



BDO Kendalls

# Carbon reporting in the Queensland Public Sector

The state of play, trends and better practices



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# Executive summary

The reporting of Greenhouse Gas Emissions (GHG) is an important strategy in encouraging organisations to reduce their emissions and to publicly demonstrate to stakeholders their progress in reducing them.

This report identifies the current state of reporting on GHG emissions (or carbon footprints, measured in terms of carbon dioxide equivalents or CO<sub>2</sub>e) across the Queensland public sector, including by departments, government owned corporations (GOCs), local governments and statutory bodies.

Overall, the survey found that:

- in this first year of reporting within the budget sector, all departments have started reporting on their emissions, although significant gaps in scope and data limitations are evident;
- a number of port and electricity GOCs are the most advanced in reporting their GHG emissions, albeit with further improvements being implemented to meet mandatory reporting standards;
- a small number of local governments have started reporting emissions;
- few statutory bodies are yet in a position to report their emissions; and
- none of the disclosures have been audited, although one GOC has provided an 'independent limited assurance report'.

From a review of reporting practices, both in Australia and overseas across the public and private sectors, a number of 'better practices' are evident:

- the classification of emissions by source is likely to provide more 'decision useful' information than the high-level Scope 1, 2 and 3 categories which are used in the Greenhouse Gas Protocol reporting standard to avoid double-counting by two or more entities;
- a time series of data by source provides greater transparency, particularly in comparison with targets, although reasonably reliable data is required before it is feasible to set absolute targets; and
- the reporting on an organisation's 'carbon intensity' provides useful benchmark information. The electricity generator GOCs report carbon intensity in terms of CO<sub>2</sub>e per megawatt hour of production, whereas for agencies that are electricity consumers, CO<sub>2</sub>e emissions per FTE may provide a better basis for comparison over time and between agencies with similar types of operation.

This review also suggests that requirements for the mandatory reporting of emissions and the independent verification of emissions, are likely to increase, particularly in the public sector where governments are seen as having a leadership role in setting an example for business and households.

## Note:

^The terms 'emissions' and 'carbon emissions' are shorthand for emissions of the six greenhouse gases included within reporting systems relating to climate change. They include carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons.

# Introduction

This research report has been developed by BDO Kendalls, the University of Southern Queensland and Carbon Planet to identify the current state of reporting on carbon emissions across the Queensland public sector.

A baseline study is included which forms the first stage of a broader research project that aims to:

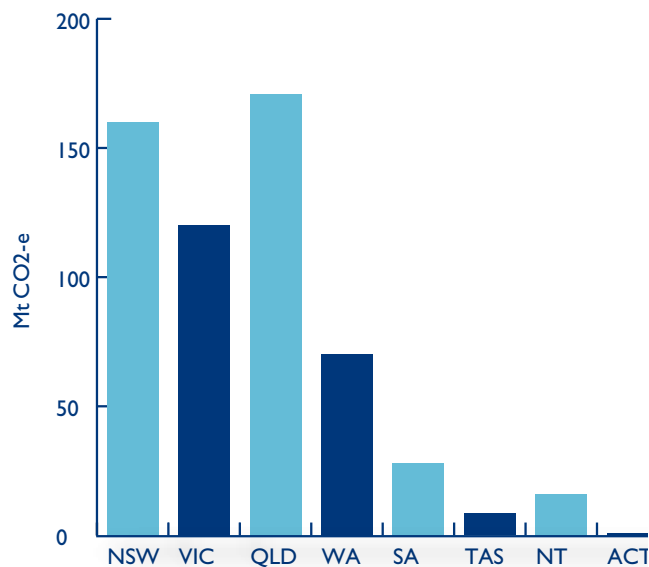
- 1. Analyse current practices** in reporting emissions across the Queensland public sector and understand the gap between these reports and the ideal of reporting information that is valid and reliable (and auditable) as well as being useful in inducing behavioural change;
- 2. Assess improvements** in reporting practices over time;
- 3. Identify impediments** to improved reporting on emissions;
- 4. Assess** whether **existing reporting and auditing frameworks** for financial and performance information, whether by agencies or at whole-of-government level, are appropriate for emissions information; and
- 5. Identify current and likely future trends** in the reporting and auditing of emissions, whether in the public or private sectors.

# 1

## Emissions in Queensland

The reporting of emissions in Queensland is particularly relevant as it has the highest level of emissions of any State in Australia, as shown in *Figure 1*. At almost 30% of the nation's total, the state's proportion of Australia's emissions is one and one-half times its population share of 20%.

**Figure 1: Carbon emissions by State, 2006**



Source: National Greenhouse Gas Inventory 2006, Department of Climate Change

Queensland accounted for 171 million tonnes of CO<sub>2</sub>e emissions in 2006. This is equivalent to 44 tonnes per person.

As shown in *Figure 2*, Queensland's higher level of emissions relative to the other States is largely attributable to land use, as well as the generation of energy from coal-fired power stations.

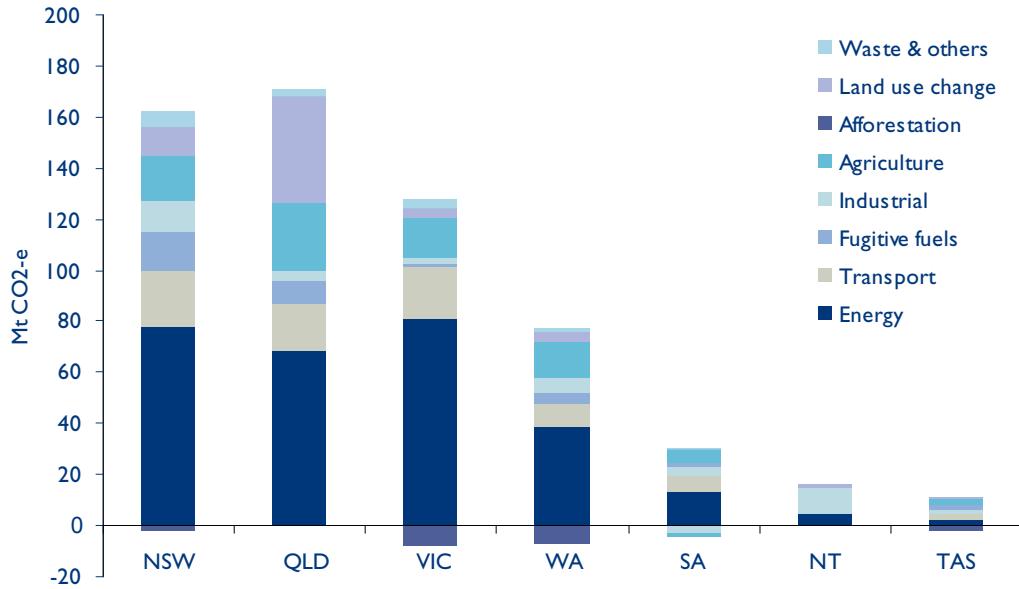
Interestingly, the Garnaut Report suggests that Queensland will also be the State most affected by climate change, due primarily to reductions in coal exports and agricultural production.

Energy is the largest contributor to Queensland's emissions. *Figure 3* shows how this source has grown compared with other sources.

To meet the national emissions target of reducing emissions by 60% of 2000 levels by 2050, Queensland will need to emit no more than 65 million tonnes, which is equivalent to 9.4 tonnes per person (having regard for the projected population increase in the meantime).

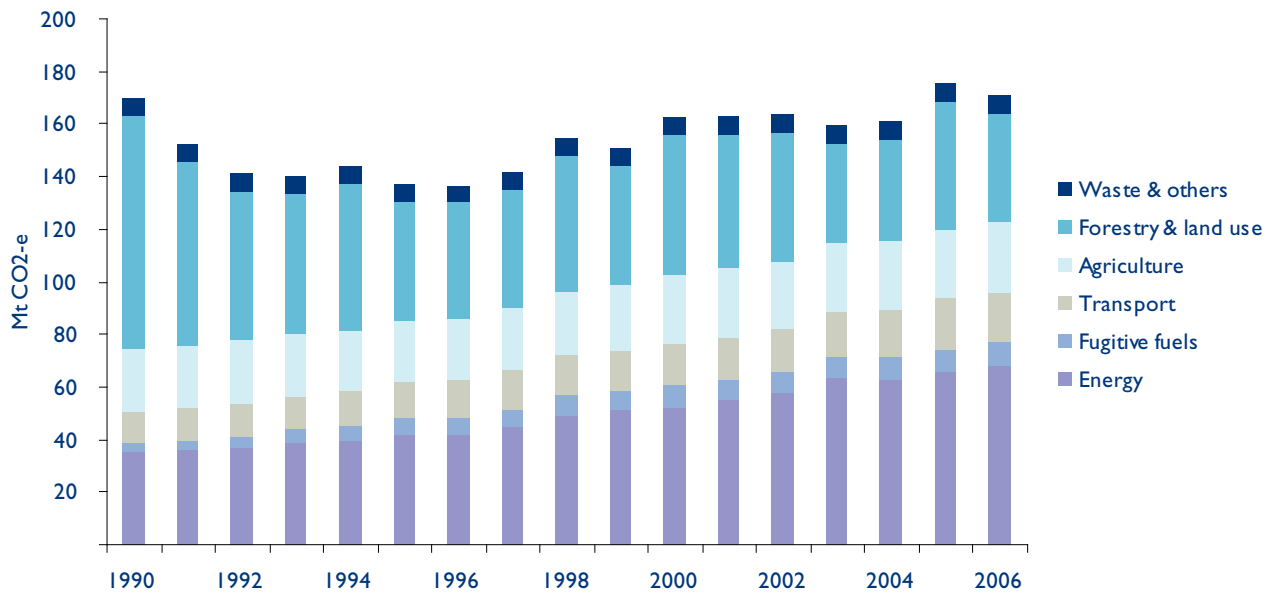


**Figure 2: Carbon emissions by state & source, 2006**



Source: National Greenhouse Gas Inventory 2006, Department of Climate Change

**Figure 3: Carbon emissions in Queensland, 2006**



Source: National Greenhouse Gas Inventory 2006, Department of Climate Change

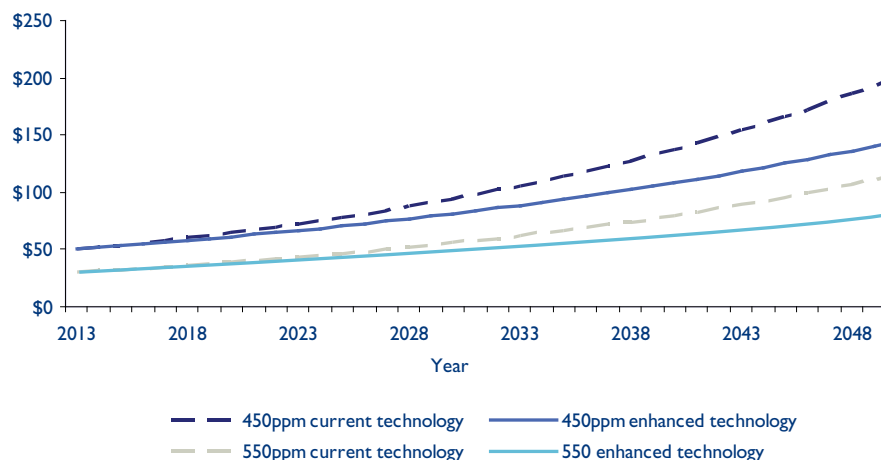


# The cost of reducing emissions

The Garnaut Report estimated that the net cost to the Australian economy of mitigating emissions would be about 0.1% of GDP per annum up to 2050 – slightly more to achieve a concentration of 450ppm of CO<sub>2</sub>e in the atmosphere, and slightly less to reach a target of 550ppm. In the second half of the century, there would be a net economic benefit.

This estimate of economic costs was based on the impact on the cost of electricity, fuel, and inputs generally, of the projected price of emission permits that would result from the ever-decreasing emissions caps required to meet the agreed targets. The modelled increase in the required price of emissions permits is shown in *Figure 4*.

**Figure 4: Projected price of emissions permits**



Source: *Targets and Trajectories*, Garnaut

Putting aside the opportunity cost of reduced production from climate change, there are financial costs in undertaking sufficient abatement strategies to reach either target. At the same time, McKinsey's 2020 carbon cost abatement curve shows that many abatement strategies provide a net financial saving. In other words, there are a range of energy saving initiatives that will pay for themselves regardless of a permit system.

Further, the business case for some abatement strategies, such as the construction of a 'green' building rather than a 'non-green' building has become more sustainable. Studies by the Green Building Council of Australia show that construction costs for a 5-star green star building are now only about 3% to 5% higher than for a 'non-green' building – and a further 5% higher for a 6-star green star building. Davis Langdon estimates that the operating costs for a green building tend to be 5% lower than for a non-green building (and will be lower still when electricity charges include a cost for carbon), while 'non-bankable' benefits include increases in productivity and reductions in staff churn and sick leave.

In existing premises, actions to reduce electricity consumption provide an opportunity for significant cost savings. The cost of electricity will increase significantly faster than inflation as the costs of carbon permits and mitigation strategies are factored into electricity prices.

# 3

## Role of reporting in reducing emissions

The reporting on carbon emissions, either at source or by energy users, is one of a number of strategies being mandated by governments or adopted voluntarily to address the issue of climate change. Permit trading schemes (such as Australia's proposed Carbon Pollution Reduction Scheme), renewable energy targets and subsidies, offset schemes and 'green star' building projects, are other strategies being adopted.

In most cases, the effectiveness of these strategies relies on having reliable and valid information that will induce behavioural change, whether in terms of the less carbon-intensive generation of energy or reduced energy consumption.

While the potential impacts of human activities on the planet's climate have been identified and debated for many years, the reporting on emissions remains largely at an embryonic stage. The initial steps, such as those being taken in the Queensland public sector (as discussed below), are tending to follow the traditional path of reporting financial and performance information – that is in the annual reports of individual agencies, albeit without independent verification.

Whether this is the most appropriate, or only, approach remains to be seen – for example, such reporting alone may not provide sufficient 'granularity' to effect behavioural change within large and diverse agencies.

### **Better practice example: Performance alignment**

The United Kingdom's largest utility, the National Grid, is linking executive remuneration to their performance in achieving carbon reduction targets in their businesses. The company's overall target of a 45% reduction by 2020 exceeds the proposed EU target of a 30% reduction by that date.

# Emissions reporting generally

The types of human activities which emit significant amounts of greenhouse gases include:

- the generation of electricity; and
- the use of petrol and other hydrocarbon-based fuels.

The internationally-recognised reporting framework uses tonnes of carbon dioxide equivalents (CO<sub>2</sub>e) as its unit of measurement.

The Greenhouse Gas Protocol document A *Corporate Accounting and Reporting Standard* provides the commonly used standard for reporting emissions of the six gases covered by the Kyoto Protocol. It provides for three levels of emissions to be measured:

- **Scope 1:** Direct emissions – from sources owned or controlled by an organisation, such as operation of a vehicle fleet or combustion of fuel;
- **Scope 2:** Indirect electricity emissions – relating to the electricity consumed by an organisation; and
- **Scope 3:** Other indirect emissions – relating to other sources not controlled by the organisation, such as energy imbedded in its consumption of resources, outsourced activities, employee business travel, production of waste and usage of water.

The Scope 1, 2 and 3 basis of reporting has been generally adopted by mandatory schemes (such as Australia's National Greenhouse & Energy Reporting Scheme) to ensure consistency in defining organisational boundaries in national accounting and thereby facilitating compliance with countries' commitments under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. However, it does not generally provide useful management information unless it is supplemented by reporting on specific organisational, geographic or functional sources.

As the Corporate Accounting and Reporting Standard indicates, the subdivision of emissions data within scopes aids transparency and facilitates comparability over time. Data can be classified by business unit/facility, source type (stationary combustion, process, fugitive, etc.) and activity type (production of electricity, consumption of electricity.)

## **Better practice example: Time series reporting**

The BG Group publishes a 5-year time series of its world-wide emissions, categorised by source (e.g. fuel use, electricity generation) and type of business. This is supplemented by a year-to-year movement summary showing the causes of particular decreases and increases in emissions.

Further, the company reports on its annual progress in meeting its target, set in 2007, of a 1 million tonne reduction in CO<sub>2</sub>e emissions by 2012.

# 5

## Voluntary reporting on emissions

### Global Reporting Initiative (GRI)

Many companies and some public sector agencies (such as the Port of Brisbane Corporation) report under the GRI framework on their sustainability performance generally.

For the public sector, the GRI has issued *Sector supplement for public agencies* which provides for agencies to report on the following aspects of sustainability:

- **Vision and strategy:** regarding their contributions to sustainable development;
- **Profile:** an overview of their structure and operations and the scope of the report;
- **Governance structure and management systems;** and
- **Public policies and implementation measures.**

The GRI public agencies framework involves a variety of social, environmental, economic and process indicators. While only three of these are readily quantifiable and relate to an agency's greenhouse gas emissions (namely, electricity consumption, travel and waste) they provide a starting point for more comprehensive reporting on emissions.

### Better practice example: Reporting on carbon intensity

Lion Nathan has developed a GHG emissions index to determine the emissions per kilolitre of beer produced across its various facilities and by its salesforce.

The company reports this index in a time series to show how much and how quickly the 'carbon intensity' of its operations is falling.

# Overseas public sector reporting requirements

Although emissions reporting and carbon trading have been operating in Europe and elsewhere for a number of years, there appears to be no public sector reporting requirements in these countries as yet. However, there are proposals to extend emissions trading schemes to the public sector.

Current developments in Canada and the United States, such as the Western Climate Initiative, focus on the development of market-based, cap-and-trade systems for the private sector. Reduction targets are specified for States as a whole, with no reporting requirements nor specific targets for the public sector.

There is also, as yet, no discernable attention overseas to sustainable procurement requirements nor reporting on such strategies. The Carbon Disclosure Project (CDP) based in England however has demonstrated how requesting suppliers to the public sector to report their emissions can contribute to carbon emission reduction, given the considerable buying power of the public sector.

# 7

## Mandatory reporting

The *National Greenhouse and Energy Reporting Act 2007* (the NGERS Act) established a mandatory reporting system for Australia's larger emitters to report their emissions (as well as their energy production and consumption) to the Commonwealth's Greenhouse Energy and Data Officer.

As well as providing for public disclosure of corporate-level information, the NGERS Act provides for 'consistent and comparable data available for decision making, in particular, the development of the Carbon Pollution Reduction Scheme'.

A number of Queensland GOCs, particularly in the energy sector, will be reporting under NGERS as from 2008-09.





# 8

## Audit verification

The Institute of Chartered Accountants in Australia (2008) has argued in a recent report that:

*“In order for companies to avoid their public disclosures being perceived as ‘greenwash’ or an attempt to influence people with regard to their sustainability credentials, there is great benefit for companies to provide an independent assurance report supporting the claims made in the statements.” (p.8)*

In its Inquiry into Sustainability Reporting in the NSW Public Sector, that State’s Public Accounts Committee was advised by Integral Energy that its sustainability report was independently verified, but that there is a ‘need for verification to drive a process of business improvement, rather than merely compliance’.

The Committee proposed that the Auditor-General should have a principal role in the verification or auditing of sustainability reports for the NSW public sector.

Internationally, the accounting profession is preparing for such a role, with the International Auditing and Assurance Standards Board undertaking a project to develop requirements and guidance for auditors in providing assurance on carbon emissions information. Under the Board’s assurance framework, this may provide for two levels of assurance:

- **Reasonable assurance:** with an opinion that the information is not materially misstated; and
- **Limited assurance:** with a statement that nothing has come to the auditor’s attention which indicates that the information is materially misstated.

Notably, the NGERs Scheme has only required emissions information to be audited if required by the Greenhouse and Energy Data Officer. Subordinate legislation and standards relating to the auditing of large emitters are being developed as part of the Carbon Pollution Reduction Scheme.

# Reporting requirements across Australian states

Across Australia, State governments have introduced or proposed various reporting requirements to reduce emissions, generally aimed at businesses that are large energy users, energy retailers and households.

Some of the notable requirements include:

- Tasmania's *Climate Change (State Action) Act 2008*, whose objectives include providing for 'reporting and Parliamentary oversight of progress being made towards achieving the State's 2050 target and other targets' and which provides for regulations for 'the setting of targets for the State Government, including interim targets and specific targets for specified government agencies or instrumentalities for the reduction of greenhouse gas emissions from their activities in Tasmania';
- Western Australia's System for Accounting and Reporting Government Emissions for non-constitutional corporations that would otherwise be subject to NGERs.

It is noted that the NSW Public Accounts Committee, in its 2005 report, recommended:

*"...mandated sustainability reporting for all agencies, phased in according to a clear timetable and process."*



# Queensland reporting requirements

The Queensland Government has set a target of reducing emissions by the State's households by one-third by 2020. As part of its commitments in the Q2 statement, the Government has committed to improving its own carbon footprint. To provide a basis for this commitment, Queensland Government departments were required to start reporting their carbon emissions from 2007-08.

In addition to meeting its climate change commitment, Queensland has a financial incentive to reduce its energy consumption. The Australia Institute has calculated that the CPRS will create an additional cost burden on the States of \$1.4billion – of which the annual cost to the Queensland Budget in 2010-11 will be \$289million (based on a nominal carbon price of \$20 per tonne and net of an increase in GST receipts of \$88million) .

## **Better practice example: Operating savings**

The Murray Goulburn Co-operative has lowered emissions by 55,000 tonnes per year through an energy saving program that reduced energy costs by 8% or \$6million per year. The program's up-front cost, of \$5.5million, was therefore recovered in less than a year.

## 2007-08 State of Play

The purpose of this survey is to gain a 'baseline' picture of the current state of reporting on carbon emissions by public sector agencies in Queensland.

The survey identified the current state of reporting by State and Local Government organisations as published in their 2007-08 annual reports, a whole-of-Government report tabled in Parliament by the Premier and, in some cases, separate sustainability reports. The organisations were classified as State Government Departments, Local Governments, Government Owned Corporations (GOC's), and Statutory Authorities. They were also categorised by size.

An analysis of the survey results, as set out below, identifies some of the key issues emerging in this first year of reporting by Government Departments, as well as the status of reporting in other sectors of the Queensland public sector.

### State Government Departments

Of the 27 State Government departments and other budget sector agencies that reported in 2008, three were large agencies (having more than 10,000 staff), 14 were medium-sized (having between 1,000 and 10,000 staff) and six were small. All of these reported, to some extent, on their Scope 1, 2 and 3 emissions.

In one case, the information was considered auditable, but had not been independently verified. For the remainder, there were a number of caveats regarding limitations on how emissions were measured, pending the improvement in systems, including:

- Electricity use (Scope 2) in multi-tenanted government buildings could not be attributed to individual agencies and was apportioned on floor space;
- Hire car emissions (Scope 3) only related to the major supplier under the Government's Standing Offer Arrangement;
- Emissions from taxi travel (Scope 3) was generally excluded; and
- A number of other sources (Scope 3), such as waste, were also excluded.

On the other hand, information on fleet vehicle emissions (Scope 1) was calculated for departments by QFleet using details of distance travelled, ADR fuel consumption statistics and emissions factors. As well, the Queensland Government Chief Procurement Office calculated air travel emissions based on data from the airlines.

The data reported by departments has been compared with their staffing levels as a reliability check, to identify significant variations and to assess potential reasons for those variations.

This analysis shows that the emissions reported by departments varied between 4 tonnes/full time equivalent (FTE) and 17 tonnes/FTE – with an average of 7.1 tonnes/FTE. Of these, 89% were Scope 2 emissions. Scope 1 emissions averaged 0.6 tonnes/FTE, while Scope 2 and 3 emissions averaged 6.3 tonnes/FTE and 0.2 tonnes/FTE respectively (details are shown in Appendix 1).

It is assumed that the major emission source for most departments is electricity consumption, while the departments with significant mobile operations will also have significant emissions from vehicle fuel consumption. In terms of management decision-making, it would be useful if information on electricity and fuel consumption were disclosed.

The analysis also had regard for similarities and differences in the modes of operation across agencies, such as office administration (policy departments), client hosting (Education, Health, Corrective Services) and mobile operations (Police, Emergency Services).

It is expected that departments that provide services to clients 'in-house', such as Education, Health and Corrective Services, would have significantly higher emissions per employee, but this is not necessarily reflected in the data currently reported. Further, there are significant variations in emissions/FTE between departments of a similar nature.

It appears then that the data collection is not yet sufficiently comprehensive nor reliable to provide 'decision useful' information at the whole-of-agency level, or at the facility level where it may be expected to provide a useful baseline and direct feedback on the impact and cost-effectiveness of emissions reduction strategies.

## Local Government

Prior to the 2008 structural reform of local government in Queensland, there were 157 councils, including the Indigenous councils. Of these, 6% were large councils with populations of over 100,000, 25% were medium-sized with populations between 10,000 and 100,000 and 68% were small councils with populations below 10,000.

Of the 157 councils, one (Brisbane) reported a four year time series of emissions, with details of annual energy consumption in total and by source (electricity, LPG, petrol, diesel and compressed natural gas). The data has not been independently verified.

Another four large councils provided carbon emissions data in aggregate form and, in some cases, disaggregated the data by source, rather than into Scopes 1, 2 and 3.

## Government Owned Corporations

There were 15 GOCs owned by the Queensland Government, including three electricity generators and six port authorities.

Two of the port GOCs provided data on CO<sub>2</sub>e emissions. Port of Brisbane Corporation provides a separate People and Environment Report under the GRI framework which includes data on CO<sub>2</sub>e emissions, as well as total electricity use and total energy use, together with volumes of petrol, diesel and LPG consumed. The Corporation obtained an 'Independent Limited Assurance Report', issued in accordance with the International Standard on Assurance Engagements ISAE 3000 by its contract internal auditor.

Ports Corporation of Queensland has disclosed data on emissions from its head office as part of a move to a corporate-wide energy savings plan, as well as from contractor activities at particular facilities. The data was classified into sources (electricity, fuel for vehicles, fuel in flights and vegetation clearing), with a three year time series. For vegetation clearing (at the Port of Abbot Point), emissions were based on an estimate of 50 tonnes CO<sub>2</sub>e per hectare. The Corporation also estimated its net emissions after sequestration through vegetation.

Queensland Rail's report includes a graph showing its emissions since becoming a signatory to the Greenhouse Challenge in 2000. The graph compares actual emissions with its estimated 'static' emissions (without mitigation strategies).

One of the electricity generators reported its CO<sub>2</sub>e emissions, while each of them report their carbon intensity (kilograms of CO<sub>2</sub>e emitted per megawatt hour produced). Their reports indicate that information systems are being upgraded to meet the NGERs reporting requirements.

The electricity transmission network provider, Powerlink, is also subject to NGERs reporting (including on the insulating gas, SF<sub>6</sub>) but has not yet reported its CO<sub>2</sub>e emissions.

Of the two electricity distributors, Energex reported a three year time series of emissions by source (to 2007, 2008 data was not yet available). The primary source was transmission losses, with smaller amounts from electricity generation, organisational energy use and SF<sub>6</sub> losses. Ergon has reported its 2007 emissions of CO<sub>2</sub>e based on a preliminary GHG inventory. As was the case with Energex, most emissions related to transmission losses. Ergon also reported the volume of vehicle fuel used and the approximate distance of air travel by employees. Each of these GOCs is transitioning to mandatory NGERs reporting.

SunWater reported its estimated carbon footprint, of which 97% related to electricity used in pumping water.

## Statutory Authorities

Of the 181 Statutory Authorities that reported to Parliament, only a small number have included data on their carbon emissions, including the Commission for Children and Young People and Child Guardian, Legal Aid Queensland and Queensland Treasury Corporation (QTC). None of these has been independently verified to date.

QTC disclosed data on the sources of its emissions, although these were not categorised into Scopes 1, 2 and 3.

Legal Aid Queensland reported its Scope 1, 2 and 3 emissions by category, including for electricity purchased for government-owned premises and leased premises, CO<sub>2</sub> emissions from vehicles (rather than CO<sub>2</sub>e), and international and domestic air travel.

In addition to the disclosures by these statutory authorities with 'administrative' operations, it is notable that Forestry Plantations Queensland is participating in an Australia-wide study to develop a life-cycle inventory of timber products which will allow it to estimate its carbon footprint.



## Summary of the State of Play

2007-08 was the first year for which all Queensland government departments reported on their emissions to Parliament. While their annual reports disclose a number of caveats about the quality and consistency of the information (and this is reflected in a reliability check on emissions per FTE), this sector of the Queensland Government is generally ahead of its interstate counterparts. In making this start, agencies have been able to identify some of the issues that need to be addressed in providing reliable, and potentially auditable, information.

Across the Queensland public sector as a whole, the agencies most advanced in reporting their emissions are a number port and electricity GOCs – some of whom will be subject to mandatory reporting under NGERs. As well, several of the larger local governments are now reporting their emissions. However, most statutory bodies and local governments are yet to start the journey. While measuring reporting on emissions is not an end in itself, it does demonstrate a credible commitment towards a more sustainable future.

# 12

## Appendix A:

### Emissions reported by departments

Agency Name	Emissions (tonnes CO <sub>2</sub> e)				Staff No.	Emissions (tonnes CO <sub>2</sub> e) / FTE	Emissions (tonnes CO <sub>2</sub> e) / FTE			
	Scope 1	Scope 2	Scope 3	Total			Scope 1	Scope 2	Scope 3	Total
Department of Communities	1,836	15,205	833	17,874		2,694	0.7	5.6	0.3	6.6
Department of Child Safety	2,370	11,730	841	14,941		2,455	1	4.8	0.3	6.1
Disability Services Queensland	1,700	8,425	321	10,446		2,796	0.6	3	0.1	3.7
Department of Justice & Attorney General	1,230	32,543	807	34,580		2,707	0.5	12	0.3	12.8
Department of Primary Industries and Fisheries	7,810	25,651	1,371	34,832		2,757	2.8	9.3	0.5	12.6
Department of the Premier & Cabinet	1,394	3,145	391	4,930		455	3.1	6.9	0.9	10.8
Department of Local Government, Planning, Sport & Recreation	320	4,796	450	5,566		588	0.5	8.2	0.8	9.5
Department of Main Roads	8,840	31,549	1,520	41,909		4,972	1.8	6.3	0.3	8.4
Department of Mines and Energy	880	4,346	340	5,566		660	1.3	6.6	0.5	8.4
Department of Natural Resources & Water	3,050	20,991	1,050	25,091		3,101	1	6.8	0.3	8.1
Environmental Protection Agency	6,524	6,714	4,519	17,757		2,294	2.8	2.9	2	7.7
Department of Employment & Industrial Relations	1,720	5,043	219	6,982		991	1.7	5.1	0.2	7
Department of Public Works	6,740	38,222	650	45,612		6,582	1	5.8	0.1	6.9
Department of Tourism, Regional Development & Industry	530	3,767	296	4,593		760	0.7	5	0.4	6
Queensland Transport	4,726	18,087	1,350	24,163		3,753	1.3	4.8	0.4	6.4
Department of Housing	535	6,641	282	7,458		1,256	0.4	5.3	0.2	5.9
Department of Infrastructure & Planning	219	2,503	227	2,949		524	0.4	4.8	0.4	5.6
Queensland Treasury	340	6,337	225	6,902		1,711	0.2	3.7	0.1	4
Queensland Police Service	18,543	69,040	1,325	88,908		13,334	1.4	5.2	0.1	6.7
Queensland Emergency Services	15,205	19,616	1,015	35,836		6,524	2.3	3	0.2	5.5
Department of Corrective Services	1,660	57,089	327	59,076		3,564	0.5	16	0.1	16.6
Queensland Health	17,170	458,716	11,536	487,422		56,333	0.3	8.1	0.2	8.7
Department of Education, Training & the Arts	6,771	316,164	2,779	325,714		63,702	0.1	5	0.04	5.1
<b>Total</b>	<b>108,277</b>	<b>1,151,115</b>	<b>31,841</b>	<b>1,291,233</b>		<b>181,819</b>	<b>0.6</b>	<b>6.3</b>	<b>0.2</b>	<b>7.1</b>

Source: Office of the Public Service Commissioner Annual Report 2007-08, Hansard and Agency annual reports

**Note:** This data should be interpreted with care as it was drawn from agency reports which draw attention to a number of data limitations and measurement issues yet to be resolved.

## Survey contributors



### BDO Kendalls



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### BDO Kendalls

BDO Kendalls has an extensive team of advisory, consulting and audit services to assist organisations on their journey to sustainability. In conjunction with our network of strategic alliance partners, we are able to assist clients with:

- assessment of environmental sustainability risks and opportunities;
- measuring and reporting on emissions;
- independently verifying emissions; and
- preparing for the proposed Emissions Trading Scheme.

For further information please contact Bob Shead, Partner, BDO Kendalls on (07) 3237 5808.



Prof. Peter Best  
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### University of Southern Queensland (USQ)

The School of Accounting, Economics & Finance (AEF) USQ offers accounting, finance, sustainable economics & policy, and sustainable business majors within the Bachelor of Commerce degree, and a range of double degrees including the new Bachelor of Accounting & Sustainable Business, which commenced in 2009. This four-year program is accredited by the Australian professional accounting bodies, includes a full major on sustainable business, and provides eligibility for the award of a second degree (Bachelor of Science in Business Administration, from the City University of Seattle).



Simon McCabe  
State Manager  
Audit & Advisory Services

### Carbon Planet

Carbon Planet offers organisations the opportunity to reduce their impact on climate change through comprehensive carbon emissions assessments and targeted energy and emissions-reduction strategies. Carbon Planet is working with government institutions to prepare them for compliance and has also partnered with leading companies in the private sector ranging from mining and automotive, to financial services and pharmaceutical.

Carbon Planet's operations and services have been certified Greenhouse Friendly™ by the Australian Government's Department of Climate Change - the first carbon management company to receive such certification.



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