BREAKING THE LINK BETWEEN TRANSPORT AND OIL

Ending the UK's dependence on oil is critical if we want to cut carbon emissions, improve energy security and increase the chances of future economic stability. Breaking the link between transport and oil offers huge opportunities for th UK. A large scale shift to a low carbon transport system could create jobs and attract investment. Economic prosperity would be less vulnerable to volatile oil prices and the UK would be in a better position to deliver on its commitment to substantially reduce carbon emissions.

Close to 75% of oil consumed in the UK is used in the transport sector and transport has a huge impact on $\mathrm{CO_2}$ emissions both in the UK and globally. In 2008 road transport was responsible for 22% of the UK's emissions. Car travel accounts for the majority of distance travelled and energy used, and is likely to continue to do so in the coming decades. If the UK is to end its dependence on oil then it will have to radically change its approach to cars and transport policy.

To explore this issue in detail, Greenpeace supported the Institute for Public Policy Research (IPPR) in examining how the UK transport system could most effectively and equitably break its dependence on oil.

IPPR's subsequent report, 'Untying the knot' identifies three key critical challenges that the UK transport system faces over the coming years.

If the UK government is to tackle climate change, support a stable economy and improve access to transport, it must:

- Improve vehicle efficiency and support UK manufacturing
- Distribute the benefits of a more efficient transport system fairly throughout society
- Find ways to fund transport in an era of reduced oil consumption

By implementing the policy recommendations in this report the UK government can:

- Meet its climate targets
- Put itself at the forefront of the next wave of industrial development
- Reduce social inequality
- Significantly reduce fuel imports



THE EFFICIENCY CHALLENGE: IMPROVING VEHICLE EFFICIENCY, CUTTING CARBON EMISSIONS AND DRIVING SUPPORT FOR UK MANUFACTURING

Modelling used by the Department of Transport assumes a huge growth in vehicle numbers over the coming decades. However, in most developed countries including the UK, evidence suggests that car ownership and use has peaked. This offers the government an historic opportunity to shift from its predict-and-provide model for transport and overhaul its transport system.

Reducing car travel while increasing cycling, walking and public transport use is an important strategy for reducing the carbon intensity of our transport system. It is unlikely however, that even successful implementation of the most ambitious of these strategies will be able to displace the car as the principle mode of transport in the UK, in the coming decades.

Therefore a key aim of policy makers must be to make cars as efficient as possible, encourage a shift to hybrid and electric vehicles, and work to stabilise, or reduce, distances travelled. Given current moves towards tighter emissions legislation and the continued pressure of high oil prices, a global trend toward more efficient vehicles is inevitable. What is not yet clear however is whether or not the UK and Europe intend to set the pace of change, or allow others to lead. IPPR research shows that it is strongly in the UK's economic interest to force the pace of change.

The current government is signed up to a vehicle efficiency target of 95g/km for average fleet emissions by 2020. However, with no clear strategy for supporting this target either in Europe or the UK, the strength of the commitment to this target is unclear. In addition, within Europe the car manufacturers' lobby is stepping up its attempts to undermine this target.

IPPR's research shows that the car industry has the technology to meet this target. Its reluctance to do so is a result of corporate vested interests that are wedded to a business model of minimal regulation and voluntary agreements.

Supporting UK industry

Efficiency targets not only reduce carbon emissions, they also have a key role in creating a framework to support innovation and jobs within the UK car industry. The UK manufactures around 30% of car engines in Europe. With 180,000 people directly employed by the industry, 200,000 indirectly employed through supplying parts and over half a million working in retail and sales, this is an important UK industry.

The government's Committee on Climate Change argues that more than 25% of surface transport emissions can and must be cut by 2020

Efficiency standards exist or are being introduced in many developed countries including the USA. This, combined with the vast and growing market for cars in lower income developing countries, will undoubtedly turn both the UK and global market towards more efficient hybrid and fully electric vehicles. The UK's expertise in engine manufacture, battery technology and light weight materials offers a unique opportunity to benefit from this shift in market focus.

Given the inevitability of change in this industry, the UK could be at the forefront of what is likely to be one of the key technological changes this century. This would secure the long term future of this important sector in a time of great economic uncertainty. Standing still is a recipe for industrial decline, whilst progressive efficiency targets would push consumers and the car industry towards creating low carbon vehicle demand and supply, helping cement the UK's competitive advantage.

60% of the UK's road transport emissions in 2008 was attributable to cars

Supporting a stable economy

Ending the UK's dependence on oil would have both important environmental benefits and positive impacts on the economy. Oil production in the North sea is in permanent decline and therefore the UK's balance of trade, in relation to oil consumption, gets worse every year that we fail to improve efficiency. At a time when debt is causing huge financial problems globally, it makes no sense for the UK to be spending money on importing oil that we could – if we implemented the right policies – do without. In addition, economies overly reliant on oil will be vulnerable to high prices and price volatility. There is a strong link between high oil prices and recession.

To achieve environmental and economic stability, the UK government must:

- Fully support the 95g/km target and implement an industrial strategy to ensure that UK manufacturing supports and benefits from this drive towards improved efficiency.
- Mount a strong campaign within Europe to champion this target.
- Put in place a set of policies that support a shift to hybrid and electric vehicles and stimulate the domestic market.

To improve vehicle efficiency, cut carbon emissions and support manufacturing, IPPR recommends the UK government:

- Lock in mandatory exhaust emissions standards for new car fleets at 95g/km, or better, by 2020, and strongly advocate for this target within the EU.
- Extend the current £5,000 plug-in vehicle grant to the end of the current spending review period in 2015, with a budget of £230 million as originally proposed.
- Introduce a revenue neutral 'feebates' system for new vehicle registration from 2013 onwards to overlap and then replace the plug-in vehicle grant. The feebate 'pivot point' (the g/km emissions rate at which rebate becomes fee) should be reduced as the 2020 target for exhaust emissions standards is met.
- Revise Vehicle Excise Duty banding and charges to ensure that motorists have clear incentives to increase efficiency and reduce emissions that are in line with technological progress.
- Support infrastructure for plug-in hybrid and full electric vehicles.
- Enforce more effectively the 70 mph limit (which the government's own Committee on Climate Change suggests will save 1.3 MtCO₂ by 2020) rather than increasing motorway speed limits.

To deliver growth and create an industrial strategy for a low carbon automotive sector, IPPR recommends the UK government:

 Explicitly back five grand vehicle technology challenges – fuel cell, electric, hybrid, internal combustion engine efficiency and vehicle

- design and weight with a bespoke innovation strategy for the automotive industry.
- Form research clusters around each grand challenge and provide a clear route to commercialisation through industry partnerships, including small to medium enterprises (SMEs), financiers (including representatives of the Green Investment Bank when operational) and business development specialists as well as larger companies.
- Spend larger sums of money on single challenges, rather than spread finance too thinly across a wide range of institutes and technologies.
- Increase funding for technology and innovation centres, over and above the current £200 million being invested. In the longer term this should be offset against job creation and cost reduction at deployment.
- Scale up the UK Innovation Investment Fund, which has clean technologies in its portfolio, and uses public money to draw in private capital, towards the originally-proposed £1 billion within the next five years, to help SME development in particular.
- Develop a sector strategy to address the skills shortages faced by the automotive industry, to prevent the migration of innovation overseas due to lack of skilled workers and to ensure that investors choose the UK as an R&D base

THE SOCIAL JUSTICE CHALLENGE: DISTRIBUTING THE BENEFITS OF A MORE EFFICIENT TRANSPORT SYSTEM **FAIRLY THROUGHOUT SOCIETY**

Access to transport of all forms is a key indicator of social welfare and mobility. Those who commute further tend to have higher wages and those who cannot afford the rising costs of both personal transport and public transport have more difficulty accessing services.

There is extensive research which shows how supporting cheap, accessible, well integrated public transport is the most effective method of reducing transport poverty. However, IPPR's research focuses on a world in which cars dominate the transport mix for the foreseeable future. These cars should use either no oil or as little oil as possible, and the benefits of more efficient vehicles must be spread as widely as possible. In the short term, the push for more efficient, hybrid or electric cars presents a key difficulty in terms of social justice. These cars will be newer and so more expensive. Therefore, the associated reduced fuel and tax costs will only benefit those wealthy enough to purchase these cars.

To support a fairer distribution of the benefits of more efficient cars, IPPR recommends the UK government:

Provide financial and practical support for different models of car ownership and use, such as car clubs and car sharing schemes. This enables people to avoid the upfront costs of car ownership and pay only when the car is used.

Develop a strategy for transport with an emphasis on the smart integration of public and private modes and with an explicit goal to tackle transport poverty.

THE FISCAL CHALLENGE: FINDING WAYS TO FUND TRANSPORT IN AN ERA OF REDUCED OIL CONSUMPTION

The Treasury currently receives almost £30 billion in taxes on fuel. As car efficiency, electric, hybrid cars, and modal shift make an impact, this revenue from VAT, VED and fuel duty will fall radically, as these are taxes on fuel use or carbon. Tax receipts from North Sea oil will follow production downward. This is a significant loss of national income.

IPPR modelling shows that in some scenarios fuel duty will fall from over 2% of national income to under 1% (from around £30 billion to £15 billion by 2030). All scenarios show significant declines in revenue through the coming two decades. This raises the serious question for the government and opposition parties: how will they replace this revenue whilst keeping incentives to move to more efficient vehicles in place?

IPPR suggests that one solution to this problem is the incremental introduction of road pricing. Polling suggests that road pricing could gain public acceptance if it does not increase costs for the majority of motorists and is not seen as an attempt by government to increase the tax revenue from motorists.

A well thought out road pricing system has three key potential benefits. It could encourage more efficient cars, be less regressive than the current system and potentially help reduce congestion and the huge costs associated with it.

85% of total distance travelled in 2009 was made up of car journeys

The critical issues are carbon reduction and social justice. Any system of charging motorists, be it road pricing, fuel tax or road tax, must encourage a reduction in the consumption of oil, increase travel options for people on lower incomes and support other less environmentally damaging forms of travel.



CONCLUSIONS

Transport strategy is no longer simply a case of facilitating travel. It lies at the hub of a set of critical issues that the government must address.

IPPR's report 'Untying the knot' identifies the multiple benefits to the UK of developing a transport strategy that supports low emission vehicles, encourages industrial development and creates a fairer system for people on lower incomes.

Improving the efficiency of the UK's car fleet will benefit the climate and the UK's balance of trade and economic security, deliver long term reduced costs for motorists and provide a significant boost to manufacturing at a time when this is desperately needed.

Greenpeace has identified three key areas of transport policy that the UK government must implement in relation to its car fleet. For the full set of IPPR's recommendations, visit www.greenpeace.org.uk/ipprreport

For more details please contact: Greenpeace Canonbury Villas London N1 2PN www.greenpeace.org.uk

GREENPEACE RECOMMENDS THE UK GOVERNMENT:

- Champion an exhaust emissions standard of 95g/km or better, by 2020 at an EU level, and develop strong policy to encourage take up of these more efficient vehicles.
- Implement an industrial strategy to put the UK at the forefront of developing this next generation of vehicles.
- Create policies aimed at encouraging fairer access to these new vehicles throughout society.

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