

# **All Party Parliamentary Light Rail Group/pteg Enquiry into Light Rail**

## **Memorandum from the Oil Depletion Analysis Centre (ODAC)**

### **Summary**

- a. Peak oil is a term used to denote the point at which global oil production will reach its maximum level and then go into sustained decline.
- b. Opinions about the timing of peak oil differ, but the latest authoritative report on the subject says there is a significant risk of reaching peak before 2020 – ie within about 10 years' time.
- c. The UK government has consistently refused to acknowledge the approaching peak in oil production. It is essential that it now takes the matter seriously.
- d. The economic effects of peak oil will be dramatic. Our response as a nation must be a reduction *now* in overall demand for energy and increased use of non-fossil fuels.
- e. Transportation is a key sector in which local and central government have roles to play in fossil fuel reduction. Local authorities have the front line responsibility.
- f. Trams are good for peak oil and good for climate change. Their source of power (electricity) is largely insulated from interruptions in oil supply and this electricity can be provided from renewable and nuclear sources.

### **1. About ODAC**

ODAC was founded in 2001 at the instigation of the late David Astor, former editor of *The Observer*. ODAC is a registered charity whose main aim is to increase awareness of the challenges posed by peak oil and the ways in which its effects can be mitigated. One of ODAC's current aims is to raise the level of awareness of peak oil to that of its near relation – climate change.

### **2. What is Peak Oil?**

A growing number of experts now predict that world oil production will reach its ultimate peak within the next ten years and then start permanently to decline. There is disagreement about the date of the peak,

but the latest authoritative report on the subject, by the UK Energy Research Centre (*Global Oil Depletion: An assessment of the evidence for a near-term peak in global oil production*), says there is a significant risk of reaching peak before 2020 – ie within about 10 years' time. But under almost any scenario lead time is running short for a smooth transition to new energy systems and a less oil-dependent way of life. Supply insecurity, balance of payments problems, plus climate change mean that minimising the use of hydrocarbons must now be an international priority. Human ingenuity may be expected to find total or partial solutions to the challenge, but this ingenuity cannot be unlocked and applied unless there is a widespread appreciation of the size and imminence of the challenge.

### **3. The Role of Local Authorities**

In an era of highly volatile energy prices and potentially growing energy shortages, both central and local governments have roles to play in managing a progressive reduction in fossil fuel dependency, particularly for transport. However, the government's refusal to take seriously the likelihood of a near-term peak in oil production has hampered realistic policy-making in this area. As a result, local authorities have been left holding the baby. There are already encouraging signs that the more progressive authorities recognise the need on environmental and cost grounds to reduce fossil energy consumption in absolute terms, while developing sustainable local energy supplies. Here are some of the ways in which they are tackling this:

- auditing and minimising the transport energy consumed across council services;
- encouraging a major shift from private to public transport, cycling and walking;
- promoting the use of locally produced, non-fossil transport fuels such as biogas and renewable electricity in both council operations and public transport; and
- reducing overall transport demand by using planning powers to shape the built environment.

However, despite the progress already made by some authorities, much more needs to be done *now* to minimise the shock results which will follow the advent of peak oil.

#### **4. Peak Oil and Trams**

The environmental benefits and cost-effectiveness of tram systems are well documented and will no doubt be covered extensively in the evidence submitted to the Enquiry by other interested parties. They are a conspicuous success story in this country and abroad. Indeed, it is hard to think of a tram system that could be branded a failure. Above all, trams are good for peak oil and good for climate change. They emit no pollution or greenhouse gases. Powered by electricity, they are largely insulated from interruptions to the oil supply. They also have the potential to be completely carbon-neutral if combined with renewable generation. There is no reason why this electricity should not be provided from renewable and nuclear sources.

Trams in our view have a vital part to play in a balanced local transport mix designed to reduce reliance on fossil fuels, to minimise congestion and to provide a safe and secure environment for travellers.

#### **5. Recommendations**

- a.** The government should give priority to conducting a risk assessment into the effects of peak oil before 2020 and to planning national and local strategies to meet the problems identified.
- b.** Decisions on new nuclear capacity should be taken quickly as part of the move to fossil-free electricity generation.
- c.** Planning should concentrate on a long term sustainable transport policy aimed at reducing reliance on fossil fuels and increasing the use of sustainable bio-liquids and electricity. This policy should *inter alia* give special consideration to the needs of local and regional authorities to encourage the introduction of light rail and tram systems.

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