Strategic Audit
Implementation of environmental management systems in Victorian Government 2013-14
# Contents

- **Report from the Commissioner** ................................................................. 2

- **International Trends in Sustainability Frameworks** ................................ 4
  - The Global Reporting Initiative ................................................................. 4
  - Integrated reporting and sustainability .................................................... 8
  - The future direction of sustainability reporting in the public sector .......... 10
  - Recognising environmental excellence in the Victorian public sector ...... 12
  - Case Study: Creating a sustainable health care system ......................... 13

- **Environmental Performance Results** .................................................... 15
  - Overview .................................................................................................. 16
  - Financial Reporting Directive (FRD) 24C ............................................... 17
  - Greenhouse gas emissions ....................................................................... 18
  - Energy use in office buildings ............................................................... 21
  - Waste in office buildings ....................................................................... 26
  - Water use in office buildings .................................................................. 28
  - Transport .................................................................................................. 30
  - Vehicle environmental performance ....................................................... 30
  - Victorian Government vehicle fleet mix ................................................ 31
  - Air travel .................................................................................................. 33
  - Paper use ................................................................................................ 34
  - Sustainable procurement ......................................................................... 35

- **Conclusion** ............................................................................................. 36
  - The Commissioner’s top five messages .................................................. 36
I am pleased to present the 2015 report on the environmental performance of government departments and agencies – my first as Commissioner for Environmental Sustainability.

Each year we report the results of the strategic audit of the implementation of environment management systems of mandated government departments and agencies, in accordance with the Commissioner for Environmental Sustainability Act 2003. Since the first strategic audit results were published in 2005, sustainability reporting has continued to be a valuable management framework for government to transparently report on the impact of its activities on the environment.

This strategic audit is for the period 2013-14 and is based on an aggregate of annually reported information provided by departments, Sustainability Victoria and the Environment Protection Authority Victoria.

A decade of progress towards environmental sustainability in the public sector

The past decade has seen significant efforts by the departments and agencies to reduce their environmental footprint. I’d like to acknowledge the contribution of department and agency staff whose collaborative efforts and commitment have made this possible.

The results for the 2013-14 strategic audit indicate that while trending towards improvement across a number of areas over the five-year period to 30 June 2014, performance has plateaued and in some areas begun to decline over the past 12 months.

Our performance at a glance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>% change 2009-10 to 2013-14₁</th>
<th>% change 2012-13 to 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emissions</td>
<td>-3%</td>
<td>+7%</td>
</tr>
<tr>
<td>Total energy use</td>
<td>-3%</td>
<td>+7%</td>
</tr>
<tr>
<td>Total waste produced (kg)</td>
<td>-34%</td>
<td>-2%</td>
</tr>
<tr>
<td>Total office-based water use (kl)</td>
<td>-14%</td>
<td>+4%</td>
</tr>
<tr>
<td>Vehicle energy (MJ)</td>
<td>No change</td>
<td>+23%</td>
</tr>
<tr>
<td>Total air travel (km)</td>
<td>-34%</td>
<td>+10%</td>
</tr>
<tr>
<td>Total paper use (reams)</td>
<td>-25%</td>
<td>-8%</td>
</tr>
</tbody>
</table>
International sustainability reporting trends: are we measuring the right things?

The existing reporting framework used since 2008 is the Financial Reporting Directive 24C (FRD 24C), which fulfils the purpose of applying a minimum criteria for government to report on its office-based environmental impacts in a consistent manner.

Since FRD 24C came into effect, international efforts to better understand and ensure the relevance of sustainability reporting, including but not limited to reporting on the environment, have seen significant progress in redefining and evolving the frameworks to increase their value to business and government.

This year, we take a closer look at some of the international trends amongst different reporting frameworks used in the private and public sector. We note that GRI is now the most widely referenced sustainability framework, with 78% of reporting companies worldwide referencing the GRI guidelines in their corporate responsibility reporting.\(^2\)

The true test of a good report is not how widely it is read, but how widely it is used by stakeholders.\(^3\) There is a synergy between reporting requirements and the consequent quality of the information that is available to continue to support and facilitate sound environmental practices and procedures to be adopted by Government. The purpose for highlighting international trends in sustainability reporting is to assist the Victorian public sector to advance in a way that reflects contemporary thinking and practice in environmental and sustainability reporting.

I encourage Victorian public sector organisations to review their approach to environmental reporting by considering a broader set of criteria to report against, such that they expand on the existing information base and continue to reflect global trends in broader sustainability reporting. The Voluntary Disclosure Clause in FRD 24C provides for the use of broader sustainability reporting protocols along with the annual reporting requirements that are currently mandated. Examples are listed in Table 1.

The Victorian public sector is well-placed to be a leader in sustainability performance and reporting. The Department of Health and Human Services is one of the organisations that was recently recognised by its peers for leading the way in environmental sustainability. I congratulate and thank them for their efforts, featured on page 13, along with all those organisations and individuals that have contributed to this report.

Dr Gillian Sparkes
Commissioner for Environmental Sustainability

---

1. Percentages are rounded to whole figures (%) throughout this report.
International Trends in Sustainability Frameworks

Last year’s strategic audit report of the implementation of environmental management systems stated that: “Sustainability reporting continues to evolve, develop in importance and provide significant insights about organisational efforts in respect of environmental best practice in both the public sector and private enterprise.”

This continues to hold true as various reporting frameworks were updated, and new iterations of their standards issued, in the past year.

Two international frameworks are discussed in this section of the report to help raise awareness and encourage the Victorian public sector to continue to evolve the existing framework (Financial Reporting Directive (FRD) 24C) in a manner that ensures the Victorian public sector maintains relevance and consistency with contemporary sustainability reporting more broadly. FRD 24C requires government entities to report on office-based environmental impacts in a consistent manner. The current version of FRD 24C has been in place since 2008 and has served us well. FRD 24C does allow for more detailed reporting under the Voluntary Disclosure clause. In this chapter we offer some examples of better practices used internationally by business and the public sector.

Continuing to evolve the way the public sector reports its performance and impacts, particularly in line with the better-practice sustainability reporting by the private sector, will improve the relevance and effectiveness of Victorian public sector environmental and broader sustainability outcomes.

The Global Reporting Initiative

More than a decade ago, the Global Reporting Initiative (GRI) embarked on a global process to help public sector organisations report on sustainability using a common language. While many of the same drivers for reporting on sustainability impacts that apply to business also apply to the public sector, significant differences also exist in their mission and purpose. The public sector is a significant employer, provider of services, consumer of resources and buyer of goods and services and, as such, it has a significant footprint and responsibility to the communities it serves. To many, this alone is enough to warrant regular disclosure of sustainability impacts.

However, the public sector also contributes to the goal of sustainable development through the design and implementation of public policy, laws and regulations.

Transparency, accountability, stewardship and leadership in sustainability can be enhanced through regular reporting using a globally recognised framework. In 2005, GRI published the Pilot Version 1.0 of a Sector Supplement for Public Agencies to complement the Sustainability Reporting Guidelines issued in 2002. The supplement identified three different types of sustainability information that reports by public agencies can include. Specifically they were:

- Organisational performance
- Public policies and implementation measures, and
- Context or state of the environment.

The GRI’s guidance focused on organisational performance and, to some extent, public policy. The Victorian Government implemented FRD 24C in 2008 and it has been a primary instrument for the disclosure of office-based sustainability impacts by the mandated government departments, Sustainability Victoria and the Environment Protection Authority Victoria. Although FRD 24C requires reporting against a set list of indicators, it also allows for reporting of additional issues, using GRI indicators where appropriate.

Since the introduction of FRD 24C, the GRI has released two further iterations of its guidelines, marking a significant change in focus. The most recent edition of the GRI guidelines (G4) was released in May 2013. The aim of the guidelines is to help organisations apply a more relevant set of reporting principles, such as including materiality and stakeholder engagement, to focus on the most significant sustainability impacts for reporting.

The GRI is now the most widely referenced sustainability framework, with 78% of reporting companies worldwide including the GRI guidelines in their corporate responsibility reporting. Frameworks such as GRI are increasingly being referenced in sustainability and reporting guidance by regulators and other bodies.\(^7\) While no Australian jurisdiction currently mandates sustainability reporting using GRI, there are several government departments, agencies and state-owned enterprises across Australia, including in Victoria, which voluntarily report to GRI.\(^8\)

Context, or state of the environment, is a key principle of the GRI guidelines, which requires that a report should present the organisation’s performance in the wider context of sustainability. In practical terms, this means how an organisation contributes, or aims to contribute in the future, to the improvement or deterioration of economic, environmental and social conditions at the local, regional or global level.

An organisation’s annual water consumption, for example, gains greater meaning when expressed as a function of overall consumption or availability of water in the region where it draws that water.

> “Pressure for increased transparency on sustainability impacts isn’t limited to reporting by companies. The public sector has a large impact on sustainability through roles as a landowner, purchaser, employer and consumer of resources. How departments and agencies identify, understand and respond to such impacts should also be transparent in public sector reporting.”

Dr Robyn Leeson, Member, GRI Stakeholder Council

---


The Importance of Materiality – reporting what’s most relevant to your organisation and stakeholders.

Understanding the Materiality Principle in public sector reporting is important, as the strategic context in which it operates is necessarily different from the private sector. Across both sectors, sustainability reporting plays an important role in measuring and transparently reporting on the impact of an organisation’s activities. This should take into account the topics that are most significant and have the greatest impact on performance. Materiality in sustainability reporting is necessarily broader than financial reporting tests and “also includes considering economic, environmental and social impacts that cross a threshold in affecting the ability to meet the needs of the present without compromising the needs of future generations.”

In public sector reporting, input and output data are arguably important only to the extent that they are able to shed light on what outcomes were achieved (for example, if inputs were lower than previously consumed it is understandable that outcomes may be commensurately lower). Ultimately, it is outcome data that is decision-relevant, so any materiality test of performance data being reported must assess whether the public’s decision making or judgement would be influenced by reporting or not reporting particular data.

For example, if water is a material issue for a business it is likely to be reported as a function of consumption, recycling or withdrawal, and possible risks associated with things like drought and how this impacts on shareholder value. It is rarely reported as a function of water scarcity, limits in regions of operation or the cumulative impacts of multiple users in a single catchment area. In contrast, this is an area of unique opportunity for public sector reporting. It reflects again the structure outlined nearly a decade ago in which the public sector is able to report on its operational performance (e.g. FRD 24C and GRI) and the performance of its business model and strategy in creating value for the public (e.g. GRI and IR).

GRI requires the identification of the material aspects (or other material topics) and it depends on an assessment of the impacts resulting from the organisation’s activities. This should reflect the organisation’s significant economic, environmental, and social impacts. These impacts might be identified inside or outside of the organisation’s direct control, including factors such as the organisation’s overall mission and strategy, concerns expressed directly by stakeholders, broader social expectations, and the organisation’s influence on upstream (e.g. supply chain) and downstream (e.g. customers) entities.

Therefore, meaningful reporting by the public sector requires a clear view of how an entity contributes (positively and or negatively) to sustainable development. Fundamental to the process is having a robust materiality assessment.
DEFINING MATERIAL ASPECTS AND BOUNDARIES – PROCESS OVERVIEW

Topics ➔ Aspects ➔ Disclosure on Management Approach + Indicators

Figure 1: Defining Materiality. GRI https://g4.globalreporting.org/how-you-should-report/how-to-define-what-is-material/Pages/default.aspx
Integrated reporting and sustainability

In December 2013, the International Integrated Reporting Council (IIRC) released the Integrated Reporting Framework (the IR Framework).

According to the IIRC, an integrated report is a concise communication about how an organisation’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term. Reporters are expected to use the guiding principles and content elements to inform the development of a concise report to the providers of financial capital, such as investors or shareholders. It is currently used in the private sector.

The IIRC states that the IR Framework can also be applied, adapted as necessary, by the public sector. There are specific design elements of the framework that may lend themselves to the public sector:

- **Strategic focus, future orientation and outlook** in which a report provides insights into the organisation’s strategy and also highlights the changes that might be anticipated over time. Good governance requires that the public sector reflect on the performance of strategy in the short, medium and long term and do so transparently. For example, by making clear the links between funding levels, service delivery, program participation and outcomes.

- **Materiality** requires disclosure about matters that substantively affect the organisation’s ability to create value over the short, medium and long term. This is determined by considering their effect on the organisation’s strategy, governance, performance or future outlook.

- **Key stakeholder relationships** are another guiding principle where the public sector would seem to have a natural strength. An integrated report is expected to illustrate the nature and quality of the organisation’s relationships with its key stakeholders. This includes how, and to what extent, the organisation understands, takes into account and responds to their legitimate needs and interests in activities such as public policy development and implementation.

- **Reporting on outcomes** rather than outputs alone remains a challenge for organisations, especially where there is an attraction to report data that is easily collected and measured, but may not always be meaningful for evaluation.

The public sector is well-placed to focus on elements of the framework where it has existing strengths and there are clear gains to be made. This may include a focus on stakeholder engagement, strategy performance and measuring outcomes.

A fundamental concept of the framework is an explanation of how an organisation creates value over time, which is a primary interest to the providers of financial capital. This is also a key difference between the framework and the GRI guidelines. While the IR Framework focuses on value creation for the providers of financial capital as an audience, the GRI guidelines focus on impact on multiple stakeholder audiences.

The IR Framework classifies six forms of capital to underpin the consideration of value creation, which is illustrated by Figure 2 overleaf.

---

Reporters using the framework are not required to adopt the same classification of the capitals nor are they required to monetise the effect they have on various capitals. The IR Framework recommends using a mix of quantitative and qualitative information to explain how the business model and strategy create or diminish value. While the further development and application of such tools is evolving, it will take some time before accepted standards are in place and it is understood how they can routinely inform the creation of value, both private and public, in a way that might be both consistent and comparable over time.

Integrated reporting in the public sector

To date, there are no public sector reports listed on the IIRC’s database of integrated reporting practice. This reflects both the fact that integrated reporting is a relatively new practice as well as efforts to adapt what is essentially a framework designed for private sector into public sector applications.

In April 2014, the IIRC and the Chartered Institute of Public Finance and Accountability (CIPFA) in the UK announced the launch of a network for bodies in the public sector to pioneer the implementation of integrated reporting. A preliminary report by CIPFA concluded that integrated reporting principles can be applied in the public sector. The network launched by the IIRC and CIPFA will test this theory, with the network expected to run over two years, commencing from 2014-15 and covering two reporting cycles. Participants listed to date are: the World Bank Group, the United Nations Development Programme, the City of London Corporation, the Welsh Government and UK government departments.

The future direction of sustainability reporting in the public sector

Measuring environmental performance is an evolving process and the public sector may benefit from aligning its sustainability reporting requirements with specific elements of GRI (G4) and/or the IR Framework. As a minimum, it is recommended that these frameworks be considered by departments and agencies to continue creating public value through their sustainability activities.

The theory and process of sustainability reporting is generally well understood by government agencies and a number of government agencies already align their reporting requirements to national (e.g. NGER14) or international (e.g. GRI) standards or current “better practices”, well beyond their office-based activities.15 For example, FRD 24C requires the total greenhouse gas emissions segmented by primary source (i.e. energy use, vehicle fleet, air travel and waste production) and offsets (t CO₂-e) to be reported. However, a number of government agencies go beyond this and report emissions consistent with GRI, NGERs or the greenhouse gas protocol.

By following these internationally accepted guidelines in a consistent manner, the public sector can better compare its performance over time to enable more systematic consideration of sustainability when decisions are made on public policy, as well as the implications of these policies for the environment. Greater consistency between government agencies in their approach should help address any variation in the quality, quantity and relevance of disclosures and improve the effective use of information by key stakeholders in decision making.

Public sector reporting can focus on the use of other GRI reporting principles, such as materiality and stakeholder engagement, to determine the most significant sustainability impacts for reporting. This helps to ensure that an entity can focus on what is material, and it encourages organisations to provide only information critical to their business and stakeholders. This may in turn result in reports that are increasingly strategic, focused, contemporary and easier to navigate. Similarly, elements of the IR Framework, such as stakeholder engagement, measuring outcomes and strategy performance, are likely to be the most attractive starting points for this framework.

In this context, we provide a few examples of the type of sustainability indicators that could be collected to better reflect the public sector’s sustainability impacts and outcomes. This is not meant to be an exhaustive list, but a few examples to demonstrate the opportunity for a recalibration of some of the indicators outlined in FRD 24C. The table below is included for illustration purposes only.

---

**Greenhouse Gas Emissions**

Total greenhouse gas emissions segmented by primary source (i.e., energy use, vehicle fleet, air travel and waste production) and offsets (t-CO₂-e)

Reporting on greenhouse gas emissions includes Scope 1, 2 and 3 emissions but also the amount of reductions achieved and emissions of ozone depleting substances.

G4-EN15 – EN17: Report on greenhouse gas emissions of Scope 1 (direct), Scope 2 (indirect) and Scope 3 (material) greenhouse gas emissions (tonnes CO₂-e).

G4-EN18: Report greenhouse gas emissions intensity ratio (a normalisation factor).

G4-EN19: Report the amount of greenhouse gas emissions reductions achieved as a direct result of initiatives to reduce emissions.

G4-EN20: Report on emissions of ozone-depleting substances (ODS) and report the production, imports and exports of ODS (CFC-11e).

**Energy Use**

Total energy usage segmented by primary source, including green power (megajoules) and energy intensity (normalised by FTE employee and unit of office area)

A broader set of indicators such as reductions in energy consumption.

G4-EN4, EN5: This is consistent with FRD 24C. However non-renewable and renewable energy sources are reported including stationary and transport-related energy use.

G4-EN6: This requires the reporting of the amount of reductions in energy consumption including the types of energy (electricity, heating, cooling or steam).

**Procurement (e.g. suppliers)**

FRD 24C requires entities to discuss whether and how their procurement activities are environmentally responsible and support the objectives of the Government’s Environmental Procurement Policy (see FRD 24C).

Sustainable Procurement: GRI G4 considers supplier environmental assessment [G4-EN32-EN33]. This includes the percentage of new suppliers that were screened using environmental criteria and the significant actual and potential negative impacts in the supply chain.

**Biodiversity**

Not currently included in FRD 24C.

GRI G4 [G4-EN11-EN13] reports on a number of biodiversity indicators.

G4-EN11 reports biodiversity at sites that are operational sites and are owned, leased or managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.

G4-EN12 describes significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

### Table 1: Examples of possible alignment of FRD 24C and GRI indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FRD 24C</th>
<th>GRI (G4) aspects for consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>Total greenhouse gas emissions segmented by primary source (i.e., energy use, vehicle fleet, air travel and waste production) and offsets (t-CO₂-e)</td>
<td>Reporting on greenhouse gas emissions includes Scope 1, 2 and 3 emissions but also the amount of reductions achieved and emissions of ozone depleting substances. G4-EN15 – EN17: Report on greenhouse gas emissions of Scope 1 (direct), Scope 2 (indirect) and Scope 3 (material) greenhouse gas emissions (tonnes CO₂-e). G4-EN18: Report greenhouse gas emissions intensity ratio (a normalisation factor). G4-EN19: Report the amount of greenhouse gas emissions reductions achieved as a direct result of initiatives to reduce emissions. G4-EN20: Report on emissions of ozone-depleting substances (ODS) and report the production, imports and exports of ODS (CFC-11e).</td>
</tr>
<tr>
<td>Energy Use</td>
<td>Total energy usage segmented by primary source, including green power (megajoules) and energy intensity (normalised by FTE employee and unit of office area)</td>
<td>A broader set of indicators such as reductions in energy consumption. G4-EN4, EN5: This is consistent with FRD 24C. However non-renewable and renewable energy sources are reported including stationary and transport-related energy use. G4-EN6: This requires the reporting of the amount of reductions in energy consumption including the types of energy (electricity, heating, cooling or steam).</td>
</tr>
<tr>
<td>Procurement (e.g. suppliers)</td>
<td>FRD 24C requires entities to discuss whether and how their procurement activities are environmentally responsible and support the objectives of the Government’s Environmental Procurement Policy (see FRD 24C).</td>
<td>Sustainable Procurement: GRI G4 considers supplier environmental assessment [G4-EN32-EN33]. This includes the percentage of new suppliers that were screened using environmental criteria and the significant actual and potential negative impacts in the supply chain.</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>Not currently included in FRD 24C.</td>
<td>GRI G4 [G4-EN11-EN13] reports on a number of biodiversity indicators. G4-EN11 reports biodiversity at sites that are operational sites and are owned, leased or managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. G4-EN12 describes significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.</td>
</tr>
</tbody>
</table>
Aligning FRD 24C with international frameworks could support the public sector to report on its operational performance (i.e. FRD 24C & GRI G4).

Although beyond the scope of the current report, it is worth noting that adopting the principles of sustainability and integrated reporting (e.g. GRI and IR Framework) could, in the longer term, assist the public sector to assess the performance of its business model and strategy in creating value for the public. To be meaningful and reflect progress towards sustainable development, such reporting would also need to be couched within the overall context of the issues and parameters in which the agency or department is trying to effect change (e.g. State of the Environment [SoE] reporting or other baseline reporting such as the Catchment Condition and Management Report produced by the Victorian Catchment Management Council).

The adoption and alignment of FRD 24C with current international reporting frameworks creates a number of benefits that may be realised:

a. Leadership by investing in a process to improve understanding of impacts throughout the value chain
b. The importance of the public sector’s role as a leader in sustainable development, and
c. Better define the linkages between operational impacts, government policies and outcomes.

Recognising environmental excellence in the Victorian public sector

The Institute of Public Administration Australia (IPAA) developed the leadership in the Public Sector Awards as part of its mission to build the capacity, integrity and reputation of the public sector. The Awards aim to recognise and celebrate outstanding practices as well as showcase exemplars in public administration across a range of areas including policy development, service delivery, people development, health and safety, Indigenous employment, communications and environmental sustainability.

Dr Geraldine Kennett, chief executive officer, IPAA (Victoria Division), says that while systems and frameworks like the existing environment management systems are important, leadership from within the public sector is driving some stand-out performances.

“In 2014 the Institute was fortunate to work in partnership with Sustainability Victoria and the Environment Protection Authority Victoria to develop a new significant award category that strategically aligns with IPAA’s corporate sustainability policy – to promote long term outcomes for the environment. This Award recognises organisational leadership and excellence in an initiative which delivers environmental benefits within the organisation or to the wider Victorian community.”

Dr Geraldine Kennett, CEO, IPAA, Victoria Division.
Case study: Creating a sustainable health care system

The winner of the inaugural Environmental Sustainability (achieving long term outcomes for the environment) Award for Leadership in the Public Sector was the Victorian Department of Health and Human Services.

The Department of Health and Human Services Sustainability Unit’s strategic leadership on environmental sustainability has resulted in a large number of major metropolitan and regional health services employing a dedicated sustainability officer to provide a local focus. Over the past eight years, public hospitals have reduced water use by some 800 million litres and energy use has reduced by 8% relative to bed-days, 10% relative to floor area, and 22% relative to separations.

The Department of Health and Human Services has implemented a number of projects to improve the overall environmental performance, thereby saving money and creating a better, more sustainable health care system. Recent and ongoing projects include:

- $5.8 million energy performance contract at the West Gippsland Healthcare Group, which will reduce annual energy use and carbon emissions by approximately 25% and water use by approximately 10%.
- The Department requiring 80 standard-practice sustainability initiatives on all capital projects through its guidelines for sustainability in healthcare capital works.
- Securing funding to divert organics generated by public and private health providers across the Parkville health precinct from landfill.
- Implementing a whole-of-portfolio comprehensive on-line environmental data management system for all health services to enable them to better manage utility costs and report environmental impacts.
- A four-year longitudinal study, in conjunction with Sustainability Victoria, to investigate the links between indoor environment quality and staff productivity, patient outcomes, visitor experience and building efficiency.
- Installation of a 96 kilowatt solar array at Yarrawonga Health.

Reporting is a key component of any environmental management system (EMS). This section presents information on the environmental performance of mandated Victorian Government departments, Sustainability Victoria and the Environment Protection Authority Victoria for the period 2013-14. While not included in this report, details of other Victorian public sector organisations’ environmental performance are included in their annual reports.

Our environmental performance reporting is in accordance with the Financial Reporting Directive 24C (FRD 24C) which states that every year by 31 January, the Commissioner for Environmental Sustainability will report to the Minister for Environment and Climate Change on the implementation of defined entities EMSs.16

FRD 24C enables government entities to report on office-based environmental impacts in a consistent manner. In addition to reporting the 2013-14 results, a comparison of trends over the past five years is included.

While FRD 24C sets minimum reporting requirements for office-based environmental impacts, some departments and agencies have expanded reporting boundaries beyond these activities. This is in recognition of the need to report on a broader set of criteria, consistent with international standards such as GRI, and to adapt business plans to include sustainability objectives and considerations.

During the course of our audit and report, government agencies have shown strong leadership and commitment to the ongoing pursuit of better environmental performance.

The whole-of-government performance is aggregated from data provided in the annual reports of departments, Sustainability Victoria and the Environment Protection Authority Victoria. The measurement and reporting of environmental performance allows us to compare progress over time and provides transparency and accountability to stakeholders and the community. Where available, both absolute and intensity-based indicators are presented, and, where applicable, progress at the departmental level is also compared.

Government agencies have continued to show leadership in environmental performance with many improvements over the past five years. The results for the 2013-14 strategic audit indicate that while trending towards improvement across a number of areas over the five years to 30 June 2014, performance has plateaued and in some areas begun to decline. The 12-month trend highlights an increase in energy use and greenhouse gas emissions, water usage and vehicle numbers compared to 2012-13.

16. The Minister for Environment and Climate Change is required under the Commissioner for Environmental Sustainability Act 2003 to table the strategic audit report in Parliament within 10 sitting days of its receipt.
2013-14 results include:

- Total greenhouse gas emissions including office-based, air travel and vehicle use emissions, decreased by 3% over the five-year period 2009-10 to 2013-14. The 12-month trend to 30 June 2014 saw greenhouse gas emissions increase by 7%, which is attributed to increases in both building energy use and vehicle emissions.

- Total energy use decreased by 3% over the five-year period 2009-10 to 2013-14. Energy intensity (measured as use per m²) increased by 5% over the same period. The 12-month trend to 30 June 2014 saw energy use increase by 7%, which is attributed to the inclusion of additional building assets in the data reported compared with the previous strategic audit period.

- Total waste produced (kg) decreased by 34% over the five-year period 2009-10 to 2013-14 and a total of 78% of office-based waste was recycled in 2013-14, a slight decrease over the 5-year period from 82% in 2009-10. However, the 12-month trend to 30 June 2014 saw total waste to landfill increase by 34% which is attributed at least in part, to a waste contractor unintentionally diverting waste to landfill instead of composting. This has since been rectified.

- Total office-based water use has decreased by 14% over the five-year period 2009-10 to 2013-14. However, reported water use per FTE employee increased by 13% over the same period. The 12-month trend to 30 June 2014 saw total office-based water use increase by 4%.

- Vehicle fleet use decreased by 9% over the five-year period 2009-10 to 2013-14. This coincided with a concurrent 20% increase in hybrid vehicles and a 12% and 19% decrease in six cylinder and four cylinder vehicles, respectively. Noting that the 12-month trend to 30 June 2014 saw the size of the vehicle fleet increase by 3%, which is attributed to the reportable data extending to include two- and four-wheel drive utility vehicles. Vehicle energy use (MJ) remained largely unchanged over the five-year period 2009-10 to 2013-14 with a reported increase of 0.3%. The 12-month trend to 30 June 2014 saw vehicle energy use increase by 22.8%.

- Total office paper use has decreased by 25% over the five-year period 2009-10 to 2013-14. The 12-month trend to 30 June 2014 saw the average office paper use per FTE employee, decrease from 13.6 reams to 13.1 reams.

Our performance at a glance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>% change 2009-10 to 2013-14</th>
<th>% change 2012-13 to 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emissions</td>
<td>-3%</td>
<td>+7%</td>
</tr>
<tr>
<td>Total energy use</td>
<td>-3%</td>
<td>+7%</td>
</tr>
<tr>
<td>Total waste produced (kg)</td>
<td>-34%</td>
<td>-2%</td>
</tr>
<tr>
<td>Total office-based water use (kl)</td>
<td>-14%</td>
<td>+4%</td>
</tr>
<tr>
<td>Vehicle energy (MJ)</td>
<td>No change</td>
<td>+23%</td>
</tr>
<tr>
<td>Total air travel (km)</td>
<td>-34%</td>
<td>+10%</td>
</tr>
<tr>
<td>Total paper use (reams)</td>
<td>-25%</td>
<td>-8%</td>
</tr>
</tbody>
</table>
FRD 24C sets minimum reporting requirements for office-based activities including:

- **energy use** – stationary energy: building consumption such as electricity (including green power), natural gas, LPG, heating oil, diesel and solid fuel
- **waste production** – which includes waste to landfill, waste sent for recycling and composted waste
- **paper use** – paper used for printing, photocopying and similar processes
- **water consumption** – including domestic water use, rainwater and reused water
- **transportation** – vehicle fleet energy use, air travel and staff commuting
- **greenhouse gas emissions** – those associated with building energy use, vehicle fleet use, air travel and waste production (any offsets purchased are also reported)
- **procurement** – a discussion of whether and how procurement activities are environmentally responsible.

---

Greenhouse gas emissions

Total greenhouse gas emissions including office-based, air travel and vehicle use emissions, decreased by 3% over the five-year period 2009-10 to 2013-14. The 12-month trend to 30 June 2014 saw greenhouse gas emissions increase by 7%, which is attributed to increases in both building energy use and vehicle emissions.

The total reported greenhouse gas emissions from Victorian Government departments, Sustainability Victoria and the Environment Protection Authority Victoria remains below 2009-10 results. However, total emissions increased by 7% over the last 12-month period. This increase in emissions is consistent with the rise in reported energy use over the year.

Office building energy use is the largest source of greenhouse gas emissions by agencies accounting for 69% of emissions in 2013-14. Vehicle use and air travel accounted for 24% and 6% of total emissions respectively, with office-based waste accounting for less than 1% of total emissions.

Figure 3: Annual greenhouse gas emissions 2013-14

ANNUAL EMISSIONS
103kt CO₂e

Vehicle use 24%
Air travel 6%
Office waste to landfill 0.4%
Office building energy 69%

18 Note: in some cases, Victorian Government agencies subsequently revised the 2012-13 data presented in the 2013-14 annual reports. The strategic audit report reflects the latest data for comparative purposes.
Greenhouse gas emissions have increased for all sources over the last 12 months. Office building energy use increased by 3%, air travel increased by 7%, vehicle emissions increased by 21%, and waste to landfill by 53%, respectively. The increase in office building energy use is in part attributed to the inclusion of additional building assets in the data reported compared with the previous year. The increase in vehicle use was due to the expansion of the vehicle fleet. Increases in waste emissions are due to reduction in the amount of waste being recycled.
Figure 5: 2013-14 change in greenhouse gas emissions from 2009-10 and 2012-13

Table 2: Greenhouse gas emissions – Victorian Government departments and agencies 2009-10 to 2013-14

<table>
<thead>
<tr>
<th>Emission source</th>
<th>Annual emissions (tonnes CO₂-e)</th>
<th>% change 2009-10 to 2013-14</th>
<th>% change 2012-13 to 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009-10</td>
<td>2010-11</td>
<td>2011-12</td>
</tr>
<tr>
<td>Office building energy</td>
<td>66,823</td>
<td>62,987</td>
<td>68,875</td>
</tr>
<tr>
<td>Vehicle use</td>
<td>24,955</td>
<td>23,458</td>
<td>21,609</td>
</tr>
<tr>
<td>Air travel</td>
<td>13,958</td>
<td>14,911</td>
<td>6,868</td>
</tr>
<tr>
<td>Office waste to landfill</td>
<td>394</td>
<td>342</td>
<td>305</td>
</tr>
<tr>
<td>Total GHG emissions (tCO₂-e)</td>
<td>106,130</td>
<td>101,698</td>
<td>97,657</td>
</tr>
</tbody>
</table>

Notes:
A. Data excludes emissions associated with water and paper use.
B. The multiplier used to calculate air travel emissions was revised in 2011-12. Consequently, emissions prior to 2011-12 appear to be over-estimated.
Total energy use decreased by 3% over the five-year period 2009-10 to 2013-14. Energy intensity (measured as use per m²) increased by 5% over the same period. The 12-month trend to 30 June 2014 saw energy use increase by 7%, which is in part attributed to the inclusion of additional building assets in the data reported compared with the previous strategic audit period.

Energy efficiency continues to play a large and valuable role in ecological sustainable development. A recent International Energy Agency (IEA) report referred to energy efficiency as a “hidden fuel” that extends energy supplies, increases energy security, lowers carbon emissions and generally supports sustainable economic growth.

The building sector has significant potential for delivering long term and cost-effective reductions in greenhouse gas emissions. This was recognised by the Victorian Government with the introduction of the Greener Government Building program in 2009.

Energy use in buildings is responsible for 26% of Australia’s greenhouse gas emissions, with energy use in Victorian government buildings accounting for approximately 70% of associated greenhouse gas emissions.

Energy use in office buildings includes heating, ventilation and air conditioning, water heating, appliances, lighting and installed equipment such as computers.
Efficient Government Building Program

In 2009, the Victorian Government introduced a world-leading program called the Greener Government Building (GGB) Program (later renamed the Efficient Government Building Program) to help government agencies reduce their outgoings through energy efficiency. The program invested funds to upgrade infrastructure in schools, hospitals and other government buildings, reducing recurrent expenditure on energy and maintenance.

The program is a comprehensive, government-wide program that applies to all agencies, and includes:

- Loans for agencies to implement energy efficiency upgrades. Loan funding to cover the up-front capital costs of GGB projects, to be repaid using operational cost savings over a predefined payback period (initially eight years, revised to seven years in February 2011).
- Establishing a facilitation unit in the Department of Treasury and Finance (DTF).
- A mandate for all agencies to implement energy efficiency upgrades at sites accounting for 20% of agency energy use by 2012 and 90% by 2018.

Under the program:

- Agencies were required to identify opportunities to reduce energy and maintenance costs.
- Agencies were required to invest in any projects that deliver an internal rate of return (IRR) of more than 12%, based on current energy prices.
- Agencies could borrow funds under Section 37 of the Financial Management Act (treated as capital expenditure) to invest in these energy efficiency programs.

The program has driven a number of upgrades to high-profile sites, saving these sites between 9% and 55% of their energy costs. The GGB Program had positive impact on almost every metric of the Victorian budget including at least a 12% IRR on energy projects, reduction of outgoings estimated at over $1 billion in energy and maintenance savings over a period of 25 years, increase in surplus due to the reduction in outgoing costs, a positive impact on net debt and the balance sheet.

A review by the DTF in 2012 found that the program was delivering substantially beyond expectations. In 2009, DTF anticipated that projects would reduce greenhouse gas emissions (and energy costs) by an average of 25%. However, across the first 19 projects, emissions savings were over 40%. As a result, the net present value from projects in the period 2009-12 increased from an anticipated $37 million to $95 million. DTF also estimated that the program was on track to save the Victorian Government $2 billion in energy and maintenance costs over 25 years, with a net present value estimated at around $400 million.

Source: Energy Efficiency Council
Total energy use by Victorian Government departments and agencies decreased by 3% over the five-year period 2009-10 to 2013-14, however energy intensity (measured as use per m²) increased by 6% over the same period.

The increase in office building energy use is in part attributed to the inclusion of additional building assets in the data reported compared with the previous year.

In addition, the Department of State Development, Business and Innovation, Sustainability Victoria and the Environment Protection Authority Victoria purchased accredited carbon offsets for the period 2013-14. This covers the emissions associated with activities such as stationary energy use in buildings, vehicle use and air travel.
Table 3: Energy use, intensity and GreenPower purchased for government office buildings 2009-10 to 2013-14

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>% change 2009-10 to 2013-14</th>
<th>% change 2012-13 to 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total building energy (MJ)</td>
<td>285,072,746</td>
<td>291,916,710</td>
<td>283,506,942</td>
<td>262,913,849</td>
<td>277,510,906</td>
<td>-3%</td>
<td>+6%</td>
</tr>
<tr>
<td>Building energy per m² (MJ)</td>
<td>419</td>
<td>430</td>
<td>420</td>
<td>402</td>
<td>442</td>
<td>+5%</td>
<td>+10%</td>
</tr>
<tr>
<td>Electricity purchased as GreenPower (%)</td>
<td>24%</td>
<td>27%</td>
<td>14%</td>
<td>6%</td>
<td>1%</td>
<td>-97%</td>
<td>-85%</td>
</tr>
</tbody>
</table>

Note:
- Includes Department of Environment and Primary Industries’ large ongoing research component at many of its sites. This, along with increases experienced by Sustainability Victoria and the Department of Transport, Planning and Local Infrastructure, contributed in part to the overall rise in energy consumption.
- Includes Environment Protection Authority Victoria’s electricity and gas use in all offices, electricity consumed by its laboratories and air monitoring stations, and a portion of base building consumption for shared buildings.

Figure 7: Energy use, intensity and GreenPower purchased for government office buildings 2009-10 to 2013-14

Note: Includes Department of Environment and Primary Industries’ large ongoing research component at many of its sites which accounts for a significant portion of overall energy consumption.
Case Study: Increasing energy and water efficiency in the community

Sustainability Victoria’s Smarter Choice Program

Sustainability Victoria’s Smarter Choice retail program works in partnership with appliance, hardware, lighting and home-entertainment retailers across the state to influence Victorian consumers to purchase energy- and water-efficient products. This helps consumers ease the impact of increasing living costs by saving money on their energy and water bills.

The average Victorian household spends almost $2,800 each year on energy to run its household. Research has shown that when householders start to think about purchasing a new appliance, the question of energy and water efficiency plays a significant role in the purchasing decision. The average household can save around $400 each year by purchasing higher-efficiency appliances. A household purchasing an energy-efficient product typically saves up to 30% on its running costs with every extra ‘efficiency star’.

Smarter Choice operates in 526 stores, where more than one million Victorians purchase appliance, hardware, lighting and home entertainment products each year. The retail partners include Beacon Lighting, Betta Home Living, Bunnings, Camberwell Electrics, David Jones, E&S Trading, Harvey Norman, Home Timber & Hardware, JB Hi-Fi, Mitre 10, Myer, The Good Guys, Thrifty-Link Hardware and leading independent retailers.

The success of the retail program since it commenced in 2007 has led other states to launch similar programs. The program also provides a presence in 118 Member of Parliament offices, local government offices and Sustainability Fund sites such as Eco Living Centres.

Key program outcomes:

- 526 retail stores across Victoria are part of the Smarter Choice program.
- In the 12 months to June 2014, more than 570,000 white goods were sold in Victoria, of which 49% were energy-efficient products, compared with 43% to June 2013 and 37.3% to June 2012.
- In 2014, the Smarter Choice program suite of point-of-sale material was awarded the Money Smart award for improving financial literacy.
- The program boasts an online running cost calculator and app.

Achievements from July 2013 – June 2014

<table>
<thead>
<tr>
<th></th>
<th>Reached</th>
<th>Influenced</th>
<th>Estimated Savings ($M/Yr)</th>
<th>Estimated Lifetime Savings ($M)</th>
<th>Energy Savings (GJ)</th>
<th>Estimated Savings (k/T/Yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>126,248</td>
<td>58,084</td>
<td>$1.79</td>
<td>$23.20</td>
<td>30,072</td>
<td>7.56</td>
</tr>
<tr>
<td>Product purchases</td>
<td>256,987</td>
<td>118,215</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Waste in office buildings

Total waste produced (kg) decreased by 34% over the five-year period 2009-10 to 2013-14 and a total of 78% of office-based waste was recycled in 2013-14, a slight decrease over the five-year period from 82% in 2009-10. However, the 12-month trend to 30 June 2014 saw total waste to landfill increase by 34% which is attributed, at least in part, to a waste contractor unintentionally diverting waste to landfill instead of composting. This has since been rectified.

Waste is separated into different waste streams in Victorian Government offices including waste to landfill, waste (including paper) sent for recycling and composted organic waste. It should be noted that variations in data reported, strongly reflect changes in waste audit methodology.

For the five-year period between 2009-10 and 2013-14, total waste decreased by 34% resulting in a decrease of 17% per FTE employee. However waste to landfill increased over the last 12-month period, with the recycling rate down to 78% from 84% in 2012-13.

Table 4: Waste produced, waste intensity and recycling rate 2009-10 to 2013-14

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total waste produced (kg)</td>
<td>1,945,566</td>
<td>1,531,606</td>
<td>1,626,564</td>
<td>1,316,778</td>
<td>1,288,386</td>
<td>-34%</td>
<td>-2%</td>
</tr>
<tr>
<td>Waste recycled (kg)</td>
<td>1,590,986</td>
<td>1,245,451</td>
<td>1,374,718</td>
<td>1,105,545</td>
<td>1,004,348</td>
<td>-37%</td>
<td>-9%</td>
</tr>
<tr>
<td>Waste to landfill (kg)</td>
<td>354,579</td>
<td>286,155</td>
<td>251,846</td>
<td>211,233</td>
<td>284,038</td>
<td>-20%</td>
<td>+34%</td>
</tr>
<tr>
<td>Recycling rate (%)</td>
<td>81.8</td>
<td>81.3</td>
<td>84.5</td>
<td>84.0</td>
<td>78.0</td>
<td>-5%</td>
<td>-7%</td>
</tr>
<tr>
<td>Waste per FTE (kg)</td>
<td>94.8</td>
<td>76.1</td>
<td>98.6</td>
<td>93.1</td>
<td>79.0</td>
<td>-17%</td>
<td>-15%</td>
</tr>
</tbody>
</table>

Note: 2012-13 and 2013-14 excludes Sustainability Victoria data.

Between 2009-10 and 2013-14 waste decreased by 34% resulting in a reduction of 17% per FTE. However waste to landfill increased in 2013-14. One reason for this was that separated organic waste at one Department of Environment and Primary Industry site was found to have been incorrectly disposed to landfill by service providers. This issue has since been rectified.
Figure 8: Waste produced, waste intensity and recycling rate 2009-10 to 2013-14

Note: 2012-13 and 2013-14 excludes Sustainability Victoria data.
Water use in office buildings

Total office-based water use has been reduced by 14% in the past five years (between 2009-10 to 2013-14). However, reported water use per FTE employee increased by 13% over the same period. In addition, total office-based water use over the last 12-month period increased by 4%.

Office buildings account for as much as 10% of a capital city’s water use. Office-based water use data includes water consumption for drinking, washing, cleaning and toilet flushing, and base building requirements such as heating and cooling systems.

Victorian Government agencies are implementing a range of initiatives, which seek to reduce potable water use in office-based accommodation. These range from installing dual flush toilets, flow restrictors on taps, harvesting and reusing water from roofs to installing water meters and real-time water tracking.

Total water use decreased by 14% over the five-year period between 2009-10 and 2013-14. Despite this, water use per FTE employee increased by 13% over the same period. However, in 2013-14, total water use increased by 4% and water use per FTE increased by 12%.

Table 5: Water use, water intensity across government offices 2009-10 to 2013-14

<table>
<thead>
<tr>
<th>Water</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>% change 2009-10 to 2013-14</th>
<th>% change 2012-13 to 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Kilolitres</td>
<td>204,732</td>
<td>192,034</td>
<td>183,547</td>
<td>169,613</td>
<td>176,840</td>
<td>-14%</td>
<td>+4%</td>
</tr>
<tr>
<td>Litres per FTE</td>
<td>10,028</td>
<td>9,633</td>
<td>9,497</td>
<td>10,119</td>
<td>11,379</td>
<td>+13%</td>
<td>+12%</td>
</tr>
</tbody>
</table>

Notes:
- Prior years have been adjusted to reflect Sustainability Victoria’s revised data, which was detailed in its 2013-14 annual report.
- Working year assumed to be 250 days out of a possible 365 days.

Water consumption at 121 Exhibition Street and 50 Lonsdale Street Melbourne is subject to the regular functioning of the building blackwater treatment systems. The recycled water is used to flush the toilets and when fully operational significantly reduces the amount of potable (drinking) water used.
Despite several water-saving initiatives, water use increased over the last 12-month period. There are no clear reasons why this has occurred, however, several agencies reported increases in pipe leakages, which may have been a contributing factor.
Transport

The size of the vehicle fleet decreased by 9% between 2009-10 and 2013-14, with a 20% increase in hybrid vehicles and a decrease in six-cylinder and four-cylinder vehicles by 12% and 19% respectively.

Vehicle environmental performance

Vehicle fleet use decreased by 9% over the five-year period 2009-10 to 2013-14. This coincided with a concurrent 20% increase in hybrid vehicles and a 12% and 19% decrease in six-cylinder and four-cylinder vehicles, respectively. Noting that the 12-month trend to 30 June 2014 saw the size of the vehicle fleet increase by 3%, which is attributed to the reportable data extending to include two- and four-wheel drive utility vehicles.

Managing the environmental performance of the vehicle fleet primarily involves reducing greenhouse gas emissions associated with travel by, for example, improving the efficiency of fleet operations and reducing the total number of kilometres travelled. Government agencies continue to report that they encourage alternatives to travel such as video and teleconferencing.

Table 6: Vehicle fleet use, intensity and emissions 2009-10 to 2013-14

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle energy (MJ)</td>
<td>355,344,560</td>
<td>335,670,108</td>
<td>307,278,950</td>
<td>290,070,210</td>
<td>356,262,169</td>
<td>0%</td>
<td>+23%</td>
</tr>
<tr>
<td>Vehicle kilometres</td>
<td>103,007,874</td>
<td>100,887,187</td>
<td>95,638,699</td>
<td>87,770,503</td>
<td>101,855,236</td>
<td>-1%</td>
<td>+16%</td>
</tr>
<tr>
<td>Vehicle kilometres per work day</td>
<td>412,031</td>
<td>403,549</td>
<td>382,555</td>
<td>351,082</td>
<td>407,421</td>
<td>-1%</td>
<td>+16%</td>
</tr>
<tr>
<td>Vehicle tonnes CO₂ per 1,000 km</td>
<td>0.24</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.24</td>
<td>0%</td>
<td>+5%</td>
</tr>
</tbody>
</table>

Notes:
• For completeness, many agencies voluntarily report on commercial vehicles and executive fleet vehicles.
• In 2013-14, the Department of Environment and Primary Industries expanded reporting to include all operational vehicles (passenger, and two- and four-wheel drive utilities). Utilities account for a significant portion of the vehicle kilometres.
• Department of Education and Early Childhood Development’s 2012-13 and 2013-14 passenger fleet data excludes executive vehicles (included in prior years).
In 2013-14, 1% fewer vehicle kilometres were travelled compared with 2009-10, with 407,421 kms of vehicle travel per working day.

**Victorian Government vehicle fleet mix**

The size of the government vehicle fleet decreased by 9% over the five-year period between 2009-10 and 2013-14, however there was a 3% increase in the vehicle fleet use over the last 12-month period due to inclusion of operational vehicles such as two- and four-wheel drive utility vehicles.

The overall composition continues to move to a lower intensity fleet with a 12% decrease in six-cylinder and 19% decrease in four-cylinder petrol vehicles, and a 20% increase in hybrid vehicles in 2013-14. In addition, the number of diesel vehicles in the fleet also increased in 2013-14.

The shift to more fuel-efficient passenger vehicles has resulted in a reduction of the average vehicle emission rate (based on manufacturer specifications) from 215 g CO$_2$/km in 2009-10 to 180 g CO$_2$/km in 2013-14, a decrease of 16%. The higher average emission intensity reported [243 g CO$_2$/km] is due to actual vehicle use in the field versus the theoretical manufacturer specifications such as the way the vehicles are driven and non-passenger vehicle use.

While the executive fleet consists predominately of six-cylinder vehicles, there has been an increase in the number of four-cylinder vehicles.
Figure 11: Victorian Government passenger vehicle fleet composition and average vehicle greenhouse intensity 2009-10 to 2013-14

Figure 12: Victorian Government passenger vehicle composition for operational and executive fleets 2013 to 14
Air travel

There was a 34% decrease in kilometres travelled (air travel) over the five-year period between 2009-10 and 2013-14.

Victorian Government agencies’ air travel distance is 34% below that in 2009-10. However, air travel increased by 10% over the last 12 months. A number of agencies reported an increase in air travel and associated emissions over the last 12-month period.

Air travel information is obtained from the whole-of-government travel services contract, and covers domestic and international flights.

<table>
<thead>
<tr>
<th>Table 7: Air travel kilometres travelled 2009-10 to 2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Travel</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total air travel kilometres</td>
</tr>
<tr>
<td>32,204,449</td>
</tr>
<tr>
<td>29,275,013</td>
</tr>
<tr>
<td>20,646,007</td>
</tr>
<tr>
<td>19,276,699</td>
</tr>
<tr>
<td>21,137,989</td>
</tr>
<tr>
<td>2009-10 to 2013-14 % change</td>
</tr>
<tr>
<td>-34%</td>
</tr>
<tr>
<td>2012-13 to 2013-14 % change</td>
</tr>
<tr>
<td>+10%</td>
</tr>
<tr>
<td>Air travel kilometres per work day</td>
</tr>
<tr>
<td>128,818</td>
</tr>
<tr>
<td>117,100</td>
</tr>
<tr>
<td>82,584</td>
</tr>
<tr>
<td>77,107</td>
</tr>
<tr>
<td>84,552</td>
</tr>
<tr>
<td>2009-10 to 2013-14 % change</td>
</tr>
<tr>
<td>-34%</td>
</tr>
<tr>
<td>2012-13 to 2013-14 % change</td>
</tr>
<tr>
<td>+10%</td>
</tr>
</tbody>
</table>

Note: The multiplier used to calculate air travel emissions was changed in 2011-12. Consequently, emissions prior to 2011-12 appear to be over-estimated.

Figure 13: Air travel annual and per work day kilometres travelled 2009-10 to 2013-14
Paper use

Total office paper use has decreased by 25% over the five-year period 2009-10 to 2013-14. The 12-month trend to 30 June 2014 saw the average office paper use per FTE employee decrease from 13.6 reams to 13.1 reams.

The increased use of electronic communication tools by government (online publishing and social media) and the take-up of smarter printing technologies, such as swipe and follow-me printing, is expected to further reduce the amount of copy paper and paper used.

Follow-me-print is a secure printing facility that allows staff to print documents at any available printer by authenticating themselves using a swipe card. Follow-me-print automatically purges any print jobs not accessed within a set timeframe, it also removes the need for personal printers. In 2013-14, there were 146 million sheets of paper used and 26 sheets of paper used per FTE employee per working day.

Table 8: Paper use and use per FTE employee 2009-10 to 2013-14

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total paper use</td>
<td>391,506</td>
<td>387,986</td>
<td>363,572</td>
<td>318,421</td>
<td>292,525</td>
<td>-25%</td>
<td>-8%</td>
</tr>
<tr>
<td>Paper use per FTE</td>
<td>14.3</td>
<td>14.1</td>
<td>14.1</td>
<td>13.6</td>
<td>13.1</td>
<td>-8%</td>
<td>-4%</td>
</tr>
</tbody>
</table>

Figure 14: Paper use and use per FTE employee 2009-10 to 2013-14

Note: 1 ream = 500 sheets of paper.
Sustainable procurement

The public sector has a great opportunity to influence environmental outcomes by selecting products and services that represent value for money with the least environmental impacts over the life of the product or service. FRD 24C requires all departments to report progress in incorporating environmental considerations into purchasing decisions. This can include reporting on purchasing-related targets or listing any tenders, contracts, or products, which incorporate sustainability clauses or specifications.

 Agencies reported to varying levels their sustainable procurement activities in 2013-14. These actions range from purchasing fair-trade products in some offices to incorporating environmental considerations in the procurement requirements for office accommodation fit-outs, IT equipment and fleet vehicles.

Sustainable procurement highlights in 2013-14 include:

- The Department of Health and Human Services developed an Efficient Fleet Procurement Policy to guide the purchase of efficient, low-emission vehicles, which received a Special Recognition Award at the department’s Making a Difference Awards in 2014. Other measures included expanding the environmental management system to include the department’s entire property portfolio. This includes monitoring and mapping of energy usage and expenditure in disability services group homes, comprising of 570 electricity accounts and 550 gas accounts. This achieved a 9% reduction in monitored gas use and a 7% reduction in monitored energy use.

- The Department of Treasury and Finance has facilitated energy-efficiency upgrade projects at 206 Government buildings as part of the Efficient Government Buildings program. In aggregate, project investment costs of $50.8 million are contracted to achieve a minimum saving of 55,000 tonnes per annum of greenhouse gases, and a full return on investment over a 4.5 year period. The projects include sites operated by Holmesglen and Chisholm TAFE, the Melbourne Cricket Ground, Museum Victoria, the Metropolitan Fire and Emergency Services Board, East Gippsland Water, and the Director of Housing’s high-rise public apartments.

- The Environment Protection Authority Victoria introduced mandatory swipe printing in 2013-14. The initiative aims to improve paper use and printing practices.

- The Department of Justice and Regulation incorporated environmental and social analyses within the department’s Procurement and Contract Management Framework. The only department to specify a mandatory minimum two out of five star Finsbury green rating for all external print publications. This initiative encourages our suppliers to build on their environmental credentials and drive further improvement in more sustainable printing.

- The Department of Education and Early Childhood Development increased awareness of the departmental ‘swap-shop’ – a stationery reuse system – which has assisted in decreasing excessive stationery purchases and in turn reduced waste to landfill.

The Victorian Government Purchasing Board reported that the department-specific procurement activity for goods and services in 2013–14 is valued at around $1.2 billion, therefore, incorporating environmental considerations into procurement requirements remains an area of continued focus.


Conclusion

Top five messages:

• The results for the 2013-14 strategic audit indicate that while trending towards improvement across a number of areas over the five-year period to 30 June 2014, performance has plateaued and in some areas begun to decline over the past 12 months.

• We have taken the opportunity in this year’s report to highlight some trends in international sustainability reporting and pose the question: “Are we measuring the right things?” We also assert that the true test of a good report is not how widely it is read, but how widely it is used.

• A snapshot of examples of how the existing reporting framework used since 2008, the Financial Reporting Directive (FRD) 24C, could be adapted, for example, by incorporating relevant aspects of the Global Reporting Initiative’s G4 protocols and in doing so, support the Victorian public sector to take a broader leadership role in this area.

• The data for energy and greenhouse gas emissions indicates an increase in the energy use of the reporting organisations. The data shows 69% of the annual greenhouse gas emissions are linked to office building energy use, indicating that more effort in this area is needed, which presents a key opportunity for the future.

• The public sector has a great opportunity to influence environmental outcomes through procurement choices. Incorporating environmental considerations into purchasing decisions and selecting products and services that represent value for money with the least environmental impact over the life of the product or service is a win-win.