Cabinet Policy Committee

Government leadership in energy efficiency and climate change through the Govt³ programme

Proposal

1. In this paper we identify opportunities for government leadership to improve energy efficiency and reduce greenhouse gas emissions in relation to government buildings and transport. We seek Cabinet agreement for agencies in the Govt³ programme to consider best practice and other measures to achieve more sustainable management of public buildings and vehicle fleets.

Executive summary

- Government spending power can help drive innovation, cleaner production, and improved cost-effectiveness over the whole life cycle of goods and services. In sectors such as roading, buildings, office supplies, and IT equipment, central government purchasing in New Zealand comprises the single largest share in the market.
- 3. The Ministry for the Environment leads the Govt³ programme, working with 47 central government agencies to help them become more sustainable. The current membership of the Govt³ programme (all core public service agencies and some other entities) is responsible for approximately \$6 billion a year of operational expenditure. This expenditure can be leveraged to support sustainable development.
- 4. The Govt³ programme includes initiatives that help government agencies take leadership in reducing greenhouse gas emissions and improving energy efficiency, particularly in transport and buildings. The programme has significant agency support and has already made significant progress in a variety of areas. Further progress could be made on greenhouse gas emission reductions and energy efficiency improvements with more consistent application of whole-of-life costing and best practice in procurement. There are also opportunities for further gains from changes in leasing practices for vehicles and buildings.
- 5. Internationally, governments are pursuing opportunities to mitigate greenhouse gas emissions and improve energy efficiency by setting targets for their agencies and mandating best practice. This activity has helped drive wider, market-led changes. In New Zealand, examples in the building sector have shown how government leadership can prompt positive change in the market.
- 6. In this paper we recommend measures Govt³ agencies can take to reduce greenhouse gas emissions and improve energy efficiency in government buildings and transport-related activities.

7. The Govt³ programme will continue to be developed in harmony with government's good practice procurement framework. Tools to support sustainable procurement will be created in partnership with the Ministry of Economic Development and the Procurement Advisory Group.

Background

- 8. In November 2000, the government approved the establishment of the *EnergyWise Government* programme, targeting a 15% improvement in energy efficiency in the government sector by June 2006. The programme targeted 85 government organisations with annual energy accounts exceeding \$100,000. Participation was voluntary and signatories agreed to identify and implement all cost-effective opportunities to reduce energy costs. EECA is due to report to Cabinet on the progress and achievements of this programme in November 2006.
- 9. Under the motto 'walking the walk', the Ministry for the Environment has been leading the Govt³ programme since November 2003. The '3' in Govt³ represents the three pillars of sustainability: environmental, social and economic. The programme has four work areas:
 - Procurement of office consumables and equipment;
 - Waste minimisation and recycling;
 - Transport; and
 - Buildings.
- 10. Through all four work areas, the Govt³ programme enables government to demonstrate leadership in improving energy efficiency and greenhouse gas emissions reductions in government buildings and transport-related activities.
- 11. The Govt³ programme works with 47 central government agencies to enable them to become more sustainable. Current members include all 34 core public service departments and a range of non-public service departments, Offices of Parliament, crown entities and companies, and state owned enterprises. In the longer term, there is a possibility of extending the Govt³ programme to include all Crown Agents. These include the 21 District Health Boards around New Zealand, and School Boards and Trustees. A similar programme could also be developed for local government. While such an extension would significantly increase the contribution of the Govt³ programme to improving energy efficiency and greenhouse gas emissions reductions, it would be subject to further Cabinet approval and resourcing.
- 12. In consultation with Govt³ agencies, the Ministry for the Environment has developed a Govt³ reporting programme, which enables agencies to report progress against eight key sustainability indicators (including for energy efficiency, travel demand, procurement and waste) (CAB Min (06) 7/3c). The baseline year will be 2005/06, with the first reports due by the end of 2006.
- 13. On 6 March 2006, the Cabinet Policy Committee considered an update on the Govt³ programme *Toward Sustainable Practice in the Public Sector* and agreed that "it is the government's expectation that all core public sector agencies will participate in these initiatives" (CAB Min (06) 7/3c). In response

- to a paper on encouraging energy efficiency measures in the business sector, the Cabinet Policy Committee "agreed that it would be desirable for all public sector agencies to show leadership in implementing appropriate energy efficiency measures" (POL Min (05) 6/6).
- 14. Other government leadership measures to enhance energy efficiency and reduce greenhouse gas emissions include the development of a biofuels sales obligation; the Review of the Building Code to enhance energy efficiency of new and existing residential and commercial buildings, and work to reduce vehicle emissions.
- 15. Appendix 1 outlines areas of government activity outside the Govt³ programme that influence the energy efficiency and greenhouse gas emissions of government buildings and transport.

Government leadership in sustainable procurement

- 16. New Zealand is party to several international agreements recognising the need for governments to lead by example in procuring goods and services to help foster sustainable development.¹
- 17. Government spending power can help drive innovation, cleaner production, and improved cost-effectiveness over the whole life cycle of goods and services. In sectors such as roading, buildings, office supplies and IT equipment, central government purchasing in New Zealand comprises the single largest share in the market.
- 18. The current membership of the Govt³ programme is responsible for approximately \$6 billion a year of operational expenditure. This expenditure can be leveraged to support sustainable development.
- 19. Detailed analysis of the life cycle impacts of goods and services (resource extraction, transport, manufacture, use, and disposal) indicates that the principal areas in which changes in government procurement can improve environmental sustainability are buildings (new and renovations) and transport (vehicles, purchased travel, and roading). These are followed by paper and printing, office machines, waste and cleaning services, electricity, and catering services.
- 20. In New Zealand, sustainable procurement initiatives have largely been voluntary, led since 2003 by the Govt³ programme. Recent sustainability initiatives in central government building have shown how government leadership can stimulate demand and drive higher quality procurement into the market. Statistics New Zealand, Department of Conservation and New Zealand Defence Force requirements for sustainable elements in their new buildings have influenced the private sector to demand similar improvements and even to exceed government performance.
- 21. Most jurisdictions in developed countries have set in place guidelines and general policies for sustainable procurement in government and most have set mandatory requirements and targets. Reviews of effectiveness of voluntary

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^{1.} Agenda 21 (Chapter 4.23); WSSD (World Summit on Sustainable Development) Plan of Implementation 2002 (Chapter III.19); OECD Council recommendation January 2002 (OECD C (2002) 3); UN Guidelines for Consumer Protection (para 54).

- programmes have generally found difficulties with limited monitoring data and uneven or poor agency participation².
- 22. There is evidence that the best uptake of more sustainable procurement practice has occurred where the guidance is explicit, measurable, achievable, and mandated. Examples include the rapid uptake by the US federal government of computers meeting Energy Star criteria, which drove the international market, and the performance of the federal government vehicle fleet in Japan, which is now 100% compliant with top end fuel and emissions standards. Robust costbenefit analysis of the feasibility of similar initiatives for New Zealand has not yet been done.
- 23. See Appendix 2 for details of international examples of government sustainable procurement initiatives.

Opportunities for extending Government leadership

Government Buildings

- 24. Government undertakes a significant proportion of new building and retrofitting in New Zealand. Recent building activities by government agencies have started to have a noticeable impact on the market.
- 25. Twenty Govt³ agencies are currently engaged in the Govt³ buildings programme. A number of these agencies are planning to incorporate sustainable design elements into the specifications for their new buildings and the retrofitting of existing buildings.
- 26. Central government is a significant owner and lessee of commercial buildings. These buildings use between 20-25% of government's total energy use at an annual cost of \$110 million. Central government also has a significant role in new construction, responsible for 16% of commercial construction undertaken annually.
- 27. With the adoption of best practice, Govt³ agencies can dramatically reduce their buildings' energy consumption and greenhouse gas emissions over the buildings' lifetime. The Ministry for the Environment's new building uses 60% less energy than a comparable conventional building, saving approximately \$100,000 per year. New head offices for Statistics New Zealand and the New Zealand Defence Force are designed to use 50% less energy than industry norms. Although not a Govt³ member, Meridian Energy has designed its new head office to use 70% less energy than a conventional building.
- 28. While examples such as these are encouraging, best practice in sustainable building construction and renovation is not consistently applied by government agencies. More consistency could be achieved if building tender documents issued by Govt³ specified best practice sustainable building indicators (known as performance indicators). These indicators incorporate energy efficiency,

2. OECD, The Environmental Performance of Public Procurement (2003); US General Accounting Office, Federal Procurement, Better Guidance and Monitoring Needed to Assess Purchases of Environmentally Friendly Products (2001, GAO-01-430); House of Commons, Environmental Audit Committee, Greening Government 2003 (HC 961); Australian National Audit Office, Cross-Portfolio Audit of Green Office Procurement (ANAO no.22 2005-06); ICLEI Eco-Procurement Programme, Survey - the state of play of green public procurement in the European Union (July 2003).

- water conservation, site ecology, recycled content and low toxin building material use, indoor environmental quality, waste minimisation, the transport impacts of building location, and facilities for cycle commuters.
- 29. There is an opportunity for government agencies to require the installation of energy efficiency measures when leasing new buildings. The building developer would meet many of the up-front costs. While these costs are likely to be reflected in rent, they will also generally be justified by lower building operational costs for the tenant.
- 30. Commissioning is the process of ensuring that all of a building's features and systems (e.g. heating, air-conditioning, lighting and other environmental control technologies) are built and function as intended. International research has found that commissioning is one of the most cost-effective means of improving energy efficiency in buildings. Many of today's buildings contain highly sophisticated environmental control technologies that require careful supervision of installation, testing and calibration.
- 31. In New Zealand, commissioning is mainly confined to air conditioning and often ceases when construction is complete, before the handover of the building to the occupants. EECA research suggests that fewer than 50% of commercial buildings are commissioned. There is anecdotal evidence that New Zealand office buildings receive a poor level of commissioning resulting in higher than designed energy usage³.
- 32. The Ministry of Economic Development's Government Procurement Guidelines (*Policy Guide for Purchasers*) state that agencies should follow the principle of best value for money over whole of life when purchasing goods and services, including buildings. It is not a mandatory requirement. Whole of life costing can involve a more detailed procurement process and further training and education. Because of this and other capacity issues, a number of agencies have not adopted a whole of life costing when purchasing or leasing buildings, despite the significant savings available.
- 33. International research⁴ and Govt³ research⁵ indicate that an increase in up-front costs of 2-6% to support best practice building design will, on average, result in whole-of-life savings of 20% of total construction costs up to ten times the initial investment. Whilst it is unlikely that a government agency will occupy a building for the building's entire life (approximately 50 years), any additional costs can potentially be repaid well within average lease periods. For tenants, the 20 year rental premium for sustainable buildings is likely to be repaid by a factor of three from operating cost savings alone.
- 34. The perception within Govt³ agencies that longer lease periods are discouraged is creating a significant barrier to the adoption of best practice building practices in relation to leased buildings. Treasury advises that leases of six to nine years are common for existing buildings. Extending lease periods would enable Govt³

^{3.} Information provided by EECA suggests that the cost of providing commissioning is around \$4/m2 with savings expected to exceed \$3/m2 per annum.

^{4.} Source: Kats, G., Alevantis, L., Berman, A., Mills, E., Perlman, J., 2003: The Costs and Financial Benefits of Green Buildings, a Report to California's Sustainable Building Task Force

^{5.} Source: Fullbrook, D., Jackson, Q., Finlay, G., 2005: The value case for sustainable building in New Zealand, Ministry for the Environment.

- agencies to adopt more energy efficiency measures such as double-glazing, exterior shading devices, and renewable energy such as solar hot water and photovoltaic panels, some of which have longer payback periods. This opportunity needs to be balanced against agency operating requirements, the Crown's financial commitment and the flexibility offered by shorter leases.
- 35. There is currently no environmental rating tool for office buildings in New Zealand. A rating tool would enable government agencies to ensure that their new building design is meeting desired energy efficiency and environmental standards. After consultation with the building industry the New Zealand Green Building Council has decided to adopt the Australian Green Star Environmental Rating Scheme. Major gains in energy efficiency and greenhouse gas emissions reductions could be made if the government were to recommend a preferred rating standard to be achieved for all new government buildings or leases.
- 36. Taking account of the factors described above, the Ministry for the Environment is developing guidance material on best practice in sustainable building procurement and will provide it to Govt³ agencies by April 2007.

Government Transport

- 37. While the Govt³ agency vehicle fleet (11,000 light vehicles) represents a small proportion of the national fleet, there is an important opportunity for government to demonstrate leadership in this area. The cost and emissions savings obtainable from the government fleet are worthwhile, but the real value of a government commitment to purchasing fuel efficient vehicles is the potential influence on purchasing decisions for company fleets (231,000 cars and vans) and, in due course, vehicles owned by private individuals (2.4 million cars and vans).
- 38. Examples of Govt³ agencies that have procured smaller, more fuel efficient, lower-emissions vehicles include the Accident Compensation Corporation (95% of fleet vehicles under 2000cc), the Inland Revenue Department (98% under 2000cc) and the Ministry of Social Development (94% under 2000cc and 89% under 3 years old). Comprehensive data on government agency vehicles (size, usage, and operating costs) is not yet available, but information will improve with the advent of the Govt³ reporting framework (starting 2006/2007, refer paragraph 12).
- 39. The Govt³ transport programme will soon be working with government agencies to develop workplace travel plans. A workplace travel plan is a series of responsive, coordinated and planned activities to providing better informed travel choices for work-related travel, including commuting. Templates to help agencies prepare workplace travel plans will be available later this calendar year. Workplace travel plans help reduce greenhouse gas emissions and transport costs and improve the health of staff by increasing physical activity, a key objective of the Government's Healthy Eating Healthy Action Strategy. The Ministry for the Environment is leading this work in partnership with the Ministry of Transport.
- 40. A project has recently commenced offering all Govt³ signatories with fleets of over 50 vehicles a free fleet check audit. The project will calculate the existing average baseline for emissions and fuel economy, ascertain current use and

- requirements, and identify appropriate vehicles that offer better fuel economy, lower greenhouse gas emissions and better safety for the same whole-of-life cost or less. The project, due to finish in June 2007, has a budget of \$60,000.
- 41. Some existing agency guidelines already include standards for fleets such as fuel efficiency, vehicle size, emissions (the equivalent of Euro IV or better), fit for purpose analysis, lease periods and safety. Govt³ agencies using these standard guidelines are expected to achieve enhanced economic and environmental benefits.
- 42. Many government agencies also employ three-year lease arrangements. This term can preclude consideration of vehicles that have a higher initial cost but return significant operating savings throughout their lifespan.
- 43. Government domestic and international travel generates greenhouse gas emissions and there could be an opportunity to demonstrate leadership by measuring, reducing and offsetting these emissions through a carbon offset programme. Such programmes enable travel to be "carbon neutral" by offsetting emissions through tree planting.
- 44. One means of reducing greenhouse gas emissions from land transport involves supporting the use of biofuels, rather than fossil based fuels. Ministers will soon consider options for a mandatory biofuels sales obligation; there are similar policies in several other countries. A complementary policy to demonstrate the benefits of using biofuels blends could involve the government exhibiting leadership in its own vehicle fleets.
- 45. In 2007, Cabinet will receive a further report-back on government leadership in energy efficiency and reducing greenhouse gas emissions under the umbrella of the Govt³ programme.

Consultation

- 46. The Treasury, the Department of Building and Housing, State Services Commission, Ministry of Transport, the Energy Efficiency and Conservation Authority, Electricity Commission; Department of Prime Minister and Cabinet, Department of Internal Affairs, Ministry of Health and the Ministry of Economic Development have been consulted in the preparation of this paper, and their views have been incorporated where appropriate.
- 47. Govt³ agencies have been informed of the paper.
- 48. The Govt³ programme will continue to be developed in harmony with government's good practice procurement framework. Tools to support sustainable procurement will be created in partnership with both the Ministry of Economic Development, and the Procurement Advisory Group (an independent advisory group which has professional procurement representatives from central government, the health and education sectors, and State Owned Enterprises).

Financial implications

49. There are likely to be financial implications from the recommendations of this paper. For Government buildings, this may result in higher up-front capital costs, but better value over the whole of life of the buildings due to reduced operating costs. For government vehicles, there may be both reduced up-front

- capital costs and reduced costs of operation, leading to better value over wholeof-life.
- 50. Specific whole-of-life analysis would be required on a case-by-case basis to ensure better value over whole-of-life.
- 51. If Cabinet wishes to accelerate the adoption of energy efficiency and greenhouse gas emissions reduction measures within government agencies, further resources will be required. Such resources could allow both investment in projects for energy efficiency and greenhouse emissions reductions, as well as enhanced capacity within agencies to develop workplace travel plans and assess the value of specific projects.

Human rights

52. This paper is consistent with the Human Rights Act 1993.

Legislative implications

53. None.

Regulatory impact and compliance cost statement

54. A regulatory impact statement (RIS) and business compliance cost statement (BCCS) will not be required since this paper has no legislative implications.

Gender implications

55. None.

Publicity

56. We seek the Committee's agreement to public announcement of the package of work described in this paper, including Cabinet decisions, once Cabinet has made a decision on this paper.

Recommendations

As Minister for the Environment and Minister Responsible for Climate Change Issues, we recommend that Cabinet Policy Committee:

- 1. **Note** that government spending comprises the single largest share of the market in sectors such as roading, buildings, office supplies and IT equipment;
- 2. **Note** that government purchasing power can help drive cleaner production and improved cost-effectiveness over the whole life cycle of goods and services, as well as the development of low-emissions and energy efficient technology;
- 3. **Note** that the Govt³ programme has been operating since November 2003 and currently has a membership of 47 government agencies;
- 4. **Note** that the Govt³ programme enables government agencies to show leadership in improving energy efficiency and reducing greenhouse gas emissions, particularly in regard to buildings and transport;

- 5. **Note** that the Ministry for the Environment will provide Govt³ agencies with guidance on best practice in sustainable building procurement by 30 April 2007;
- 6. **Direct** Govt³ agencies to consider the following actions to accelerate the adoption of sustainable building practices:
 - a. Specifying best practice sustainable building indicators (performance goals) for government building tender documents for new buildings and renovations focusing on:
 - i. improving energy efficiency
 - ii. minimising the transport impacts by carefully considering building location and facilities
 - iii. improving water conservation
 - iv. improving the site ecology
 - v. improving recycled content and low toxin building material use
 - vi. improving indoor environmental quality; and
 - vii. improving waste minimisation facilities in buildings and during construction.
 - b. Undertaking pre-occupation and ongoing commissioning of building systems for their buildings, particularly where buildings are on net leases and/or are over 2000 square metres. Building commissioning is the process of ensuring that all the building features and systems are built and function as intended;
- 7. **Invite** the Minister for the Environment to report to Cabinet by 30 April 2007 with recommendations for appropriate environmental rating tool standards for government buildings;
- 8. **Note** that the Ministry for the Environment in partnership with the Ministry of Transport will provide Govt³ agencies with guidance on best practice in sustainable vehicle procurement and travel planning by 30 April 2007;
- 9. **Direct** Govt³ agencies to consider the following actions to accelerate the adoption of sustainable transport practices:
 - a. Adopt best practice vehicle procurement guidelines that improve fuel economy, safety and greenhouse gas emissions reductions;
 - b. Participate in fleet check audits;
 - c. Adopt workplace travel plans;
- 10. **Note** that a project has recently commenced offering all Govt³ signatories with fleets of over 50 vehicles the opportunity to undertake a free fleet check audit;
- 11. **Invite** the Prime Minister to send out the letter attached as Appendix 3 to Chief Executives of all Govt³ member departments with vehicle fleets of 50 vehicles or more;
- 12. **Direct** the Ministry for the Environment to work with Govt³ agencies to develop guidelines on how to measure, reduce and offset the carbon footprint associated with transport impacts by 30 April 2007;

- 13. **Agree** that fleet replacement and Govt³ building projects will take into account whole-of-life costing to ensure purchasing decisions are delivering best value over whole-of-life;
- 14. **Direct** the Ministry for the Environment and the Ministry of Economic Development in consultation with The Treasury to consider the impacts of recommended government lease periods for vehicles and buildings and report back to Cabinet with proposals by 30 April 2007;
- 15. **Invite** the Minister for the Environment and the Minister Responsible for Climate Change Issues to further report to Cabinet on progress towards Government leadership in energy efficiency and reducing greenhouse gas emissions under the Govt³ programme by 30 April 2007;
- 16. **Invite** the Minister for the Environment to report to Cabinet on Govt³ agency progress against eight key sustainability indicators, including indicators for energy efficiency, travel demand, procurement and waste by 30 April 2007.
- 17. **Note** that the Minister for the Environment and the Minister Responsible for Climate Change Issues propose to publicly announce the package of work described in this paper.

Hon. David Parker Hon. David Benson-Pope

Minister for the Environment Minister Responsible for Climate Change

Issues

Appendix 1: Related Government Activity in Emissions Reductions and Energy Efficiency

Agency	Area of Impact	Initiative	
Department of Building and Housing	Building	A recent Cabinet paper, "Additional Measures to Improve the Energy Efficiency of Buildings", identified opportunities to improve the energy efficiency of new and existing buildings in the areas of: thermal insulation in new residential buildings; solar heating for water; lighting systems in commercial buildings; heating, ventilation, and air conditioning systems in commercial buildings; and the provision of information to builders, designers and consumers.	
Ministry for the Environment	Building	The Warm Homes programme aims to ensure that New Zealanders heat their homes sufficiently, cleanly and efficiently. The programme aims to improve energy efficiency and achieve better quality housing.	
Energy Efficiency and Conservation Authority (EECA)	Building	Developing a Home Energy Rating Scheme. This scheme will result in an energy rating (comparable to the "star rating" system for appliances) for both existing and new homes. The scheme is being developed in conjunction with the Ministry for the Environment and the Department of Building and Housing.	
EECA and the Ministry of Transport	Transport	The fuelsaver website (www.fuelsave.govt.nz) provides public information about the fuel consumption of vehicles on the New Zealand market, including a calculator that enables users to calculate the fuel running cost of vehicles.	
EECA	Transport	Developing a vehicle labelling scheme to include fuel economy and greenhouse gas emissions. The fuel consumption programme aims to provide labelling information on new and used vehicles entering the fleet at the point of sale.	
Land Transport New Zealand	Transport	Developing a tool-kit to assist organisations to develop workplace travel plans, which aim to reduce the environmental footprint caused by travel and encourage agencies to look for alternatives to travel (eg video-conferencing, teleworking, etc).	
Ministry of Transport	Transport	Vehicle import controls for emission standards. This is subject to cabinet consideration and is one of a number of policy tools currently being investigated.	
Ministry for the Environment	Transport and urban design	Integrating transport into urban planning. Working with the central-local government transport sector on taking a city-regional development perspective with a particular emphasis on Auckland.	
Whole of Government	Climate Change	A series of climate change policy work programmes are under way. Policy proposals will be brought to Cabinet over the next few months. They include the transport initiatives identified above in addition to a number of proposals on preferred tools to reduce greenhouse gas emissions across sectors.	

Appendix 2: Examples of Government Sustainable Procurement Requirements

(Not comprehensive: focus is on strongest measures for each jurisdiction)

	New Zealand	Australia	UK & Europe	Asia	USA & Canada
Procurement policy	Guideline – best practise in procurement includes whole of life costing (MED). Voluntary – Govt ³ – sustainability policy & clauses included in new contracts (eg NZDF, NZ Police, ACC).	Mandated – federal agencies – annual reports include sustainable development performance. Guideline - federal agencies – adopt waste reduction and purchasing plans.	Mandated – UK – every department to have a sustainable procurement strategy by Dec 2005. "Quick wins" guidelines to be followed for all specified product areas.	Mandated – Japan and Korea - federal agencies – shall establish green procurement policies and preferentially procure specified ecolabelled products.	Mandated – USA – procurement plan & preference for EPA- designated environmentally preferable products. Mandated – Canada – sustainability reporting to include procurement.
Buildings	Voluntary – Govt ³ – improved energy efficiency (eg MfE, NZDF, Statistics NZ, DOC) Reporting on building energy use (from 2006/07).	Mandated – federal – minimum energy performance standards for all new buildings (leased or owned). Mandated – Victoria – all new accommodation to meet criteria for five Green Stars.	Target – UK – government office estate to be carbon neutral by 2012 & building emissions cut by 30% by 2020.		Mandated – USA –two year commissioning for government buildings to ensure energy efficiency Target – Alberta, Canada – 100% green power by 1998 for key agencies (subsidy available).
Transport	Voluntary – Govt ³ – procurement of vehicles includes fuel efficiency (eg, ACC, IRD & MSD). Reporting on transport energy use (from 2006/07).	Mandated – Victoria –requires transport demand management strategies for agencies. Target – Federal agencies – % of fleet in top half of Green Vehicle Guide from 18% to 28% by Dec 2005.	Mandated – eg UK, France, Austria, – vehicle taxes increase by increased engine size.	Mandated – Japan – 100% of government fleet to meet highest emission and energy efficiency standards.	Mandated – USA – vehicle taxes increase by increased engine size.
Energy	Mandated – minimum energy performance for specified equipment. Target – NEECS – 15% reduction in energy use.	Mandated – all new appliances purchased by agencies must meet Energy Star specifications.			Mandated – USA – federal agencies- all new computers to meet Energy Star specifications.

Appendix 3. Proposed draft letter from the Prime Minister to the CEOs of 22 Govt³ agencies with 50+ vehicles in fleet
[Letter will be made available once it has been sent]