

Southern Sydney Regional Organisation of Councils  
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Vehicle Fuel Efficiency Consultation  
C/- Department of the Environment, Water, Heritage and the Arts  
By email: vfedpaper@environment.gov.au

7 November 2008

Dear Sir or Madam

**Re: Vehicle Fuel Efficiency – Potential measures to encourage the uptake of more fuel efficient, low carbon emission vehicles**

Thank you for the opportunity to comment on the potential measures outlined in the paper. SSROC has 16 member councils across the southern Sydney region, and a population of over 1.5 million people. In delivering services to their residents, our members consume substantial quantities of fuel, primarily through vehicle fleets comprising over 1200 petrol- and 700 diesel-engine vehicles, and including heavy vehicles such as garbage trucks.

SSROC and its members are very conscious of the need to reduce greenhouse gas emissions and tackle global warming. All our councils have initiatives in this area, including reducing emissions from vehicle fleets. We welcome efforts to progress towards alternative fuels for vehicles, for a range of reasons in addition to direct environmental considerations, such as the potential for Australia to produce its own CNG, contributing to the economy, reducing the life-cycle emissions of production and delivery mechanisms, improving energy security by reducing our dependence on fuels sourced from overseas, and reducing the inflationary pressures that our dependence on increasingly highly priced imported fuel.

In considering alternative fuels, we have identified some major barriers to change, including:

- A paucity of reliable and relevant research on which to base robust and long-term plans
- The lack of necessary infrastructure to support extensive operational dependence on particular fuels.

**Research and development**

Council fleet operations cannot be changed quickly due to the significant investment in vehicles and supporting infrastructure in depots. Switching to alternative fuels may require considerable capital investment, for example, in reticulation and storage systems at depots for CNG. With the current level of information as to the effects of such a transition it is not possible to devise a robust business case. Research is

needed to inform the business case for transitioning to alternative fuels, and answer specific questions such as:

- What are the operational impacts of using the alternative? Factors such as the required range of vehicles, time to re-fuel and availability of re-fuelling stations potentially have a huge impact upon vehicles that are utilised for specific purposes according to complex and time-critical schedules.
- How does the alternative compare with the current fuel in vehicles carrying heavy loads over relatively short distances and frequently stopping?
- What is the effect of the alternative fuel on the vehicle's maintenance schedule?

These are major considerations in the council fleet operations, and while there is insufficient information available to assess alternatives in this context, a robust business case for any transition plan cannot be made.

### **Lack of necessary infrastructure**

There is a huge vested interest in maintaining the existing market for petrol and diesel fuels, which is given further weight by the existing capital investment in infrastructure. Power drivers for change will be needed to implement innovative ways to transition to alternative fuels.

Councils are generally willing and keen to make this transition, in support of their greenhouse gas reduction policies. Our research suggests that the use of CNG might be a viable alternative to vehicle fleet replacement that would deliver environmental benefits at the same time as being cost-effective and fuel-efficient. The cost of vehicle conversion and fuel tank installation appears to be much lower than, say, the cost of vehicle replacement with hybrid models. However, the lack of infrastructure for re-fuelling is a major barrier to CNG use. The issue particularly of reticulation of CNG or any other alternative is a major one that is beyond the capacity of councils or individual consumers to address and requires national investment.

### **Responses to the Discussion Paper**

1. The policy measures overview (section 3.3.1).

The research and development described has too narrow a focus, on individual vehicle models. Research and development needs to cover fleet operations and the efficiency of alternative fuels when used in particular scenarios. For councils this includes, for example, the operation of garbage collection vehicles i.e. heavy vehicles carrying heavy loads over short distances, stopping very frequently.

Support needs to be extended beyond vehicle manufacturers to all participants in the fuel supply chain e.g. CNG is of no real operational use without the infrastructure to deliver it efficiently to the vehicle, which in turn must be equipped with the appropriate receptacle.

The huge vested interests in maintaining the existing market and infrastructure for petrol and diesel are unlikely to be impacted effectively by voluntary agreements with the automotive industry.

Mandatory vehicle fuel efficiency or CO<sub>2</sub> emission standards would be a good measure for new vehicles, and should be extended to older vehicles to bring short-term benefits from existing fleets. However, including older vehicles would have to be supported by adequate funding for the development of reasonably priced retro-fitted modifications.

2. Direct financial incentives/disincentives based on vehicle CO<sub>2</sub> emissions (section 4.2, measure 2.2)

Careful consideration needs to be given to the issues of whether CO<sub>2</sub> emissions or greenhouse gas emissions are to be targeted. For example emissions of methane from alternatives should also be considered or a perverse incentive could be created which encourages the acquisition of methane-emitting vehicles (a more potent greenhouse gas than CO<sub>2</sub>) at the expense of say, a highly efficient, particulate-filtered, ultra-low-sulphur diesel vehicle.

With this in mind, perhaps disincentives to buying new vehicles with high emissions are more important than incentives to encourage purchase of low-emission vehicles.

3. Fleet purchasing frameworks (section 4.2, measure 2.3)

SSROC is already working on this area, having already drafted a new vehicle assessment tool for use in procurement, which includes criteria for efficiency, social and environmental impacts as well as the traditional cost-effectiveness criteria. However, we have found that the research necessary to provide really reliable guidelines is not currently easily accessible. Procurement is a field in which councils have substantial expertise: it is the source data on which to make decisions that is currently lacking.

4. Vehicle advertisements (section 4.3, measure 3.1)

This measure, like the others, targets only new vehicles and so fails to address the massive proportion of vehicle emissions from existing vehicles and fleets. While valuable in its own right, it is very limited in its potential effectiveness.

## **Conclusion**

The use of vehicle fleets is an absolute necessity for all councils in the delivery of basic services, and so alternative fuels are critical in the reduction of greenhouse gas emissions from transport in this sector. Councils' investment in their vehicle fleets and supporting infrastructure is significant, and will take time to change. Change will not come about until reliable and robust research, relevant to the operational context, is available for making the business case.

SSROC also keeps a watching brief on emerging trends in the area of vehicle and fuel development. In addition to considering CNG, we are also interested in progress in:

- the production of bio-diesel from waste – which has enormous potential for councils, as they control significant waste-streams and are actively seeking to maximise the recovery of resources from waste
- sources of bio-diesel that do not impact upon food crops or the price of food products in Australia or overseas
- the fuel-efficiency of particular vehicles and models, including the types of technologies and design measures noted in the discussion document
- development of new vehicles/models such as lightweight battery-electric ones.

This kind of research requires not only incentives to stimulate the market, but actual funding for research projects.

SSROC is broadly supportive of measures to encourage the take-up of more fuel efficient, low carbon emission vehicles. However, the measures put forward are limited in their coverage and measure that are much broader in their potential are required to make a real difference to greenhouse gas emissions from transport in Australia.

The measures proposed are focused on promoting known technologies, and this is important in reducing greenhouse gases. However, the measures do not address many aspects of council operations, and do not promote promising emerging technologies that require either investment in infrastructure or robust and relevant research and development effort. There is also an emphasis on new vehicles and not on retrofitting older vehicles: this means that a huge proportion of vehicles on the road are not covered by these measures.

SSROC members are quite advanced in their thinking in this area, and would be keen to lead research into particular aspects relevant to council operations if funding were available.

Thank you for the opportunity to put these views forward. If you would like further information please contact me at SSROC, or by email [dl@ssroc.nsw.gov.au](mailto:dl@ssroc.nsw.gov.au).

Yours faithfully



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