

# Smaller footprint, stronger business.

Energy Efficiency Opportunities Report 2011



**Determined** to be different

# Contents

---

<b>Strength through sustainability</b>	<b>2</b>
Focusing on our carbon reduction target	2
Commonwealth Bank Place	2
Our sustainability framework	3
Carbon Solutions Group	3
Responsible property investment	4
Our renewable energy portfolio continues to expand	4
Strong leadership in environmental reporting	4
<b>Our energy efficiency opportunity program</b>	<b>5</b>
Total energy use assessed by the Group	6
Table 1 – Energy use assessed by the Group	6
Energy efficiency opportunities that have been identified and evaluated	7
Table 2 – Opportunities assessed	7
Table 3 – Energy use throughout the Group	9
<b>Conclusion</b>	<b>11</b>

# Strength through sustainability

---

At the Commonwealth Bank Group (the Group), we are working to build a more sustainable future in everything we do. Sustainability is about being a successful business today while ensuring we deliver value over the long term for our people, our customers, our shareholders and the community.



Naturally, as one of Australia's largest organisations, we are keenly aware of the importance of managing our environmental impact and reducing our carbon footprint. Our sustainability philosophy isn't limited to environmental outcomes. For us, sustainability is also about creating a responsible and successful business over the long term, supporting the Group's business strategy and vision of excellence in customer service.

This report highlights our key environmental sustainability initiatives for the period from 1 July 2010 to 30 June 2011. It also summarises our achievements during the first five-year reporting cycle of our Energy Efficiency Opportunity program. And it looks to the future, outlining our ongoing initiatives to create an even more efficient business in the years to come.

## Focusing on our carbon reduction target

We continue to focus on achieving our target of a 20% reduction in carbon emissions from 2008–09 levels by June 2013. To that end, we implemented a range of initiatives in our retail and commercial portfolios during the 2011 financial year, as well as further improvements to our tool-of-trade vehicle fleet.

We are currently developing and rolling out new initiatives throughout the Bank, due to be completed by June 2012. During the 2011 year, we reduced our emissions from 176,806 tCo2-e to 170,668 tCo2-e<sup>1</sup> – a reduction of over 6,000 tCo2-e.

## Commonwealth Bank Place

Our newly opened Sydney office building, Commonwealth Bank Place, has played a major role in reducing the Group's overall carbon emissions. Designed to enable activity-based working and provide staff with an innovative, sustainable and creative work space, the building specifically caters to the variety of different work activities our people undertake each day.

The building incorporates a range of sustainable design principles, including centrally based atriums delivering abundant natural light and chilled-beam air-conditioning throughout. The building also uses a tri-generation power plant that converts waste energy into power, as well as a state of the art water treatment facility.

Our people are inspired and encouraged by the virtually paperless environment, spending their working days in natural light, and knowing that the building converts waste energy into usable power. This environment increases the engagement of our people and their personal wellbeing.



Click here for a short video about:

[Commonwealth Bank Place](#)

<sup>1</sup> Emissions are measured in carbon dioxide equivalent (Co2-e). Co2-e represents the total climate change impact of all the greenhouse gases caused by the associated items or activities.

# Strength through sustainability

## Our sustainability framework

<b>Strategic goal</b>	<b>Determined to make Sustainability part of everything we do</b>				
<b>Focus Areas</b>	<b>Sustainable Business Practices</b>	We embed sustainable business practices across our operations through strong governance, established management systems, responsible procurement and transparent reporting			
	<b>Responsible Financial Services</b>	We take a responsible approach to the provision of financial products and services			
	<b>Engaged and Talented People</b>	We attract, foster and retain a diverse, engaged and talented workforce			
	<b>Community Contribution and Action</b>	We make impactful contributions to our communities through mutually beneficial partnerships			
	<b>Environmental Stewardship</b>	We are proactive in measuring and reducing our own environmental footprint and provide smart solutions to help our customers and employees reduce their own			
<b>Foundations</b>	<b>Customer</b>	<b>People</b>	<b>Community</b>	<b>Environment</b>	<b>Governance</b>

## Our sustainability framework

During the 2011 financial year, we revised our strategic approach to sustainability and refreshed our sustainability framework.

Building on our five sustainability foundations of People, Customers, Community, Governance and Environment, the framework, illustrated above, clarifies our sustainability position for both internal and external stakeholders. It also allows us to identify and focus on key priorities to strategically respond to the needs of our stakeholders.

2012 will see us build on the framework with initiatives and programs designed to embed sustainable practices into every aspect of our business.

### Carbon Solutions Group

The Carbon Solutions Group is a dedicated team providing financing and risk management solutions to the Bank's clients, helping them manage their carbon risks and finance new emission reduction opportunities as we transition to a low-carbon economy.

The team leverages the Bank's core financing, trading and relationship management capabilities to deliver innovative, integrated solutions to our corporate and institutional clients.

These clients view the impacts of a carbon price in the same way as any other operational or financial risk – and just as we help them mitigate other risks, we will continue to work closely with them to manage the cash-flow and price impacts of the new carbon pricing mechanism.

During 2011, the Carbon Solutions Group has worked collaboratively with our clients to explore the likely effects of a carbon price, as well as the carbon-related services and financial solutions we have developed. Among other things, our offering includes:

- › Australian carbon permits and credits from the Carbon Farming Initiative.
- › International credits from UN-managed and certified emissions reductions, converted into Australian dollars.

The Carbon Solutions Group is also working with a number of our clients on hedging and financing opportunities associated with carbon farming projects. By acting early, we can support our clients with a full spectrum of services that will help them not only manage risk, but also leverage the opportunities of a new low carbon economy. Solutions like these reinforce our position as Australia's leading provider of total capital solutions.

## Responsible property investment

“ We manage our assets to be more efficient and have a lower environmental footprint. There are real cost benefits that we can measure, assisting us to deliver more sustainable returns for our investors. ”

– Angus McNaughton, Managing Director, Property CFSGAM

Colonial First State Global Asset Management (CFSGAM) is committed to making an environmental difference through responsible property investment. The assets within their funds are managed to optimise water, waste, energy and carbon outputs, with a bottom line focus of improving efficiency.

At a Group level, CFSGAM is a signatory to the United Nations Principles for Responsible Investment (PRI). This provides a global framework for CFSGAM to consider environmental, social and governance issues within their decision making processes.

### Creating value

Maintaining and developing sustainable assets is not only good business practice, improving the efficiency of our assets also helps us reduce operational costs. From an owner's perspective, responsible property investment is a key factor in maintaining property valuations over time, which is aligned with the long-term interests of our unit holders.

During the year, our Responsible Property Investment program resulted in real efficiencies being achieved across the portfolio of property assets.

### Our renewable energy portfolio continues to expand

We continue to strengthen our position within the global renewable energy sector as a senior investor in renewable and clean energy projects, currently generating over 17,400 megawatts (MW) in Australia and New Zealand each year.

During the 2011 financial year, we increased our portfolio by approximately 4,000 MW, with an investment of more than 11,000 MW in Australia, compared with the previous year's investment of around 7,000 MW.

Our loan facilities to clean and renewable generation companies in Australia and New Zealand represent approximately 59% of total exposures in this sector, measured by megawatt capacity. This is based on a combined energy exposure of 29,550 MW across the region, of which clean and renewable exposure makes up 17,474 MW.

## Strong leadership in environmental reporting

Robust and transparent disclosure is essential to communicating our environmental progress to our stakeholders. Our current reporting activities include:

- › **National Greenhouse and Energy Reporting Scheme (NGERS).** This is the third consecutive year of reporting for the Group. This year the government introduced the mandatory reporting of uncertainty associated with the Group's Scope 1 emissions to meet Australia's international reporting obligations. Since the new legislation was introduced, we have revised our data capture and reporting systems to ensure they comply.
- › **Energy Efficiency and Opportunity Act (EEO Act).** This reporting year marks the end of the first five-year reporting cycle under the EEO legislation, in which 80% of the Group's energy consumption was to be assessed as per legislation. The Bank is proud to report that a greater than 80% assessment rate was achieved. Identifying a number of opportunities to further reduce the Group's energy consumption and production, the Group now targets a 90% assessment rate for the next five year reporting cycle. The Bank is currently developing its assessment plan.
- › **Carbon Disclosure Project (CDP).** The CDP seeks information on business risk, opportunity and strategy related to climate change. In 2011, 404 of the Global 500 companies responded to CDP, while only 29 of these attained Global 500 performance leadership status. The Commonwealth Bank ranked seventh globally, with a performance level A. The Group scored very highly with 89 from a possible 100 for disclosure. The Commonwealth Property Office Fund (CPA) and CFS Retail Property Trust (CFX) jointly scored highest for disclosure out of all Australian and New Zealand respondents; CPA was also recognised as a Carbon Performance leader.
- › **Dow Jones Sustainability Index (DJSI).** In 2011, the Group secured a place on the Dow Jones Sustainability Asia Pacific Index. This index tracks the financial performance of the top 20% in terms of sustainability of the 600 biggest companies in the developed Asia Pacific markets, as listed in the Dow Jones Global Total Stock Market Index. CPA and CFX have been included in this index since 2003 and 2004 respectively.
- › **Global Real Estate Sustainability Benchmark.** CPA was recognised as the global leader among 341 property funds in this investor driven global survey on environmentally sustainable management and performance, CFX and CPA scored in the top 5 Australian listed property trusts, while two unlisted funds managed by CFSGAM scored in the top 5 of Australian unlisted property funds.
- › **Asia Pacific Real Estate Association Best Practices Awards.** CFX, CPA and Kiwi Income Property Trust (KIP) are highly regarded for their submissions and notably for the valuation and property performance reporting in this survey of property funds across Asia on governance and disclosure.

# Our energy efficiency opportunity program

---

This year, we increased the proportion of our total portfolio assessed under the Energy Efficiency Opportunities program from 75% to 81%.

The Australian Government's Energy Efficiency Opportunities program encourages large energy-using businesses to improve their energy efficiency. The program requires businesses to identify, evaluate and report publicly on cost-effective energy savings opportunities.

There are two separate reports that are to be submitted to government by 31 December 2011, closing out the first five year reporting cycle of the EEO Act:

- 1. Public report.** Cumulative in nature, the public report is an annual update of the Group's participation and progress in the program. It provides a listing of all opportunities identified since the inception of the EEO Act and their associated energy savings, broken down by Group entity.
- 2. Government report.** This report provides additional information on the energy types (for example, electricity, natural gas and diesel) and their associated net financial benefits where opportunities have been identified, broken down by Group entity.

The Bank's approach to the Energy Efficiency Opportunities assessment depends on the activity being assessed. Individual assessments are carried out by the Bank's external energy consultancy firm, Energetics.

Assessment methodologies include:

- › Collecting energy use data from supplier invoices.
- › Physically inspecting a site and collecting further information on how it operates.
- › Identifying energy saving opportunities, along with a technical review of the operations.

Assessors work in consultation with management to review and categorise the energy saving opportunities. A written report of these opportunities is supplied to the Group at the end of the assessment.

## Total energy use assessed by the Group

Table 1 sets out the energy use of all entities assessed since the Energy Efficiency Opportunities program began, up until 30 June 2011.

**Table 1 – Energy use assessed by the Group**

Name of group member and key activity assessed	Assessment Period	Amount of Energy Assessed in Gigajoules (GJ)						
		Electricity	Diesel	Natural Gas	Gasoline	LPG	Ethanol	Total (GJ)
CBA Commercial Portfolio	2007–08	16,024		2,423				18,447
CBA Commercial Portfolio	2008–09	34,804		155				34,959
CBA Commercial Portfolio	2009–10	31,415		743				32,158
CBA Commercial Portfolio	2010–11	52,548		3,538				56,086
CBA Retail Portfolio	2007–08	224						224
CBA Retail Portfolio	2008–09	3,422		513				3,935
CBA Retail Portfolio – Representative Assessment	2009–10	263,922		8,829				272,751
CBA Fleet Portfolio – Representative Assessment	2008–09		7,192		96,382	10	1,762	105,346
CBA ATM Portfolio – Representative Assessment	2009–10	14,638						14,638
Colonial First State Global Asset Management (CFSGAM)	2007–08	45,125	191	8,760				54,076
CFSGAM	2008–09	96,762	22	50,918				147,702
CFSGAM	2009–10	294,217	492	77,762				372,471
CFSGAM	2010–11	227,533	3	42,040				269,576
Bankwest Commercial Portfolio	2009–10	21,568						21,568
Bankwest Commercial Portfolio	2010–11	1,844						1,844
Bankwest Retail Portfolio	2009–10	2,217						2,217
Bankwest Retail Portfolio – Representative Assessment	2010–11	34,351						34,351
Bankwest ATM Portfolio – Representative Assessment	2010–11	1,874						1,874
Bankwest Fleet Portfolio – Representative Assessment	2010–11		261		5,413		81	5,755
<b>Totals</b>		<b>1,142,488</b>	<b>8,161</b>	<b>195,681</b>	<b>101,795</b>	<b>10</b>	<b>1,843</b>	<b>1,449,978</b>

# Our energy efficiency opportunity program

## Energy efficiency opportunities that have been identified and evaluated

The Group is required to provide at least three examples of significant opportunities for improving the energy efficiency of its operations that have been identified in the assessments reporting schedule.

Table 2 sets out the Group-wide opportunities that we have identified, together with their estimated payback period and the combined energy savings per year in gigajoules.

**Table 2 – Opportunities assessed**

Name of group member and key activity assessed	Voluntary information	
<p>The proposed projects for CFSGAM at Queens Plaza, Brisbane, will have the following outcomes for the energy efficiency performance of the site:</p> <ul style="list-style-type: none"> <li>› Installing modern supply air temperature and zone control methodologies.</li> <li>› Reducing the incidence of simultaneous heating and cooling, and optimising loads on central plant.</li> <li>› Optimising chiller performance control strategies – this intelligent control will allow for the chillers to operate at maximum efficiency based on the outside air conditions and internal loads.</li> <li>› Using economy cycle operation – relocating the site's weather station and upgrading the controls methodology will allow the site to take advantage of more free cooling from the outside air.</li> <li>› Rebalancing of HVAC supply air fans and installation of VSDs – this retro-commissioning measure will allow for HVAC fans to supply the same quantities of air at lower fan speeds and pressures.</li> </ul> <p>The completion of these projects at Queens Plaza will improve the efficiency of the centres, reduce overall costs and support the Bank's sustainability agenda.</p>	<b>Business Response</b>	To be implemented
	<b>Energy saved (GJ)</b>	3,636
	<b>Greenhouse gas abated (CO2-e)</b>	1,064 tonnes
	<b>Savings</b>	c\$150,000
	<b>Payback period</b>	< 2 years

Name of group member and key activity assessed	Voluntary information	
<p>The proposed controls, supply air fan and low-load chiller upgrades for the Myer Centre Brisbane will have the following outcomes for the energy efficiency performance of the site:</p> <ul style="list-style-type: none"> <li>➤ Installing modern supply air temperature and zone control methodologies.</li> <li>➤ Reducing the incidence of simultaneous heating and cooling and optimising loads on central plant.</li> <li>➤ Upgrade of the chilled water plant – the site's low load chiller will be upgraded to a variable speed unit with current market best practice performance.</li> <li>➤ Optimising chiller performance control strategies – this intelligent control will allow for the chillers to operate at maximum efficiency based on the outside air conditions and internal loads.</li> <li>➤ Rebalancing of HVAC supply air fans and installation of VSDs – this retro-commissioning measure will allow for HVAC fans to supply the same quantities of air at lower fan speeds and pressures.</li> </ul> <p>The completion of these projects at the Myer Centre Brisbane will improve the efficiency of the centre, reduce overall costs and support the Bank's sustainability agenda.</p>	<p><b>Business Response</b></p> <p><b>Energy saved (GJ)</b></p> <p><b>Greenhouse gas abated (CO2-e)</b></p> <p><b>Savings</b></p> <p><b>Payback period</b></p>	<p>To be implemented</p> <p>6,912</p> <p>2,020 tonnes</p> <p>c\$285,000</p> <p>2-4 years</p>
<p>Apply Solacoat (solar reflective paint) to the upper level roof surface at Altona Gate shopping centre, Victoria.</p> <p>Solacoat is a revolutionary water-based acrylic coating that contains a unique membrane additive, which reflects the sun's hot infra-red rays while reducing greenhouse gas emissions. It is a well tried and tested method of reducing solar gain in a building and lowers heat levels within a building by up to 15°C.</p>	<p><b>Business Response</b></p> <p><b>Energy saved (GJ)</b></p> <p><b>Greenhouse gas abated (CO2-e)</b></p> <p><b>Savings</b></p> <p><b>Payback period</b></p>	<p>Implemented</p> <p>368</p> <p>107 tonnes</p> <p>c\$15,000</p> <p>2-4 years</p>

Our assessment program covers all energy use associated with properties owned and leased by the Group, including the Commonwealth Bank, CFSGAM and Bankwest, as well as the energy used by the Group's vehicle fleet.

Table 3 shows a breakdown of the total energy use per entity by activity during the financial year. It shows the percentage of energy assessed compared to the total energy use of that activity, while also providing the percentage of energy assessed compared to the Group's total energy use during the year.

# Our energy efficiency opportunity program

**Table 3 – Energy use throughout the Group**

<b>Commonwealth Bank – Commercial Portfolio</b>	
Total energy use in the last financial year	257,973 GJ
Energy use assessed in this entity as a percentage of total entity energy use	55%
Energy use assessed in this entity as a percentage of total corporate energy use	8%
<b>Commonwealth Bank – Commercial Portfolio</b>	
Total energy use in the last financial year	276,910 GJ
Energy use assessed in this entity as a percentage of total entity energy use	100%
Energy use assessed in this entity as a percentage of total corporate energy use	15%
<b>Commonwealth Bank – Fleet Portfolio</b>	
Total energy use in the last financial year	105,346 GJ
Energy use assessed in this entity as a percentage of total entity energy use	100%
Energy use assessed in this entity as a percentage of total corporate energy use	6%
<b>Commonwealth Bank – ATM Portfolio</b>	
Total energy use in the last financial year	14,638 GJ
Energy use assessed in this entity as a percentage of total entity energy use	100%
Energy use assessed in this entity as a percentage of total corporate energy use	1%
<b>Colonial First State Global Asset Management</b>	
Total energy use in the last financial year	1,020,424 GJ
Energy use assessed in this entity as a percentage of total entity energy use	83%
Energy use assessed in this entity as a percentage of total corporate energy use	47%
<b>Bankwest – Commercial Portfolio</b>	
Total energy use in the last financial year	68,883 GJ
Energy use assessed in this entity as a percentage of total entity energy use	34%
Energy use assessed in this entity as a percentage of total corporate energy use	1%

---

### Bankwest – Retail Portfolio

Total energy use in the last financial year	36,568 GJ
Energy use assessed in this entity as a percentage of total entity energy use	100%
Energy use assessed in this entity as a percentage of total corporate energy use	2%

### Bankwest – Fleet Portfolio

Total energy use in the last financial year	5,756 GJ
Energy use assessed in this entity as a percentage of total entity energy use	100%
Energy use assessed in this entity as a percentage of total corporate energy use	0.3%

### Bankwest – ATM Portfolio

Total energy use in the last financial year	1,874 GJ
Energy use assessed in this entity as a percentage of total entity energy use	100%
Energy use assessed in this entity as a percentage of total corporate energy use	0.1%

## Conclusion

---

We continue to invest and embed energy efficiency practices across our business and we look forward to identifying and implementing new opportunities, ensuring we deliver ongoing value into the future.

“

The Group has made significant progress during the financial year 2011, and we remain committed to further embedding sustainable practices across our business. We recognise the importance of proactively and transparently communicating our sustainability initiatives, programs and achievements to our customers, people, shareholders and the broader Australian community, and we look forward to the opportunity to share more information about our progress over the year to come.

”

– *Tristan Wills, Commonwealth Bank Executive General Manager, Corporate Sustainability*

