you potentially improve carbon emissions as well as the security of the fuel which is being used, but risk competing with other better solutions. Hence, if an alternative solution is decarbonising road transport altogether by getting more renewable forms of energy through the grid and so on, then that might be a much better outcome than the ‘halfway house’ which might prevent or slow down positive developments such as the use of electric vehicles.

Hence, the Minister’s view is that biofuels should be used where there is no suitable alternative, rather than competing with other solutions.

**Professor Julia King** agreed that the Minister had outlined some good technology solutions, and that the approach to biofuels was rational. However, the really challenging part of this is the fact that modifying driver behaviour by consumers is the quickest way to get some big wins (almost tomorrow) at very little cost. The improvements that we are beginning to see are tending to come through technology but if we could persuade people to adhere to speed limits, to adopt eco-driving, then the impact would be much greater.

Professor King had just come back to the UK after conducting an international study into reducing emissions from freight, and the best evidence there is that for HGV drivers it is eco-driving and driver information which makes the biggest impact. However, the Department of Transport has just concluded that it will not be making eco-driving mandatory for HGV drivers.

What is really missing at the moment is things that can really change consumer and driver behaviour which can deliver very quickly on the low carbon agenda. Technology measures are good, but they are for the longer term.

**Norman Baker MP** agreed that driver behaviour is very important. Driving appropriately – or in the best possible method – can reduce emissions by 15%. The Minister wished to assure everyone that the Government had not abandoned the ‘behaviour’ agenda at all.

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

The Secretary of State and the Minister had, for example, just signed off the budget for the Energy Savings Trust for 2012, and he said that they have done some fantastic work to encourage eco-driving, and this is something which the Government is very keen to see develop. In addition the bidding rules for the Sustainable Transport Fund have been written in such a way to enable the local council to take initiatives for their areas.

As far as HGVs are concerned, fellow Transport Minister, Mike Perry, is discussing with the freight industry the savings that are to come from eco-driving. If the driver is happier driving in the eco-friendly way, then that reduces emissions and helps the business too. For the moment Mr Perry expects the industry to self regulate regarding emissions reductions – but it has been made clear that, if the freight industry does not do so, then Government will come in and there will be regulations. Mr Baker thinks that the freight industry would prefer to sort this out themselves.

**Question 2: Ralph Smyth, Senior Transport Campaigner, CPRE:** How will the Minister make sure that planning will deliver in the long term to reduce carbon emissions and other impacts from transport? The EU Commission and the Government's Committee of Climate Change have highlighted how important it is to get planning right in order to get carbon reductions. There are, however, very different conceptions as to what planning steps can be taken to reduce carbon emissions: (i) addressing relatively modest issues such as putting electric charging points in car parks, and promoting sustainable travel with cycle to work schemes for particular days; or (ii) determining fundamental issues such as where you put development and how you get the right scale of development to fulfil the particular function envisaged so as to encourage shorter trip distances to get to places. The recently published National Planning Policy Framework points more towards the former conception, rather than the latter conception by saying that development should be allowed to proceed unless there are strong reasons against.

**Norman Baker MP** referred to the complicated task which Government has to make sure that different objectives can be met at the same time. It is sometimes difficult to get to a position where every objective is met by every Government policy: choices and judgments have to be made, as well as some fine tuning.

There is a carbon consequence from the outcomes of the planning system. There has always been a presumption in favour of development, every since the 1947 Town and Country Planning Act was implemented. This is not something new. An applicant can appeal against a refusal, but that is the system that we have had for 60 years.

Legitimately some people will say that in some cases planning has been too long-winded, and has taken years and years to get anything done compared with other countries, and that has had a detrimental economic impact. There is equally a legitimate argument that with planning we should minimise the carbon impacts of anything which is developed. These are tensions which have to be resolved.

There framework paper referenced is not a Department of Transport (DoT) publication – it is a CLG paper – but the DoT has given its comments. Local people have a say in what happens in their areas, and that is perhaps a counterbalance which might provide the reassurance sought.

**Question 3: Robert McCracken QC.** Demand management is likely to play a large role in achieving our targets. Part III of the Transport Act 2000 empowers local authorities to

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

introduce charging schemes for work place parking. It also empowers the Government to promulgate regulations to extend parking charging schemes to superstores. What proposals does the Government have to extend the power of local authorities to impose parking charges to retail activities?

**Norman Baker MP** referred to the Government's genuine localism agenda which will mean that far more power and responsibility is being handed down to local authorities than in the past. A workplace charging scheme is going ahead in Nottingham if the City Council there wants it to go ahead – and that is the key point. The Government is not seeking to impose from the top a nationwide policy that this must / must not happen. The Government really does think that local communities need to be able to determine more accurately and effectively what they want to happen in their city or county, and the benefits and dis-benefits of particular measures. Looking at charging schemes for parking at work, this is a matter for the Department of Communities and Local Government. The Minister was unsure what position DCLG has taken on this matter, and will find out more.

**Robert McCracken QC.** To clarify, the question was not related to planning permissions for retail development, it is to whether or not the Government will exercise the power it has under Part II of the Transport Act 2000 to promulgate regulations which will alter the powers of local authorities and give them the power to charge retail operators for their parking spaces – i.e. this is as much as DoT issue, as it is a DCLG matter. At the moment local authorities do not have this power.

**Norman Baker MP** said that this issue was a CLG matter as it relates to whether out of town developments ought to be given the 'go ahead' and whether or not they ought to be controlled, and he thought that the use of parking charges could be a relevant factor. He said that there were no plans to give local authorities the power referred to, but he said that Mr McCracken had made a fair point and confirmed that he would go back and consider this further.

**Question 4: Richard Everitt, Port of London Authority** said that road, rail and air had been mentioned by the Minister, but no mention had been made of our waters or of our seas.

**Norman Baker MP** said that there are opportunities to make use of sea transport, and of our inland waters, to some degree. Mike Penny is the Shipping Minister and he has been looking at the issue of freight movement. The Department's twin objectives are to create growth and to cut carbon. If more freight is to be handled in short sea journeys and in a more carbon friendly manner, then is to be welcomed.

**[At this juncture, the Minister, Norman Baker MP, had to leave the debate to attend another meeting].**

### **Professor Julia King**

Professor King's aim is to provide an impression of the key points: the wider context, as well as where progress has and has not been made.

We have a target set down in legislation to reduce our emissions by 80% by 2050. Domestic transport is the second largest contributor to UK CO<sub>2</sub> emissions (20%), so if we are going to reduce emissions by 80% then domestic transport has to play its fair share.

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

However there are some sectors that are not going to be able to reduce by 80% - e.g. aviation has to get back to 2005 levels (this has already been agreed) and there is very little chance that CO2 emissions from agriculture will be reduced by anything close to 80%, and there are sectors of industry that will really struggle. So that leaves transport and the power sector having to take the bulk of the reduction.

Forget the EU's 60% emissions cut target – transport is going to have to achieve a cut nearer to 90%. It is worth noting that Sweden is aiming for a 95% cut in transport emissions by 2050. Hence, the challenge in developed countries is huge. There are a billion vehicles in the world today, and these already use more than half of the oil that is produced, and these figures are rising fast.

HGVs make up 20% of land transport emissions, and cars and vans make up most of the rest. The CO2 emissions from buses are trivial by comparison. Similarly, trains only produce 1.9% of land transport emissions – hence the electrification of rail is not going to make much difference to our emissions. The challenge is to improve cars, vans and HGVs which are absolutely critical.

If we all drive cars that emit the average UK new car emissions of 145g/km – and many of us probably drive cars with higher emissions levels that this – on an average annual mileage this would contribute around 2 tonnes of CO2, from our car use alone. By 2050 that will be all that anyone in the world can emit if we are going to meet our emissions reduction targets – the allowable carbon emissions per head will be approximately 2 tonnes. Hence, our cars today emit our entire CO2 allowance for 2050. That is the scale of the challenge for all of us, not just the Department of Transport!

Another challenge is that since 1950 we have been increasing the miles that we drive every year. Recessions are only temporary dips, and the trend seems likely to continue, and it is a global trend. Every year miles driven is increasing.

In addition every year the number of vehicles is increasing globally, especially in India, China and South America. It is predicted that the number of vehicles will double to 2 billion by 2030, and 3 billion by 2050. If we all have as many cars as the Americans have today, then by 2050 there would almost 6 billion vehicles globally. This means that there is both an enormous business opportunity, but also a massive challenge to reduce emissions.

One of the problems with more vehicles is that we have more congestion which in turn creates more emissions. Congested urban transport is twice as energy intense as other forms of intercity transport - so it generates twice as many emissions. To reduce emissions we need smarter people, cities and cars.

Smarter people make a huge difference with no need for new technology or expenditure of money. Eco driving and choosing low emission vehicles are a good challenge for politicians. We can get 20% fuel saving in the UK if we enforce the speed limit on motorways at 50 miles per hour (it makes very little difference to journey times, but a big difference to CO2 emissions).

If we could get people to change their behaviour we could deliver, quickly and at almost zero cost, 50% emissions reductions from cars in the UK. This would not really impede people's mobility. Professor King acknowledged that this is an easy thing to say but that it is a much bigger challenge for politicians to deliver. Most of the means of doing this are unappealing – in

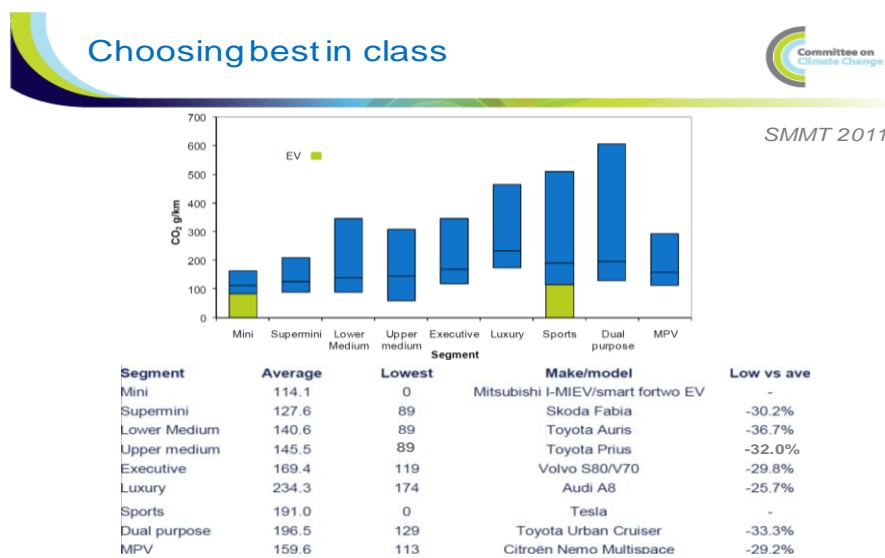
Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

developed countries there is a sense that the use of our cars is some kind of human right. Changing this has become very, very difficult – but it is something that we are going to have to do.

If we could simply persuade people not to buy the vehicle they currently, on average, choose, in terms of emissions performance in their class (family saloon, people carrier, luxury car etc.) but the lowest emitting vehicle (excluding new technologies like electric vehicles) then that would result in emissions reductions of between 25% and 40% for new cars. These vehicles are already on the market:



Governments should be doing much more to ensure that this opportunity is grabbed.

Smart cities also have a role to play. In Hong Kong less than 20% of journeys are by private vehicle. In Calgary more than 90% of journeys are by private car. This is explained by the availability of public transport, but also how cities have been allowed to grow – the North American model is growth by dispersion (leafy, gated communities which are not large enough to sustain public transport so people have to drive into the city to work). By contrast, Hong Kong is a very compact city, with an excellent public transport system which people have to use to get around. Hence there are lots of emissions savings to come from sensible, integrated planning.

Other savings come from technology. With the innovations and improvements, the internal combustion engine can, in time, probably get down to about 80 grams of CO<sub>2</sub> per kilometre. This represents about a 50% reduction in emissions compared to most current cars. If we go beyond this and look to some of the new electric vehicle technologies, we can radically lower our emissions, depending upon how we generate our electricity. Hence, if we have zero carbon electricity generated from renewable resources, we would have zero carbon emissions from electric vehicles too. Conversely, if we have high carbon electricity generation, then we will have high carbon emissions from electric vehicles.

To meet our targets we need to be around 60 grams of CO<sub>2</sub> per kilometre by 2030; and we need to be down to 15 grams of CO<sub>2</sub> per kilometre by 2050. Technology is available – but it is expensive and we need to start introducing it now if we are going to have significant

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

numbers of electric vehicles on our roads in the 2030s and 2040s. We also need to be changing people's behaviour, because that is the short, sharp and cheap route that we can take today. Hence, the recommendations of the Committee on Climate Change for 2030 were for smarter choices – including: speed limiting, eco-driving, increased efficiency of conventional vehicles and larger vehicles such as buses, serious numbers of affordable hybrid and electric vehicles on our streets, caution about bio-fuels for the reasons that the Minister relayed.

There are lots of exciting things that we could do, but how are we doing? The right sorts of things are generally happening on the technology front:

- 1) There is a lot of support for electric vehicles – probably not quite enough, but it is a good start;
- 2) Biofuels comprise 2.9% of the fuel that we use – we need to better understand the sustainability issues associated with biofuels if this is to increase (and the Minister is looking into this);
- 3) The EU Commission's target of 130 grams of CO<sub>2</sub> per kilometre by 2020 for vans has been increased as a result of industry lobbying to 147 grams per kilometre;

The challenge relates to people's behaviour: with eco-driving and speed limits, if anything, we are going backwards:

- 1) We are already seeing a more relaxed attitude to speed cameras and the removal of such cameras, and over the past year speeding has started to increase. We are seeing exactly the wrong kind of behaviour from drivers.
- 2) We now have the Sustainable Transport Fund which leaves it to local politicians to decide whether we pay for our parking, or whether we can drive cars into city centres. Professor King said that she was not very confident that local politicians are the best people to make these decisions – she suspects that we will get more free parking in city centres, rather than less.
- 3) There is some progress with regard to out of town use planning and planning frameworks.

Technology is delivering: new car emissions since 1997 show significant CO<sub>2</sub> reductions as a result of improved technology. The behaviour change required is not yet happening significantly, and we need a focus on this area in our policy. This is the really hard area for politicians to address.

### **Robert McCracken QC**

As a lawyer, Mr McCracken sees his job as encouraging people to think about difficult issues and to ask hard questions.

Sponsored by:

*the* **ENDS** *report*

## Fourth Castle Debate 2011 – Sustainable Transport

It is clear from Professor King's presentation that radical changes are needed to our way of life in order to achieve the drastic reductions in domestic land transport emissions – 90% reductions by 2050. Our culture would have to change – less travel, and by different modes, with strong disincentives to travel by car (note: cars represent 58.3% of emissions, HGVs 15% and vans 11%). A paradigm shift in the economic and intellectual attitudes of our leaders would be needed.

They would need courage to resist the lobbying of powerful economic interests. There are no signs at all that any such shift is taking place.

Reliance on technological advances alone would be misplaced, albeit that they have a part to play as Professor King has demonstrated. To persuade people to choose electric cars one would need financial or other economic incentives to make people decide to do this. If these decisions are left to individuals then they will make their decisions, by and large, on a selfish basis.

If we were to rely on technological advance, we would be deferring the difficult decisions that we are going to have to make. By way of example, one needs to recognise that all forms of power generation involve some form of harm. A zero emission vehicle may be powered by nuclear power, or by a coal fired power station.

The key mechanism for making the cultural shift that we need to make (absent the introduction of a universal carbon credit which might well be the ideal) in the transport sector is likely to be a combination of motor usage charging (road pricing) and parking charges. Technology is available to support these measures, which are likely to be socially progressive (benefitting the poor and public spirited at the expense of the rich and selfish). Such measures involve maximum freedom of decision making by the individual, potentially unlimited reductions in emissions, improvements in public transport (if you decrease congestion, you effectively increase the number of buses on the roads), and it would also generate useful public revenue.

The powers that are needed are for local authorities to charge people for using the roads, and to charge other people for parking under Part III of the Transport Act 2000. As the exchange with the Minister showed, the retail sector could have a role to play. The growth of superstores under the last Government was astonishing, and one area which appears to be more wasteful and ripe for reform was the number of car journeys taken to these stores – but the opportunity to address this was not taken by the last Government. The power to do this does not currently exist – albeit that primary legislation allows for the extension of parking charges to other sectors.

The ineffective scrutiny by Parliament and the media suggests that a Standing Inquiry should be established – e.g. by Royal Commission, or other non statutory means. Such an inquiry would examine existing as well as proposed transportation infrastructure, and would proceed as follows:

- 1) Hold regular hearings with invited parties represented by lawyers who can then – and this is critical - cross examine public officials, including ministers, and commercial operators. It is the ability to ask follow on questions and to insist upon an answer – and for those who are listening to be able to judge that no answer has been given because no convincing explanation can be offered;
- 2) Require the attendance and production of documents.

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

It is by these means that the quick win measures which Professor King has advanced so convincingly would come to pass.

Some hope that conventional intervention through the courts by judicial reviews (e.g. under the Climate Change Act or the Renewable Energy Directive) will make a difference – but these challenges are unlikely to be more than an occasional adjunct to other more effective methods of implementation.

### **Questions for Professor Julia King and Robert McCracken QC**

**1). Question 1: Stephen Sykes** – from what we know of the Coalition Government's policy (with 12 pledges in the Coalition Agreement relating to transport), how close will these policies take us to our overall target?

**Professor King:** There is nothing in the Coalition Agreement which assures Professor King that various backward steps that have been taken are going to change.

Professor King's presentation sought to indicate that there are some very positive developments on the technology front, but there is also a sort of desire or hope on the part of many that technology is the sole solution. Even on the technology front, there is not yet sufficient commitment from Government to the introduction of technologies to cut emissions, and this is due in part to the additional expense which it entails – e.g. we have the new electric car grant of £5,000 at present, but it is just for a year and we are going to need it for quite a lot longer than that, though perhaps at decreasing levels.

Not enough is being done by Government with regard to the issues concerned with behaviour change. At the moment the focus is on the technology front, but in general we have gone backwards in relation to changing behaviour. Hence, for example, the move towards enhancing the role of local government could result in more free parking in city centres. Fuel tax is one of the most effective ways of making people think twice about driving, and encourages them to buy smaller and more efficient cars.

The simple picture is that we can reduce emissions from cars through electrification etc., but we cannot cope with congestion this way, and we have to have policy to address behaviour change as well.

**2). Question 2: Pamela Castle** – is there enough publicity to engage the public about the steps which they need to take to change behaviour and reduce emissions?

**Professor King** – this would be welcomed. In a review for the last Government, Professor King tried to persuade the politicians to support this, as well as the issue of car advertising (after all, we have labels on cigarette advertising). Car advertising can be disingenuous at

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

times by showing the statistics for the lowest emissions achieved by the model, whilst showing a picture of the model at the top end with significantly higher emissions.

Professor King said she was disappointed that we have got into a fight with the Advertising Standards Authority for not allowing electric vehicles to be advertised as zero emissions because we do have to get the public to buy these cars. Emissions shown for cars with an internal combustion engine are only the emissions which arise when the car is being driven – not to do with the production of the fuel. Hence, why should electric vehicles be treated in a different way?

**Robert McCracken QC** thought that the public is far in advance of the Government in its treatment of these issues. The public is waiting for a strong lead from the Government but we have had instead a pusillanimous attitude particularly from the last Government, and an unwillingness to take any of the measures that are needed and would be supported by the public. The public will tend on the whole to make an individually selfish position – whereas the public would take a different position if it is convinced that everyone else has to do the same.

**Question 3: Mike Quint – Environmental Scientist and Toxicologist** observed that the environmental impacts of transport are becoming viewed as purely a carbon issue. The air quality issue has been underplayed, notwithstanding the known causal link between air pollution and health. There is a lack of control and enforcement across the board – we are, for instance, are infringing legal requirements at this moment in terms of London's air quality. Action on air pollution emissions from transport can make a real difference to people's lives now.

**Robert McCracken QC** agreed that we should not focus on carbon emissions to the exclusion of other pollutants such as PM10s (particulate matter). On the other hand the people whose health is adversely effected from diesel cars or HGVs are not the same people as those who are making money from driving or selling these cars. It is a classic instance where it is not the smoker who will get the bad lungs, but those in whose presence he smokes.

**Professor King** noted that 2011 is the international year of road safety. Road accidents are the second largest cause of death for children, globally.

**Robert McCracken QC** commented that with road safety in mind, electric vehicles need to make a noise which alerts pedestrians as to their arrival, and that this noise needs to be acceptable.

**Question 4: Nick Schoon (Editor of ENDS, the sponsor for the Castle Debates)** – the Climate Change Committee has the task of setting carbon emission targets for the UK, and it goes into a fair amount of detail about how these are set. We are gradually going to see the real world departing more and more from what the Committee is saying should happen, and it has been set out today how this is starting to happen with transport. What is the Panel's view as to how this will play out – how the Committee's recommendations will depart increasingly from what is going on? What is going to stop this – and bring Britain back on track to complying with the splendid Climate Change Act?

**Robert McCracken QC** – it is going to require courage from leaders at every level. Courage will also be required from the non specialist media. It is disappointing to see the puerile comments from the media whenever any sensible proposal is put forward to reduce the

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

amount of emissions from private vehicles. There will need to be change on the part of the media. We will need Ministers of integrity, and for them to be empowered to stand up to civil servants and commercial interests. We are also going to have stand up to advertisers who promote ever growing material consumption.

**Professor King** – the Committee is worried about this. She sees the Committee as something like the conscience of the public. It is responsible for carrying out analysis which is generally able to go to greater depth than that which Whitehall bodies carry out. Its analysis shows that there are pathways which can be followed to meet our targets. If the recession had not occurred, these pathways might be even more demanding. The Committee is keen to get its message out – there are ways to achieve these targets. Her interactions with students at Aston University suggest to her that younger people have different attitudes to car ownership, and this is a source of encouragement too.

**Robert McCracken QC** said that judicial reviews puts Parliament under closer scrutiny to justify its policies and decisions.

**Pamela Castle:** Who is going to bring an expensive judicial review – NGOs?

**Robert McCracken QC:** There is not usually a shortage of interest groups of interest groups or lawyers to bring judicial reviews. There is often a shortage of judicial courage, and sometime of administrative law merit. With the growing practice of protective cost orders, such challenges may be more feasible than they used to be when to go to law was the equivalent of going to the Ritz and paying for the meal of someone whose price list you have not seen.

**Question 5: Alison Austin, independent consultant** asked what external events or crisis might need to happen which will give the Government license to make these changes? Without this one cannot have much confidence that the Government will have the courage to take the necessary steps.

**Professor King:** said that this was an enormously important question which she has pondered. There have been some who have posited that famines and so forth might be associated with the early stages of climate change – and there may be some patterns here, but the evidence is not absolutely clear. What does it take – another famine on our televisions which the scientists can definitely associate with climate change? Does it take three years of very severe weather conditions which can be associated in this manner? She said she did not know what it will take, but something might well be needed to show the link.

**Robert McCracken QC:** hoped that we will not need an external event to make us face up to this challenge because the event would have to be truly horrific to do that. He suspects that a peaceful citizens movement using modern communication technology might be the most likely route to generate pressure for something to happen.

Sponsored by:

*the***ENDS***report*

## Fourth Castle Debate 2011 – Sustainable Transport

**Question 6: Mike Smyth, Energy4all and Friends of the Earth:** the planning system has not caught up with the requirements of low carbon and is driving against it. Planning seems to be working against the necessary changes to the transport sector: e.g. it is virtually impossible to get HGV transshipment centres built, or new settlements built which could be far more attuned to use public transport. An urban extension to an existing settlement practically imposes the high carbon infrastructure on the new settlement rather than the other way around.

**Robert McCracken QC** agrees that the planning system has limitations – it is only concerned with new developments, rather than the infrastructure that we have already. In the context of a target to meet by 2050 the planning system will only play a limited role. One of the most effective ways of changing behaviour is to use the tax systems to get people to behave in a socially desirable fashion, and this should be used to drive or encourage people towards sustainable ways of living. By way of example, people invest in residential property – if people were taxed on under occupied property, that would reduce second homes in the countryside, which then makes such properties more affordable for local people and makes their communities more sustainable.

**Summary by Chair:** There needs to be cross departmental communication in Government (e.g. between DoT and CLG / planning) to deal with these multi-faceted, complex issues. We need an ability to hold officials to account and there are impediments to this, including costs. We need firm policies and targets to encourage the development of new technologies. We need more public engagement through various incentives and increased publicity to facilitate changes of behaviour.

Sponsored by:

*the***ENDS***report*