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Ms Susan Redman
Inquiry Secretary
Joint Standing Commitee on Treaties
Parliament House
Canberra ACT 2600

Dear Ms Redman,

re KYOTO TREATY

I understand that the Commiteee has called submissions and I would be grateful if you could accept the following letter as a submission. The submission is in part based on a submission to the Senate Environment, Communications, Information Technology and the Arts References Committee in its inquiry into Australia's RESPONSE TO GLOBAL WARMING.

The submission shall be restricted to energy use and land transport which are regarded as two areas Australia should be paying more attention to: to reduce imports, to reduce air pollution, and to reduce greenhouse gas emissions. Although the submission draws on research conducted at the University of Wollongong, it is a personal submission.

The State of the Environment (SOE) Australia 1996 Report noted (p 3-36) that Australia's average energy consumption per head (at 16.2 GJ per head in 1993-94) has increased in recent years, and, is a little higher than the OECD average. (In a warm country, we should do better than this average). This Report (p3-37 and 10-9) also notes the relatively poor average fuel efficiency of our cars at 11.8 litres per 100 km as compared with the United States at 10.8 litres per 100 km, and, (p10-20) that "*public transport patronage has declined significantly over the past 50 years. Research, funding and management for public transport have all been deficient. Commonwealth funding for transport has ... concentrated on road building....*"

The SOE Report notes some scope for improvement in energy use. However, the overall impression that Australia may be conveying to the world is one of at best being 'relaxed and comfortable' about energy use and greenhouse emissions.

National Competition Policy, a mentioned (p32,33) in a 1996 Federal Government Green Paper, is a major factor affecting some energy use and production. However, it is

now clear that the present agreements, as approved by COAG in 1995, are not sufficient to assist Australia to reduce its energy use per capita. Clearly, insufficient attention is given to Ecologically Sustainable Development (ESD) considerations.

The Green Paper on energy was supposed to proceed to a White Paper. **After three years, what has happened to the proposed White Paper is a good question.**

In comment about transport, many reports in the mid and late 1990s, (including the 1996 Green Paper) have downplayed the approach and recommendations of both the ESD Working Group on Transport in their 1991 report, and the National ESD/Greenhouse Gas Strategies of 1992. These two strategies had a common recommendation of reducing

"...total energy consumption in transport through:

* *improved technical and economic efficiency of urban and non-urban transportation*
* *switching to alternative transport technologies or modes where this reduces greenhouse emissions per passenger or unit of freight".*

Although there has been some progress on the first of these fronts during the 1990s, there was little on the second front. It would appear that Government in the late 1990s has been 'relaxed and comfortable' about our ever growing road vehicle fleet and its thirst for petrol, and, does not appear to recognise modal shifts in transport as a way of reducing energy use. For the 25 years to 1998, in Australia,

* car km in urban areas has more than doubled, whilst urban public transport struggles
* the urban road freight task (in tonne km) has tripled,
* the domestic aviation passenger kilometres has more than quadrupled, and
* the non urban articulated truck freight task has quadrupled, whilst our interstate rail tracks in Eastern Australia need upgrading or are in danger of closing down.

It is of concern that recent measures adopted in 1999 by the Federal Government for the New Tax System, including cheaper cars and a GST on public transport, have made the situation worse. Clearly, a review of taxation to encourage energy efficiency in personal mobility is warranted (see Appendix A). Attention is also drawn to the recent report 'Sustainable Transport; responding to the challenges" of the Institution of Engineers, Australia and comment by the Chartered Institute of Transport (see Appendix B).

As recognised in the 1997 report 'Urban Air Pollution in Australia', *"motor vehicle transport is the major anthropogenic emitter of air pollutants in Australia"* (p31), and *"Travel demand Management (TDM) measures that indicate to travellers the environment (and other) consequences of their travel decisions should be implemented"* (p154).

Australia's approach to Federal funding of land transport stands at odds with the United States. The*Intermodal Surface Transportation Efficiency Act 1991* that sets out to mandate responsible intermodal planning in such a way to *"...reduce energy consumption and air pollution while promoting economic development"* as follows: *"It is the policy of the United States to develop a National Intermodal Transportation System which is economically efficient and environmentally sound, provides the foundation for the*

nation to compete in global economy and will move people and goods in an energy efficient manner." These words are backed with the approach taken in 1998 legislation and in dollars. During the 1990s, about 20 per cent of Federal US land transport funds were allocated to Mass Transit. In Australia, the percentage of Federal land transport funds allocated during the 1990s to rail and urban public transport would be less than 4 per cent.

The ESD Transport Working Group (1991) cited above also considered that*"...Government funding of interurban road and rail infrastructure development, including the National Highway system and the National Rail Corporation's network, should be brought onto an even-handed basis that incorporates ESD principles, by assessing both roads and rail projects according to a single set of criteria covering national and local economic, social and environmental benefits and costs."*

Support for this view was given by a National Transport Planning Taskforce (NTPT 1994, #2) recommendation:*"That road, rail, port and airport infrastructure investments and their funding arrangements should be considered within a framework that allows intermodal, network and corridor considerations to be evaluated transparently."* The rationale is that *"...more flexible funding mechanisms should be negotiated so funds can be channelled into corridors and modes of highest priority."*

Since 1994, the situation in Australia has become worse. The Federal Government's generous funding of roads, and tightness in funding the relatively energy efficient rail mode of transport, raises questions about current priorities. As a result, and as noted by the Business Council of Australia in 1996, and Austroads in 1997, **Australia has the highest road freight per capita** (measured in net tonne-kilometres per head).

Whilst much land freight activity is now most effectively performed by road trucks, the dubious distinction of Australia having high road freight per capita has arisen in part because road transport undertakes significant interstate and bulk freight tasks. Many (but not all) of these freight tasks could be performed by an upgraded rail system with improved energy efficiency, with estimates of potential savings given in a Land Freight Transport Energy Evaluation (Laird and Adorni-Braccesi, ERDC, 1993) updated to over 200 million litres of diesel a year. However, as noted in a 1986 Energy 2000 Report Booklet on Energy Conservation, (p46) *"the potential energy savings from more use of the less energy intensive sea and rail freight transport modes ... would be more likely with improved road cost recovery from heavy truck operations."*

Both the first generation and the new National Road Transport Commission (NRTC) charges have problems that are well summarised by the Industry Commission in its 1991-92 Annual Report (p197-198): *"Annual fixed charges are not efficient because costs vary with the distance travelled and the mass of the vehicle. The result is that some vehicles - the heaviest travelling long annual distances - will meet less than 20 per cent of their attributed costs. ... Differences between the recommended (NRTC) charges and road-*

related costs are greatest for vehicles competing with rail. The charges, as recommended, will therefore potentially distort the long-haul freight market as rail reforms take effect...."

Clearly there is a need to improve competitive neutrality between road and rail. The 1999 BTE Report on **Competitive Neutrality** between road and rail report indicated that rail will be disadvantaged in competing for freight with the New Tax System that started on I July 2000.

On competitive neutrality, the House of Representatives Standing Committee in Communications, Transport and Micro economic Reform (referred to as the Neville Committee) in its 1998 report 'Tracking Australia' recommended, inter alia, **that the Commonwealth develops a more consistent, equitable approach to transport infrastructure charges to ensure competitive neutrality between modes.**

The question of competitive neutrality, or providing a level playing field, between road and rail to compete for land freight (as opposed to CPA requirements on GBEs), was also seen as important by many who made submissions to the Neville Committee. Here the five main considerations are:

(i) Federal investment in road and rail. The Neville Committee noted (p121) advice that in 20 year period from 1977-78 to 1996-97, the Commonwealth spent some $3.86 billion on rail (1996-97 terms including Australian National's revenue supplements) as against some $31.5 billion on road infrastructure. (Note that the funding in favour of road is heightened due to the outlay of some $18 billion in today's terms on the National Highway System from 1974 to 1999, as against a net capital outlay on rail capital works, over this time, in the order of $1 billion).

(ii) cost recovery measures for both modes, needs review, as above.

(iii) harmonization of regulations between States affecting land transport operations (well advanced for road after the efforts of the Inter-State Commission in the 1980s and the National Road Transport Commission in the 1990s, but retarded for rail).

(iv) adherence to regulations affecting safety (driving hours and speeds) and weight of loads (with generally good compliance for rail, and poor for road).

(v) support by Government to advance industry research, (generally good for road via NRTC, ARRB, Austroads, and, to date, quite poor for rail).

Support for a more balanced approach in funding road and rail was again expressed by the Neville Committee in its August 1998 report 'Tracking Australia', and, a Rail Projects Task Force "Revitalising Rail" released May 1999. The formal Government response of 13 April 2000 to these two reports, and that of the Productivity Commission's final report on Progress in Rail Reform, simply fails to address the real issues, and the May 2000 budget actually cut funding for upgrading existing track in 2000-01. This Government response also failed to establish this year either a National Land Transport Commission (as recommended by the Neville report) or a National Rail Transport

Commission (a compromise solution, although a National Transport Secretariat was formed).

During the course of an inquiry into National Competition Policy (NCP) a Senate Select Committee *"received considerable evidence about the administration and implementation of NCP and the practical application of the policy which goes to concerns about good, equitable and efficient governance."* (Chaper 6 in its February 2000 report). This report recommended, inter alia, *"…Given the significance of road and rail infrastructure, that transport be a matter for priority consideration by CoAG."* and *"…that the NCC address the issue of road-rail competition for freight as a matter of urgency."*

Recent advice from the National Competition Council (NCC) suggests that it is presently constrained in how it deals with competive neutrality and is unlikely to be able to act quickly on this recommendation. Yet, if Australia was serious about meeting the Kyoto agreements, and seeing that the transport sector was required to 'pull its weight' in meeting greenhouse gas targets, we would be quickly making the situation better.

Concerns are raised about recent Australian Bureau of Statistics **transport data**.

As an example of ABS difficulties in providing transport data, one only needs to look at the 1997 Year Book for the tables giving rail data, where for freight tasks (billion tonne km) public rail was overstated and private rail understated. This problem was rectified in the 1998 Year Book. With increasing privatisation of rail systems, and with the present arrangements, there is by no means confidence that all rail freight tasks (in billion tonne km) will be accurately reported, or even reported at all. Indeed, the 1999 Year Book did not update the rail freight task data, and the 2000 Year Book omitted tonne km entirely.

Re Vehicle Kilometres Travelled (VKT), total Vehicle km for all vehicles was estimated by ABS as 173.3 billion km (bvkm) in 1997-98 (passenger vehicles = 134.3 bvkm) as against 166.5 bvkm in 1994-95 (passenger vehicles = 123.7 bvkm -12 months ending September 1995). This 1994-95 estimate of vehicle km was revised DOWN by ABS by some 7 per cent to 155.8 bvkm (with passenger km 113.1 bvkm). By way of contrast, Apelbaum (1997, Energy consumed and Greenhouse gas emissions in Australian Transport) considered the ABS 1994-95 estimates of total vehicle km and passenger vehicle km as too low, and claimed 183.2 bvkm for all vehicles and 142.9 bvkm for passenger vehicles.

For 1990-91 (12 months ending September 1991), ABS estimated 150.4 bvkm for all vehicles (Apelbaum (1997) 153.7 bvkm for 1990-91) and 114.3 bkm for passenger vehicles. It is noted that the revised ABS estimates show the 1991VKT as less than the 1988 VKT. ABS Notes for 1997-98 include brief mention of ‘Reliability of Estimates’ (p21), and present a revised time series for vehicle km from 1979. ‘Data Quality’ is also discussed. For total VKT, one has the impression that it grew appreciably from 1995 to 1998 – particularly in areas such as outer Sydney.

Re Road freight task, ABS put their estimate for the Australian road freight task for 12 months ending 31 July 1998 (1997-98) at just 113.8 billion tonne kilometres (btkm).

This compares with their estimate of 119.2 btkm for 12 months ending 30 Sept 1995 (1994-95). In 1994-95, ABS used 89.4 btkm for articulated trucks (Apelbaum 85.4 btkm) and 25.0 for rigid trucks (Apelbaum 24.2 btkm) with ABS estimates declining to 1997-98 at 86.9 btkm for articulated trucks and 21.5 btkm for rigid trucks. The balance is due to Light Commercial Vehicles (LCVs). Whilst Apelbaum (1997) argued 119.2 btkm was too high for 1994-95 and used 114.4 btkm, the ABS estimate of only 113.4 btkm for 1997-98 is hard to believe. In their 1998 SMVU report, ABS gave two tables on freight tasks on p29 and 30, but do not appear to revisit their 1994-95 estimates.

ABS and Apelbaum have agreed on a road freight task 88.2 btkm for 1990-91, with 62.9 btkm for articulated trucks and 20.6 btkm for rigid trucks. This year was one with recession impacts. From 88.2 btkm to 113.4 btkm over 7 years is an annual average growth rate of about 3.7 % pa. This is too low.

There is a need for more and better data in land freight transport in Australia along with a need for increased energy efficiency in transport. **To this end, the National Transport Planning Taskforce in 1994 recommended an expanded role for the Bureau of Transport (and Communications) Economics in this area.**

It is submitted that a quantum increase in resources now needs to be applied to transportation data collection and analysis in Australia, and, that these resources should be provided by the Commonwealth. The **United States Bureau of Transportation Statistics** (BTS) is a good model. The BTS was established as a result of the United States Intermodal Surface Transportation Efficiency Act 1991. Funding for the BTS was continued in the Transportation Equity Act signed into law by President Clinton in 1998.

Limitations on transport data were noted as acute as far back as 1980 by the NSW Commission of Inquiry into the Road Freight Industry (G. McDonell). The situation for timely and accurate transport data available for the public record has not improved since then, and in the 1990s has become worse. As per an Editorial of Railway Digest, December 1997: *"Both road and rail would benefit from more and better data on freight and passenger movements. Such data needs to be accurate, up to date, and published quickly. Transport data is an important area where the Australian Bureau of Statistics is struggling with other demands on its resources (it ceased its publication Rail Transport years ago and more recently its Interstate Freight Statistics). Other Government agencies analysing land transport data have either gone (the Inter-State Commission 1990, the Bureau of Industry Economics in 1996; and now the Energy Research and Development Corporation) or, been down sized (Bureau of Transport Economics in 1996, and now our Universities)."*

The Productivity Commission in its 1999 final report on rail on page 8 put the situation succintly: ***"There is a lack of up-to-date transport data available in Australia, impeding public debate and sound policy formulation."***

As well as having more and better transport data freely available, there should be more **energy data** available. Quoting from a 1998-99 submission to the Productivity Commission inquiry from this writer **re implementation of Ecologically Sustainable Development by Commonwealth departments and agencies** it would be good to get better data on energy use, and progress in improving energy efficiency along with promoting Ecologically Sustainable Development. To this end, it was recommended:

That each Commonwealth department and agency be required, in their annual report, to make substantial comment on progress in implementing Ecologically Sustainable Development principles, and include details of total energy use and data on energy efficiency for their relevant major operations, and the sectors of the economy for which they have responsibility.

That, via the COAG process, or other means, similar reporting measures be required for State and Territory departments and agencies, and for each publicly listed company.

Such measures would improve the level of awareness and understanding about energy use along with Ecologically Sustainable Development, and the need to practice the underlying principles, plus to improve energy conservation and efficiency (and so have a counting of Megajoules used or generated etc, as well as millions of dollars earned or spent).

It is hoped that this Committee may be more receptive to this type of recommendation than the Productivity Commission was in its ESD report. Incidentally, the NSW Department of Transport in its 1998-99 Annual Report cites energy use data (page 97).

In summary, there is much more that Australia could be doing to conserve energy and reduce greenhouse gas emissions in the movement of people and goods. Yet, since the Kyoto agreement was signed, the situation has generally gone from bad to worse. Most energy used in transport is liquid fuel. Rather than regarding liquid fuel only as a financial input into operating costs, and let market forces decide on its use, there is a case for much more Government support and intervention to conserve liquid fuel use in transport so as to:-

i) improve transport energy efficiency,
ii) reduce total costs,
ii) improve balance of payments of net oil and vehicle imports,
iii) reduce externalities arising from liquid fuel use, and
iv) reduce Greenhouse gas emissions.

To these ends, allocation of resources to overcome severe land transport data deficiencies would be useful, as would improving the level of debate on the issues.

Please let me know if you would like more information on any of the topics raised . If it would be of assistance to the Commitee, I would be pleased to appear before it.

Yours sincerely,

Appendix A. Re **taxation**, Table 1 shows the extent of tax deductions recently allowed. These deductions are presumably greater than the loss of revenue to Government. In turn, the loss of revenue is greater than FBT payments for vehicles made by taxpayers. The aggregate gross deductions have been running in excess of $10 billion per annum for 5 years now.

The gross loss of revenue to Government, if we assume an average tax rate of 36% for all classes of taxpayers, or non taxpayers (individuals, companies, partnerships, and trusts), for the last three years, exceeds $4 billion per annum. The net loss of revenue to Government, when taking into account FBT for vehicles, is $2.9 billion in 1997-98.

Motor Vehicle user groups often claim that aggregate vehicle related payments to Government exceed road outlays by Government, with 1997-98 payments at $12.4 billion ($8.6 b fuel excise, $2.3 b registration, $1.5 b other (excluding $1.3 b stamp duty which is not specific to motor vehicles - .ref. Bureau of Transport Economics, 1999, “Public Road Related Expenditure in Australia”). In 1997-98, there were $7.0 b outlays on roads.

The net surplus to Government is then some $5.4 b. However, this should be offset by the net tax loss of about $2.9 billion in 1997-98, to leave $2.5 billion. In turn, this amount is far exceeded by the $ 7 billion difference of an annual road crash bill of about $15 b (BTE, The Cost of Road Crashes,2000) and about $8 billion for insurance premiums of all motor vehicles (based on recent Australian Prudential Regulation Authority statistics).

TABLE 1 AUSTRALIAN MOTOR VEHICLE EXPENSES CLAIMED FOR TAX DEDUCTIONS $millions

	Individuals	Companies	Partnerships	Trusts	TOTAL	FBT offset
1992-93	1535	4655	2135	1050	9375	606
1993-94	1613	5082	2272	1148	10 115	1211
1994-95	1855	4986	2360	1232	10 433	1405
1995-96	2064	5802	2318	1325	11 509	1574
1996-97	2131	5876	2240	1384	11 641	1622
1997-98	2274	6223	2237	1488	12 222	1650

Ref: Taxation Statistics 1997-98 and earlier years Report and CD-ROM

As noted by ABC Radio National, Background Briefing 3 September 2000 *"Treasury Department estimates that concessions on fringe benefits tax for company cars cost about $800-million a year. This is how it works: Instead of taking salary and paying tax on it at their marginal income tax rate, the employee takes a car at a much reduced tax rate. There's a sliding scale: if the car does less than 15,000 kilometres a year, that's assumed to be private use and the highest rate applies."* These and other tax anomolies warrant remediation.

Appendix B. The November 1999 report **Sustainable Transport** to the Institution of Engineers, Australia accepted by the Committee on recommends, inter alia, that consideration be given to taxation and fiscal policy instruments as follows:

1.1 Review taxation policies that favour the use of private motor vehicles... and potentially discourage use of urban public transport

1.2 Review the GST package

1.3 Accelerate the introduction of transparent user-pays regimes... that reflect full environmental, health and economic costs...

1.4 Expand the new clean-fuel credit program

1.5 Allow for effective congestion pricing in urban areas and mass distance pricing for heavy vehicles.

The broad recommendations from the report *Sustainable Transport* to the Institution of Engineers, Australia are as follows:

1. Taxation and fiscal policy instruments should encourage sustainable transport (at present, these measures encourage car and truck use).
2. There is a strong case for increased investment in transport infrastructure that... is... more sustainable and less greenhouse gas intensive [and] where market forces fail... government should intervene.
3. More holistic approaches that integrate considerations into transport decisions are needed... (with consideration of) impacts on health, sustainability and greenhouse gas emissions.
4. These is a need for... research...to support ... cleaner transport fuels and technologies...[and into] transport pricing, economics and demand-management technologies.

A statement issued by the Chartered Institute of Transport in Australia after a National Symposium held at Launceston in November 1998 is also of interest. In part:

"Our greatest ever source of cheap energy may soon contract and the 'Petroleum Age' in which we live now can be seen to be approaching an eventual end.

The Symposium heard that a clear consensus is emerging that cheap oil production outside the Middle East will begin permanent decline around the year 2000, to be followed by permanent world decline within 15 years.

We have reached a crucial stage in the development of our local, national and international transport services. Our present path is leading us into potentially serious economic, social and environmental problems. New directions are needed for our future transport fuels and vehicles.

'More of the same' in our current transport plans and ways of thinking is no longer tenable.'