Environmental performance and initiatives at Parliament in Public Administrative House

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Environmental management responsibilities at Parliament House

- The role of Department of Parliamentary Services (**DPS**) includes managing the environmental aspects of activities at Parliament House. We aim to report openly about our environmental performance and our priorities for making improvements.
- The Standing Committee on Finance and Public Administration's report, Annual Reports (No1 of 2008), speaks highly of our reporting on environmental performance, stating that:

"DPS presented in its annual report a clear account of its effect on the environment" and

"DPS details both its specific effects on the environment and the measures it adopted to improve environmental performance".

- The Committee has recommended that "agencies, where appropriate, adopt the practice of reporting on environmental impacts and mitigation measures as outlined in the 2006-07 annual report of the Department of Parliamentary Services..."
- 4 DPS sets challenging environmental targets in its Portfolio Budget Statements. This is the how we demonstrate our commitment to improving our environmental performance. Progress in meeting these targets is published on the APH website.

Water

Strategic plan

- 5 The DPS Water Strategic Plan 2007-2010 sets the priorities for saving water. These are:
 - (a) a reduction in building water consumption;
 - (b) a landscape that is drought tolerant and uses less water;
 - (c) a reduction in the use of treated mains water for non-drinking purposes; and
 - (d) to provide meaningful reports on water use and savings to building occupants.

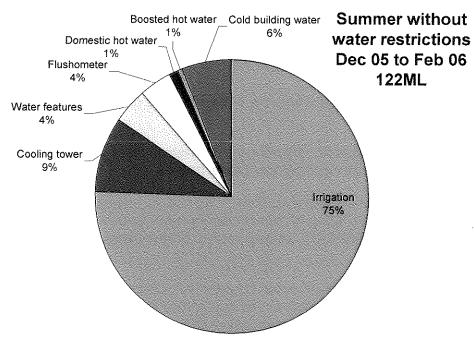
Saving water at Parliament House

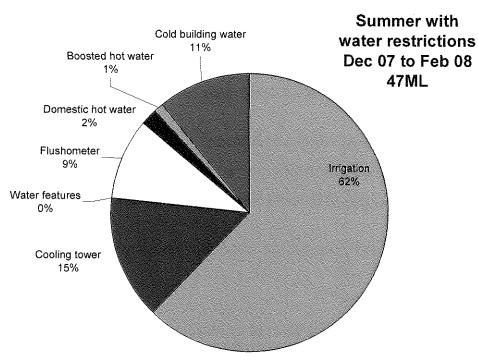
6 Parliament House is surrounded by approximately 23 hectares of landscape and gardens. Before water restrictions were implemented, 150

megalitres of water was typically used each year to maintain the grounds, including gardens, lawns and 21 external water features.

Since the introduction of Stage 3 Water Restrictions, Parliament House has reduced water use by more than 40%. In 2006-07, 224 megalitres of water was used in Parliament House and the parliamentary precincts. Up to the end of the third quarter of 2007-08, 108 megalitres has been consumed—this is 11% less than the Stage 3 target of 122 megalitres and 42% reduction compared to the same period in 2006-07. The introduction of water restrictions has changed the way water is used, but irrigation is still the primary area of usage.

Figure 1 – Water use breakdown





- To achieve the reductions required under Stage 3 Water Restrictions (35% reduction of the 2005-06 period prior to introduction of restrictions), all external water features were switched off; the dumping of water from air conditioning cooling towers was postponed; seasonal planting of annuals did not occur and watering of the recreational oval was decreased significantly (rendering it unusable at times). Further water savings were achieved by discontinuing the irrigation of nine hectares of gardens and lawns, including the gardens on either side of the ministerial entrance, resulting in the loss of around 8,000 shrubs and trees.
- Watering priority was given to some turfed areas and internal courtyards, particularly the lawn on the roof of Parliament House. Nevertheless, savings were also made in these areas. There was a 3% reduction in irrigation to the turf on the ramps, 5% reduction in the courtyards, 15% reduction to the formal gardens and 25% reduction to all buffalo grass areas (tennis court lawns and two viewing strips in the south-east corner of the landscape).
- In bathrooms, all showers are fitted with AAA showerhead. Sensor taps and dual flush toilets have been installed during the public toilets refurbishment project. Raising the cooling set point has also helped save water.

Continued water savings

- Other measures that will be introduced by DPS to ensure Parliament House becomes less reliant on water into the future include:
 - (a) drought resistant plants to replace those that were lost during the drought;
 - (b) consideration of replacing lawns with warm season grasses such as buffalo and couch grass and using native grasses in areas that do not receive heavy traffic. Zoysia grass is also being trialled for use in the internal courtyards. These new grasses are expected to use only half the amount of water the current turf varieties use;
 - (c) drip irrigation in shrub beds, in combination with wetting agents, will be trialled in the coming months;
 - (d) additional water meters will be installed so more detailed information on consumption can be provided;
 - (e) low water use urinals are being introduced; and
 - (f) investigation into the feasibility of using recycled water.

Energy

Strategic Plan

- 12 The DPS Energy Strategic Plan 2007-2010 sets the priorities for energy savings. These are:
 - (a) to achieve energy savings consistent with the efficient operation of Parliament House;

- (b) ensure that Parliament House is not interrupted by failure of ageing energy plant and equipment and continues to operate essential services if there is a failure of the electricity and gas supply; and
- (c) to provide meaningful reports on energy use and savings to building occupants and others.

Lighting

- Phasing out incandescent lamps is an ongoing priority. Recently, compact fluorescent lights were installed in general circulation corridors and areas. Trials are continuing to identify more energy efficient lamps for other areas, including offices.
- A project to revise the lighting scheme in the landscape will result in the use of 40% less energy compared to the existing scheme.
- 15 Work continues on ensuring lights are only switched on when they are needed, particularly:
 - (a) reprogramming the times that lights switch on and off;
 - (b) installing additional photo-electric cells; and
 - (c) incorporating occupancy sensors and push-button timers into refurbishment projects and areas where lights being left on is a continuing issue.

Energy audit

An energy audit of Parliament House, in accordance with the Australian Standard AS/NZS 3598:2000 Energy Audits, is scheduled to begin in June 2008 (the contract negotiations are being finalised). DPS has set an objective of implementing measures to achieve a 10% decrease in consumption compared to 2005/06, over the three year period 2007-2010. This will ensure that the downward trend in annual energy consumption continues (**Figure 2**).

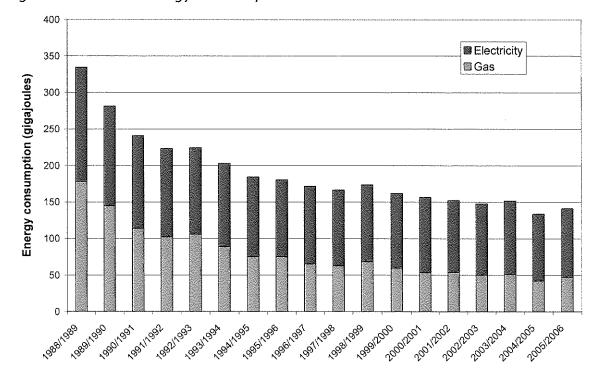


Figure 2 - Annual energy consumption

Green Vehicle Guide

On 31 October 2007, the price cap for vehicles made available under the Executive Vehicle Scheme was raised by \$1,000 for any vehicle identified as fuel efficient in the Green Vehicle Guide. The purpose of this financial determination was to encourage SES officers to consider the Green Vehicle Guide in their vehicle selection.

Cooling set-point for the heating, ventilation and air-conditioning (HVAC) system

DPS raised the cooling set point from 22 to 24°C (eg the temperature at which the HVAC system begins to cool the air) in some areas of Parliament House for the 2007-08 summer months. The intention behind this initiative was to save water, but minimising the temperature difference between outside and indoor air means that less energy should be needed for cooling.

Renewable electricity

19 Under the contract for the supply of electricity, 25% of total electricity consumption at Parliament House is from "new" green (renewable) and "old" green (Snowy Hydro) energy. This helped reduce greenhouse gas emissions by 13% in 2006-07.

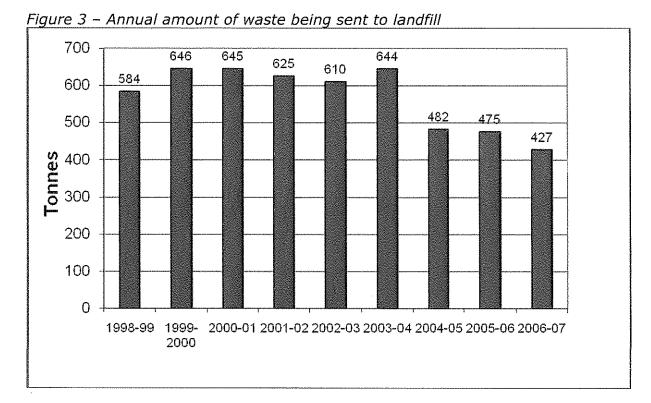
Continued energy savings

- 20 Initiatives for making on-going energy savings include:
 - (a) switch-off and standby settings, including a trial of uniform hibernation settings across the computers linked to the parliamentary network;

- (b) reviewing time programs and switching mechanisms for lighting and air-conditioning; and
- (c) ensuring energy efficiency is integral in asset replacement decisions. DPS currently has a once in 20-year opportunity to make significant savings through replacement or refurbishment of ageing engineering infrastructure.

Waste

- 21 DPS provides facilities to recycle:
 - (a) paper;
 - (b) cardboard;
 - (c) co-mingled materials—glass, aluminium, steel, plastic and cartons;
 - (d) printer cartridges;
 - (e) mobile phones;
 - (f) batteries;
 - (g) fluorescent tubes and other lamps; and
 - (h) IT equipment.
- 22 Most landscape (green and woody) waste is mulched and used on-site with the remainder being composted off-site.
- 23 Building occupants have been able to participate in a voluntary co-mingled recycling scheme since 4 February 2008. To date we have had the following responses to join the scheme:
 - (a) 26 Senate suites;
 - (b) 17 House of Representatives suites;
 - (c) 15 Ministerial suites;
 - (d) 37 DPS work areas; and
 - (e) one press gallery office.
- Co-mingling bins have also been placed in all communal kitchens and lunch rooms.
- Over time there has been a decrease in the amount of material being sent to landfill (Figure 3).



Other waste management initiatives

- Putrescible waste (eg vegetable, fruit, meat, other food scraps and handtowel) from Parliament House currently goes to landfill. DPS is discussing opportunities for recovering and recycling putrescible waste with the waste contractor, SITA.
- 27 DPS is now procuring 100% recycled content copy paper, at a cost increase of approximately 27%. The department aims to reduce paper use to help cover the additional cost of the recycled content copy paper.
- 28 Since December 2007, all catering contractors provide cardboard cups, which can be recycled.

Continued improvements

- Preliminary results of an audit of the waste from Parliament House office areas indicated that 659 kilograms (**kg**) off general waste, 1,585 kg of paper waste and 61 kg of co-mingled material is generated on a sitting day. There was a significant amount of paper (37%) and co-mingled material (34%) in the general waste stream, going to landfill. DPS wants to raise awareness amongst occupants about the environmental impacts of this contamination, and encourage recycling.
- 30 DPS is also working on providing visitors with recycling facilities, and occupants and the catering contractors with options for organics recycling.

