




REPORT ON AN AUDIT/ASSESSMENT OF ACT GOVERNMENT AGENCIES' ENVIRONMENTAL PERFORMANCE REPORTING

22 October 2010

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Commissioner for Sustainability and the Environment

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Executive summary and recommendations

This report presents findings from an audit/assessment of ACT Government agencies' environmental resource use reporting, including the accuracy of data reported and makes recommendations to assist the ACT Government and government agencies. It fulfils the Commissioner's role of scrutinising Resource Management Plans (RMPs) under *Weathering the Change: Action Plan 1* 2007–11.¹

The requests of the ACT Legislative Assembly's Select Committee on Estimates regarding the Commissioner's assessment of government environmental resource use² is also met by this report.

Although this report focuses on resource use reporting, the fundamental use of reporting should be to manage the resource being reported.

The ACT Government has committed to a goal of zero net greenhouse gas emissions for the ACT with interim targets of:

- reducing greenhouse gas emissions by 40 per cent by 2020 based on 1990 levels
- reducing greenhouse gas emissions by 80 per cent by 2050 based on 1990 levels.³

If the ACT Government is to gain the support of, and engage the community in actions to achieve these targets it is important that its agencies be exemplary in taking actions to reduce their greenhouse gas emissions and be able to show the results of their actions through effective reporting. The ACT Government in July 2007 committed to achieving carbon neutrality in its own buildings and services by 2020. Between 2006 and 2008, emissions from electricity use in the ACT Government increased by about 15 per cent.⁴

Not only is it important to understand the source and total energy used by the government but a comprehensive understanding of where, how and when the energy is used allows for a focused systematic approach to energy management. The same applies to all other types of environmental resources. Data on whole-of-government environmental resource use is essential to tracking progress; however, such data are not readily available.

In developing environmental resource reduction and management actions, consideration needs to be given to different agencies activities, potential and community priorities. For example, Roads ACT, ACT Health (Canberra Hospital) and the Department of Education are all high energy users. These agencies have all undertaken work to improve their resource use efficiency and reduce their emissions. However, these agencies are likely to remain high energy users due to the

¹ This audit/assessment was conducted similarly to a commissioner initiated investigation as outlined in the *Commissioner for the Environment Act 1993*, <http://www.legislation.act.gov.au/a/1993-37/default.asp>

² <http://www.hansard.act.gov.au/hansard/2009/comms/estimates08.pdf>, pp1052–53

³ ACT Government Climate Change Greenhouse Reduction Bill, August 2010, http://www.legislation.act.gov.au/b/db_39279/default.asp

⁴ Data sourced from pitt&sherry OSCAR Project Report, 2009

nature of their activities. Accordingly, options to reduce their energy use might be limited and a focus on alternative technologies and offsets may be needed.

As each agency has different activities, environmental resource use will vary; therefore each agency needs to be involved in determining its own resource efficiency and emission reduction priorities and actions. However, there also needs to be a whole-of-government approach to environmental resource management that includes tracking progress in a way that is strategic, accountable and transparent. Whole-of-government data and reporting on the environmental resources being used, and where, would facilitate progress in improving management of environmental resources and provide information for strategically targeting actions.

ACT Government Environmental Resource Management Strategy

While there is a government commitment to advance initiatives to manage environmental resources more efficiently, this has often taken considerable time to be realised by agencies. One reason for this seems to be the lack of an overarching environmental resource management strategy. Work has only recently begun on a strategic, whole-of-government approach to carbon neutrality. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, needs to be completed as a matter of high priority. Such a strategy should include whole-of-government and agency targets; pathways to reduce and better manage environmental resource use; and reporting requirements and accountabilities.

Given the government's strong commitment and the importance of taking action, particularly as financial gains can often be achieved in addition to environmental, Chief Executives should be responsible for addressing all aspects of environmental resource management. The Chief Executive Management Council (CEMC) offers an opportunity to ensure Chief Executives focus on managing their environmental resources and as such this could be a standing agenda item for this group's meetings.

An important component of a whole-of-government strategy would be RMPs. The target for implementation of RMPs by 2009 has not been met; only the Department of the Environment, Climate Change, Energy and Water (DECCEW) has completed its RMP within the timeframe. However, as at 30 May 2010, four other RMPs were in draft form and all other agencies were on track to complete their RMPs in 2010-11.

DECCEW's RMP has been circulated within ACT Government agencies to provide guidance on the key areas that need to be covered in agency RMPs.⁵ However DECCEW has not developed and promulgated guidelines for RMPs. These would assist agencies and should be completed as a matter of high priority. Work already done within agencies and in other jurisdictions could assist with this.

DECCEW's inclusion of an energy consumption target for 2011 is applauded. Developing targets for all environmental resource use in future reports should be required of all agencies. It is important to ensure that the sum of agency targets equals the whole-of-government target. For this reason, DECCEW should work with

⁵ D Papps, Chief Executive, DECCEW, Letter to Commissioner, 5 March 2010

each agency to develop targets, which reflect the resource needs, potential and community priorities of agencies.

The Energy Efficiency Fund commenced 7 November 2007, with the first round of applications closing in mid February 2008. Two applications from the Canberra Institute of Technology and one from Canberra Stadium were approved, worth a total \$128,000. These applications were for cogeneration, heating and energy audits. However, there has been limited progress beyond this.

In 2005, seventeen audits of government buildings were conducted which identified costs, savings and calculated payback time for energy efficiency improvements. With the establishment of the Energy Efficiency Fund, some of the recommendations of these 2005 audits could have been implemented more easily; however, there are no reports of this occurring.

The Energy Efficiency Fund has been reviewed and renamed the Resource Management Fund. It now supports funding for a wider range of projects to deliver resource efficiencies, innovative technology systems, improved data collection and reductions in greenhouse gas emissions. The Fund is important as it allows agencies the opportunity to undertake minor capital works to improve resource use efficiency. This should be continued with RMPs being a pre-requisite for accessing the fund.

A Green Lease Schedule is a tool to facilitate environmentally beneficial practices and outcomes associated with the leasing of buildings. These provide guidance and information for a collaborative approach to improve operational activities. The ACT Government agency responsible for the green leasing policy and development is the Department of Land and Property Services (LAPS).⁶ A number of lease renewals in the ACT are in progress and landlords will be approached to implement a Green Lease Schedule within the new leasing arrangements. This should continue to be progressed as leases are renewed across the ACT Government.

The Property Sustainability Working Group (PSWG) is open to all agencies and generally attended by representatives from most agencies. As a result, it has considerable potential to progress effective environmental resource management across government, through information sharing. It would also be the appropriate body to report agency and whole-of-government progress on environmental resource management to the CEMC on a regular basis.

Data collection and coordination

Data on whole-of-government and agency resource use are essential for developing targets, management strategies and tracking progress. Data collection and coordination needs to be addressed as a matter of high priority. While there has been progress, given its importance, current inadequacies need to be addressed soon.

Data recorded in the Online System for Comprehensive Activity Reporting (OSCAR), metered by ActewAGL and reported in annual reports were found to be inconsistent and incomplete, resulting in gaps and discrepancies. For example, electricity data reported in OSCAR between 2006 and 2008 were consistently under half that

⁶ http://www.laps.act.gov.au/projects_and_initiatives/environment_and_sustainability/green_leasing_policy

recorded by ActewAGL for whole-of-government consumption. Units for reporting measurements varied across agencies, contracts and reporting systems.

Reporting of environmental resource use through OSCAR usually only occurs once a year for Annual Report purposes. Although training in OSCAR is offered 'on-demand' by DECCEW, staff often need annual refresher training in order to recall processes. As there is often a lack of consistency of staff who enter data, there is often a lack of understanding of OSCAR's potential and its requirements; and the available training.

Despite the difficulties agencies faced using OSCAR; agencies also respect the value of such a system. ACT Health stated that it is 'a convenient tool for collating and calculating greenhouse gas emissions'⁷ and Chief Minister's Department (CMD) referred to the 'ease with which outputs are provided for inclusion in Annual Reports and other required reporting'.⁸

Data collection is decentralised, generally undertaken by each agency. This creates the opportunity for inconsistencies and errors. Only a limited amount of information is collected centrally. The changing nature of government, with agency restructures and evolving activities and responsibilities can add to the challenge in reporting on environmental resource use. It is, for example, very difficult to compare total energy use from one year to the next if an agency has grown or reduced in staff numbers or the number of buildings for which it is responsible has changed. Accordingly, this makes whole-of-government reporting particularly important.

Centralising data collection and coordination is likely to improve the quality of data across government. DECCEW is currently responsible for managing the ACT Government's access to OSCAR, which captures some environmental resource use data. This should be extended to include all resource use data with support being given by LAPS. LAPS is responsible for managing government buildings and accommodation and has a significant amount of energy and water data for a range of government buildings. However, for quality control and efficiency other agencies should no longer directly enter their data into OSCAR unless accredited for OSCAR use by DECCEW. It is important that centralising data collection and coordination does not centralise responsibility and accountability for the actual use of resources. Agencies would need to provide relevant environmental resource data to DECCEW in a timely manner and maintain accountability for their own use as well as having an understanding of their data. It is important that agencies continue to have access to OSCAR to view data and generate reports for their use. Enhancing OSCAR to align with reporting requirements, which might include modifying formats and units for measuring resources, could also improve data. While the Australian Government will be responsible for some of the needed changes to OSCAR, the ACT Government should promote these changes.

Smart metering might facilitate greater accountability and ownership of energy data and use by agencies. Smart meters log building energy data (usually electricity

⁷ Letter, 17 March 2010

⁸ Letter, 17 March 2010

although there are also smart meters for gas and water) at frequent intervals and make data available remotely. This should allow agencies to monitor and, therefore, directly manage their energy use. Agencies in multi-tenanted leased buildings can use smart metres to monitor their environmental resource use performance separately to other tenants and thereby gain an accurate understanding of what they are using rather than apportioning use from the total use of resources of all tenants. This would have advantages in enabling better practice to be adopted with regard to heating, ventilation and air conditioning systems and would identify particular areas for potential improvement. It may also encourage greater accountability and engagement within an agency on its energy use. Online 'real time' reporting through smart meters should be encouraged as part of an ACT Government environmental resource management strategy.

Reporting

The ACT Government has a long history of environmental performance reporting and continues to build on this. To be effective, reporting needs to be complete, transparent, comparable and accurate. However, work is needed to significantly improve data collection and address gaps in reporting. Improving data collection will improve the accuracy and comparability of information.

There is currently no whole-of-government reporting on environmental resource management. Without this, progress towards carbon neutrality is difficult to assess. A whole-of-government statement on environmental resource management should be produced annually either through DECCEW's annual report or in a standalone report.

Agency reporting on environmental resource management is primarily undertaken through annual reports. However, compliance varies and there is a lack of accuracy and consistency in the data reported. Annual reports require environmental resource management data in Section A.10 Triple Bottom Line Report and Section C.21 Ecologically Sustainable Development (ESD).

The Chief Minister's Directions on Annual Reports 2007–10 state that 'Ecologically Sustainable Development means the integration of economic, social and environmental considerations in decision-making process'.⁹ However, this is not reflected in the C.21 Ecologically Sustainable Development reporting section. The template provides for effective reporting on environmental resource use in government operations but does not seek details of the integration of economic, social and environmental considerations in decision-making processes. Furthermore, agencies tend to focus on completing the template while not providing qualitative descriptions of programs or processes implemented that improve environmental resource management or progress towards ESD. However, the template in this section has significantly improved reporting on environmental resource use, which has resulted in a more complete dataset for 2007–08 and 2008–09.¹⁰ There are gaps in

⁹ Annual Report (Government Agencies) Notice 2010 (No. 1) 16 June 2010: Chief Minister's 2007–10 Annual Report Directions, <http://www.legislation.act.gov.au/ni/2010-308/current/pdf/2010-308.pdf> p38

¹⁰ Green Steps report: *Energy and Water Usage Reporting Practices of ACT Government Departments*

the data reported, in particular air travel and putrescible waste data, which should be addressed. The table should be identified as reporting only on environmental resource use rather than a complete ESD report. Progress against RMPs should also form part of annual reporting.

The Section A.10 Triple Bottom Line Report in annual reports is in its early stage and as such provides an opportunity to realise the intent of Section C.21, which was to report on ecologically sustainable development. To be an effective reporting and comparison tool for all ACT Government agencies, both qualitative and quantitative information should be pursued. Section A.10 Triple Bottom Line Reporting should be improved by reporting on the integration of sustainability into decision making, and including the issues required under section 158A *Environmental Protection Act 1997* for annual reports.

Recommendations

To assist the ACT Government and government agencies better report on and manage their environmental resource use, the following five recommendations are made:

ACT Government Environmental Resource Management Strategy

- 1. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, should be developed and published as a matter of high priority.**

DECCEW should be responsible for developing, fostering the implementation of, and monitoring the strategy, which should include:

- a. Time-related targets for environmental resource use for the whole-of-government and for individual agencies. Targets should be set on a triennium basis and reviewed periodically.

DECCEW, in consultation with agencies, should be responsible for fostering the development of targets and ensuring that the sum of agency targets equals a whole-of-government target.

- b. Preparing and publishing an annual environmental resource use statement with quantifiable data and progress towards targets.

This statement should be produced by DECCEW and be part of its annual report or be in a standalone document to be published concurrently with annual reports.

- c. Adopting a centralised data collection and coordination process (see Recommendation 3).

- d. The Chief Executive Management Council receiving quarterly reports on progress against agency and whole-of-government targets and on the implementation of actions. Environmental resource use could be a standing agenda item at their meeting. The Property Sustainability Working Group should develop the quarterly report.

- e. Reporting on an assessment of whole-of-government progress in the ACT State of the Environment Report.

The Commissioner for Sustainability and the Environment should do this.

2. Environmental resource management plans for all ACT Government agencies should be finalised and published by 31 December 2010.

Chief Executives should be responsible for addressing all aspects of environment resources management in their agencies.

Resource management plans should:

- a. Be signed off by the Agency's Chief Executive and published on its website.
- b. Be updated and published annually and concurrently with Annual Reports.
- c. Incorporate provisions of Green Lease Schedules.
- d. Be based on a consistent across-government process for data collection and coordination (see Recommendation 3).
- e. Include recommendations from environmental resource use related audits undertaken for an agency, or of its accommodation, and include responses to audit recommendations.
- f. Be a pre-requisite for all applications to the Resource Management Fund after 31 December 2010.
- g. Be updated following the development of agency targets.
- h. Be subject to audits.
- i. Be supported by:
 - Guidelines. These should be developed by DECCEW.
 - Continuing to install smart meters to improve understanding of energy use and better target actions. This should continue to be a LAPS responsibility.
 - Existing smart meter infrastructure being connected to allow data capture and monitoring. This should be an InTACT responsibility.

Data collection and coordination

3. Data collection and coordination should be centralised as a matter of high priority.

As part of this process:

- a. Data collection and entry into OSCAR should be the responsibility of DECCEW with support from LAPS. This should be undertaken quarterly. Other agencies should no longer directly enter data into OSCAR unless accredited to do so by DECCEW. However, they should provide all relevant environmental resource management data to DECCEW, in a

timely manner, and continue to have access to OSCAR to view data and generate reports for their own use.

- b. OSCAR data should be verified and monitored by DECCEW so that timely corrective actions can be undertaken by agencies in an agreed, specified timeframe. Failure to implement agreed timeframes for corrective actions should be reported in the whole-of-government environmental resource use annual statement.
- c. Quarterly reports should be provided to agencies on their environmental resource use. This should be a DECCEW responsibility.
- d. Agencies would continue to report their environmental resource use in Annual Reports and resource management plans.
- e. The accuracy and completeness of data reported in OSCAR should be independently audited on a triennium basis.

4. The Online System for Comprehensive Activity Reporting (OSCAR) should be enhanced.

This should include modifying OSCAR so that:

- a. Automated data entry from spreadsheets or other file formats can be accepted.
- b. Smart meter data can be accepted.
- c. Conversion formulae are included to allow data to be recorded in consistent units and to provide transparency for 'lay' users.
- d. Information is in a format that can be directly placed into Annual Reports, resource management plans and triple bottom line reporting.

These modifications would need to be implemented by the Australian Government; however, DECCEW should promote the recommended actions.

Reporting

5. Environment resource use, ecologically sustainable development and triple bottom line reporting required in annual reports should be reviewed.

The Chief Executive of the Chief Minister's Department should progress this as CMD has accountability for Annual Report Directions. This should include:

- a. Ensuring that the table in Section C.21 Ecologically Sustainable Development is identified as reporting on environmental resource use, and progress against agency targets and implementation of actions in RMPs are required to be reported. The reported environmental resource use indicators should be assessed and in so doing air travel and waste putrescibles should be considered for inclusion.
- b. Integrating reporting requirements for ecologically sustainable development (currently under Section C.21) and triple bottom line (currently Section A.10) in a manner that ensures the requirements in

section 158A of the *Environmental Protection Act 1997* are respected. Qualitative and quantitative information should be included.

1. Context

1.1 Background

This audit/assessment fulfils the Commissioner's role of scrutinising Resource Management Plans (RMPs) under *Weathering the Change: Action Plan 1* 2007–11.¹¹

Action 2: Pursue Carbon Neutrality in Government Buildings:

Resource Management Plans will be developed by all ACT Government agencies and will be in place by 2009. They will identify cost-saving opportunities, help agencies monitor energy and water use and waste production and implement emission-reduction activities. Agencies will report annually on their progress.

These Plans will be useful tools in guiding expenditure of the Energy Efficiency Fund as outlined in the 2007–08 Budget and will be subject to scrutiny by the ACT Commissioner for the Environment.¹²

The Commissioner was questioned on this Action in Estimates (26 May 2009) and in relation to the government's progress towards carbon neutrality in government buildings. Other questions relating to the Commissioner's assessment of government resource use were also raised.¹³

In June 2009, the government response to the Report of the Select Committee on Estimates 2009–10 on the Appropriation Bill 2009–10 regarding Recommendation (50)¹⁴ was that 'the Commissioner will be commencing an ACT Government agencies Environmental Performance [reporting] audit/assessment in the future'.¹⁵

This report meets the requests of the Committee and respects the government's response.

¹¹ This audit/assessment was conducted similarly to a Commissioner initiated investigation as outlined in the *Commissioner for the Environment Act 1993*, <http://www.legislation.act.gov.au/a/1993-37/default.asp>

¹² *Weathering the Change: Action Plan 1*, 2007–11, Action 2, http://www.environment.act.gov.au/climate_change/weathering_the_change/Climate_Change_Action_Plan.pdf, p13

¹³ Legislative Assembly for the ACT, Select Committee on Estimates 2009–10 (Reference: Appropriation Bill 2009–2010), transcript of evidence, <http://www.hansard.act.gov.au/hansard/2009/comms/estimates08.pdf> pp1052–53

¹⁴ Recommendation 50 stated 'The Committee recommends that the *Commissioner for the Environment Act 1993* (ACT) and the *Environment Protection Act 1997* (ACT) be amended to grant the Commissioner for Sustainability and the Environment the power to audit in relation to sections of annual reports prepared under section 158A of the *Environment Protection Act 1997*.'

¹⁵ Government response to the report of the Select Committee on Estimates 2009–10 on the inquiry into the Appropriation Bill 2009–10, <http://www.parliament.act.gov.au/downloads/reports/7th%202009-10%20Estimates%20Report.pdf>

1.2 Terms of reference

The terms of reference (Appendix 1) for this audit/assessment of ACT Government agencies environmental performance reporting are that the Commissioner will prepare a report that:

- scrutinises public reporting (including in annual reports) by ACT Government agencies, corporations and statutory entities (agencies) covering the last five years, with respect to their use of energy and water use, waste production, and transport resources
- audit/assesses agency compliance with existing government reporting requirements
- identifies key actions to reduce the consumption of resources, being progressed, if applicable, but not reported, and identify reasons for this
- identifies opportunities for improving Resource Management Plans and their guidelines
- highlight ways to advance the ongoing implementation, and continuous improvement of Resource Management Plans.

With respect to the first term of reference, sufficient information was gained from scrutinising the annual reports of the major agencies to identify systemic issues to be addressed. Accordingly, other than the ACT Planning and Land Authority (ACTPLA) and the Land Development Agency (LDA), corporations and most statutory entities were not considered. The LDA is now part of the Department of Land and Property Services (LAPS) portfolio, however, given that the LDA had already undertaken several initiatives, particularly with regard to development of a (RMP), it is considered in this report.

Since the terms of reference for this audit/assessment were established in August 2009 the ACT Auditor-General's Office released a performance audit report on Performance Reporting in April 2010¹⁶ and the ACT Legislative Assembly Standing Committee on Climate Change, Environment and Water's report on Annual Reports has been released.¹⁷ This audit/assessment differs from these other reports in that it considers the accuracy and consistency of information being reported.

1.3 Method

Staff of the Office of the Commissioner for Sustainability and the Environment, with assistance from the ANU Green Steps program, conducted the audit/assessment of ACT Government environmental performance reporting. It included:

- analysing reports on ecologically sustainable development (ESD) indicators in agency Annual Reports from 2004 to 2009

¹⁶ ACT Auditor-General's Office Performance Audit Report: Performance Reporting, April 2010
<http://www.audit.act.gov.au/auditreports/reports2010/Final%20Report%208%20April%202010.pdf>

¹⁷ ACT Legislative Assembly Standing Committee on Climate Change, Environment and Water, annual and financial reports (Climate Change, Environment and Water) 2008–09
<http://www.parliament.act.gov.au/committees/index1.asp?committee=112&inquiry=851>

- assessing existing or draft agency RMPs, namely the Department of the Environment, Climate Change, Energy and Water (DECCEW), LDA, Treasury and the Dickson Motor Vehicle Registry
- seeking information from agencies in writing
- reviewing various reports and recommendations from the ACT Auditor-General and the ACT Legislative Assembly
- collating existing ACT Government policies
- attending Property Sustainability Working Group (PSWG) meetings
- consulting with agency staff on resource use reporting
- assessing relevant existing reports, data and initiatives in the ACT
- accessing data recorded in the Online System for Comprehensive Activity Reporting (OSCAR)
- considering environmental performance reporting and environmental management plans of other Australian jurisdictions and organisations.

This Office also commissioned an analysis of the energy and water use of ACT Government agencies through an ANU Green Steps internship. This resulted in the document *Energy and Water Usage Reporting Practices of ACT Government Departments* (Appendix 2), which was peer reviewed. Key findings of this report include:

- Significant missing and inconsistent data in reporting
- OSCAR issues including discrepancies between OSCAR and Annual Reports and whole-of-government energy consumption data (Appendix 2, Table 5)
- Barriers to collecting, collating and reporting data
- Difficulties in developing baselines upon which to build reduction activities.

The report also offered a number of recommendations that have informed the recommendations provided in this report.

1.4 Scope

The following ACT Government agencies were contacted regarding this audit/assessment as they form the General Government Sector Departments as identified in the 2009–10 Budget Paper:¹⁸

- ACT Health
- ACT Planning and Land Authority (ACTPLA)
- Chief Minister's Department (CMD)
- Department of Disability, Housing and Community Services (DHCS)

¹⁸ ACT Department of Treasury, *Classification of ACT Entities*, http://www.treasury.act.gov.au/budget/budget_2010/files/paper3/appendix/entities.pdf 2009–10 Budget Paper No. 3, Appendix D

- Department of Education and Training (DET)
- Department of Justice and Community Safety (JCS)
- Department of Territory and Municipal Services (TAMS)
- Department of the Environment, Climate Change, Energy and Water (DECCEW)
- Department of Treasury
- Department of Land and Property Services (LAPS: established December 2009 and includes in its portfolio the Land Development Agency [LDA])

1.5 Environmental performance reporting history

The ACT Government's commitment to environmental performance reporting principals, and in particular environmental resource management reporting, have been shown by the various requirements and guidelines that have been developed for many years, as outlined in Table 1.

Environmental resource management reporting has also been undertaken through the *Measuring Our Progress* report in 2004 and the 2010 updated *Measuring Our Progress* website and report card, the Ecological Footprints in 2004 and 2007 and through State of the Environment Reporting. However, these reports focused on environmental resource use for the whole of the ACT and did not separate government environmental resource use.

Table 1: ACT Government environmental performance reporting history

Year	Document/Action
1998	Ecologically sustainable development requirements introduced into annual reports ^a
2001	First Government Energy Consumption Report (EDGAR) produced. ^a This was repeated for 2002–03 and 2003–04. No further whole-of-government energy reports have been produced.
2003	Ecologically sustainable development annual report directions included into the <i>Environmental Protection Act 1997</i> (section 158A) 'People, Place, Prosperity: A policy for sustainability in the ACT' was launched by the Chief Minister. It was a statement of the government's policy on sustainability and included 'embedding sustainability within its decision-making processes ... and; developing indicators and reporting regularly on progress.' ^b
2004	The <i>Annual Reports (Government Agencies) Act 2004</i> provided for directions which are issued as a notifiable instrument and are refreshed annually to account for variations to reporting requirements. This includes ecologically sustainable development reporting.
2005	ACT Auditor-General's Office Performance Audit Report, Reporting on Ecologically Sustainable Development, which outlined a number of recommendations to improve ecologically sustainable development reporting.
2007	The ACT Government launched the climate change strategy <i>Weathering the Change</i> ^c to replace the ACT Greenhouse Strategy 2000 and to complement the ACT sustainability plan People, Place, Prosperity. ^b The Strategy is implemented through a series of action plans. Action 2 of <i>Weathering the Change: Action Plan 1 2007–11</i> outlines the government's commitment to 'pursue carbon neutrality in government buildings.' ^d
2009	People, Place, Prosperity, the ACT's Sustainability Policy is released. It revised the 2003 policy and includes a commitment to triple bottom line annual reporting. Triple Bottom Line Report for the Chief Minister's Department – The Chief Minister's Department produced a pilot triple bottom line report for 2008–09, which details the department's economic, social and environmental outcomes.
2010	ACT Chief Minister's Annual Report Directions 2007–11 are updated to include a triple bottom line reporting requirement. ESD reporting is maintained. Both sections include resource use reporting. ACT Auditor-General's Office; Performance Audit Report, Performance Reporting included an audit of ecologically sustainable development reporting in annual reports.

Sources: ^a From ACT Auditor-General's Performance Audit Report;

^b March 2003 'People, Place, Prosperity: A policy for sustainability in the ACT'

http://www.cmd.act.gov.au/_data/assets/pdf_file/0003/119730/people_place_prosperity.pdf;

^c *Weathering the Change*,

http://www.environment.act.gov.au/climate_change/weathering_the_change/Climate_Change_Strategy.pdf

^d *Weathering the Change: Action Plan 1 2007–11*, Action 2, p13,

http://www.environment.act.gov.au/climate_change/weathering_the_change/Climate_Change_Action_Plan.pdf

1.5.1 ACT Auditor-General's Office performance audit reports

In July 2005, the ACT Auditor-General's Office produced the Performance Audit Report, *Reporting on Ecologically Sustainable Development*, which included suggested improvements to guide agencies on how and what data to report (Appendix 3).¹⁹ The Performance Audit Report suggested that agencies should ensure 'executive management has regular access to ESD information so that management decisions are made against a background of appropriate ESD information' and that procedures should be put in place to document consideration of ESD. The Auditor-General also recommended regular updated training for staff with ESD responsibilities and that:

¹⁹ ACT Auditor-General's Office produced the July 2005 Performance Audit Report, *Reporting on Ecologically Sustainable Development*, <http://www.audit.act.gov.au/auditreports/reports2005/Reporting%20on%20ESD.pdf>.

Agencies should draw from the work of other ACT agencies with better practices ... to:
(a) implement ESD measures consistently in agency activities across all ACT public sector agencies; and (b) achieve better reporting practices with more robust systems and processes in annual reports.

The government accepted recommendations.

The Commissioner for the Environment's response to the 2005 Auditor-General report was:

'Overall, the report is most welcome. Your findings show that there can be a considerable improvement in ESD reporting and in consideration of ESD principles in service delivery by ACT Agencies.'

In 2010 the Auditor-General undertook an audit of ESD reporting in annual reports as part of the Performance Audit Report, *Performance Reporting*. The report found that reporting requirements for ESD are complex and unclear and that the extent of full compliance with ESD reporting requirements remains low. A number of recommendations were made in regards to ESD reporting in annual reports, these were:²⁰

- a. The Chief Minister's Department should, in consultation with other agencies, seek to establish a simple and cost-effective set of performance measures and targets for ecologically sustainable development (ESD).
- b. The Chief Minister's Department should improve consistency in the guidance on completing the ESD section of the Annual Report.
- c. All agencies should complete the ESD section of their Annual Report in the format recommended by the Annual Report guidelines. This will ensure better consistency and comparison across government agencies.
- d. Relevant agencies should include discussions on how they use the ESD indicators in implementing government sustainability policies and objectives.

The Chief Minister's Department agreed in part, with the following comment: 'Chief Minister's Department will, in conjunction with the Department of the Environment, Climate Change, Energy and Water, undertake a review of existing ESD indicators and related requirements in the Annual Report Directions.'²¹

²⁰ Recommendation 8 from ACT Auditor-General's Office Performance Audit Report, *Performance Reporting*, April 2010, <http://www.audit.act.gov.au/auditreports/reports2010/Final%20Report%208%20April%202010.pdf>

²¹ ACT Auditor-General's Office Performance Audit Report, *Performance Reporting*, April 2010, <http://www.audit.act.gov.au/auditreports/reports2010/Final%20Report%208%20April%202010.pdf>

2. Practices in other jurisdictions

The reporting frameworks of the Commonwealth Department of the Environment, Water, Heritage and the Arts (DEWHA), the Australian National University, the NSW Government, the Victorian Government and Brisbane City Council include policy documents that provide a structure upon which to base performance reporting and resource reduction activities. Creating an overarching environmental policy document enables agencies to coordinate activities and share information to achieve common outcomes, for example, carbon neutrality or ESD.

Some of the tools developed by these jurisdictions should be used to assist in developing environmental performance standards, guidelines and tools for ACT Government agencies.

2.1 Australian Government

Australian Government organisations are required to report annually on environmental performance and their contribution to ESD under section 516A of the *Environment Protection and Biodiversity Conservation Act 1999*. They report against two key criteria:

- how agencies accord with and contribute to ecologically sustainable development
- the environmental performance of agencies, that is the impact their activities might have on the natural environment, how these are mitigated and how they will be further mitigated.

DEWHA²² has developed guidelines for reporting under this section (Appendix 4), which includes indicators for energy efficiency, waste and water; steps taken to reduce the effects of their resource consumption, and measures to review and improve reducing these effects. Australian Government agencies undertake this reporting as part of their annual reports.

An example of the data provided can be found in the Table 2, from DEWHA's 2008–09 annual report.

This table, although including information similar to that in the ACT Chief Minister's 2007–10 Annual Report Directions,²³ does not include the level of detail required of ACT Government agencies. For example, energy intensities for office area and more comprehensive data on waste such as co-mingled and waste paper.

²² Although DEWHA has recently been renamed the Department of Sustainability, Environment, Water, Population and Communities, this report will refer to DEWHA, as the work referenced in this report was published under DEWHA

²³ See <http://www.legislation.act.gov.au/ni/2009-283/current/pdf/2009-283.pdf>, p 43

Table 2: DEWHA summary of environmental performance some buildings*, 2008–09

Greenhouse gas emissions	
Total greenhouse gas emissions (after offsets)	3,026 tonnes CO ₂ -e
Total emissions offset (including Green Power)	2,154 tonnes CO ₂ -e
Electricity use (tenant light and power)	
Total electricity consumed	9,393,691 mega joules
Total electricity consumed per employee (offices only)	5,566 mega joules per employee
GreenPower purchased	6,561,795 mega joules
Air travel	
Total distance travelled	20,617,402 kilometres
Total number of flights	19,910 flights
Average flights per employee	10 flights per employee
Vehicle use	
Vehicles in use (owned or leased by the organisation)	38 vehicles
Proportion of alternative fuel or hybrid vehicles	34 per cent
Total distance travelled	812,409 kilometres
Fuel consumed (unleaded petrol)	28,148 litres
Fuel consumed (E10)	27,597 litres
Fuel consumed (diesel)	22,305 litres
Paper use	
Total paper purchased	27, 615 reams
Paper purchased per employee	13.8 reams per employee
Waste generated	
Solid waste generated per employee	79 kilograms per employee
Solid waste diverted from landfill	95 per cent

Note: * Summary of environmental performance of John Gorton Building, Burns Centre, Farrell Place and Allara Street in Canberra and Fyshwick and Queanbeyan warehouses; DEWHA = Department of the Environment, Water, Heritage and the Arts (Commonwealth); ream = 500 sheets of paper.

DEWHA also published a triple bottom line report in 2003–04 and 2004–05, which subsequently morphed into a Sustainability Report in 2005–06. In terms of environmental performance, the Sustainability Report mapped the DEWHA's progress against its environmental performance goals for a number of areas including energy, water, greenhouse gas emissions, waste and materials. The report provides similar performance information to that required in ACT Government agencies annual reports. The 2005–06 Sustainability Report was the last completed by DEWHA and the Department has indicated that it has no plans for further sustainability reporting.

2.1.1 Environment Management Systems

Australian Government policy encourages agencies to implement an Environmental Management System for at least one site. An Environmental Management System supports an organisation to develop a plan to manage its environmental impact and involves an organisation undertaking the following:

- devise a policy that articulates the organisation's environmental commitments

- appoint an environmental manager or management team responsible for the ongoing coordination of the Environmental Management System
- identify the organisation's significant environmental aspects
- identify legislative and regulative requirements relevant to the organisation's environmental aspects
- establish environmental objectives and targets
- implement programs to achieve those objectives and targets
- monitor and measure progress towards achieving those objectives and targets
- take steps to continually improve the effectiveness and efficiency of environmental management
- strategically review the continuing effectiveness of environmental management within the organisation.²⁴

DEWHA has achieved certification to AS/NZS ISO 14001:2004 Environmental Management Systems and supported a number of its divisions in doing the same, for example the Australian Antarctic Division. The use of an Environmental Management System provides a framework for organisations to build an environmental management strategy that incorporates actions to improve environmental performance, which underpins environmental performance reporting.

DEWHA has developed an Environmental Management System toolkit to assist organisations in developing and implementing an Environmental Management System.²⁵ This toolkit seeks to provide solutions to potential barriers including:

- lack of management support and commitment
- inadequate resources
- lack of support from staff
- poor internal communication and awareness
- lack of clear responsibilities and authorities
- lack of Environmental Management System training for implementers
- the Environmental Management System being too complex for the organisation.

Some of these barriers also frustrate the implementation of ACT Government agencies RMPs.

2.1.2 Energy Efficiency in Government Operations

DEWHA has implemented the Energy Efficiency in Government Operations policy to improve the energy efficiency and the environmental impact of Commonwealth

²⁴ DEWHA Environmental Management for Office Based Organisations,
<http://www.environment.gov.au/sustainability/government/ems/index.html>

²⁵ DEWHA Environmental Management System Tool,
<http://www.environment.gov.au/sustainability/government/ems/publications/pubs/ems-tool.pdf>

government operations. This policy applies to all Australian Government agencies but can also be applied to private organisations.

Key elements of Energy Efficiency in Government Operations include:

- annual energy reporting requirements (as part of whole-of-government energy reporting *Energy Use in the Australian Government's Operations*)
- energy intensity portfolio targets (allows for comparisons over time)
- minimum energy performance standards (assists agencies meet targets)
- communications and program management (education and awareness).

The Government Energy Efficiency Team in DEWHA with assistance from the OSCAR Development Team and the OSCAR Support Unit, prepare the annual report *Energy use in the Australian Government's Operations*.²⁶

The report states that total Australian Government energy use has declined substantially since 1999–2000 due to reductions in Defence Operational Fuel Use in Australia; however, energy use has increased over the same time. The Australian Government's non-defence operations had a measured increase in energy use of five per cent between June 2007 and June 2008 although some of this increase can be attributed to an improvement in reporting. There was an 11 per cent increase in energy use between 2000 and 2008 in non-defence operations. The number of public servants increased by about 40 per cent between 1999–2000 and 2007–08.

The report, among other things, examined the performance of Australian Government agencies against the two energy intensity targets in the Energy Efficiency in Government Operations policy:

- 7,500 MJ/person/annum for Office – Tenant Light and Power
- 400 MJ/m²/annum for Office – Central Services.

These targets are to be met by all agencies by June 2011.

The 2007–08 report is published in a printed form with additional information available online²⁷ instead of data being provided on a CD as was the past practice. The printed report has an overview of Australian Government energy use and emissions and a series of ranking tables showing agency performance.

2.2 NSW Government

The NSW Government Sustainability Policy²⁸ seeks to support a move towards carbon neutrality by 2020. It incorporates Water Savings Action Plans, the Waste Reduction and Purchasing Policy, building ratings under the National Australian

²⁶ The most recent report, 2007–08, is at <http://www.climatechange.gov.au/en/government/initiatives/eego/~media/publications/eego/reports/2007report.ashx>

²⁷ <http://www.environment.gov.au/settlements/government/eego/energyuse/>

²⁸ NSW Government Sustainability Policy, <http://www.environment.nsw.gov.au/resources/government/08453SustainabilityPolicy.pdf>

Built Environment Rating System (NABERS) and the Cleaner Government Fleet program.

The NSW Department of Environment and Climate Change (DECC) is providing the following assistance to agencies to reduce their environmental impact:

- a Sustainability in Government network, including website, newsletters and regular forums
- development of diagnostic tools, guidelines and case studies
- training and technical advice, including access to energy efficiency expertise
- support to identify and implement cost-effective measures through management and technical reviews (audits)
- a centralised data management system
- facilitating access to finance as outlined above, including issuing guidelines for the NSW Treasury Loan Fund and Climate Change Fund.

The NSW Treasury Loan Fund, administered by DECC, is a \$40 million low interest fund of between \$10,000 and \$500,000 designed to support agencies implement water and energy efficiency activities through the Government Energy and Water Efficiency Investment Program.²⁹ Since 2001, the Program has supported 23 projects, totalling \$4.7 million. Some of the projects undertaken through the Program include energy efficient lighting, heating, ventilation and cooling systems, hot water and appliance upgrades. To ensure energy and water savings from projects, agencies are asked to complete the Government Energy and Water Efficiency Investment Program Verification Methodology when applying for funding. This methodology includes:

- establishment of reference case
 - identify project participants
 - define broad scope and duration of project
 - determine appropriate reference or base case for each project type covered.
- methodology for estimated savings
 - specify methodology used to estimate baseline water and energy use and the savings associated with reference and project cases.
- aggregate project cost and savings
 - quantify the economic, environmental and social benefits.

2.2.1 NSW Government agency reporting

The reporting requirements for NSW Government agencies are outlined in the NSW Sustainability Policy as follows:

²⁹ <http://www.environment.nsw.gov.au/government/geeip.htm>

- budget dependent agencies operating in office buildings, will report water and energy centrally by DECC
- agencies with less than 200 staff are only required to report once every three years: in their annual report on waste and purchasing; and to DECC on water and energy (if not covered by central report on office buildings) and on fleet where applicable
- other agencies report to DECC annually on water and energy, annually on fleet where applicable, and biennially on waste and purchasing.

DECC coordinates data gathering requirements for water and energy, in addition to the central report for office buildings, through arrangements with the Department of Commerce, the State Property Authority and directly with electricity and water suppliers. Annual reporting by agencies, where applicable, is undertaken through a web-based reporting tool administered by DECC.

To strengthen accountability, performance of the Sustainability Policy is reported each year to the Minister for Climate Change and the Environment through the Sustainability in Government CEO's Group in the form of:

- an annual progress report summarising energy and water consumption, fleet improvement, use of biofuels and waste management from key end uses including health, education, and office space
- a detailed whole-of-government sustainability report every three years summarising energy and water consumption, fleet improvements, biofuels and waste at agency level.³⁰

2.3 Victorian Government

Since 2002 the Victorian Government has required agencies to undertake a number of environmental resource management activities. These activities are overseen by the Department of Sustainability and Environment (Victoria), the Environment Protection Authority (Victoria), and the Department of Treasury and Finance (Victoria), and include:

- adopting an Environmental Management System
- developing an environment improvement plan which includes waste reduction targets
- complying with a green purchasing policy
- reporting annually on their environmental performance
- auditing their Environmental Management System.

The development of a framework, such as that undertaken by the Victorian Government and overseen by key agencies, results in a system that supports agencies to develop a structure in which to create baselines and reduction activities,

³⁰ http://www.dpc.nsw.gov.au/__data/assets/pdf_file/0009/39627/M2008-28_Sustainability_Policy_for_NSW_Government_-_Attachment.pdf

monitor and report environmental performance and develop a strategic approach towards resource management.

2.4 Australian National University

ANUgreen is the Australian National University's (ANU) award winning environmental management program responsible for implementing the ANU's Environmental Management Plan and other environmental activities. The ANU has had an Environmental Management Plan in place since 1999. This initial plan covered energy management, water management, waste management, air quality management, biodiversity and community education. With strong corporate commitment, their latest plan for 2009–15 aims to lead internationally, building on the following principles:

- exceeding world and Australian best sustainability practices, in particular for energy and water use
- encouraging sustainability in the broader community through outreach activities and demonstration projects
- mainstreaming sustainability management across university decision-making processes and operations
- fostering an organisational culture for sustainability through responsibility, innovation and leadership
- integrating sustainable campus management with professional development and academic programs.

The plan establishes a firm target of 20 per cent to reduce energy use and neutralise greenhouse gas emissions by 2015 with a longer-term target to achieve 35 per cent reductions by 2020. The plan also includes targets for water, waste, transport, resilience, and landscape, a culture of sustainability and research and teaching.

Resulting from years of experience in developing and monitoring environmental management plans, environmental management at the ANU has evolved to implement programs in terms of People, Place and Performance and a fourth program integrating the three elements.

In May 2007 the ANU established a \$3 million Green Loan Fund to support projects that reduce resource use, specifically focusing on the areas of water, greenhouse gas emissions and waste management.³¹ Interest free loans between \$20,000 and \$250,000 are available for projects with a ten year or less return on investment. The fund has been used to support dual flush toilets, water saving chillers and cooling units and a Helium Gas Recovery and Re-Liquefaction Process Unit. In 2010, this fund will be used to focus on strategic energy saving projects, shifting towards on-campus initiatives such as solar panels on buildings.

The Vice Chancellor is accountable for implementation of the Environmental Management Plan with coordination and management undertaken by the Director of

³¹ http://info.anu.edu.au/ovc/Media/Media_Releases/2007/May/170507_GreenLoans

Facilities and Services Division. ANUgreen implements the plan, which is overseen by the Environmental Management Planning Committee that reports annually to the Vice Chancellor, through the Director of Facilities and Services Division.

3. Environmental resource use

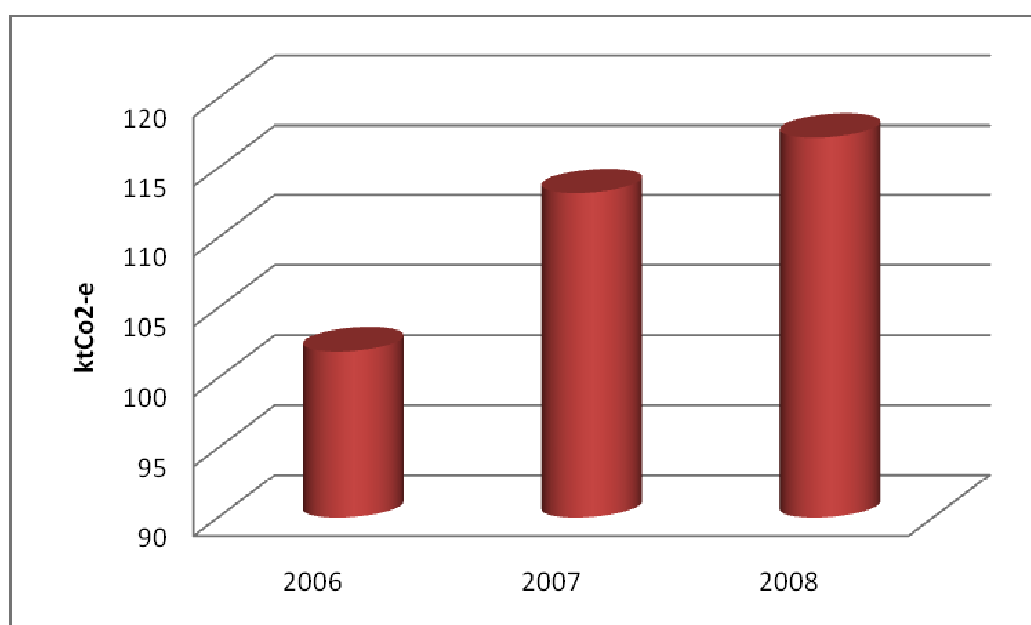
The fundamental use of reporting should be to manage the resource being reported. The ACT Government has committed to a goal of zero net greenhouse gas emissions for the ACT with interim targets of:

- reducing greenhouse gas emissions by 40 per cent by 2020 based on 1990 levels
- reducing greenhouse gas emissions by 80 per cent by 2050 based on 1990 levels.³²

If the government is to gain the support of, and engage the community in actions to achieve these targets it is important that its agencies be exemplary in taking actions to reduce its greenhouse gas emissions through reducing and better managing their resource use, and be able to show the results of their actions through effective reporting. The ACT Government has also committed to pursue carbon neutrality in ACT Government buildings and services by 2020. However, as yet no pathway or guidance is documented on how to achieve this. Work has only recently begun on a whole-of-government approach to carbon neutrality.

Figures based on metered electricity use indicate that, between 2006 and 2008, far from heading towards carbon neutrality, the ACT Government increased its emissions from electricity by around 15 per cent (Figure 1).

Figure 1: Total ACT Government greenhouse gas emissions from electricity (based on metered use)



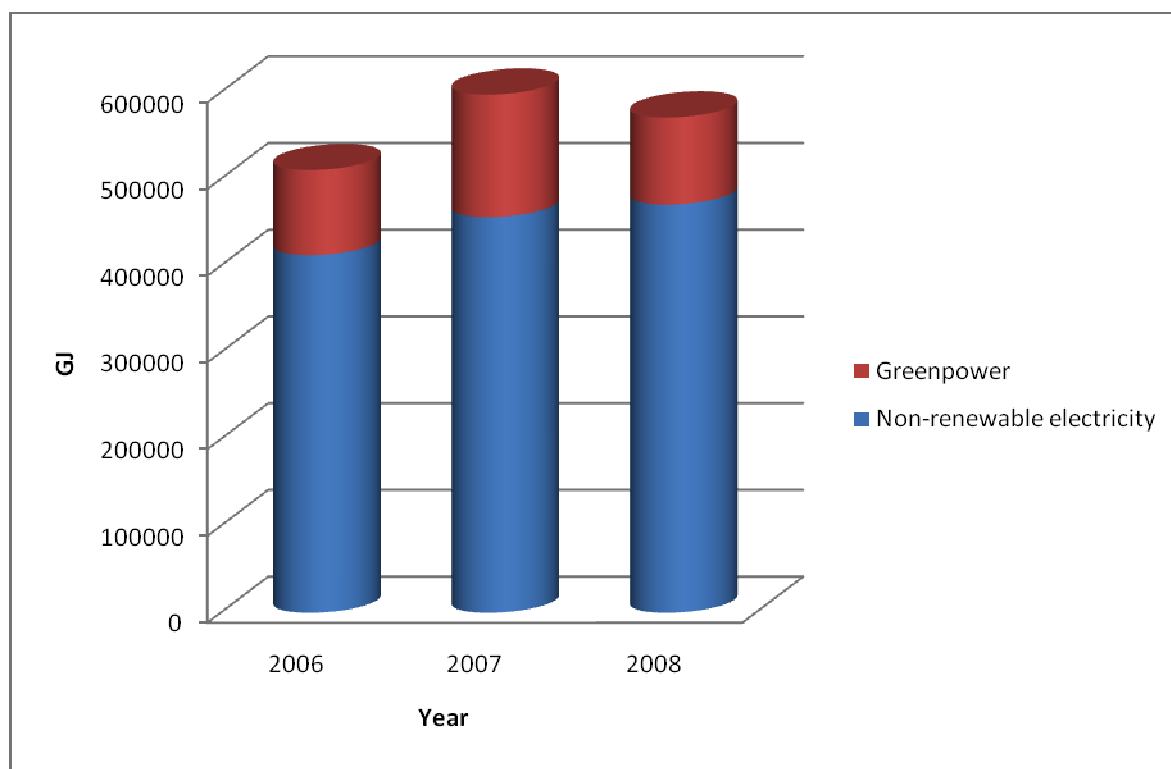
Note: ktCO₂-e = kilotonnes of carbon dioxide equivalent

Source: Data sourced from pitt&sherry OSCAR Project Report, 2009; Electricity net of Greenpower (emissions calculated with scope 2 EF)

³² ACT Government Climate Change Greenhouse Reduction Bill, August 2010

Understanding environmental resource use in the ACT Government is important if the commitment to pursue carbon neutrality is to be realised. Figure 2 illustrates that while the total electricity use by the ACT Government decreased slightly between 2007 and 2008 less was sourced from non-renewable sources, leading to an increase in emissions.

Figure 2: Total ACT Government electricity use (based on metered use)



Source: Data sourced from pitt&sherry OSCAR Project Report, 2009

Not only is it important to understand the total energy use but it is also important to consider from where it is sourced and how it is used etc. so energy management can be targeted and strategic.

The top five ACT Government sites for energy use (covered in the whole-of-government contract) and their proportion of the government electricity consumption in 2008 were street lighting (22.89%), Canberra Hospital (17.33%), Callum Offices (2.83%), Canberra Institute of Technology Campus (2.45%) and Erindale College (1.89%; Table 3).

In developing environmental resource reduction and management actions, consideration needs to be given to different agencies activities, potential and community priorities. For example, Roads ACT, ACT Health (Canberra Hospital) and the Department of Education are all high energy users. These agencies have all undertaken work to improve their resource use efficiency and reduction of emissions. However, these agencies are likely to remain high energy users due to the nature of their activities. Accordingly, options to reduce their energy use might be limited and a focus on alternative technologies and offsets might be needed.

Table 3: ACT Government agency energy consumption 2008

Agency	kWh pa
ACT Health	3,700,774
ACT Health – Hospital	26,953,688
ACT Legislative Assembly	1,096,113
Audit Office	74,633
Canberra Institute of Technology	11,914,755
Chief Minister's Department	735,524
Chief Minister's Department – Arts ACT	243,989
Cultural Facilities Corp	1,014,880
Department of Disability Housing and Community Services	2,757,657
Department of Education and Training	29,932,293
Department of Justice and Community Safety	954,121
Department of Justice and Community Safety – Corrective Services	26,758
Department of Justice and Community Safety – Director of Public Prosecutions	134,174
Department of Justice and Community Safety – Emergency Services Agency	2,072,149
Department of Justice and Community Safety – Public Trustee	107,155
Department of Territory and Municipal Services	658,677
Department of Territory and Municipal Services – ACTION Bus Services	2,882,186
Department of Territory and Municipal Services – Canberra Connect	187,237
Department of Territory and Municipal Services – InTACT	14,502
Department of Territory and Municipal Services – InTACT ACT Records	15,956
Department of Territory and Municipal Services – Nursery	116,779
Department of Territory and Municipal Services – Property	25,243,979
Department of Territory and Municipal Services – Roads ACT	40,486,202
Department of Territory and Municipal Services – Shared Services	489,787
Department of Territory and Municipal Services – Tourism	191,201
Department of Territory and Municipal Services – Venues	1,603,479
Exhibition Park in Canberra	1,201,572
Land Development Agency	260,307

Source: ACT Property Group – based on bills.

To date, each ACT Government agency has determined its own actions to reduce emissions and improve resource efficiency. As each agency has different activities, environmental resource use will vary; therefore each agency needs to be involved in determining its own resource efficiency and emission reduction priorities and actions. However, there also needs to be a whole-of-government approach to environmental resource management that includes tracking progress in a way that is strategic, accountable and transparent. Whole-of-government data and reporting on what environmental resources are being used, and where, would help improve management of environmental resources and provide information for strategically targeting actions.

3.1 Findings

The fundamental use of reporting should be to manage the environmental resource being reported. With the ACT Government committing to significant emission reduction targets for the whole of the ACT and to pursuing carbon neutrality in its own buildings, it is important that ACT Government agencies be exemplary in pursuing emission reductions. Between 2006 and 2008, emissions from electricity use in the ACT Government increased by about 15 per cent.

The data available on whole-of-government environmental resource use are essential to tracking progress against targets; however, such data are not readily available. Whole-of-government data and reporting on what environmental resources are being used and where, would facilitate tracking of overall government progress in improving its management of environmental resources and provide information for strategically targeted actions.

4. ACT Government environmental resource management strategy

Efficient environmental resource management supports the ACT Government's commitment towards a sustainable future for Canberra.

The ACT Government's overarching resource management commitment is expressed in its *Weathering the Change*, which aims to:

- be smarter in how we use resources
- design and plan our city to be more sustainable
- build our capacity to adapt to and manage the changes to climate that we are now beginning to face, and possible future changes
- improve our understanding of climate change, its causes and effects, and how we need to respond.³³

While there is a government commitment to advance initiatives to manage environmental resources more efficiently, this has often taken considerable time to be realised by agencies. One reason for this seems to be the lack of an overarching environmental resource management strategy. Work has only recently begun on a strategic, whole-of-government approach to carbon neutrality. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, needs to be completed as a matter of high priority. Such a strategy should include whole-of-government and agency targets; pathways to reduce and better manage environmental resource use; reporting requirements and accountabilities. An important component of a whole-of-government strategy would be resource management plans.

Given the government's strong commitment and the importance of taking action, particularly as financial gains can often be achieved in addition to environmental, Chief Executives should be responsible for addressing all aspects of environmental resource management. The Chief Executive Management Council (CEMC) offers an opportunity to ensure Chief Executives focus on managing their environmental resources and as such this could be a standing agenda item for this group's meetings.

4.1 Environmental resource management plans

DECCEW is responsible for assisting agencies develop and implement resource management plans. Action 2 of *Weathering the Change: Action Plan 1 2007–11*, requires agency resource management plans (RMPs) to be in place by 2009. These plans are intended to highlight activities to save money, monitor resource use and outline resource efficiency activities. RMPs are a reporting framework with an action imperative but are not in themselves the required strategic approach towards carbon neutrality in ACT Government buildings.

³³ http://www.environment.act.gov.au/climate_change/weathering_the_change/Climate_Change_Strategy.pdf

Of the 10 ACT Government agencies, only DECCEW had completed a RMP by the end of 2009. As at 30 May 2010, there was also a building RMP from the Dickson Motor Vehicle Registry³⁴ and three agencies – the Department of Disability, Housing and Community Services (DHCS), the Land Development Agency (LDA) and Treasury – had completed drafts.

In the Standing Committee on Climate Change, Environment and Water's report on 2008–09 annual reports Recommendation 1 (2.11) stated that

the guidelines to assist agencies develop their resource management plans be finalised by DECCEW as a matter of priority. To further assist agencies, a model resource management plan should be made publicly available.³⁵

While the target date for agencies having a RMP has not been met, the remaining ACT Government agencies are in the process of drafting their plans and have indicated that they will finalise these plans in 2010–11.

DECCEW's RMP has been circulated within ACT Government agencies to provide guidance on the key areas that need to be covered in agency RMPs.³⁶ DECCEW³⁷ has also outlined key areas that need to be covered in agency RMPs including:

- the purpose of the plan
- context – agency and government policies and principles
- goals and objectives
- targets
- strategies and actions
- stakeholder engagement, both internal and external
- capacity building
- monitoring and evaluation
- reporting
- governance
- a work plan with responsibilities and performance measures
- baseline data.

While this assistance has been given, DECCEW has not developed and promulgated guidelines for RMPs. These would assist agencies and should be completed as a matter of high priority. Work already done within agencies and in other jurisdictions could assist with this.

³⁴ The Dickson Motor Vehicle Registry incorporates the Office of the Commissioner for Sustainability and the Environment as well as Territory and Municipal Services (TAMS) staff

³⁵ Report 3 released February 2010,
<http://www.parliament.act.gov.au/committees/index1.asp?committee=112&inquiry=851>

³⁶ D Papps, Chief Executive, DECCEW, Letter to Commissioner, 5 March 2010

³⁷ D Papps, Chief Executive, DECCEW, Letter to Commissioner, 5 March 2010

DECCEW's inclusion of an energy consumption target for 2011 is applauded. Developing targets for all environmental resource use in future reports should be required of all agencies. It is important to ensure that the sum of agency targets equals the whole-of-government target. For this reason, DECCEW should work with each agency to develop targets, which reflect the resource needs, potential and community priorities of agencies.

4.1.1 Resource Management Fund

Weathering the Change established a \$1 million Energy Efficiency Fund for ACT Government agencies.³⁸ The purpose of the fund was to create a loan fund for agencies to access to make energy efficiency improvements in their own operations. The structure of this scheme allowed agencies to keep the savings they make through energy efficiency measures. As agencies repay the loan, the funding can be drawn-on by other agencies to fund their energy efficiency improvements. The Energy Efficiency Fund commenced 7 November 2007, with the first round of applications closing in mid February 2008. Two applications from the Canberra Institute of Technology and one from Canberra Stadium were approved and are worth a total of \$128,000. These applications were for cogeneration, heating and energy audits.

While, to date loans have been repaid in accordance with agreed timeframes, there have been no additional applications for the fund. Although calls on the fund have so far been low, the fund is important as it allows agencies the opportunity to undertake minor capital works to improve resource use efficiency.

The Energy Efficiency Fund has been reviewed and renamed the Resource Management Fund. It now supports funding for a wider range of projects to deliver resource efficiencies, innovative technology systems, improved data collection and reductions in greenhouse gas emissions (Appendix 5). This use of this fund should be encouraged.

Although the fund supports initiatives that are consistent with agency RMPs, it is not currently a requirement that agencies to have a RMP in order to receive funding. Adjusting the assessment criteria so that having a plan is a condition of this funding would ensure that all agencies are undertaking activities that support a strategic approach.

4.1.2 Energy audits

Audits were previously undertaken in 2005 prior to release of *Weathering the Change* in July 2007 and were referred to in Action 2: 'Energy and water audits have been undertaken on a number of government buildings and RMPs are the next step.' These 17 audits identified costs, savings and calculated payback time for energy efficiency improvements. With establishment of the Energy Efficiency Fund, some of the recommendations of these 2005 audits could have been implemented more easily; however, there are no reports of this occurring.

³⁸ *Weathering the Change: Action Plan 1 2007–11*, Action 3,
http://www.environment.act.gov.au/climate_change/weathering_the_change/Climate_Change_Action_Plan.pdf

Energy audits of a selection of ACT Government agency buildings, is proposed to take place in late 2010. LAPS is coordinating this consultancy. This will be beneficial in terms of assisting the ACT Government agencies involved to develop options to reduce their energy use. The findings from these audits and options adopted for implementation should become part of the RMP for the affected agencies. Both agencies and DECCEW, as the administrator of the Resource Management Fund, should use the audits to ensure that the fund is heavily accessed by the end of the financial year.

4.2 Property Sustainability Working Group

The Property Sustainability Working Group (PSWG) is open to all departments and is generally attended by representatives from the ACT Property Group (LAPS), DECCEW, Treasury, ACT Health, the Chief Minister's Department, the Department of Justice and Community Safety, Information and Communications Technology for the ACT Government (InTACT), DET, DHCS, TAMS, and ACTPLA. It was established to help agencies improve the sustainability of property assets. It also has an acknowledged role in progressing actions in *Weathering the Change: Action Plan 1 2007–11*.³⁹

The Secretariat is shared by Property Group, LAPS⁴⁰ and Climate Change and Natural Environment⁴¹, DECCEW, with Property Group chairing the meetings. The PSWG terms of reference (Appendix 6) identifies the work of the group as providing consistency across government in improving measurement, reporting and implementation of resources in buildings. This is done through knowledge sharing, advice and supporting action in terms of:

- sustainable government properties: measuring, reporting and action plans
- cost-effectiveness
- the Energy Efficiency Fund (now the Resource Management Fund).

4.2.1 Property Sustainability Working Group Strategic Direction

The PSWG is tasked with developing and maintaining a work program describing its scope, timeframe for implementation, responsibilities and accomplishments. This work program is to provide the basis for reporting to each meeting of the Property Forum and the Climate Change Interdepartmental Committee. A work program was drafted and circulated to members in January 2009 but has not yet been completed.

The agenda of the PSWG meeting on 10 May 2010 included updates on: the ACT Government's climate change policies resulting from the newly announced budget (DECCEW), the National Green Leasing Project (LAPS), the Office Tenancy Rating proposal (LAPS), review of Energy Efficiency Fund (DECCEW), and resource reporting and smart meters (LAPS).

³⁹ In particular Action 2 – moving towards carbon neutrality of ACT Government buildings, and Action 3 – use of the Energy Efficiency Fund for ACT Government agencies

⁴⁰ Formerly part of TAMS

⁴¹ Formerly Sustainability Policy and Sustainability Program

Due to the inclusion of representatives from all ACT Government agencies, PSWG has considerable potential to progress sustainability and in particular environmental resource management across government.

The CEMC, convened by the Chief Executive, CMD, is an important entity for fostering across government action. Accordingly, key initiatives from PSWG's work might best be progressed by direct reference to the CEMC. It should be noted that the PSWG reports to Property Forum, which is a subcommittee of the CEMC and, from time to time, projects carried out through the PSWG have been the subject of briefs to the CEMC (for example, the Sustainable Workplaces Questionnaire). The CEMC could consider referring matters to the PSWG.

4.3 Green Lease Schedules

The Australian, state and territory governments through their property groups and environment departments are working together to implement environmental improvements in the operation of buildings through government leasing. The National Green Leasing Policy is the first nationally consistent approach to capitalise on this opportunity.

This policy facilitates environmentally beneficial practices and outcomes associated with the leasing of buildings, through using a Green Lease Schedule (GLS). It provides guidance and information for a collaborative approach to improve operational performance. This policy sets target performance standards (which individual jurisdictions may elect to exceed) and it outlines the requirements of building owners and government tenants. These standards and requirements are to be implemented by individual governments through their respective legal and policy.

The GLS involves a Building Management Committee, an Energy Management Plan, implementation of the Energy Management Plan, monitoring the performance of the building and regular reporting on progress. The ACT Government agency responsible for green leasing policy and development is LAPS.⁴²

A number of lease renewals in the ACT are in progress covering the Nature Conservation House, Canberra Nara Centre and 11 Moore Street. CMD and Treasury are located within the Canberra Nara Centre and DHCS is in Nature Conservation House, therefore both landlords will be approached to implement a GLS within new leasing arrangements. This sets an example for other ACT Government agencies in leased buildings that will be renewing leases in the next couple of years. This arrangement will assist agencies develop a structure to support environmental resource management and performance reporting and should continue to be progressed as leases are renewed across the ACT Government.

⁴² http://www.laps.act.gov.au/projects_and_initiatives/environment_and_sustainability/green_leasing_policy

4.4 Findings and Recommendations 1 and 2

While there is a government commitment to advance initiatives to manage environmental resources more efficiently, this has often taken considerable time to be realised by agencies. One reason for this seems to be the lack of an overarching environmental resource management strategy. Work has only recently begun on a strategic, whole-of-government approach to carbon neutrality. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, needs to be completed as a matter of high priority. Such a strategy should include whole-of-government and agency targets; pathways to reduce and better manage environmental resource use; reporting requirements and accountabilities.

Given the government's strong commitment and the importance of taking action, particularly as financial gains can often be achieved in addition to environmental, Chief Executives should be responsible for addressing all aspects of environmental resource management. The CEMC offers an opportunity to ensure Chief Executives focus on managing their environmental resources and as such this could be a standing agenda item for this group's meetings.

At an agency level, the target for the implementation for RMPs by 2009 has not been met, though agencies are on track to complete them in 2010–11. While the DECCEW RMP provides a strong example, developing guidelines for RMPs should be given a high priority. Work done by agencies and other jurisdictions could assist with this. RMPs should include targets for all resource use, which reflect the resource needs, potential and community priorities of each agency. It is important that the sum of all agency targets equals the whole-of-government target.

Green leasing would also be a useful tool to help improve environmental resource management in ACT Government buildings. A number of lease renewals in the ACT are in progress and landlords will have the opportunity to implement the GLS within the new leasing arrangements. Implementation of the GLS should continue to be progressed as new leases are developed.

The Resource Management Fund is important as it allows agencies the opportunity to undertake minor capital works to improve resource use efficiency. This should be continued, with RMPs being a pre-requisite for accessing the fund.

Due to the inclusion of representatives from all ACT Government agencies, PSWG has considerable potential to progress effective environmental resource management across government. It would also be the appropriate body for agencies to share information on environmental resource management and to report agency and whole-of-government progress on environmental resource management to the CEMC on a regular basis.

Recommendations 1 and 2

To improve environmental resource management it is recommended that:

1. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, should be developed and published as a matter of high priority.

DECCEW should be responsible for developing, fostering the implementation of, and monitoring the strategy, which should include:

- c. Time-related targets for environmental resource use for the whole-of-government and for individual agencies. Targets should be set on a triennium basis and reviewed periodically.

DECCEW, in consultation with agencies, should be responsible for fostering the development of targets and ensuring that the sum of agency targets equals a whole-of-government target.

- d. Preparing and publishing an annual environmental resource use statement with quantifiable data and progress towards targets.

This statement should be produced by DECCEW and be part of its annual report or be in a standalone document to be published concurrently with annual reports.

- e. Adopting a centralised data collection and coordination process (see Recommendation 3).
- f. The Chief Executive Management Council receiving quarterly reports on progress against agency and whole-of-government targets and on the implementation of actions. Environmental resource use could be a standing agenda item at their meeting. The Property Sustainability Working Group should develop the quarterly report.
- g. Reporting on an assessment of whole-of-government progress in the ACT State of the Environment Report.

The Commissioner for Sustainability and the Environment should do this.

2. Environmental resource management plans for all ACT Government agencies should be finalised and published by 31 December 2010.

Chief Executives should be responsible for addressing all aspects of environment resources management in their agencies.

Resource management plans should:

- j. Be signed off by the Agency's Chief Executive and published on its website.
- k. Be updated and published annually and concurrently with Annual Reports
- l. Incorporate provisions of Green Lease Schedules.
- m. Be based on a consistent across-government process for data collection and coordination (see Recommendation 3).

- n. Include recommendations from environmental resource use related audits undertaken for an agency, or of its accommodation, and include responses to audit recommendations.
- o. Be a prerequisite for all applications to the Resource Management Fund after 31 December 2010.
- p. Be updated following the development of agency targets.
- q. Be subject to audits.
- r. Be supported by:
 - Guidelines. These should be developed by DECCEW.
 - Continuing to install smart meters to improve understanding of energy use and better target actions. This should continue to be a LAPS responsibility.
 - Existing smart meter infrastructure being connected to allow data capture and monitoring. This should be an InTACT responsibility.

5. Data collection and collation

In the ACT Government accountabilities are unclear with respect to providing and managing data. No one agency is accountable for managing all the data and there is no overarching guidelines or process to guide data management. Until tools and systems are in place for allowing access to accurate and comparable data in a timely manner, accurate agency and whole-of-government resource use monitoring will be impossible and this will limit strategic resource use planning.

Centralising data collection and coordination would be an important step to improving the accuracy of data, the foundation of managing resource use.

Responsibilities for a centralised data position/unit would include:

- aligning OSCAR with reporting units/requirements
- collecting resource data for OSCAR
- monitoring and verifying reporting through OSCAR.

5.1 Online System for Comprehensive Activity Reporting

All agencies are asked to use OSCAR to collect resource use data. OSCAR is part of a single national reporting framework and records the information required for resource use reporting including stationary energy, transport, water use, and waste.

OSCAR also allows offsets such as Greenpower usage and business measure such as number of staff and office space to be recorded. From this, information on resource use, greenhouse gas emissions and key indicators can be determined and report run from whole-of-government to single sites such as a school or office building.

While OSCAR is a comprehensive system, many agencies have encountered issues in collecting data and entering it into OSCAR. CMD stated

it would be of assistance to agencies if the data requirements and units were agreed and communicated as early as possible in the reporting period so that arrangements can be put in place to capture data, given that in CMD's case [they] obtain this from multiple sources.⁴³

CMD further describes the process of using OSCAR as resource intensive due to the time involved gathering data to enter into the system.

Aware of the difficulties staff encounter and the subsequent inconsistencies in reported data, DECCEW contracted pitt&sherry as an 'OSCAR consultant' to assist agency staff to accurately collect and report data in OSCAR to produce an exact record of ACT Government energy use. The unpublished project report (March 2009) finalised an entity tree in OSCAR that maps the ACT Government's physical and organisational structure, including agencies and buildings, which will allow data to be framed more effectively. This mapping process also sought to update and

⁴³ Letter, 17 March 2010

establish key contacts for each agency, which will need to be updated regularly so it remains relevant.

5.1.1 Consistency of data

A key element of the pitt&sherry consultancy involved an ACT Government emissions inventory validation which compared data recorded in OSCAR in 2006, 2007 and 2008 against whole-of-government ActewAGL electricity consumption. There is a significant difference between OSCAR and whole-of-government energy use as illustrated in Table 4. This table shows that electricity data reported in OSCAR between 2006 and 2008 is consistently under half of that recorded in ActewAGL whole-of-government consumption.

Table 4: ACT Government agency energy use comparison between OSCAR and ActewAGL whole-of-government energy consumption

Energy	2006	2007	2008
Whole-of-government electricity use (from ActewAGL)			
Electricity*	412,402	456,407	470,696
Greenpower	98,070	141,177	100,453
OSCAR			
Electricity*	209,534	224,217	199,561
Greenpower	24,854	41,515	56,871

Note: *Electricity net of Greenpower; OSCAR = Online System for Comprehensive Activity Reporting
Source: pitt&sherry OSCAR Project Report, 2009

Furthermore, measurements collected by agencies may be different to those outlined in the OSCAR. For example, many waste contracts specify waste collection in litres whereas OSCAR requires this information to be recorded in weight. This can result in disproportionate figures and ambiguous records. Changes to improve OSCAR's usefulness for ACT Government agencies (for example changing waste reporting units and aligning reporting formats to ACT reporting requirements) is possible, subject to the Australian Government workplan. Accordingly, the ACT Government might need to foster Australian Government action on these changes.

5.1.2 Frequency of use

Reporting resource use through OSCAR usually only occurs once per year for Annual Report purposes. Although DECCEW offers on-demand training in OSCAR, staff often need annual refresher training in order to recall processes. As there is often a lack of consistency of staff who enter data, there is often a lack of awareness of OSCAR, its requirements and the training available. Agencies have stated that collecting data and inputting it into OSCAR is 'time consuming and requires specific skills' for which training to date has not been adequate.⁴⁴ As DHCS stated in its 2008-09 Annual Report, the lack of accurate information, especially waste management and some utility usage

⁴⁴ Letter, 14 April 2010

from leased properties, prevents any calculation of total emissions. For this reason the OSCAR spreadsheet format has not been used to report against the outcomes.⁴⁵

To simplify the process, OSCAR was set up with the anticipated categories and fuel types.

Collated data are not always coordinated by a staff member who has the training or ability to accurately interpret resource data. This can result in incomplete and ineffective data collection, which is amplified when agencies only record the data and there is no senior accountability for taking action based on the data. The pitt&sherry report concluded that 'While the objective of having each government agency report its energy use is important, procedures are required to ensure OSCAR is accurate and up-to-date'.⁴⁶

Despite the difficulties agencies faced using OSCAR; agencies also see the value of such a system. ACT Health stated that it is 'a convenient tool for collating and calculating greenhouse gas emissions'⁴⁷ and CMD referred to the 'ease with which outputs are provided for inclusion in Annual Reports and other required reporting'.⁴⁸

The pitt&sherry consultancy report also recounts that:

all Australian governments have had difficulty in achieving comprehensive energy reporting. The [Australian] Government did not achieve accurate whole-of-government energy use data until it created a dedicated position with the authority necessary to require compliance.⁴⁹

There is currently no position or unit who is responsible for tracking environmental resource management either across the government or within an agency. Centralising data collection, collation and coordination is likely to improve the quality of data across government. DECCEW currently manages OSCAR and should continue to do so. This role should be extended to data collection and entry into OSCAR. This should be undertaken with the support of d LAPS. LAPS is responsible for managing government buildings and accommodation and has a significant amount of energy and water data for a range of government buildings. It would be efficient for LAPS to enter into OSCAR relevant data they receive. Other agencies should no longer enter data into OSCAR unless accredited by DECCEW to do so. It is important that centralising the data collection and collection does not centralise responsibility and accountability for the actual use of resources. Agencies would need to provide relevant resource management data to DECCEW in a timely manner and maintain accountability for their own use as well as having an understanding of their data. It is important that agencies continue to have access to OSCAR to view data and generate reports on their use.

⁴⁵ DHCS, Annual Report 2008–09

⁴⁶ pitt&sherry OSCAR Project Report, 2009

⁴⁷ Letter, 17 March 2010

⁴⁸ Letter, 17 March 2010

⁴⁹ pitt&sherry OSCAR Project Report, 2009

5.1.3 Multi-tenancies, non-office use and agency changes

In addition to issues of data collection ownership and accountability also create a challenge for a clear understanding of resource use.

Leased buildings often involve a situation where energy and water costs are incorporated into the rent which results in agencies not having access to accurate resource use data and having limited ability to control monitoring. This is further compounded in buildings with multiple tenants where agencies might not be able to separate their resource use from that of other tenants. LDA has stated that agencies in multi-tenanted leased buildings experienced issues disaggregating data for OSCAR.⁵⁰

DET stated that it was unable to provide data on 12 ESD indicators, mostly those relating to waste and resource management, due to data unavailability resulting from shared tenancy arrangements.⁵¹ Other issues encountered are those related to agency energy use within a multi-tenanted building which is also multi-function. For example, some agencies contain computer data centres, which consume significant amounts of energy resulting in high energy data outputs per staff member, which are not necessarily representative of office energy use. Some of these issues might be resolved with implementation of a GLS which stipulates that landlords provide for the data needs of tenants regarding environmental resource use.

Energy use in non-office environments and public venues, such as theatres, schools and hospitals, also result in inappropriate measurements of agency energy use per person or per square metre. ACT Health encountered problems in collating data as the Annual Report template is 'office-centric and as much of ACT Health's activity is non-office based, it required modification (to the extent possible) to accommodate both office data and non-office data'.⁵² DHCS has also experienced issues as the reporting system does not address their buildings, which provide specialist services to the public.⁵³

An additional challenge to data collection is changes to agency size and activities. The changing nature of government, with agency restructure and evolving activities and responsibilities can be challenging in reporting resource use. It is not possible to compare total energy use from one year to the next if the agencies has grown in staff number or the number of buildings it is responsible. Whole-of-government reporting may assist with some of these challenges.

5.2 Smart meters

LAPS anticipates that installing electricity smart meters might help address some of these issues in the future.⁵⁴ Smart meters log building energy data (usually electricity

⁵⁰ Letter, 14 April 2010

⁵¹ Letter, 31 March 2010

⁵² Letter, 17 March 2010

⁵³ Letter, 8 March 2010

⁵⁴ Letter, 17 March 2010

although there are also smart meters for gas and water) at frequent intervals and make that data available remotely. It allows agencies to monitor and, therefore, manage energy use as well as assisting agencies in multi-tenanted leased buildings to monitor their environmental performance separately so they can tell what they are using rather than apportioning use from the total of all tenants.

Smart meters have been installed in Macarthur House, Lyneham, and 1 Moore Street, Civic and are currently being installed in Dame Pattie Menzies House and the Dickson Motor Vehicle Registry, both located in Dickson. There is some work to be done by InTACT to connect the smart meters to servers and establish a network to allow them to be monitored. It is also important that the smart meters be closely linked to the OSCAR reporting entities to reduce duplication of effort and to assist cross-verification of data.

Despite the potential to monitor resource use through technologies such as smart meters, there is still a need for a human element to make meaning out of data and determine strategies to reduce resource use. In the future, smart meters might be expected to allow for easy aggregation of government electricity use in almost 'real time'. This would have advantages in enabling better practice to be adopted with regard to heating, ventilation and air conditioning systems and would identify particular areas for potential improvement. It may also encourage accountability and engagement within an agency on energy use. Online 'real time' reporting through smart meters should be encouraged as part of a transparent and accountable system. One possible model is that of the United Kingdom Department of Energy and Climate Change, which has installed smart meters and reports its energy use measured at 5-second intervals.⁵⁵

5.3 Findings and Recommendations 3 and 4

There is no readily accessible, accurate data on resource use for agencies. Without this, it is difficult to develop effective strategies for emissions reductions or track progress on effective environmental resource management. Data recorded in OSCAR and annual reports were found to be inconsistent and incomplete, resulting in gaps and discrepancies. Units for reporting measurements varied across agencies, contracts and reporting systems.

There is currently no position or unit responsible for tracking environmental resource management either across the government or within an agency. OSCAR is usually only used by agencies once per year for annual reporting purposes. There is often a lack of consistency in staff who enter data as well as a lack of awareness of OSCAR, its requirements and the training available. Centralising data collection and coordination is likely to improve the quality of data across government. DECCEW is currently responsible for managing data and should continue to do so. This role should be extended to data collection and entry into OSCAR. This should be undertaken with the support of the LAPS. LAPS is responsible for managing government buildings and accommodation and has a significant amount of energy

⁵⁵ See <http://www.decc.gov.uk/>

and water data for a range of government buildings. It would be efficient for LAPS to enter into OSCAR relevant data they receive. However, for quality control and efficiency other agencies should no longer directly enter their data into OSCAR unless accredited for OSCAR use by DECCEW.

It is important that centralising data collection and collection does not centralise responsibility and accountability for the actual use of resources. Agencies would need to provide relevant resource management data to DECCEW in a timely manner and maintain accountability for their own use as well as having an understanding of their data. It will be important for agencies to maintain accountability for their own use as well as understanding and engagement of the data relevant to the agency. Agencies should continue to have access to OSCAR to view data and generate reports on their use. If this occurred, additional resources might be needed to undertake this task and provide on-going support to agencies to achieve potential savings.

Data can also be improved by enhancing OSCAR to align with reporting requirements this may include modifying formats and units for measuring resources. While the Australian Government will be responsible for these changes to OSCAR, the ACT Government should promote this action.

Smart metering may allow for accountability and ownership of energy data and use as it allows agencies to monitor and, therefore, manage their energy use. Online 'real time' reporting through smart meters should be encouraged as part of an ACT Government Resource Strategy.

Recommendations 3 and 4

To improve environmental resource data management the following is recommended:

3. Data collection and coordination should be centralised as a matter of high priority.

As part of this process:

- a. Data collection and entry into the Online System for Comprehensive Activity Reporting (OSCAR) should be the responsibility of DECCEW with support from LAPS. This should be undertaken quarterly. Other agencies should no longer directly enter data into OSCAR unless accredited to do so by DECCEW. However, they should provide all relevant environmental resource management data to DECCEW, in a timely manner, and continue to have access to OSCAR to view data and generate reports for their own use.
- b. OSCAR data should be verified and monitored by DECCEW so that timely corrective actions can be undertaken by agencies in an agreed, specified timeframe. Failure to implement agreed timeframes for corrective actions should be reported in the whole-of-government environmental resource use annual statement.

- c. Quarterly reports should be provided to agencies on their environmental resource use. This should be a DECCEW responsibility.
 - d. Agencies would continue to report their environmental resource use in Annual Reports and resource management plans.
 - e. The accuracy and completeness of data reported in OSCAR should be independently audited on a triennium basis.
- 4. The Online System for Comprehensive Activity Reporting (OSCAR) should be enhanced.**

This should include modifying OSCAR so that:

- a. Automated data entry from spreadsheets or other file formats can be accepted.
- b. Smart meter data can be accepted.
- c. Conversion formulae are included to allow data to be recorded in consistent units and to provide transparency for 'lay' users.
- d. Information is in a format that can be directly placed into Annual Reports, resource management plans and triple bottom line reporting.

These modifications would need to be implemented by the Australian Government; however, DECCEW should promote the recommended actions.

6. Reporting

Public environmental performance reporting by ACT Government agencies is currently undertaken through Annual Reports. While the recent RMPs also include reporting, they are currently not public documents. To be effective, reporting should be complete, transparent, comparable and accurate; more work needs to be done to achieve these principles in the reporting of environmental resource use in the ACT Government.

There is currently no whole-of-government reporting undertaken on environmental resource management. Without this, progress towards environmental resource management and carbon neutrality is difficult to assess. A whole-of-government report on environmental resource management should be produced annually either through an agency's annual report (DECCEW seems most suited to this) or as a standalone report.

ACT Government agencies are required, under section 158A of the *Environment Protection Act 1997*, to report on ESD in their Annual Reports. Since 2004, the Chief Minister's Annual Report Directions have set out how ACT Government agencies are to fulfil these requirements.

In the reporting years of 2004–05 and 2005–06, agencies were provided with reporting guidance that did not require detailed data on resource use. Instead, they were asked to report on:

policies, programs and practices in place to systematically measure and manage the following performance areas relating to their operation:

1. energy consumption
2. water consumption
3. paper consumption
4. waste generation.⁵⁶

In 2006–07, agencies were asked to provide data, where available, on those performance areas outlined above. It is only in 2007–08 that the Chief Minister's Annual Report Directions begin to provide more specific guidance, recognising the need to integrate economic, social and environmental considerations in decision-making processes. In line with the release of *Weathering the Change: ACT Climate Change Strategy 2007–25*, agencies were required to report quantitative data on environmental resource use in terms of their direct operations regarding transport, energy use, greenhouse gas emissions, water consumption, resource efficiency and waste. Specific indicators are provided to agencies to support data reporting, for example, energy use per person per annum and total direct and indirect greenhouse gas emissions.

⁵⁶ Annual Report (Government Agencies) Notice 2006, 20 July 2006, Chief Minister's Annual Report Directions 2005–06, p26

In 2008–09, a more detailed set of indicators than that offered in previous years was provided with a template which presents a summary of the information to be reported against ESD indicators (Attachment 7). This template is also intended to provide a basis upon which to build an agency RMPs.

The Directions state:

If agency specific data is unable to be disaggregated, the data should represent the average from the whole of building data. If the data is unable to be collected, at either building or agency level, an explanation of data difficulties should be provided and the mechanisms being pursued to ensure data collection in future years.⁵⁷

In the Chief Minister's 2007–10 Annual Report Directions, environmental resource management is reported in two sections:

- A.10 Triple Bottom Line Reporting requires reporting in a table format on indicators under social, economic and environmental heading (Appendix 8).
- C.21 Ecologically Sustainable Development requires reporting in table format environmental resource management information for stationary energy, transport and water use as well as waste production and greenhouse gas emissions (Appendix 9).

As stated in the Chief Minister's 2007–10 Annual Report Directions

ACT Government agencies are requested to use OSCAR to record all information required for their ESD reporting. The use of OSCAR will provide results, which will facilitate the comparison of the ESD indicators across and within ACT Government agencies.⁵⁸

Most agencies indicated that they used OSCAR to support 2008–09 reporting although, as mentioned above, they had some problems using the system.⁵⁹

6.1 Compliance

The ACT Auditor-General's Office released a *Performance Audit Report on Performance Reporting* in April 2010, which stated that, in relation to ESD reporting in annual reports,

no department provided all the required information. Although audit assessed the data as providing useful information on ESD, in no case did it fully meet the Direction's disclosure requirement.⁶⁰

Table 5 shows the variation between ESD reporting by ACT Government agencies.

⁵⁷ Annual Report (Government Agencies) Notice 2009 (No. 1) 16 June 2009, Chief Minister's 2007–10 Annual Report Directions, p40

⁵⁸ Annual Report (Government Agencies) Notice 2009 (No. 1) 16 June 2009, Chief Minister's 2007–10 Annual Report Directions, p40

⁵⁹ LAPS letter 17 March 2010; Treasury letter 1 March, 2010; ACTPLA letter 19 March 2010; ACT Health letter 17 March 2010

⁶⁰ ACT Auditor-General's Office, *Performance Audit Report: Performance Reporting*, April 2010, <http://www.audit.act.gov.au/auditreports/reports2010/Final%20Report%208%20April%202010.pdf>

Table 5: Completeness of ESD reporting by ACT Government agencies, 2007–08 and 2008–09

Agency	No. of ESD indicators required		No. of ESD indicators supplied		% of ESD indicators reported	
	2007–08	2008–09	2007–08	2008–09	2007–08	2008–09
ACT Health	21	29	14	15	67	52
CMD	14	22	13	17	93	77
DET	21	29	5	8	24	28
TAMS	21	29	5	16	24	55
Average (%)					52	53

Notes: CMD = Chief Minister's Department, DET = Department of Education and Training, ESD = ecologically sustainable development, TAMS = Territory and Municipal Services

Source: Audit Office based on agencies' Annual Reports

The Auditor-General's report highlighted the complexity of the current reporting system but also commented on the usefulness of the data on resource use. This is supported by agencies stating that the process of gathering data to use in OSCAR is time consuming and resource intensive.⁶¹ The number of indicators is high and therefore the Audit Report questioned whether it is an effective use of resources in meeting ESD reporting requirements, particularly as these indicators do not appear to be used in decision-making processes. The Audit also expressed the need for a target to support the ESD indicators.

The Auditor-General's recommendations of April 2010 were:

The Chief Minister's Department should, in consultation with other agencies, seek to establish a simple and cost-effective set of performance measures and targets for ecologically sustainable development (ESD).

The Chief Minister's Department should improve consistency in the guidance on completing the ESD section of the Annual Report.

All agencies should complete the ESD section of their Annual Report in the format recommended by the Annual Report guidelines. This will ensure better consistency and comparison across government agencies.

Relevant agencies should include discussions on how they use the ESD indicators in implementing government sustainability policies and objectives.⁶²

The Auditor-General's report is complemented by this audit/assessment report.

6.2 Ecologically sustainable development reporting

The Chief Minister's Annual Report Directions 2007-2010 state that 'Ecologically Sustainable Development means the integration of economic, social and environmental considerations in decision-making process'.⁶³ However, this is not reflected in the C.21 Ecologically Sustainable Development reporting table

⁶¹ Letter CMD, 17 March 2010; Letter LDA, 14 April 2010

⁶² ACT Auditor-General's Office, *Performance Audit Report: Performance Reporting*, April 2010

⁶³ Annual Report (Government Agencies) Notice 2009 (No. 1) 16 June 2009, Chief Minister's 2007–10 Annual Report Directions, p38

(Appendix 9). The template provides for effective reporting on environmental resource use in government operations but not the integration of economic, social and environmental considerations in decision-making processes. Further, it does not allow for qualitative descriptions of programs or process implemented to improve environmental resource management or ESD. As an effective form of environmental resource management reporting, it should be renamed to reflect this. Progress against RMPs could also be reported in this section.

The template introduced in the Chief Minister's Annual Report Directions has significantly improved reporting on resource use, providing a framework that has resulted in a more complete dataset for 2007–08 and 2008–09.⁶⁴ CMD requested that data requirements and units be agreed and communicated early so that agencies can put arrangements in place to appropriately record data.⁶⁵ Despite this, analysis of Annual Report data over the past five years illustrates that it is impractical to compare both between and within ACT Government agencies due to missing and inconsistent data therefore, it is difficult to form a whole-of-government understanding of how resources are being used. This limits an understanding of whether or not significant reductions and savings are being made which, in turn, limits the possibility of a strategic approach to support the ACT Government's aim of carbon neutrality in government buildings. There is currently no reporting on whole-of-government resource use or progress towards carbon neutrality. A whole-of-government resource use report should be developed; this could be incorporated into the annual report of an appropriate agency.

As outlined in the Auditor-General's 2010 report, there is a need for a target to support the ESD indicators. These targets should be set at a whole-of-government level but also outlined at an agency level in RMPs, similar to the energy target set out in DECCEW's RMP. Progress against targets should be reported in annual reports.

Environmental resource management is also reported in the Triple Bottom Line section (A.10) of Annual Reports. While this audit/assessment has a focus on resource management, as a subsection of triple bottom line reporting, some comments have been made of the triple bottom line section of the annual report. Further discussion the effectiveness of triple bottom line reporting is discussed in Section 6.3.

6.3 Triple bottom line reporting

CMD produced a pilot triple bottom line report for the 2008–09 reporting period that details the Department's economic, social and environmental outcomes.⁶⁶ CMD sought comments from ACT Government agencies and the community on the triple bottom line report, however few comments were received.

⁶⁴ Green Steps report, *Energy and Water Usage Reporting Practices of ACT Government Departments*

⁶⁵ Letter, 17 March 2010

⁶⁶ Chief Minister's Department, *Triple Bottom Line Annual Report 2008–09*, http://www.cmd.act.gov.au/__data/assets/pdf_file/0008/119735/TBL_annualrpt.pdf p1

In 2009 triple bottom line reporting was included in the Chief Minister's Annual Report Directions 2007-2011⁶⁷ with the aim of providing for a high-level report that aims to make agencies' sustainability-related activities more explicit and accessible. The triple bottom line report as outlined in the Chief Minister's Annual Report 2007-2010 (Appendix 8), provides important indicators for aspects of triple bottom line; however, as with the ESD reporting, is not truly reflective of a triple bottom line approach. As with ESD reporting in annual reports, it does not allow for qualitative descriptions of programs or process implemented to improve the integration of economic, social and environmental considerations in decision-making processes.

Triple bottom line reporting uses some existing environmental indicators, along with social and economic indicators. The environmental data used come from data collected under Section C.21 of the Chief Minister's Annual Report Directions and the information in Section C.21 is also used in RMPs.

Environmental resource management reporting forms part of the triple bottom line reporting but cannot replace it. There are advantages in using the same data in different places in that there is a reduction of effort in gathering data itself and there will be no discrepancy between numbers. The same data also serve different purposes: triple bottom line reporting 'identifies actions and impacts in relation to their economic, environmental and social outcomes';⁶⁸ the ecologically sustainable development indicators in the Annual Report provide a more detailed picture of the agency's environmental resource use. The data in a RMP are used for management of resource use in order to achieve more efficient operation.

The triple bottom line report is in its early days in the ACT and it should evolve into a useful reporting and comparison tool for all ACT Government agencies. Given that the data it reports are similar to that in the Annual Report and for RMPs, there will need to be some streamlining, and alignment, in data reporting between these reports.

6.4 Accuracy and consistency of data reported

A lack of consistency between the template provided in the Chief Minister's Directions on Annual Report 2007-2010 and OSCAR has resulted in some agencies being unable to accurately record resource use. Agencies have indicated that the reporting process, both for Annual Reports and OSCAR, is challenging. ACT Health stated that 'the guidance for calculation of intensity ratios and data to be reported in each section was sometimes confusing' and requested that the template be modified and agency staff educated on data collection and completion of the template.⁶⁹

⁶⁷ Section A.10 of Notifiable Instrument NI2010-308, Chief Minister's 2007-10 Annual Report Directions, www.legislation.act.gov.au/ni/2010-308/default.asp

⁶⁸ Pilot Triple Bottom Line, Annual Report 2008-09, ACT Chief Minister's Department, http://www.cmd.act.gov.au/__data/assets/pdf_file/0008/119735/TBL_annualrpt.pdf, p1

⁶⁹ Letter, 17 March 2010

6.4.1 Energy

In reviewing the energy data recorded between 2007–08 and 2008–09 in Annual Reports (Appendix 2), there are considerable gaps in recorded data as well as discrepancies between measurements; for example, some agencies have reported gas in megajoules with others reported in gigajoules. Very few agencies submitted complete datasets, with key issues appearing to be difficulties in data collation due to tenancy arrangements (agencies in leased buildings cover energy costs through rent) and reporting of inaccurate data (possibly due to incorrect calculations or misinterpreted information). Further issues arose when agencies were asked to use OSCAR to report data to be used in Annual Reports there were numerous discrepancies between OSCAR and Annual Report data (Figure 3).

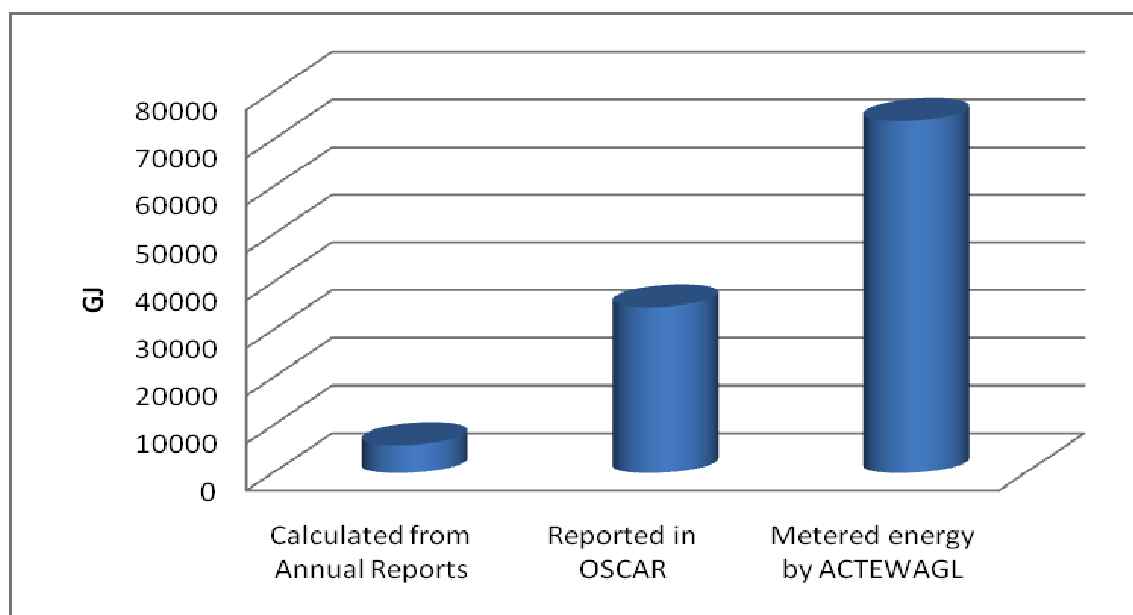
In some cases, information was included in only one dataset – either the Annual Report or OSCAR – rather than including the same data in both; for example, DET recorded office gas data in OSCAR but not their Annual Report. There were also situations in which the figures reported in the Annual Report and OSCAR were vastly different. For example, data the Department of Justice and Community Safety reported, in terms of office gas, in OSCAR are around half that reported in its Annual Report (see Appendix 2).

Considerable discrepancies also exist between OSCAR, Annual Reports and whole-of-government energy consumption information. Figure 3 shows this divergence clearly with significant under-reporting shown in OSCAR recorded data. Use of the Annual Report template, aligned with OSCAR, sought to ‘reduce the burden of duplicative reporting’.⁷⁰ However, this appears not to have been effective.

In 2008–09, few agencies included information in Annual Reports on the actions undertaken to reduce energy use, yet agency responses (Appendix 10) indicate there is a significant number of actions being progressed, which should be reported. For example, between 2005 and 2008, ACTPLA included information on initiatives to reduce energy use yet in 2008–09, no such initiatives were identified. As discussed above, environmental resource management reporting in annual reports would benefit from the reporting of both quantitative and qualitative data.

⁷⁰ OSCAR <http://www.climatechange.gov.au/government/initiatives/oscar.aspx>

Figure 3: Comparison of office electricity use for whole-of-government reported in OSCAR, Annual Reports and ActewAGL



Source: Based on data from *Energy and Water Usage Reporting Practices of ACT Government Departments – Greensteps Program*

6.4.2 Water

Similarly, there are discrepancies in data reporting for water use with missing data and inconsistencies, particularly between OSCAR and Annual Reports (Table 6).

Data are again reported in one place and then not the other and there are significant inconsistencies between figures. In Table 6 the inconsistent data are indicated with ***bold italics*** to illustrate this difference; for example, the LDA reported less than one-quarter of the water used in Annual Reports compared to that reported in OSCAR.

An analysis has been undertaken of water data reported in Annual Reports (Appendix 2) against requirements outlined in the Chief Minister's Annual Report Directions. This analysis indicates that there is some confusion around the difference between 'Water use (total)' and 'Water use (office)' with most agencies reporting the same figure in each section.

Some agencies were better than others in providing information on activities being undertaken to improve water use with DET and Treasury most consistent. There is room for improvement in terms of detailing these activities as only three out of ten agencies supplied this information. In terms of providing information on the main purposes for which water is used, only two out of ten agencies included this information in their reporting.

Agencies have also used different measurements to record data with some reporting in mega litres and others in kilolitres. Having consistent measurements allows for better comparison of data across agencies.

Table 6: Comparison of water reporting: OSCAR and Annual Reports, by agency 2007–08 and 2008–09

		Office water use (kL)		Total water (kL)	
		Annual reports	OSCAR	Annual reports	OSCAR
ACTPLA	2007–08	3,920	3,920	3,920	
	2008–09	4,422	4,422	4,422	
Assembly	2007–08	3,564	3,564	3,564	
	2008–09	2,896	2,896	2,896	
CMD	2007–08	2,132			
	2008–09	1,951		1,951	
DECCEW	2007–08	n/a	n/a	n/a	n/a
	2008–09	455	398	455	
DET	2007–08		409,527		
	2008–09	1,137	1,112		
DHCS	2007–08	2,365	2,082		
	2008–09		2,496		
Health	2007–08	138,101			9,064
	2008–09	5,979		154,711	8,600
JACS	2007–08				
	2008–09	5,352		13,016	
LDA	2007–08	1,223	4,994	1,223	
	2008–09	1,474	361	4,892	
TAMS	2007–08				48,730
	2008–09	10,958			88,683
Treasury	2007–08	2,437			
	2008–09	2,020		2,020	2,333

Notes: ACTPLA = ACT Planning and Land Authority; CMD = Chief Minister's Department; DECCEW = Department of the Environment, Climate Change, Energy and Water; DET = Department of Education and Training; DHCS = Department of Disability, Housing and Community Services; JACS = Department of Justice and Community Safety; kL – kilolitres; LDA = Land Development Agency; n/a = not available; OSCAR = Online System for Comprehensive Activity Reporting; TAMS = Territory and Municipal Services. Inconsistent data are indicated with ***bold italics***.

Overall, agency water data in Annual Reports are inconsistent and inadequate. Agencies are not fully reporting water usages or reduction activities and there are significant gaps in detailing water use.

Waste and resource efficiency

Waste and resource efficiency reporting by ACT Government agencies features similar problems as those stated for energy and water reporting with conflicting and missing data and inconsistent measurements.

A key issue in waste and resource efficiency reporting is the use of inconsistent measurements as data on waste to landfill were reported in five different measurements – tonnes, kilograms, litres, kilolitres, and cubic metres (Appendix 2).

Creating consistent measurements for waste is likely to need specifications in waste contracts. Currently one of the major barriers is that there are no waste firms in the

ACT that can actually (and accurately) measure waste at the point of collection. This means that measurement is reliant on either staff or cleaners manually estimating waste volumes on a regular basis.

There have also been difficulties in the past with waste measurements being required by weight rather than volume, as OSCAR does conversions by weight. Although this was remedied in 2010 for annual reporting with the Chief Minister's Annual Report Directions requiring waste data to be reported in litres rather than kilograms, OSCAR still requires weight data. Nonetheless, agencies can obtain conversion factors from DECCEW to enable them to convert measurements themselves before inputting data into the system. DECCEW refers to waste conversions from the Victorian Department of Sustainability and Environment,⁷¹ which provides a figure of 24 kilograms for a 240-litre bin of paper.⁷²

Most agencies have recycling programs in place, yet data on waste quantities are varied. However, there has been considerable improvement in reporting between 2007–08 and 2008–09. Some agencies outlined in their annual reports issues they encountered gathering data. For example, in its 2007–08 Annual Report, DHCS stated that most staff were located in multi-tenanted leased facilities with waste disposal costs included in the rent and that there was no requirement for building owners to provide waste recycling facilities or data on waste. A number of agencies experience this situation and therefore often apportion waste removal against their tenanted area, which did not yield accurate data. In these cases, useful agency initiatives are unlikely to show up as improvements in the data.

Waste reporting has improved between 2004 and 2009 yet significant effort is required to create a complete picture of ACT Government resource efficiency with respect to waste.

6.4.3 Transport

Overall transport data reporting was consistent across agencies with all agencies reporting some data from 2005 to 2009 (Appendix 2). Although no agencies reported transport data for 2004–05, this is still a significant achievement. Between 2005 and 2007, TAMS was unable to provide fuel type information but these data became available from 2007.

As fleet managers record data centrally, it is often difficult to obtain precise data for OSCAR entry. Specifying data reporting requirements with fleet managers could assist in improving this issue.

No aviation fuel data or air travel information was reported by any Department.

6.5 Findings and Recommendation 5

The ACT Government has a long history of environmental performance reporting and continues to build on this. To be effective, reporting needs to be complete,

⁷¹ http://www.sustainability.vic.gov.au/resources/documents/Waste_Volume_to_Weight_Conversion_Table.pdf

⁷² This approximation is supported by DECCEW OfficeSmart officers who weighed a series of bins and deducted the weight of the bins to find that on average a 240 litre bin full of paper weighs 25 kilograms

transparent, comparable and accurate, with challenges in data and gap in reporting, work needs to be done to improve these aspects of reporting. Improving data collection will improve the accuracy and comparability of information

Reporting on environmental resource management is currently undertaken through annual reports. However, compliance varies by agencies and there is a lack of accuracy and consistency in reporting. In the Chief Minister's 2007–10 Annual Report Directions, environmental resource management is reported in two sections in the annual report; Section A.10 Triple Bottom Line Report and Section C.21 Ecologically Sustainable Development. The information in these sections does not correspond with the stated intention of the sections nor do they include qualitative description of programs and processes implemented to improve ESD or triple bottom line reporting. However, Section C.21 does provide for effective reporting table on environmental resource use in government operations. The template in this section has significantly improved reporting on resource use, providing a framework, which has resulted in a more complete dataset for 2007–08 and 2008–09.⁷³ Though there are gaps in the data reported, in particular air travel and putrescible waste, which should be addressed. Given this, the table should be identified as reporting on environmental resource use and progress against RMPs could also be reported in this section.

Section A.10 Triple Bottom Line Report should be improved to more effectively measure economic, environmental and social outcomes and their integration into decision making. Both qualitative and quantitative information should be used to achieve this. It is recognised that some of the same data are reported in both Section A.10 Triple Bottom Line Report and Section C.21 Ecologically Sustainable Development. There are advantages in using the same data in different places in that there is a reduction of effort in gathering the data, there will be no discrepancy between numbers and the information serves different purposes. Section A.10 Triple Bottom Line Report is in its formative days in the ACT and it should evolve into a useful reporting and comparison tool for all ACT Government agencies.

Recommendation 5

To improve environmental resource use reporting it is recommended that:

5. Environment resource use, ecologically sustainable development and triple bottom line reporting required in annual reports should be reviewed.

The Chief Executive of the Chief Minister's Department should progress this as CMD has accountability for Annual Report Directions. This should include:

- a. Ensuring that the table in Section C.21 Ecologically Sustainable Development is identified as reporting on environmental resource use, and progress against agency targets and implementation of actions in RMPs are required to be reported. The reported environmental resource use indicators should be assessed and in so doing air travel and waste putrescibles should be considered for inclusion.

⁷³ Green Steps report, *Energy and Water Usage Reporting Practices of ACT Government Departments*

- b. Integrating reporting requirements for ecologically sustainable development (currently under Section C.21) and triple bottom line (currently Section A.10) in a manner that ensures the requirements in section 158A of the *Environmental Protection Act 1997* are respected. Qualitative and quantitative information should be included.

Glossary

ACT	Australian Capital Territory
ACTPLA	ACT Planning and Land Authority
ANU	Australian National University
CEMC	Chief Executive Management Council
CMD	Chief Minister's Department
CO ₂ -e	carbon dioxide equivalent
DECC	NSW Department of Environment and Climate Change
DECCEW	Department of the Environment, Climate Change, Energy and Water (ACT)
DET	Department of Education and Training
DEWHA	Department of the Environment, Water, Heritage and the Arts (Commonwealth)
DHCS	Department of Disability, Housing and Community Services
ESD	Ecologically Sustainable Development
GJ	gigajoule (one billion joules); one thousand megajoules
InTACT	Information and Communications Technology for the ACT Government
kL	kilolitre (one thousand litres)
kW	kilowatt (one thousand watts)
LAPS	Department of Land and Property Services
LDA	Land Development Agency
MJ	Megajoules
NABERS	National Australian Built Environment Rating System
OSCAR	Online System for Comprehensive Activity Reporting
PSWG	Property Sustainability Working Group
RMP	resource management plan
TAMS	Territory and Municipal Services
TBL	triple bottom line (social, environmental, economic)

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List of Appendices (separate documents)

1. Terms of reference for audit/assessment of ACT Government agencies' environmental performance reporting
2. Energy and water usage reporting practices of ACT Government departments (Greensteps report)
3. Extracts from the ACT Auditor-General's Office, Performance Audit Report, Reporting on Ecologically Sustainable Development, July 2005
4. Department of the Environment, Water, Heritage and the Arts - Guidelines for Section 516A reporting – *Environment Protection and Biodiversity Conservation Act 1999*
5. Resource Management Fund operating framework
6. Property Sustainability Working Group terms of reference
7. Annual Reports (Government Agencies) Notice 2010 (No 1) Chief Ministers Annual Report Directions 2007-2010 - Section A.10 – Triple Bottom Line Reporting
8. Annual Reports (Government Agencies) Notice 2010 (No 1) Chief Ministers Annual Report Directions 2007-2010 - Section C.21 – Ecologically Sustainable Development
9. *Environmental Protection Act 1997*, Section 158A Annual reports to deal with environmental matters
10. Agency Responses to Commissioner's Questions

Executive Summary and Recommendations

Report on an Audit/Assessment of ACT Government Agencies' Environmental Performance Reporting

This report presents findings from an audit/assessment of ACT Government agencies' environmental resource use reporting, including the accuracy of data reported and makes recommendations to assist the ACT Government and government agencies. It fulfils the Commissioner's role of scrutinising Resource Management Plans (RMPs) under *Weathering the Change: Action Plan 1* 2007–11.¹

The requests of the ACT Legislative Assembly's Select Committee on Estimates regarding the Commissioner's assessment of government environmental resource use² is also met by this report.

Although this report focuses on resource use reporting, the fundamental use of reporting should be to manage the resource being reported.

The ACT Government has committed to a goal of zero net greenhouse gas emissions for the ACT with interim targets of:

- reducing greenhouse gas emissions by 40 per cent by 2020 based on 1990 levels
- reducing greenhouse gas emissions by 80 per cent by 2050 based on 1990 levels.³

If the ACT Government is to gain the support of, and engage the community in actions to achieve these targets it is important that its agencies be exemplary in taking actions to reduce their greenhouse gas emissions and be able to show the results of their actions through effective reporting. The ACT Government in July 2007 committed to achieving carbon neutrality in its own buildings and services by 2020. Between 2006 and 2008, emissions from electricity use in the ACT Government increased by about 15 per cent.⁴

Not only is it important to understand the source and total energy used by the government but a comprehensive understanding of where, how and when the

¹ This audit/assessment was conducted similarly to a commissioner initiated investigation as outlined in the *Commissioner for the Environment Act 1993*, <http://www.legislation.act.gov.au/a/1993-37/default.asp>

² <http://www.hansard.act.gov.au/hansard/2009/comms/estimates08.pdf>, pp1052–53

³ ACT Government Climate Change Greenhouse Reduction Bill, August 2010, http://www.legislation.act.gov.au/b/db_39279/default.asp

⁴ Data sourced from pitt&sherry OSCAR Project Report, 2009

energy is used allows for a focused systematic approach to energy management. The same applies to all other types of environmental resources. Data on whole-of-government environmental resource use is essential to tracking progress; however, such data are not readily available.

In developing environmental resource reduction and management actions, consideration needs to be given to different agencies activities, potential and community priorities. For example, Roads ACT, ACT Health (Canberra Hospital) and the Department of Education are all high energy users. These agencies have all undertaken work to improve their resource use efficiency and reduce their emissions. However, these agencies are likely to remain high energy users due to the nature of their activities. Accordingly, options to reduce their energy use might be limited and a focus on alternative technologies and offsets may be needed.

As each agency has different activities, environmental resource use will vary; therefore each agency needs to be involved in determining its own resource efficiency and emission reduction priorities and actions. However, there also needs to be a whole-of-government approach to environmental resource management that includes tracking progress in a way that is strategic, accountable and transparent. Whole-of-government data and reporting on the environmental resources being used, and where, would facilitate progress in improving management of environmental resources and provide information for strategically targeting actions.

ACT Government Environmental Resource Management Strategy

While there is a government commitment to advance initiatives to manage environmental resources more efficiently, this has often taken considerable time to be realised by agencies. One reason for this seems to be the lack of an overarching environmental resource management strategy. Work has only recently begun on a strategic, whole-of-government approach to carbon neutrality. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, needs to be completed as a matter of high priority. Such a strategy should include whole-of-government and agency targets; pathways to reduce and better manage environmental resource use; and reporting requirements and accountabilities.

Given the government's strong commitment and the importance of taking action, particularly as financial gains can often be achieved in addition to environmental, Chief Executives should be responsible for addressing all aspects of environmental resource management. The Chief Executive Management Council (CEMC) offers an opportunity to ensure Chief Executives focus on managing their environmental resources and as such this could be a standing agenda item for this group's meetings.

An important component of a whole-of-government strategy would be RMPs. The target for implementation of RMPs by 2009 has not been met; only the Department of the Environment, Climate Change, Energy and Water (DECCEW) has completed its RMP within the timeframe. However, as at 30 May 2010, four other RMPs were in draft form and all other agencies were on track to complete their RMPs in 2010-11.

DECCEW's RMP has been circulated within ACT Government agencies to provide guidance on the key areas that need to be covered in agency RMPs.⁵ However DECCEW has not developed and promulgated guidelines for RMPs. These would assist agencies and should be completed as a matter of high priority. Work already done within agencies and in other jurisdictions could assist with this.

DECCEW's inclusion of an energy consumption target for 2011 is applauded. Developing targets for all environmental resource use in future reports should be required of all agencies. It is important to ensure that the sum of agency targets equals the whole-of-government target. For this reason, DECCEW should work with each agency to develop targets, which reflect the resource needs, potential and community priorities of agencies.

The Energy Efficiency Fund commenced 7 November 2007, with the first round of applications closing in mid February 2008. Two applications from the Canberra Institute of Technology and one from Canberra Stadium were approved, worth a total \$128,000. These applications were for cogeneration, heating and energy audits. However, there has been limited progress beyond this.

In 2005, seventeen audits of government buildings were conducted which identified costs, savings and calculated payback time for energy efficiency improvements. With the establishment of the Energy Efficiency Fund, some of the recommendations of these 2005 audits could have been implemented more easily; however, there are no reports of this occurring.

The Energy Efficiency Fund has been reviewed and renamed the Resource Management Fund. It now supports funding for a wider range of projects to deliver resource efficiencies, innovative technology systems, improved data collection and reductions in greenhouse gas emissions. The Fund is important as it allows agencies the opportunity to undertake minor capital works to improve resource use efficiency. This should be continued with RMPs being a pre-requisite for accessing the fund.

A Green Lease Schedule is a tool to facilitate environmentally beneficial practices and outcomes associated with the leasing of buildings. These provide guidance and information for a collaborative approach to improve operational activities. The ACT Government agency responsible for the green leasing policy and development is the Department of Land and Property Services (LAPS).⁶ A number of lease renewals in the ACT are in progress and landlords will be approached to implement a Green Lease Schedule within the new leasing arrangements. This should continue to be progressed as leases are renewed across the ACT Government.

The Property Sustainability Working Group (PSWG) is open to all agencies and generally attended by representatives from most agencies. As a result, it has considerable potential to progress effective environmental resource management across government, through information sharing. It would also be the appropriate

⁵ D Papps, Chief Executive, DECCEW, Letter to Commissioner, 5 March 2010

⁶ http://www.laps.act.gov.au/projects_and_initiatives/environment_and_sustainability/green_leasing_policy

body to report agency and whole-of-government progress on environmental resource management to the CEMC on a regular basis.

Data collection and coordination

Data on whole-of-government and agency resource use are essential for developing targets, management strategies and tracking progress. Data collection and coordination needs to be addressed as a matter of high priority. While there has been progress, given its importance, current inadequacies need to be addressed soon.

Data recorded in the Online System for Comprehensive Activity Reporting (OSCAR), metered by ActewAGL and reported in annual reports were found to be inconsistent and incomplete, resulting in gaps and discrepancies. For example, electricity data reported in OSCAR between 2006 and 2008 were consistently under half that recorded by ActewAGL for whole-of-government consumption. Units for reporting measurements varied across agencies, contracts and reporting systems.

Reporting of environmental resource use through OSCAR usually only occurs once a year for Annual Report purposes. Although training in OSCAR is offered 'on-demand' by DECCEW, staff often need annual refresher training in order to recall processes. As there is often a lack of consistency of staff who enter data, there is often a lack of understanding of OSCAR's potential and its requirements; and the available training.

Despite the difficulties agencies faced using OSCAR; agencies also respect the value of such a system. ACT Health stated that it is 'a convenient tool for collating and calculating greenhouse gas emissions'⁷ and Chief Minister's Department (CMD) referred to the 'ease with which outputs are provided for inclusion in Annual Reports and other required reporting'.⁸

Data collection is decentralised, generally undertaken by each agency. This creates the opportunity for inconsistencies and errors. Only a limited amount of information is collected centrally. The changing nature of government, with agency restructures and evolving activities and responsibilities can add to the challenge in reporting on environmental resource use. It is, for example, very difficult to compare total energy use from one year to the next if an agency has grown or reduced in staff numbers or the number of buildings for which it is responsible has changed. Accordingly, this makes whole-of-government reporting particularly important.

Centralising data collection and coordination is likely to improve the quality of data across government. DECCEW is currently responsible for managing the ACT Government's access to OSCAR, which captures some environmental resource use data. This should be extended to include all resource use data with support being given by LAPS. LAPS is responsible for managing government buildings and accommodation and has a significant amount of energy and water data for a range of government buildings. However, for quality control and efficiency other agencies should no longer directly enter their data into OSCAR unless accredited for OSCAR

⁷ Letter, 17 March 2010

⁸ Letter, 17 March 2010

use by DECCEW. It is important that centralising data collection and coordination does not centralise responsibility and accountability for the actual use of resources. Agencies would need to provide relevant environmental resource data to DECCEW in a timely manner and maintain accountability for their own use as well as having an understanding of their data. It is important that agencies continue to have access to OSCAR to view data and generate reports for their use. Enhancing OSCAR to align with reporting requirements, which might include modifying formats and units for measuring resources, could also improve data. While the Australian Government will be responsible for some of the needed changes to OSCAR, the ACT Government should promote these changes.

Smart metering might facilitate greater accountability and ownership of energy data and use by agencies. Smart meters log building energy data (usually electricity although there are also smart meters for gas and water) at frequent intervals and make data available remotely. This should allow agencies to monitor and, therefore, directly manage their energy use. Agencies in multi-tenanted leased buildings can use smart metres to monitor their environmental resource use performance separately to other tenants and thereby gain an accurate understanding of what they are using rather than apportioning use from the total use of resources of all tenants. This would have advantages in enabling better practice to be adopted with regard to heating, ventilation and air conditioning systems and would identify particular areas for potential improvement. It may also encourage greater accountability and engagement within an agency on its energy use. Online 'real time' reporting through smart meters should be encouraged as part of an ACT Government environmental resource management strategy.

Reporting

The ACT Government has a long history of environmental performance reporting and continues to build on this. To be effective, reporting needs to be complete, transparent, comparable and accurate. However, work is needed to significantly improve data collection and address gaps in reporting. Improving data collection will improve the accuracy and comparability of information.

There is currently no whole-of-government reporting on environmental resource management. Without this, progress towards carbon neutrality is difficult to assess. A whole-of-government statement on environmental resource management should be produced annually either through DECCEW's annual report or in a standalone report.

Agency reporting on environmental resource management is primarily undertaken through annual reports. However, compliance varies and there is a lack of accuracy and consistency in the data reported. Annual reports require environmental resource management data in Section A.10 Triple Bottom Line Report and Section C.21 Ecologically Sustainable Development (ESD).

The Chief Minister's Directions on Annual Reports 2007–10 state that 'Ecologically Sustainable Development means the integration of economic, social and

environmental considerations in decision-making process'.⁹ However, this is not reflected in the C.21 Ecologically Sustainable Development reporting section. The template provides for effective reporting on environmental resource use in government operations but does not seek details of the integration of economic, social and environmental considerations in decision-making processes. Furthermore, agencies tend to focus on completing the template while not providing qualitative descriptions of programs or processes implemented that improve environmental resource management or progress towards ESD. However, the template in this section has significantly improved reporting on environmental resource use, which has resulted in a more complete dataset for 2007–08 and 2008–09.¹⁰ There are gaps in the data reported, in particular air travel and putrescible waste data, which should be addressed. The table should be identified as reporting only on environmental resource use rather than a complete ESD report. Progress against RMPs should also form part of annual reporting.

The Section A.10 Triple Bottom Line Report in annual reports is in its early stage and as such provides an opportunity to realise the intent of Section C.21, which was to report on ecologically sustainable development. To be an effective reporting and comparison tool for all ACT Government agencies, both qualitative and quantitative information should be pursued. Section A.10 Triple Bottom Line Reporting should be improved by reporting on the integration of sustainability into decision making, and including the issues required under section 158A *Environmental Protection Act 1997* for annual reports.

Recommendations

To assist the ACT Government and government agencies better report on and manage their environmental resource use, the following five recommendations are made:

ACT Government Environmental Resource Management Strategy

- 1. A whole-of-government environmental resource management strategy, which could encompass carbon neutrality, should be developed and published as a matter of high priority.**

DECCEW should be responsible for developing, fostering the implementation of, and monitoring the strategy, which should include:

- a. Time-related targets for environmental resource use for the whole-of-government and for individual agencies. Targets should be set on a triennium basis and reviewed periodically.

DECCEW, in consultation with agencies, should be responsible for fostering the development of targets and ensuring that the sum of agency targets equals a whole-of-government target.

⁹ Annual Report (Government Agencies) Notice 2010 (No. 1) 16 June 2010: Chief Minister's 2007–10 Annual Report Directions, <http://www.legislation.act.gov.au/ni/2010-308/current/pdf/2010-308.pdf> p38

¹⁰ Green Steps report: *Energy and Water Usage Reporting Practices of ACT Government Departments*

- b. Preparing and publishing an annual environmental resource use statement with quantifiable data and progress towards targets.
This statement should be produced by DECCEW and be part of its annual report or be in a standalone document to be published concurrently with annual reports.
- c. Adopting a centralised data collection and coordination process (see Recommendation 3).
- d. The Chief Executive Management Council receiving quarterly reports on progress against agency and whole-of-government targets and on the implementation of actions. Environmental resource use could be a standing agenda item at their meeting. The Property Sustainability Working Group should develop the quarterly report.
- e. Reporting on an assessment of whole-of-government progress in the ACT State of the Environment Report.

The Commissioner for Sustainability and the Environment should do this.

2. Environmental resource management plans for all ACT Government agencies should be finalised and published by 31 December 2010.

Chief Executives should be responsible for addressing all aspects of environment resources management in their agencies.

Resource management plans should:

- a. Be signed off by the Agency's Chief Executive and published on its website.
- b. Be updated and published annually and concurrently with Annual Reports.
- c. Incorporate provisions of Green Lease Schedules.
- d. Be based on a consistent across-government process for data collection and coordination (see Recommendation 3).
- e. Include recommendations from environmental resource use related audits undertaken for an agency, or of its accommodation, and include responses to audit recommendations.
- f. Be a pre-requisite for all applications to the Resource Management Fund after 31 December 2010.
- g. Be updated following the development of agency targets.
- h. Be subject to audits.
- i. Be supported by:
 - Guidelines. These should be developed by DECCEW.

- Continuing to install smart meters to improve understanding of energy use and better target actions. This should continue to be a LAPS responsibility.
- Existing smart meter infrastructure being connected to allow data capture and monitoring. This should be an InTACT responsibility.

Data collection and coordination

3. Data collection and coordination should be centralised as a matter of high priority.

As part of this process:

- a. Data collection and entry into OSCAR should be the responsibility of DECCEW with support from LAPS. This should be undertaken quarterly. Other agencies should no longer directly enter data into OSCAR unless accredited to do so by DECCEW. However, they should provide all relevant environmental resource management data to DECCEW, in a timely manner, and continue to have access to OSCAR to view data and generate reports for their own use.
- b. OSCAR data should be verified and monitored by DECCEW so that timely corrective actions can be undertaken by agencies in an agreed, specified timeframe. Failure to implement agreed timeframes for corrective actions should be reported in the whole-of-government environmental resource use annual statement.
- c. Quarterly reports should be provided to agencies on their environmental resource use. This should be a DECCEW responsibility.
- d. Agencies would continue to report their environmental resource use in Annual Reports and resource management plans.
- e. The accuracy and completeness of data reported in OSCAR should be independently audited on a triennium basis.

4. The Online System for Comprehensive Activity Reporting (OSCAR) should be enhanced.

This should include modifying OSCAR so that:

- a. Automated data entry from spreadsheets or other file formats can be accepted.
- b. Smart meter data can be accepted.
- c. Conversion formulae are included to allow data to be recorded in consistent units and to provide transparency for 'lay' users.
- d. Information is in a format that can be directly placed into Annual Reports, resource management plans and triple bottom line reporting.

These modifications would need to be implemented by the Australian Government; however, DECCEW should promote the recommended actions.

Reporting

5. Environment resource use, ecologically sustainable development and triple bottom line reporting required in annual reports should be reviewed.

The Chief Executive of the Chief Minister's Department should progress this as CMD has accountability for Annual Report Directions. This should include:

- a. Ensuring that the table in Section C.21 Ecologically Sustainable Development is identified as reporting on environmental resource use, and progress against agency targets and implementation of actions in RMPs are required to be reported. The reported environmental resource use indicators should be assessed and in so doing air travel and waste putrescibles should be considered for inclusion.
- b. Integrating reporting requirements for ecologically sustainable development (currently under Section C.21) and triple bottom line (currently Section A.10) in a manner that ensures the requirements in section 158A of the *Environmental Protection Act 1997* are respected. Qualitative and quantitative information should be included.

Dr Maxine Cooper
Commissioner for Sustainability and the Environment
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