



**Environment**

Rob Spurr GM Group Finance, Pacific Hydro

**National  
Australia  
Bank**

## Message from the Chair, Group Environment Committee

I am pleased to report on the progress we continue to make in delivering on our Environmental Agenda.

2013 has been a year that has highlighted the importance of understanding and managing environmental risks. This year, we again faced earthquakes in New Zealand and drought in a number of countries where we operate, including Australia and New Zealand. We also continued to assist our customers in meeting their environmental objectives and have begun to establish a range of exciting new environmental collaborations at a community level.

In particular this year we have:

- continued to invest in improving the energy efficiency of our building portfolio. Our latest investments include a new 6 Star Green Star – Office Design v2 rated office<sup>1</sup> at 700 Bourke Street, Melbourne and our new data centre site which is both air cooled and highly energy and water efficient;
- successfully closed our first Environmental Upgrade Agreement (EUA) in NSW. This EUA was also the first to include tenant pass-through. We've now arranged four of the five privately financed EUAs that have been implemented in Australia;
- continued our support of Australia's transition to cleaner energy sources. Since 2006, NAB has been the leading arranger (by market share<sup>2</sup>) of project financing for the utility scale renewable energy market in Australia. This year, we are pleased to report that we were the lead arranger for the financing of the Royalla Solar Farm near Canberra, the first utility-scale solar project to be project financed in Australia;
- implemented a new environmental reporting system across the Group to improve the efficiency of our data collation and reporting;
- switched to 100% recycled, carbon neutral, Forest Stewardship Council (FSC) certified office paper to support the expansion of recycled paper collection and manufacturing in Australia. Additionally, our NZ operations have commenced the switch to carbon neutral office paper;
- supported a number of external events on natural capital, climate finance, water valuation, environmental and social risk assessment, as well as on food sustainability and agriculture. This will help raise awareness of the risk and opportunities related to natural capital, and the importance of environmental and social risk assessment as part of sound risk management;
- contributed to the formation of an Australian Business and Biodiversity Initiative under the Global Business Partnership of the UN Convention on Biological Diversity;
- continued to build collaborative relationships with community partners to support environmental outcomes. For example, in Australia we're now supporting Hume City Council in their work to assist local landholders to protect critically endangered grasslands and woodlands of the Victorian Volcanic Plains. And in New Zealand, our Morrinsville Store and business banking centre have supported the establishment of a worm farm at a local school. The school will take our organic office waste and have the opportunity to raise money from the worm farm products; and
- met eight of our thirteen environmental reduction targets for the 2011 to 2013 period and developed new targets for the 2014 to 2016 period.

We hope you enjoy reading more about our achievements and performance in our 2013 Environmental Dig Deeper and we welcome your feedback.

Michaela Healey  
Group Executive, People,  
Communications & Governance

References to 'we', 'our', 'us', 'nab', 'NAB', the 'National', 'National Australia Bank' or the 'Company' are to National Australia Bank Limited ABN 12 004 044 937. The 'Group' refers to the National Australia Bank Limited and its controlled entities. All references are as at 30 June 2013 except where otherwise stated. Any references to changes (including an increase or decrease) relate to the previous year, unless otherwise stated. Forward-looking statements, including targets, are not guarantees of future performance. All figures quoted in this Dig Deeper paper are in Australian dollars, unless otherwise stated.

<sup>1</sup> As certified by the Green Building Council of Australia.

<sup>2</sup> Project Finance International 2006-2013 APAC Mandated Lead Arranger League Tables US\$ Project Allocation, NAB analysis ranking against four major domestic banks – cumulative volume.

# Dig Deeper

## The purpose of our Dig Deeper

This is our fourth year producing an integrated Annual Review – a combination of our previous Shareholder Review and Corporate Responsibility Review.

To inform the content of our Annual Review we undertake an annual Corporate Responsibility (CR) materiality process to assess the most significant issues in each of our CR segments: Customer, People, Community, Environment and Supply Chain. This year we sought feedback from investors, analysts, our employees, government, community partners, consumer advocacy groups and non-government organisations on the most material CR issues to NAB.

We then focused on including details on these issues in our Annual Review.

We understand that we have a diverse range of stakeholders, with a wide range of interests in our business who we must keep informed. Our Dig Deeper papers have been developed to provide more performance commentary and data around our CR segments ensuring our

Annual Review continues to provide a concise overview of performance against NAB’s material CR issues.

The content of our Dig Deeper papers is informed by our materiality process and ongoing stakeholder engagement throughout the year. We also conduct an annual peer and media review to ensure our reporting is in line with best practice. Additionally, the Global Reporting Initiative Sustainability Guidelines (G3) framework guides the disclosures in our Annual Review and Dig Deeper papers.

Further information on how we manage key issues, program details, case studies and news stories can be found at [cr.nab.com.au](http://cr.nab.com.au).

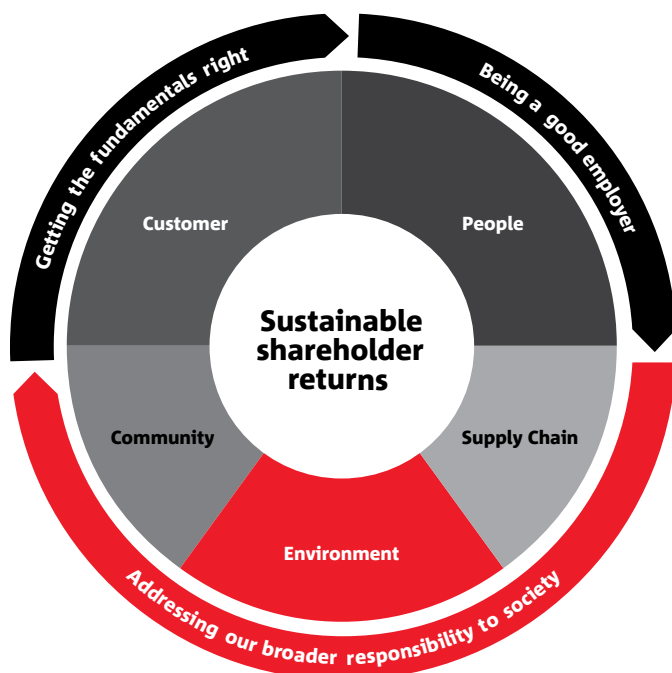
## Environmental issues

This year, our materiality process identified the following environmental issues as most material to NAB:

- environmental impact of operations<sup>3</sup>
- managing exposure to environmental risk<sup>4</sup>
- responsiveness to environmental market opportunities<sup>5</sup>.

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<sup>3</sup> Please see the *Climate change and resource efficiency* section on page 5 and the Notes to the environmental performance summary – pages 16 to 31 for further detail.

<sup>4</sup> Please see page 15 for further detail.

<sup>5</sup> Please see pages 12 to 13 for further detail.

# Dig Deeper

## Corporate Responsibility commitments

In our 2012 Annual Review, we set out a series of commitments for the coming year. The environmental CR commitments for 2013 and our performance against them are summarised below.

Commitment	Performance
Develop Group environmental performance targets for financial year 2014 to financial year 2016.	<b>We've achieved this.</b> New targets have been set. You can find further details at Note 8 on page 27.
Reduce Group greenhouse gas (GHG) emissions from building-based energy use by 18,900 tCO <sub>2</sub> -e against a 2010 baseline, by 30 June 2013 <sup>6</sup> .	<b>We didn't achieve this.</b> See Note 8 on page 27 for further details.
Continue to make a significant investment in renewable energy through project finance.	<b>We've achieved this.</b> You can find further details in the Products and services section on page 12 and in our 2013 Customer Dig Deeper page 12.
Work to meet Natural Capital Declaration commitments by incorporating consideration of natural capital into business processes and decisions.	<b>We've achieved this.</b> You can find further details in the Natural value section on pages 10 – 11.

► This year we redeveloped our Group Corporate Responsibility commitments – for further details, see page 25 of our 2013 Annual Review.

## Highlights<sup>7</sup>

External recognition	2003 & 2004	2005	2007	2008	2009	2010	2011	2012	2013
Business highlights	<ul style="list-style-type: none"> <li>Included in the CDP Carbon Disclosure Leadership Index for first time</li> <li>Became signatories to UNEP FI</li> <li>Developed first Environmental Policy</li> <li>Flagship Docklands building designed to 4 Star NABERS Energy</li> <li>Developed first EMS (aligned to ISO14001)</li> <li>Made a public statement of support for OECD Guidelines for Multi-National Enterprises</li> </ul>	<ul style="list-style-type: none"> <li>Yorkshire Bank ranks 3rd in sector in BITC Yorkshire and Humber Environment Index</li> <li>Flagship Docklands building wins a Banksia Environmental Foundation Award</li> <li>Launched our first Environmental Procurement Policy</li> </ul>	<ul style="list-style-type: none"> <li>Committed to be carbon neutral by 2010</li> <li>Established EarthWatch partnership and program with employees</li> <li>Employee Green Team Community established</li> <li>Became member of BITC's May Day Group</li> <li>Purchased 100% renewable electricity in UK</li> </ul>	<ul style="list-style-type: none"> <li>Began introducing Toyota hybrid vehicles into our Australian car fleet</li> <li>Signed the Equator Principles</li> <li>Signed the Bali Communiqué</li> <li>Introduced Prius into our Australian vehicle fleet</li> <li>Installed energy monitoring and control technology in all UK properties</li> <li>Established the BNZ Kauri Forest in conjunction with the Kauri 2,000 Trust</li> <li>BNZ's 80 Queen St and Quay Park buildings achieve 5 green star design rating</li> </ul>	<ul style="list-style-type: none"> <li>Listed as leaders in the CDP's Global 500 Climate Disclosure Leadership Index</li> <li>Launched e-statements in Australia and New Zealand.</li> <li>Signed the Poznan Communiqué</li> <li>First UK high street bank to be awarded the Carbon Trust Standard</li> <li>BNZ's Harbour Quays building achieves 5 green star design rating</li> <li>Became largest fair trade certified workplace in Australia and New Zealand</li> </ul>	<ul style="list-style-type: none"> <li>Won the CDP's inaugural A&amp;NZ Carbon Performance Leadership Award</li> <li>Trigeneration facility goes live at our major Australian data centre</li> <li>Completed the largest joint tenant &amp; building owner refurbishment in the southern hemisphere at 500 Bourke Street, saving 20,000 tCO<sub>2</sub>-e</li> <li>BNZ's Quay Park building achieves 5 green stars fitout and 80 Queen St 5 green stars as built</li> </ul>	<ul style="list-style-type: none"> <li>Won United Nations Association of Australia World Environment Day Award for Sustainability Leadership (Large Business)</li> <li>Clydesdale Bank wins Clean Glasgow – Business Award</li> <li>First Australian bank to become carbon neutral (Sept. 2010) and to be accredited Carbon Neutral by Low Carbon Australia (Dec. 2010). BNZ becomes the first carbon neutral bank in New Zealand</li> <li>Signed the Cancun Communiqué</li> <li>Launched Environmental Upgrade Agreements for financing of commercial building refurbishment with Low Carbon Australia and Eureka Funds Management</li> <li>Launched our Beyond Carbon Neutral resource efficiency program</li> <li>BNZ's Quay Park and Queen Street buildings achieve 5 green star fitout and as built ratings. Harbour Quays building achieves 6 green star fit out</li> <li>Launched our Beyond Carbon Neutral resource efficiency program</li> <li>Attained our first NABERS energy certificate for 100 St Georges Terrace, Perth at 4.5 Star</li> <li>Great Western Bank introduces recycling scheme</li> <li>Our UK Bank implements Mixed Dry Recyclate waste management system</li> </ul>	<ul style="list-style-type: none"> <li>Won Large Business category of the Victorian Premier's Sustainability Awards</li> <li>Only Australian bank to be listed in Bloomberg's Top 20 World's Greenest Banks</li> <li>Listed No. 3 on Newsweek's 2011 World's Greenest Company rankings<sup>7</sup></li> <li>ESG Risk Principles approved</li> <li>Signed the 2°C Communiqué</li> <li>Inaugural co-signatory of the Natural Capital Declaration</li> <li>5 Star Green Star ratings achieved for 500 Bourke St Melbourne and 22 King William St Adelaide</li> </ul>	<ul style="list-style-type: none"> <li>Included in 2013 CDP Climate Disclosure Leadership Index for 4th consecutive years</li> <li>Rated 29 in top 40 in Bloomberg's World's Greenest Banks</li> <li>Rated 55 in 2013 Global 100 Most Sustainable Corporations in the World by Corporate Knights</li> <li>Commenced consolidation of our Melbourne-based operations into Bourke St precinct</li> <li>Endorsed Equator Principles III</li> <li>Implemented new Group Environmental Reporting system</li> <li>5 star NABERS energy rating awarded to three commercial sites</li> <li>700 Bourke Street building achieved 6 star Green star design and as built ratings</li> </ul>

6. This target applies to specific building-based sources of GHG emissions across our Australian, New Zealand and UK operations. It is equivalent to a targeted emissions reduction of 9.2% per full-time equivalent employee (453 kg/FTE), assuming no material change in emission factors, FTE and levels of business activity when compared with the 2010 baseline year.

7. 'Highlights' above are shown in environmental reporting years – 1 July to 30 June. For example, 2013 is the year corresponding to the period 1 July 2012 to 30 June 2013.

# Dig Deeper

## Our environmental agenda

The world is changing quickly, so we think it's important to work together to plan for the challenges and opportunities that exist today, and those that will emerge in the future. Around the world, communities, businesses and governments are facing challenges to economic prosperity, human wellbeing and environmental sustainability.

We recognise these challenges are linked and that real economic prosperity and wealth is about more than just money – human wellbeing and environmental sustainability play a major part too.

Our environmental agenda is focused on three key environmental challenges – climate change, resource efficiency and natural value (see highlight box). We understand that each of these environmental issues create both business risks and opportunities, and that they are increasingly critical to address.

We believe that addressing our environmental impacts and dependencies is not only the right thing to do – it's also responsible and smart business practice. By focusing on the future, we can ensure that the decisions and actions we take today can have a positive impact on the prosperity of our business and broader society.

That's why we have an ongoing focus on reducing the environmental impacts that arise from our operations. Our focus is demonstrated by our environmental reduction targets established for 2014 – 2016. The targets cover energy, greenhouse gas (GHG) emissions, waste and recycling, paper and water consumption (see page 5) and assist in reducing our operational impacts on the climate, natural resources, biodiversity and ecosystems.

This operational focus is a valuable educational opportunity – and as we learn, we can share our experience with our customers, suppliers and others. But this alone is not enough. We're also working towards understanding and reducing the indirect impacts that arise from our lending, investment activities and business relationships.

Climate change	Resource efficiency	Natural value
<b>Imperative</b>		
<p>We recognise the direct impact we can have through our operations and the impact climate change can have on:</p> <ul style="list-style-type: none"> <li>our business risk profile, particularly through our lending, investments and other business activities</li> <li>opportunities to advise and provide products and services for clients to help them manage environmental risk and mitigate emissions</li> <li>new regulatory requirements and future energy supply and costs</li> <li>opportunities to become more energy efficient and less GHG intensive.</li> </ul>	<p>We recognise increased competition for scarce natural resources has the potential to constrain economic growth and affect operational costs. We are seeing:</p> <ul style="list-style-type: none"> <li>changes to companies' ability to access resources as a result of (i) changes to government policy and regulatory requirements and (ii) actions taken by NGOs</li> <li>innovation opportunities as our customers and other stakeholders look for more efficient ways to use resources, as well as opportunities to reuse and recycle resources</li> <li>increasing costs and potential for conflict where resource scarcity increases.</li> </ul>	<p>We recognise ecosystem services:</p> <ul style="list-style-type: none"> <li>are essential to sustaining human wellbeing and may be threatened by increasing biodiversity loss and ecosystem degradation</li> <li>need to be better understood so that companies can determine associated risks and opportunities</li> <li>are not currently valued appropriately and that work is required to develop methodologies that help to value natural capital.</li> </ul>
<b>Objectives</b>		
<p>Work to understand and manage our direct and indirect impacts and dependencies via:</p> <ul style="list-style-type: none"> <li>developing understanding of, and management of, environmental risks and opportunities</li> <li>developing products and services to help our customers respond to environmental challenges</li> <li>advocating and communicating about environmental issues</li> <li>ensuring third-party validation of our processes and activities</li> <li>leading through our own actions, i.e. reducing our own carbon/environmental footprint and sharing our experience with others</li> <li>engaging and assisting our people in their personal contribution to environmental sustainability.</li> </ul>		
<b>Strategy</b>		
<ul style="list-style-type: none"> <li>Continue to develop products and services to help our customers respond to, and manage the impacts of, climate change.</li> <li>Continue to develop our understanding of, and manage, climate change risk and opportunities.</li> <li>Share our carbon neutral experience with others, encouraging their action.</li> <li>Engage our people and assist them with their personal actions.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to reduce GHG emissions.</li> <li>Improve resource efficiency with an increased focus on water, paper and waste.</li> <li>Continue to grow employee engagement and develop positive environmental behaviours.</li> <li>Embed sustainability into our purchasing decisions.</li> </ul>	<ul style="list-style-type: none"> <li>Build NAB's thought leadership position.</li> <li>Consider risks and revenue dependencies.</li> <li>Review our operational and supplier decisions.</li> <li>Participate in initiatives to develop business tools and valuation methodologies.</li> <li>Drive awareness and employee engagement.</li> <li>Build product and service responses.</li> </ul>

We know we can't deliver on our Environmental Agenda alone. Our relationships with community and industry groups, suppliers and customers are invaluable. They help us expand our knowledge and provide us with opportunities to identify and test new ways of doing things, so we can find better solutions for the future.

The pages that follow provide an overview of the actions we've been taking in 2013 to deliver on our Environmental Agenda. You can find more information on our Group website: [cr.nab.com.au](http://cr.nab.com.au).

# Dig Deeper

## Climate change and resource efficiency

Climate change and the consumption of finite natural resources continue to be significant issues for governments, business and communities as they create risks and opportunities that need to be accounted for and managed. That’s why it’s becoming increasingly important to use scarce resources efficiently and be more sustainable in what we produce and consume.

As a service-based business, this means:

- reducing GHG emissions from our operations

- improving the efficiency of our resource use (paper, water and energy)
- reducing the waste we send to landfill
- increasing our recycling rates.

With this approach we can improve resource productivity, reduce our costs of doing business, minimise stresses on the environment and strengthen the competitiveness of our business and the economy. This approach will enable us to participate in creating a ‘circular economy’ – one in which we keep scarce resources in use for as long as possible and recover materials at the end of each

product’s life. It is also an opportunity to innovate and grow new business as clean technology is developed and implemented and infrastructure is created to support further recycling.

Our ‘learning-by-doing’ approach means we can experiment with new ideas and technologies in our own operations and, when it’s appropriate, share what we learn with our customers and suppliers. It’s with this in mind that we developed our 2014-2016 environmental performance targets and continue to develop and implement our environmental programs and initiatives.

### Our 2014 – 2016 Group-wide environmental performance targets

Climate change	Resource efficiency	Natural value
<ul style="list-style-type: none"> <li>• Reduction in stationary energy consumption (GJ) – absolute reduction – <b>5%</b></li> <li>• Reduction in GHG emissions (tCO<sub>2</sub>-e) – absolute reduction<sup>8</sup> – <b>5%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Diversion of waste from landfill (%) – increase from 58% to <b>75%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in office paper consumed (tonnes) – absolute reduction – <b>10%</b></li> <li>• Reduction in paper consumption by migrating customers to online delivery<sup>9</sup> (%) – increase the proportion of customers receiving online statements to <b>30%</b></li> <li>• Reduction in water consumption (kL) – absolute reduction – <b>5%</b></li> </ul>

#### Our environmental targets

Our previous three-year environmental performance targets (1 July 2010 to 30 June 2013) included a Group GHG emissions reduction target, as well as regional resource efficiency targets for our businesses in Australia, the UK, Asia and New Zealand. You can find an update on our performance against each of these targets in Note 8 on page 27 of this Environmental Dig Deeper.

We recognise that all organisations will face challenges as they seek to address climate change, improve operational efficiency and use resources and natural capital more efficiently. During 2013 we reflected on how, through our Environmental Agenda, we can learn more about the best ways to respond to these challenges.

This work resulted in the six Group-wide environmental performance targets set out above. These six new targets are to be achieved by 30 June

2016 and will be measured against a baseline of our 2013 performance.

In striving to achieve these targets, we expect to see short-term increases in areas like energy use and GHG emissions resulting from a temporary increase in the size of our building portfolio as we transition out of existing inefficient buildings into more sustainable and efficient alternatives. Without this transition, it is unlikely that we would achieve the energy reductions we have targeted by 2016.

8. We will also continue to use intensity measures, in addition to absolute reduction targets, to track our environmental performance over time.

9. This target currently excludes operations in the UK and Asia. Online delivery of customer statements is currently unavailable in our UK business. If this changes, our UK operations will adopt and contribute to the Group target. Asia is excluded as we currently do not have internet banking capability for customers in this region.

# Dig Deeper

## GHG emissions management and reduction

Energy efficiency and GHG emissions reduction are key priorities across the Group under the 'climate change' focus of our Environmental Agenda. They support delivery of our carbon neutral commitment<sup>10</sup> and GHG emissions reduction target. You can find further information on what it means to us to be carbon neutral on our Group website at: [cr.nab.com.au](http://cr.nab.com.au) and in our Group Environmental Reporting and Carbon Offset Standard, also available on our website.

In Australia, we use the requirements of the *Energy Efficiency Opportunities (EEO) Act 2006 (Cth)* as a tool to give structure and discipline to our approach to energy efficiency opportunities. A summary of the expected annual GHG emissions savings from these projects as at 30 June 2013 is set out below. For further detailed information on our Australian energy efficiency opportunities you can download our EEO reports at [cr.nab.com.au/download-centre](http://cr.nab.com.au/download-centre).

In 2013 we updated our Australian marginal abatement cost curve (MACC) based on our identified energy efficiency opportunities. The MACC helps us to prioritise our energy efficiency investments to maximise GHG emissions reductions within available capital and operational budgets.

The 2013 MACC update highlighted that it's becoming increasingly challenging to identify new cost effective energy efficiency opportunities, simply because we have already implemented an extensive program of opportunities, saving a total of 270,041 GJ since 2006.

Some key energy efficiency achievements implemented in 2013 included:

1. improving energy efficiency in our buildings by:
  - vacating a number of older, less efficient buildings in Sydney and Melbourne and relocating employees to more energy efficient sites. For example, our 700 Bourke Street site in Melbourne has been designed to achieve a 6 Star Green Star As Built rating and has been awarded a 6 Star Green Star – Office Design v2 certified rating from the Green Building Council of Australia. The site is expected to use 40% less energy than the six sites we are exiting combined. The transition is expected to realise annual energy savings of 10,191 GJ and annual GHG emissions savings of 4,334 tCO<sub>2</sub>-e per annum
  - installing energy efficient lighting – for example, over 4,400 energy efficient LEDs have now been installed at 800 Bourke Street Melbourne, one of our largest commercial sites. This initiative is expected to realise annual energy savings of 1,950 GJ and annual GHG emissions savings of 735 tCO<sub>2</sub>-e per annum
2. achieving or maintaining 4 Star NABERS Energy ratings or higher at five of our commercial sites. This included 5 Star NABERS Energy ratings for our office buildings in Brisbane and Perth and a 5.5 Star NABERS Energy rating in Sydney
3. fine tuning the ProtégéFX system, which in addition to controlling security systems at BNZ sites in New Zealand also manages the hours of operation for lights, air conditioning and hot water. Initial adjustments produced savings of 51,000 kWh across 76 sites over an eight week period – a 5.9% reduction in energy use. Due to this success, BNZ will continue adjusting operational schedules and extend the building management system aspects of ProtégéFX to cover more sites within our NZ building portfolio.

Emission reduction measures (Australia)	Estimated emission reductions (tCO <sub>2</sub> -e)
Reduction measures implemented between 1 July 2006 and 30 June 2012	75,319
Reduction measures implemented between 1 July 2012 and 30 June 2013 comprising:	359
• Data Centre Opportunities	87 tCO <sub>2</sub> -e
• Commercial Building Opportunities	202 tCO <sub>2</sub> -e
• Retail Network Opportunities	70 tCO <sub>2</sub> -e
<b>Total quantity of GHG emissions reduced (Australia)</b>	<b>75,678</b>

10. NAB was the first Australian bank to be certified carbon neutral under the National Carbon Offset Standard (NCOS) Carbon Neutral Program in 2010.

# Dig Deeper

## Reflecting on energy efficiency savings

In 2013 a number of store network sites were selected to trial the application of an innovative heat reflective roof paint. The paint has been shown to markedly reduce energy consumption by reducing the heat absorbed through a building's roof.

We conducted the trial to more accurately quantify the potential energy savings available, and to understand the impacts on the working environment for employees. We monitored ceiling and office space temperatures, power drawn by air conditioners and employee comfort levels before and after application of the heat reflective roof paint.

Data from the trial has been positive, indicating a reduction in ceiling and office space temperatures and in the use of air conditioning. We're currently investigating the possibility of rolling out heat reflective roof paint to additional sites. We expect to deliver ongoing total annual savings from the pilot sites of approximately \$7,000 in energy costs, with associated reductions in energy consumption and greenhouse gases emitted of 108 GJ and 35 tCO<sub>2</sub>-e respectively.

Continuing to reduce our operational expenditure enables us to deliver on our goal of providing sustainable and satisfactory returns to our shareholders, while reducing our environmental impact.

## Our approach to supporting GHG emissions abatement

In the 2012 Environmental Dig Deeper we outlined our decision to transition our support for GHG emissions abatement from GreenPower to the Carbon Farming Initiative (CFI). In 2013 we stopped purchasing GreenPower certified Renewable Energy Certificates (RECs), but we were unable to secure CFI offsets that met our requirements. We're continuing to look for appropriate CFI offsets with a particular emphasis on agricultural projects that align with our

agribusiness customer base, our natural value proposition and our Environmental Agenda more broadly. We continue to provide significant support for the renewable energy sector through project finance. We also support GHG emissions abatement from renewable energy in other ways. The majority of our voluntary carbon offsets were purchased from renewable energy projects and our UK business continues to purchase 100% certified renewable electricity<sup>11</sup>. See Note 9 on page 30 for further information.

## Offsets from renewable energy projects

**We purchase carbon offsets from a range of projects, including those supporting renewable energy in developing countries. These include established renewable technologies such as wind power and geothermal, as well as more innovative technologies such as energy from biomass and 'run of river' hydropower.**

**The key appeal of these innovative technologies is the reuse and biodiversity protection elements. For example a Chinese 'run of river' hydropower project is situated in an area that is home to over 650 species of wild animals, (including the rare giant panda and snow leopard). 'Run of river' hydropower uses continuous river flow, so avoids destroying large areas of native habitat through damming.**

**The Thai rice husk-fired power plant project emphasises the potential for all companies to identify revenue opportunities arising from their own waste streams. The power plant uses the rice husk waste to generate power not just for its own needs, but also to supply the local power grid.**

As a consequence of our carbon neutral commitment, and our voluntary purchase of carbon offsets, we have an internal price on carbon that reflects the price we pay for offsets in the voluntary market. This is built into the business case for our

energy efficiency opportunities, including the refurbishment of buildings, and has assisted in accelerating energy efficiency investments. Our internal carbon price has demonstrated that a price on carbon can be an effective tool to incentivise investment in GHG emissions reductions.

## Initiatives to reduce our environmental footprint

We continued to focus on resource efficiency in 2013. Examples of our initiatives are featured below:

### Paper reduction initiatives including:

- transitioning to a managed print service in Australia (this commenced in 2012 and will be completed in 2014). This will result in a reduction in the number of printers and multi-function devices ('MFD') across our business. It will also provide swipe-to-release technology in major commercial sites. As of June 2013 our Australian operations have reduced their MFD fleet by 8% and realised savings of approximately 20 million sheets of A4 paper, equivalent to 100 tonnes. Similar managed print services have already been rolled-out in our operations in New Zealand and the UK
- completing phase two of our Australian e-reporting project, which saw a transition of reports from printed hard copies to online delivery. This has provided an estimated reduction of 6.5 million sheets of A4 paper. Further hard copy reports are planned for deactivation.

### Water reduction initiatives including:

- installing water tanks in our tri-generation facility at our main data centre in Australia. This now allows the tri-generation cooling tower to use water from multiple rainwater collection tanks and reduces the use of potable municipal water supply
- progressively installing commercial dishwashers in all major office buildings at BNZ. The new machines help us to reduce water, energy and maintenance costs and wasted employee time. The old dishwashers ran almost continuously – up to 10 cycles per day whereas the new machines have a three minute cycle and minimal water use.

11. The electricity purchased by our UK business is certified as being produced from eligible renewable energy sources under the UK's Renewable Energy Guarantees of Origin (REGO) Scheme.

# Dig Deeper

## Waste reduction initiatives including:

- refreshing signage across the Australian business to help employees sort waste into correct waste streams, including organics
- installing a weighbridge at our 800 Bourke Street office in Melbourne to improve waste data reporting, as well as providing the detailed data to help us identify and manage fluctuations in the waste streams
- re-using close to 1,000,000 sheets of obsolete letterhead by turning it into notepads for use within our Australian business. Local employees can now order six different NAB branded notepads made from re-purposed, recycled letterhead.

## An unexpected waste

In late July and early August 2013 a series of severe earthquakes occurred in the Cook Strait and Marlborough regions affecting BNZ operations. Our Harbour Quays office building in Wellington was the main BNZ site impacted. As a consequence, approximately 1100 employees have been relocated into short-term accommodation.

As a result of this event, we've had to manage unexpected streams and quantities of waste. Wherever we can, we've found alternatives to enable materials to be recycled. We've also experienced short-term higher energy use while our Harbour Quays building is remediated and our employees occupy temporary accommodation. This event reinforces the importance of having medium to long term targets for improvements in resource efficiency and GHG emissions, so single incidents are less likely to prevent the achievement of reduction goals.

In addition to these 2013 initiatives, there are a number of ongoing programs including R22<sup>12</sup> phase out, rainwater harvesting in New Zealand and Australia, promotion of electronic statements and shareholder communications (see Products and services section on page 12 for more detail) and a variety of waste, office and IT equipment recycling programs that have been implemented across our Group. You can find further details on these initiatives on our website at: [cr.nab.com.au](http://cr.nab.com.au).

## Waste or resource?

The team at BNZ's Morrinsville Retail Store and business banking centre were facing increased costs for waste disposal to landfill, so they worked with our BNZ Property team to identify possible solutions. One idea was to use a worm farm for the disposal of organic waste. Contact was made with local schools to see if they would be interested in having a worm farm and taking organic food waste from our Morrinsville office.

Morrinsville Intermediate School agreed to be involved. A teacher and two children from the school visited the WormsRus site in South Auckland to receive training and to choose an appropriately sized worm farm. The worm farm will be a valuable addition to the school's existing horticultural programme and they'll be able to use the worm liquor and castings to fundraise for the school. Employees in our Morrinsville office are looking forward to engaging with the students, parents and teachers as they reduce the organic waste going to landfill from the office, turn it into a useful resource and provide educational opportunities for the local school community.

## Employee engagement

We continued to engage our employees in work place environmental initiatives and to provide them with support to reduce their environmental footprint in the workplace and at home. This year, we participated in Earth Hour for the sixth time – now a combined effort across our Australian, UK, NZ and Asian operations. In Australia, we switched off close to 60 capital city offices and stores including sky signs. In the UK, NZ and Asia we switched off branch lights and office lights. We also continued our support of World Environment Day in Australia and the UK, and National Ride to Work day in Australia.

In 2013 we conducted our biannual internal environmental conference covering the three key areas of our environmental agenda (climate change, resource efficiency and natural value) and ESG (Environmental, Social & Governance) risk. We had an excellent range of external speakers from government, customers and NGOs to help our employees learn more about our Environmental Agenda, the issues related to it, and how those issues are changing. The highlight was keynote speaker, Sir Bob Watson, reminding us of the urgency to act on climate change.

We maintain support for our voluntary green team community and employees who wish to use their volunteering for environmental initiatives, see Natural value section on page 11. Through our staff association, we also continue to provide access to no-interest loans for annual public transport certificates and discounted sustainability product offerings (including discounts on solar photovoltaics (PV) and water tanks).

You can find further information on our employee environmental engagement activities and support on our website at: [cr.nab.com.au](http://cr.nab.com.au).



## Dig Deeper

### Stakeholder engagement and participation in consultation processes

In 2013 we continued to participate in government and industry consultation processes in respect of a range of environmental policies, including carbon related policy and regulations.

As part of an industry consultation process, we provided feedback on proposed changes to the Energy Efficiency Opportunity (EEO) regulations to simplify EEO reporting obligations and the required reporting format. We were supportive of simplified reporting obligations, proposed flexibility in choosing which key energy efficiency reductions to report and a proposed awards program to recognise top performers.

In 2013 we participated in consultation focused on streamlining the National Greenhouse and Energy Reporting process. The consultation focused on the statistical uncertainty of calculations, simplifying measurement methods and increasing the thresholds for reporting on small facilities and GHG emissions sources. NAB supported these changes.

During 2013 we also participated in work of the United Nations Environment Program Finance Initiative (UNEP FI) climate change working group on climate finance. This included attending workshops and other side events organised by UNEP FI and others to engage climate change negotiators during the Conference of the Parties in Doha in late 2012.

A key topic of engagement with UNEP FI has been climate finance. We've provided the UNEP FI with information on:

- barriers to the provision of climate finance
- opportunities to leverage public sector finance with private capital
- the environment necessary to facilitate the flow of private finance
- the roles of different financial institutions in providing different types of finance
- the opportunities to reduce risk and incentivise the involvement of private sector financial institutions in providing climate finance
- innovative examples of climate finance provision.

We also engaged in a consultation process run by the Department of Environment<sup>13</sup> on the possible role that the United Nations Framework Convention on Climate Change (UNFCCC) and its institutions could play in international carbon markets to maximise global emission reductions at least cost.

Our representatives also continued to participate in the:

- Australian Financial Markets Association (AFMA) Carbon Markets Committee and contributed to its submission on proposed regulatory changes
- roundtables and technical working group sessions run by the Clean Energy Regulator. In 2013 a member of our Environmental Markets team was appointed to the Clean Energy Regulator's Carbon Markets Reference Group
- Victorian Government's Industry Sustainability Working Committee.

During 2013 we were an active participant in the Equator Principles review process which culminated in the launch of Equator Principles III in June 2013. We've been actively involved in the development of the Natural Capital Declaration work plans and the development of an Australian Business and Biodiversity Initiative. See Natural value section on page 10 for further information.

13. Previously known as the Department of Climate Change and Energy Efficiency.

# Dig Deeper

## Natural value

Over the past year we've focused on raising awareness, both within NAB Group and in the broader business community, of the importance of valuing natural capital.

## Thought leadership

This year, we've partnered with a number of organisations to put natural capital (otherwise known as biodiversity and ecosystem services) on the business agenda. We organised a natural capital session at the Australian Sustainability Conference in November 2012, hosted a workshop in December 2012 with leading economist Pavan Sukhdev (organised by Monash Sustainability Institute) and in June 2013 supported the first master classes on natural capital in Australia run by the Australian Centre for Corporate Social Responsibility.

### The value of nature's services

Did you know that nature provides valuable services that reduce costs and underpin the functioning of business and households?

For example, the pollination services provided by bees are worth around \$1.7 billion<sup>14</sup> annually to the agricultural sector in Australia – even more if we include the services they provide in household gardens.

And the water purification process, provided naturally by protected forest areas in Melbourne's water catchments, would otherwise cost tax payers around \$500 million to \$1 billion to build if a water treatment plant had to be installed to perform the same function<sup>15</sup>. These examples illustrate that understanding the economic value of nature's assets and how they contribute to wellbeing, productivity and wealth creation, can help us make better decisions that will reduce business costs and risks whilst simultaneously protecting and enhancing our natural assets.

## Collaborating on natural capital

**Treasury Wine Estates (TWE) is a global wine company with a leading portfolio of wine brands including Beringer, Lindeman's, Rosemount, Penfolds and Wolf Blass. With a deep and intrinsic link to agriculture and growing investor concern around natural capital risk for TWE's operations, it is critical that TWE implements sound environmental management practices and encourages and supports its contracted grape grower network to do likewise.**

**TWE recognises the natural capital dependencies and impacts of the Company's operations and monitors over 90 environmental metrics addressing consumption of energy, water, chemicals, waste generation and carbon emissions. TWE has led the wine industry in developing ways to understand and manage environmental risks. In Australia, TWE has a particular focus on the management of water – partnering with water authorities to improve environmental flows and trialling water efficient drippers for biodiversity conservation.**

**Through discussions on how to best manage natural capital risks and take advantage of new market opportunities, NAB and TWE agree that there is a need to get to a clear, measurable yet cost-effective, set of sustainability indicators. The metrics would be useful for a wide range of stakeholders, from producers and buyers who can track progress and demonstrate their sound management of natural capital risks in supply chains, to investors and consumers.**

**TWE and NAB also share a belief in the need for partnership and collaboration to address environmental sustainability. As such, we are working together to stimulate discussions on lessons learned to date on sustainability metrics and to explore the tools that support decision making about natural capital risk.**

## Collaboration

We recognise that successfully addressing biodiversity loss and appropriately valuing ecosystem services will require coordination across business, government and broader society. That's why we've played a role in creating an Australian Business and Biodiversity Initiative (ABBI) that brings business, government and NGO leaders together to share and exchange experiences and explore how best to measure and manage natural capital. Terms of reference and a first work plan for the ABBI, which will form part of the Global Partnership set up by the Convention on Biological Diversity Secretariat, are currently being finalised.

We've also entered into a new partnership with the Hume City Council to assist them with their award winning Caring for our Plains initiative.

The initiative is designed to protect the Victorian Volcanic Plains on Melbourne's urban fringe – one of Australia's biodiversity hot spots – by engaging, motivating and building the capacity of local landholders. We're providing bridge funding to allow the Hume City Council to continue with the initiative until a new council-funded program gets off the ground in 2014.

Internationally, we've participated in the development of the Road Map for the Natural Capital Declaration, published in May 2013. We look forward to the implementation phase of the Declaration as active participants in Working Group 2 (embedding natural capital considerations into financial products and services) and as the chair of Working Group 3 (on natural capital accounting).

14. Rural Industries Research & Development Corporation 2010, *Pollination Aware: The Real Value of Pollination in Australia*

15. Melbourne Water 2003, *The Source, 'Our Natural Fortune'*

<http://pandora.nla.gov.au/pan/42641/20040612-0000/thesource.melbournewater.com.au/defaulted70.html?style=OTHER&url=/content/Issue/June2003/inthisedition.htm>

## Dig Deeper

We've also continued our ongoing engagement with, and support of:

- The 'Kiwis for kiwi' Trust – a national charitable trust that supports kiwi conservation projects across New Zealand. 'Kiwis for kiwi' is continuing two decades of work undertaken by the BNZ Save the Kiwi Trust.
- Earthwatch – who have provided opportunities for our employees to experience the importance of biodiversity and ecosystem conservation through in-field experiences around the world.
- Conservation Volunteers and Landcare – who have helped us establish our *Plant Your Paper Back* program to help employees understand our dependency on paper use and its potential impacts on forests.

Further information on these initiatives and other engagement-related activities is available on our website at: [cr.nab.com.au](http://cr.nab.com.au).

### Managing our own natural capital impacts and dependencies

We've continued to integrate natural value across the Group through our risk assessment processes and Supplier Sustainability Program. We also considered natural capital and resource constraints in setting our new 2014-2016 environmental targets (see page 5 for further detail). And, we undertook an initial pilot project to better understand the current state of natural capital valuation methodologies and how these methodologies might be most effectively used within our own decision-making frameworks.

In 2013 we prioritised support to business units with material exposure to natural capital risks. For example, we started work within NAB Agribusiness to understand our customers' natural capital risks, including water availability and soil health. We created a sustainability agenda for NAB Agribusiness to build our bankers' capabilities and to help our customers minimise their natural capital risks and take advantage of new opportunities. We also continue to support our customers with finance, to help them take advantage of opportunities like renewable energy, water efficiency and waste management – 'to close the loop' and move towards a circular economy.

### Employee engagement and volunteering

We continue to provide employee engagement and volunteering opportunities to support the work of environmental conservation NGOs and others involved in biodiversity conservation and habitat restoration. In addition to Australian-based volunteering, some of our UK employees have been involved in environmental volunteering challenges including (i) clearing litter from Prestwick Beach, organised by Scottish Business in the Community; and (ii) creating a new mountain pathway at Ben Lomond with the National Trust for Scotland. You can find further examples of our volunteering and engagement activities on our website: [cr.nab.com.au](http://cr.nab.com.au).

### The road ahead

In 2014 we'll move to the implementation phase of our Agribusiness sustainability agenda and begin to develop pilot projects with customers in other priority sectors. A key focus of our work – whether it's on our own operations, on partnerships with customers or collaboration across networks and industry initiatives such as the ABBI and NCD – will be to build a collective understanding of the metrics needed to define and measure progress towards best practice management of natural capital.

## Smart investments for a sustainable future

**When faced with a 45% reduction in their groundwater entitlement and anticipating less water as a result of changes to long-term weather patterns brought about by climate change, the Estens family near Moree in northern New South Wales decided that they needed to become more water efficient.**

**As a result of switching part of their operations from flood irrigated cotton to drip irrigated citrus, they expect to deliver total annual water savings of 1150 ML (with 639 ML transferred to the Australian government).**

**NAB Agribusiness assisted the Estens with their citrus and drip irrigation investments as well as in facilitating the purchase of 50 per cent of the shares in a citrus juice company and the building of a new manufacturing plant in Warwick. These investments will enable the Estens family to build an export market for orange juice and support the development of a sustainable citrus industry in North West New South Wales and Southern Queensland.**

# Dig Deeper

## Products and services

To achieve the goal of sustainable development, each individual, household and business must transition to a sustainable pattern of production and consumption as well as cleaner sources of energy. We all need to understand that our world has limited natural resources and take action to reduce species loss and environmental degradation and to increase reuse and recycling.

Because the transition to sustainable development (whether it be in a developed or developing country) is impossible without capital, there is a significant opportunity for our business – to help our customers (i) transition to a lower carbon way of doing business; (ii) become more resilient as they manage environmental challenges like water scarcity and extreme weather events; and (iii) better manage and understand their impacts and dependencies on natural capital.

That's why we provide finance to help our customers achieve their environmental and economic objectives – whether through specialised products and services provided by teams within Business Banking and Products and Markets business units, or through other more general forms of finance. See Natural value section on page 10 for further examples.

## Customer and shareholder services

We continue to give shareholders<sup>16</sup> and personal banking customers<sup>17</sup> the option to receive electronic statements and communications and, in doing so, reduce their impact on the environment. Uptake of this option has increased significantly during the past year as customers continue to migrate towards mobile device-based banking.

## Specialist business lines providing environmental products and services (Australia and New Zealand)

- **Specialised Finance** is a global business that sits within our Product and Markets Division. It specialises in arranging and providing non-recourse senior debt for the construction and operational phases of infrastructure, energy & utilities and natural resources projects. Within the Energy and Utilities team, there is a strong focus on providing finance to renewable generation assets (e.g. wind and solar). In fact, NAB is the leading (by market share) arranger of project finance to the Australian Renewable Energy sector, having arranged over A\$1.7bn of transactions in the past seven years<sup>19</sup>. For the first half of 2013 NAB was the clear leading financier for renewables by market share in Australia<sup>20</sup>.
- **Environmental Markets (EM)** provide a range of carbon and renewable energy hedging products and services to our clients. The current product range includes spot and forward products as well as structured products to assist clients to manage their risks and cash flows.
- **Environmental Finance Solutions (EFS)** sits within our Advisory business and provides environmental finance advisory services to our corporate and institutional customers in the core areas of energy efficiency, renewable power and carbon pricing. Services include debt structuring and arranging for emission and/or energy reduction projects, risk management strategies, offset project development and Environmental Upgrade Agreement (EUA) funding to provide new funding sources for environmental retrofits of commercial buildings.

We'll build on this success by providing even more online communications functionality in the future. As at 30 September 2013 around 1,212,000 customers in Australia (equating to around 3,478,000 accounts), and around 255,000 customers in NZ (equating to around 389,000 statement accounts), had opted in to paperless statements<sup>18</sup>.

In the UK, our business continues to provide customers with credit and debit cards made using carbon neutral certified plastic.

## Supporting customers facing hardship as a result of environmental events

Following the 2012/13 drought in New Zealand, BNZ supported customers and communities who had been impacted by the adverse conditions. Affected customers were offered an immediate overdraft approval of up to \$NZ 100k at a special interest rate of 6%. They were also offered family funding of up to \$NZ 10k if it was needed. The support package was rolled out across New Zealand to provide customers with relief from financial pressure caused by the drought. BNZ also sponsored each of the local Rural Support Trusts in drought effected areas to the value of \$NZ 5k to assist with providing independent help to farmers under stress.

16. Around 134,070 shareholders have selected the option of electronic means for receipt of (some or all) their shareholding account statements. This is reducing emissions by around 11 tCO<sub>2</sub>-e per annum.

17. Online delivery of customer statements is currently unavailable in our UK business. If this changes, our UK operations will adopt and contribute to the Group target. Asia is excluded as we currently do not have internet banking capability for customers in this region.

18. This is reducing emissions by around 259 tCO<sub>2</sub>-e per annum across Australian and New Zealand operations.

19. Project Finance International 2006-2013 APAC Mandated Lead Arranger League Tables US\$ Project Allocation, NAB analysis ranking against four major Australian banks – cumulative volume.

20. Project Finance International 2013 Mid Year Review, NAB analysis ranking against four major Australian banks.

## Dig Deeper

### Supporting renewable energy development and energy efficiency

In 2013 we financed an additional 555 MW of renewable energy generation projects – taking our total MW financed from 2,359 MW in 2012 to 2,914 MW. Our project finance portfolio represents 1.65% of Group gross loans and advances, including acceptances<sup>21</sup>. We were delighted to be appointed in 2013 as the mandated lead arranger for the financing of the Royalla Solar Farm – the first utility-scale solar project in Australia to be project financed. See the case study opposite and page 12 of our 2013 Customer Dig Deeper for further information.

In addition to project finance, we also provided working capital solutions and advisory services for customers operating in, or exposed to, the renewable energy sector.

During 2013 we continued to undertake transactions and provide advisory services that support energy efficiency. Once again, we provided finance for Environmental Upgrade Agreements (EUAs) in Australia (see case study below). We also maintained the waiver for top-up application fees for approved top-ups to existing BNZ home loans to support customers taking advantage of the Energy Efficiency and Conservation Authority's (EECA) ENERGYWISE™ scheme.

### Environmental markets transactions

In 2013 we participated in environmental markets transactions in both the domestic and international renewable energy and carbon sectors. These activities were across both voluntary and compliance markets and included offset sourcing for NAB Group's own carbon neutral program.

We continued to develop our international carbon product suite and in December 2012, received an Australian Financial Services licence variation from the Australian Securities and Investments Commission enabling us to provide financial services in relation to regulated emissions units (carbon units, Australian carbon credit units and eligible international emissions units) established under Australia's carbon pricing scheme. In New Zealand, we continue to provide our Kauri bond product.

## Environmental building retrofits

**In August 2013 we successfully closed the largest Environmental Upgrade Agreement (EUA) to date – it was for 501 Swanston Street, Melbourne. The EUA covers a AU\$7 million retrofit, as part of an overall \$40 million makeover of the building. The retrofit will include upgrades to the building's heating and ventilation systems and lifts. The project is expected to lower GHG emissions by about 607 tonnes a year and cut more than \$80,000 from the building's annual energy bill.**

**An EUA is a three-way agreement between the building owner, a local council and a finance provider. The finance provider lends funds to the building owner to undertake water, energy or other environmental improvements. The financed amount is then levied by the council as a special charge back against the building over a period of time. The levied funds are then reimbursed back to the finance provider. In the case of 501 Swanston Street, the EUA was negotiated between the building owners, the City of Melbourne and The Australian Environmental Upgrade Fund (which is funded by NAB, the Clean Energy Finance Corporation (formerly Low Carbon Australia) and Eureka Funds Management).**

**Earlier in 2013 the first NSW EUA was signed at 10 Valentine Avenue, Parramatta for a lighting upgrade which has resulted in electricity cost savings of about 70% and a reduction in GHG emissions of about 550 tonnes a year. It was the first EUA to include tenant pass-through, whereby the tenant contributes to paying part of the cost of the EUA levy due to the significant reduction in energy costs. Structuring the financing in this way provides the building owner with an incentive to invest in energy efficiency. NAB has now arranged four of the five privately financed and arranged Environmental Upgrade Agreements. Other projects are in the pipeline and there's increasing interest from councils around Australia, with six councils now in a position to offer EUAs.**

**The benefits of the EUA mechanism are also being recognised internationally. Melbourne City Council's sustainable building initiatives won a 2013 C40 and Siemens City Climate Leadership Award in the category 'Energy Efficient Built Environment', with the judges commenting that the EUA program was a significant factor in their decision.**

## Wind and solar energy

**Two examples of renewable energy projects we financed in 2013 are: the Musselroe Wind Farm in Tasmania and the Royalla Solar Farm near Canberra (also highlighted in our 2013 Customer Dig Deeper).**

**Musselroe Wind Farm is located near Little Musselroe Bay at Cape Portland in north-east Tasmania. It will have a capacity of 168 MW – enough to power 50,000 households, equivalent to the township populations of Burnie and Devonport combined – and reduce GHG emissions by around 450,000 tonnes per year.**

**When complete, Royalla Solar Farm will comprise approximately 83,000 photovoltaic (PV) panels with a capacity of 20 MW and generate enough electricity to power about 4,500 households. Royalla Solar Farm will contribute to a reduction of around 700,000 tonnes of GHG emissions over 20 years.**

**Renewable energy has a positive environmental impact because it generates clean power. However, rigorous environmental reviews prior to approval and construction are still important. For example, the Musselroe project conducted an environmental and cultural assessment to assist in layout and location of the final site, due to the significant biodiversity value and Aboriginal cultural heritage in the area. An *Environmental Protection and Biodiversity Conservation Act* review and approval was required, as well as a formal public disclosure addressing environmental and social aspects of the project.**

21. This figure also includes loans at fair value.

# Dig Deeper

## Environmental governance and risk management

### Governance

Environmental governance within the NAB Group is provided by a senior management committee. Since October 2007 such environmental governance has been provided by our Group Environment Committee (GEC). In 2013 the GEC was chaired by the Group Executive – People, Communications and Governance. Membership of the Committee also included senior representatives from across the Group in Australia, New Zealand, the UK, Asia and the US.

The GEC was responsible for leading management's oversight of the Group's Environmental Agenda. This included oversight of environmental culture (engagement and awareness), integrated governance processes, strategy, and risks and performance (which includes consideration of climate change, resource efficiency and natural value). The GEC met quarterly to review progress against our Environmental Agenda. In 2014 responsibility for oversight of the Group's Environmental Agenda will be transitioned to a new governance committee chaired by the Group's Chief Risk Officer.

In addition to oversight provided by the GEC, regional level management reviewed performance regularly (usually every month). Environmental reporting was also presented to our:

- Group Risk Return Management Committee – which reviews our environmental risks and approves relevant Group-wide environmental policies
- Executive Committee CR Council – which provides oversight of our overall CR Agenda and related corporate responsibility-related matters
- Board.

The Board retains ultimate authority for oversight of all corporate responsibility issues, which includes our Environmental Agenda. You can find further information on environmental governance on our Group website at: [cr.nab.com.au](http://cr.nab.com.au).

The Group's environmental management policies and practices are aligned to the ISO 14000 framework. In the UK, our business maintains ISO 14001 certification for its Merrion Way Customer Support Centre.

In 2013 the Group undertook a significant review of a number of risk policies, including the Group Environmental Policy, in order to simplify them. We now have an Enterprise Risk Policy that incorporates eight environmental policy requirements. The environmental policy requirements are supported by two standards: (i) an *Environment Management Standard* and (ii) an *Environmental Reporting and Offset Management Standard*. Our environmental policy requirements and standards act as the global reference point for our environmental management practices and for implementation of our Environmental Agenda, including:

- compliance with environmental regulation and voluntary commitments
- management of environmental risk
- setting of environmental objectives and targets
- management of direct (operational) and indirect (via customers and suppliers) environmental impacts
- reporting and assurance
- investment in environmental opportunities
- employee awareness and community involvement, consultation and feedback
- public policy engagement
- governance.

Copies of our environmental policy requirements and Standards are provided on our Group website at: [cr.nab.com.au](http://cr.nab.com.au).

Our most significant direct environmental impacts include:

- energy use and GHG emissions
- waste production and material use (in particular paper)
- business travel.

We also recognise we can indirectly impact the environment through our purchasing choices, our supply chain management and through the customers with whom we do business. You can find out more about our sustainable supply chain work by reading our 2013 Supply Chain Dig Deeper.

In 2013 the scorecards of our Group CEO and Australian-based executives included a performance measure linked to the achievement of CR metrics, which included the reduction of GHG emissions. Performance of the Group CEO and executives against their respective scorecards is linked to their annual short-term incentive payment. Other employees with specific environmental responsibilities have scorecards which incorporate performance requirements related to the delivery of our Environmental Agenda and reduction targets.

Certain outsourced functions also have contractual arrangements that require the suppliers to deliver agreed environmental programs to assist us in meeting our environmental performance targets.

# Dig Deeper

## Risk management

Risk exists in all aspects of our business and throughout our operating environment.

The Group's collective risk management capability and competency supports the successful implementation of our strategic priorities and enables us to run a sustainable and resilient business that's responsive to its changing environment.

We identify and manage our risks as part of a Group-wide Risk Management Framework. The framework starts with Board approved strategy, risk appetite, capital, funding and operational plans. Risk appetite is translated and cascaded to our businesses qualitatively (through our risk postures, policies, standards and work instructions) and quantitatively (through our risk limits, settings and decisioning authorities).

Compliance with our Risk Management Framework is non-negotiable. When we make mistakes, we reflect on our experience, share what we learn and hold ourselves accountable through the application of balanced performance scorecards and a risk adjusted performance and rewards framework.

At an executive level, risk is overseen by the Group Chief Executive Officer through the Group Risk Return Management Committee (GRRMC) and its supporting sub-committees.

You can find further information on our Group Risk Management Framework and the systems and processes in place to identify, assess, measure, monitor, mitigate and report on risks as part of Corporate Governance on our group website at: [www.nabgroup.com](http://www.nabgroup.com).

## ESG risk management

We're continually monitoring Environmental, Social and Governance (ESG) risks at both the Group and business level. This is supported by ongoing work to embed ESG Risk considerations into our day-to-day decision making and to refine our processes and tools for managing ESG Risk, guided by our Group-wide ESG Risk Principles.

Various ESG Risk reports are compiled periodically and provided to relevant internal stakeholders. For example, our GRRMC receives a six monthly report on ESG Risks, and a monthly update is included in the Group Chief Risk Officer's report. To help our employees better understand ESG Risk, we continue to include ESG Risk case studies in our annual risk awareness training, which was completed in 2013 by all Australian and Asian employees. In 2013 we also developed ESG content for risk induction training 'Risk Ready', to be undertaken by all new Australian-based employees.

In addition to formal risk training, every two years we hold an internal environmental conference for a range of senior employees. At this year's conference we were fortunate to have a range of excellent external speakers – including Sir Bob Watson (ex NASA and scientific adviser to the UK Government), and Professor John Thwaites (Monash Sustainability Institute and ClimateWorks). Speakers provided current information and case studies on topics relating to climate change, resource efficiency, natural capital and ESG risk management.

You can find further information on our environmental risk management, specifically our policies and practices related to environmental risk in lending, on our Group website at: [cr.nab.com.au](http://cr.nab.com.au).

## Equator Principles

NAB became a signatory to the Equator Principles (EPs) in October 2007 and is a member of the EPs Association. In 2013 the EPs Association completed their review of the Equator Principles and we participated actively in the consultation processes. An updated version of the EPs (EPs III) was launched on 4 June to coincide with the 10th anniversary of the EPs. EPs III comes into full effect on 1 January 2014. For further information on our project financing see Products and services section, pages 12-13. Also see NAB's reporting to meet Principle 10 ("Reporting and transparency") of the EPs on page 12 in our 2013 Customer Dig Deeper.

## Environmental compliance

The NAB Group is subject to a range of environmental regulatory requirements in the countries where we operate. The most significant include the:

- *National Greenhouse and Energy Reporting Act 2007 (Cth) (Aust.)*
- *Energy Efficiency Opportunities Act 2006 (Cth) (Aust.)*
- *Carbon Reduction Commitment Energy Efficiency Scheme (UK).*

Since 2012, we have also reported annually on our main Australian data centre under the National Pollutant Inventory (NPI) due to the volume of gas consumed at our tri-generation facility operated on this site. Full operation of our tri-generation facility delivers a GHG emissions reduction of around 19,000 tCO<sub>2</sub>-e per annum. That's equivalent to powering 2,375 Victorian households for a year<sup>22</sup>.

During the 2013 environmental reporting period:

- the Group was not subject to any material environmental fines or penalties
- there were no significant spills from any Group storage facility.

# Dig Deeper

## Environmental performance summary<sup>23, 24, 25</sup>

Statement of position for the Group							
Indicator	Notes	Units	2013	2012	2011	2010	2009
Employee numbers (FTE) <sup>26</sup>		FTE	<b>42,993</b>	44,054	45,153	41,003	38,544
Property space occupied		m <sup>2</sup>	<b>1,079,403</b>	1,101,213	1,133,042	1,116,256	1,064,482
Total operating expense <sup>27</sup>		\$m	<b>(8,174)</b>	(7,828)	(7,974)	(7,862)	(7,580)
Underlying profit <sup>27, 28</sup>		\$m	<b>10,406</b>	10,396	9,620	8,776	9,376
Water consumption (estimate) <sup>29</sup>	7	kL	<b>686,234</b>	679,287	722,590	632,998	772,799
Waste to landfill (estimate) <sup>29</sup>	5	tonnes	<b>3,367</b>	3,528	3,786	3,514	3,620
A3 & A4 office paper purchased	4	tonnes	<b>1,440</b>	1,538	1,687	1,803	2,177
Net energy consumption	2	GJ	<b>1,102,678</b>	1,139,449	1,144,975	1,115,506	1,001,087
Gross GHG emissions	3	tCO <sub>2</sub> -e	<b>311,010</b>	305,558	319,090	319,157	269,375
Summary of Group greenhouse gas (GHG) emissions							
(tCO <sub>2</sub> -e emissions)	Notes		2013	2012	2011	2010	2009
Total Scope 1 emissions	3,6		<b>20,848</b>	25,460	25,551	22,084	16,019
Total Scope 2 emissions <sup>30</sup>	3		<b>177,540</b>	170,857	172,990	185,590	193,341
<b>Gross Scope 1 and 2 GHG emissions</b>			<b>198,388</b>	<b>196,317</b>	<b>198,541</b>	<b>207,674</b>	<b>209,360</b>
Total Scope 3 emissions <sup>31</sup>	3,4,5,6		<b>112,622</b>	109,241	120,549	111,483	60,015
<b>Gross GHG emissions</b>			<b>311,010</b>	<b>305,558</b>	<b>319,090</b>	<b>319,157</b>	<b>269,375</b>
Renewable electricity (RE)	9		<b>(22,614)</b>	(27,620)	(21,970)	(27,068)	(37,103)
Voluntary carbon offsets retired (offsets) <sup>32</sup>	9		<b>(288,396)</b>	(277,938)	(297,120)	(42,040)	(18,314)
<b>Net GHG emissions (after RE and offsets)</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>250,049</b>	<b>213,958</b>
Summary of Group progress against 2013 reduction targets <sup>33</sup>							
Indicator	Notes	2010 Baseline tCO <sub>2</sub> -e	2013 Performance tCO <sub>2</sub> -e	Movement tCO <sub>2</sub> -e	2013 Target tCO <sub>2</sub> -e	Movement tCO <sub>2</sub> -e	Status
A 18,900 tCO <sub>2</sub> -e reduction in GHG emissions from stationary energy in buildings against 2010 baseline by 30 June 2013	8	<b>207,250</b>	196,092	11,158	188,380	18,900	Not met

## Integrity of Reporting

Senior Management of the NAB Group has a responsibility in relation to establishing and monitoring internal controls relevant to the preparation and presentation of the information contained in the 2013 Dig Deeper papers with the objective of ensuring that the information is free from material misstatement.

23. Unless otherwise stated, all data in this Dig Deeper is reported for the period 1 July to 30 June and all graphs represent Group-wide data from internal sources. In this Dig Deeper Paper, 'US' refers to the performance and data from our New York branch and Great Western Bank operations. Asia refers to our combined operations across Japan, HK, China, India, Singapore and Indonesia.

24. KPMG has provided assurance on specified GHG emissions and offset data since 2009.

25. This year there has been a number of restatements to historical Group data which have been explained in the discussion and footnotes associated with various notes to the environmental performance summary. This includes the following (i) net energy in 2012 (see Note 2); (ii) GHG emissions in all years (see Note 3 and footnotes 39, 41, 42 and 43); (iii) paper in 2012, 2011 and 2010 (see Note 4); and (iv) water in 2012 (see Note 7).

26. 2013, 2012, 2011 and 2010 FTE numbers are based on a monthly average number of employees across the period 1 July to 30 June each year. All prior years are reported as at 30 June.

27. For financial year ending 30 September.

28. Use of Underlying Profit as a metric (rather than measures of profit or economic activity) for normalisation of our environmental performance data allows for meaningful comparison to prior years' data and to financial intensity measures used in our CDP disclosures due to the nature of our underlying business activities. Please refer to page 18 of NAB's 2013 Full Year Results Announcement (available at [www.nabgroup.com](http://www.nabgroup.com)) for a more detailed explanation of the elements comprising the underlying profit.

29. 2013, 2012 and 2011 water consumption and waste to landfill numbers include United States, Australia, United Kingdom and New Zealand. 2010 and 2009 numbers are based on Australia, United Kingdom and New Zealand only.

30. All prior year Group figures for Total Scope 2 emissions have been restated due to change in Department of Environment, Food and Rural Affairs (DEFRA) electricity factors.

31. All prior year Group figures for Total Scope 3 emissions have been restated due to change in DEFRA electricity factors that required a change to emissions factors for hotel stays and transmission losses and indirect emissions.

32. In 2013 we have made small adjustments to our GHG emissions for the 2012 reporting year. This has resulted in the reallocation of 1,468 offsets which had been retired in excess for the 2012 reporting year. Please refer footnotes to Note 3: GHG emissions on page 21.

33. Our targets for GHG emissions from stationary energy in buildings include the following GHG emissions: Australia – GHG emissions from gas, diesel and electricity; New Zealand – GHG emissions from electricity; UK – GHG emissions from gas and electricity. Also refer to the description on page 5 and Note 8 – Reduction targets on page 27.



# Dig Deeper

## Notes to the environmental performance summary

### Note 1: Reporting policies

#### Reporting period

This Dig Deeper paper has been prepared based on a reporting year from 1 July to 30 June, unless otherwise stated. This environmental reporting year has been established to align with regulatory reporting requirements in the Australian geography, where the bulk of the Group's GHG emissions currently occur. It should be noted that this is not the same as the Group's financial reporting period, which has a year end of 30 September.

#### Organisational boundary

NAB Group reports its environmental performance data using an operational control approach to define its organisational boundary.

In Australia, the organisational boundary for our relevant Scope 1 and 2 GHG emissions meets the definitional requirements of the *National Greenhouse and Energy Reporting Act 2007 (Cth)*. In the UK, the organisational boundary for our relevant Scope 1 and 2 GHG emissions meets the requirements of the *Carbon Reduction Commitment Energy Efficiency Scheme (UK)*.

In addition to reporting on aspects of our environmental performance over which we have operational control or can exert a significant degree of influence, we are committed to playing an influencing role with employees, customers and suppliers to assist and encourage them to reduce their own environmental footprint.

#### Geographic scope

Environmental performance data has been reported for NAB Group's operations in Australia, New Zealand, the United Kingdom (UK), Asia and the US, where data of a reasonable quality is available, or a reasonable estimate can be made. Our reporting currently excludes a small office in Canada, from which GHG emissions are considered to be immaterial.

#### Baseline for 2013 targets

The baseline data for environmental reduction targets is the data prepared for the 2010 environmental reporting period, or where otherwise stated.

#### Prior year statements

Where relevant and applicable, prior year figures have been restated when more accurate data becomes available. Restatements are noted where relevant as footnotes in this Dig Deeper paper.

#### Estimation

Where complete information is not available, estimates are made by extrapolation from known activity data or by applying an uplift based on reconciliation between systems that collect activity data and our financial reporting systems. Estimates are footnoted where relevant within this Dig Deeper paper.

#### Reporting of GHG emissions

All GHG emissions figures reported as part of the Group's environmental performance are in tonnes of carbon dioxide equivalents (tCO<sub>2</sub>-e) and include the main GHGs covered in the Kyoto Protocol – carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs) and hydrofluorocarbons (HFCs), as relevant. The Group does not have emissions of sulphur hexafluoride (SF<sub>6</sub>).

Our *Environmental Reporting and Offset Management Standard* sets out the decision framework we have used to establish which Scope 3 GHG emissions are included in our carbon inventory.

All Scope 1 and 2 GHG emissions from our direct operations in Australia, the United Kingdom and New Zealand are included in NAB Group's carbon inventory. For our smaller operations in the US and Asia, Scope 2 data is included and data for Scope 1 GHG emissions is included where it is available and of a reasonable quality.

NAB Group's Scope 3 GHG emissions include those Scope 3 emissions identified as mandatory for reporting under the framework of the World Resources Institute (WRI) provided in *Hot Climate, Cool Commerce: A Service Sector Guide To Greenhouse Gas Management*. It also includes other voluntary sources of GHG emissions which are relevant to our business, which we have determined to include using the principles and tests provided in the WRI Service Sector Guide and presented in the highlight box on page 18.

The GHG emissions associated with NAB's carbon inventory and the activities noted within this Dig Deeper paper have been determined on the basis of measured or estimated energy and fuel use, and relevant activity data, and multiplied by relevant GHG emission factors.

Where possible, fuel or energy use is based on direct measurements, purchase invoices or actual activity data; in other cases, it has been necessary to make estimates. Where estimates or extrapolations have been used, this is noted.

Relevant published national government emissions factors were used to calculate GHG emissions wherever possible. In the absence of such national factors, we have also used GHG emissions factors provided in reporting guidelines produced by voluntary reporting initiatives, or we have used GHG emissions factors developed by consultants with specialist expertise.

## Dig Deeper

### Reporting methodologies

NAB Group's carbon inventory has been consolidated using our new environmental reporting system, Foundation Footprint, with reference to the following methodology descriptions and sources of GHG emissions factors:

- National Greenhouse Accounts (NGA) Factors, July 2009
- National Greenhouse Accounts (NGA) Factors, July 2012
- National Greenhouse and Energy Reporting (Measurement) Determination 2008, Compiled 1 July 2012
- National Greenhouse Accounts (NGA) Factors, July 2013
- 2013 Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting
- For office paper we have used emissions factors prepared for EPA Victoria by Tim Grant and Leyla Acaroglu of Life Cycle Strategies, Richmond, Victoria. These were published in Greenhouse Gas Emission Factors for Office Copy Paper Publication 1374, May 2011. In 2012, it came to our attention that there were errors in this publication. The correct factors were supplied by EPA Victoria on request and have been applied to calculate our 2012 and 2013 GHG emissions from office paper consumption
- For refrigerants – our method reflects the GHG Protocol worksheet titled hfc-pfc (1) – Worksheet 3: Screening Method for HFC and PFC Emissions from Refrigeration/AC Equipment: Emission Factor Based Approach: Step 2: Determine Net Gross HFC and PFC Emissions from Operation of Refrigeration/AC Equipment. Some additional Global Warming Potentials (GWPs) have also been taken from ASHRAE Standard 34 – Table 1: GWPs of Common Greenhouse Gases and Refrigerants
- For hotel stays – the method used incorporates information and factors from the CIBSE Guide F – Energy Efficiency in Buildings, the 2013 Guidelines to DEFRA and the International Energy Agency – CO<sub>2</sub> Emissions From Fuel Combustion Highlights (2012 Edition)
- Guidance for Voluntary, Corporate Greenhouse Gas Reporting – Data and Methods for the 2010 Calendar Year. New Zealand Ministry for Environment, October 2012
- The US Climate Registry – General Reporting Protocol V1.1 May 2008, including updates and clarifications released July 15, 2011; 2013 Climate Registry Default Emission Factors – Released April 2, 2013 (incorporating eGRID Subregion Emission Rates).

Across the Group, where there is evidence that a proportion of activity data relevant to the calculation of a GHG emissions source is generated outside corporate systems, an uplift factor is applied to account for this additional business activity. This to to ensure that we do not underestimate our GHG emissions. The uplift factor is calculated based on a reconciliation of activity data in corporate systems compared to expenditure data. Uplift factors have been applied to data from Australia and New Zealand<sup>34</sup>.

### Principles and tests for guiding decisions regarding the inclusion of GHG emissions in NAB Group's carbon inventory<sup>35</sup>

#### General principles – applying to Scope 1, 2 and 3 GHG emissions:

1. relevance
2. completeness
3. consistency
4. transparency
5. accuracy

#### Tests for relevance – applying to Scope 3 GHG emissions:

- a. Is the emission causing activity significant or believed to be significant relative to the NAB Group's Scope 1 and Scope 2 GHG emissions?
- b. Is the GHG emission-causing activity crucial to the NAB Group's core business?
- c. Do NAB Group's key stakeholders believe that it is important to account for particular GHG emission causing activities?
- d. Can NAB Group reduce or mitigate some of the GHG emissions?
- e. Are the GHG emissions from an outsourced activity that would have been previously categorised as producing Scope 1 emissions?
- f. Is NAB Group able to readily find reliable data for the GHG emission causing activity?

34. We reviewed Australian uplift factors in 2012 and have applied them to our 2013 reporting as follows: (i) a 7% uplift to Business travel – air, for flights not booked through our corporate travel provider; (ii) a 6% uplift for Business travel – hotel stays for stays not booked through our corporate travel provider; and (iii) an 8% uplift for Business travel – rental cars, for bookings not made through our corporate rental car provider. In New Zealand the uplift factors applied include: (i) Air Travel – domestic uplift of 1.25% and international short & long haul uplift of 0.17%; and (ii) Rental Cars – uplift applied is 15.1%. These uplifts capture specific categories of business travel where bookings have occurred outside of BNZ's preferred travel suppliers.

35. These principles are taken from the *Hot Climate, Cool Commerce: A Service Sector Guide to Greenhouse Management* by the World Resources Institute, May 2006.

# Dig Deeper

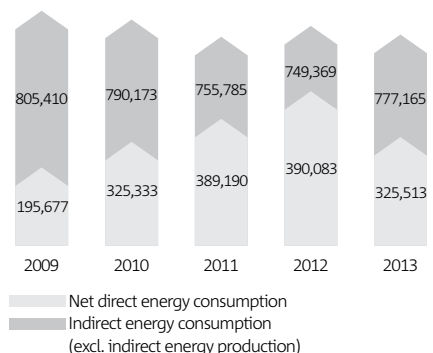
## Notes to the environmental performance summary

### Note 2: Energy consumption and production

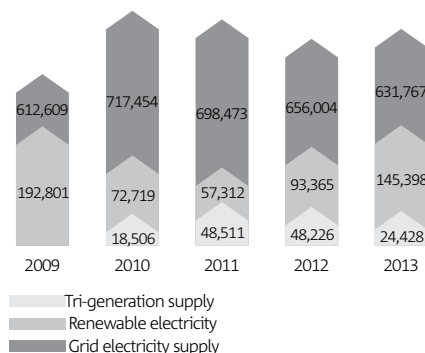
#### Direct and indirect energy consumption and production

(GJ)	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Direct energy consumption <sup>36</sup>	325,513	390,083	146,390	220,042	70,618	74,416	57,985	58,491	50,417	37,043	104	91
Indirect energy consumption <sup>37</sup>	801,593	797,595	507,173	503,412	145,398	146,667	75,517	77,110	68,908	66,083	4,597	4,323
Gross energy consumption	1,127,106	1,187,678	653,563	723,454	216,016	221,083	133,502	135,601	119,325	103,126	4,701	4,414
Indirect energy production (tri-generation)	(24,428)	(48,226)	(24,428)	(48,226)	0	0	0	0	0	0	0	0
<b>Net energy consumption</b>	<b>1,102,678</b>	<b>1,139,452</b>	<b>629,135</b>	<b>675,228</b>	<b>216,016</b>	<b>221,083</b>	<b>133,502</b>	<b>135,601</b>	<b>119,325</b>	<b>103,126</b>	<b>4,701</b>	<b>4,414</b>

#### NET DIRECT AND INDIRECT ENERGY CONSUMPTION (GJ)

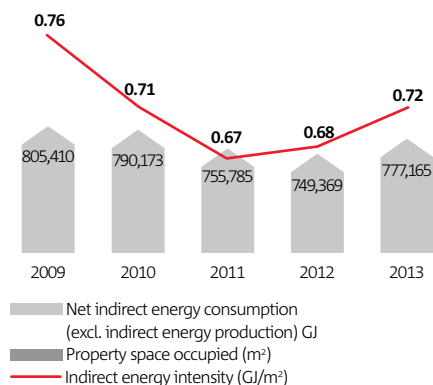


#### INDIRECT ENERGY CONSUMPTION MIX (GJ)

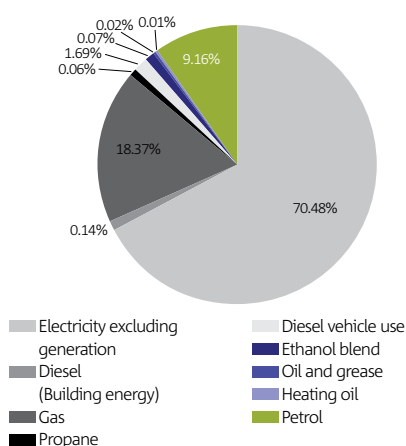


- Direct energy consumption refers to energy from fuel used in buildings for heating and back-up power generation, as well as fuel used in our vehicle fleet.
- Indirect energy consumption refers to electricity consumption, from grid supply, and from tri-generation.
- Indirect energy production refers to electricity generated through tri-generation.
- Net energy consumption refers to gross energy consumption minus indirect energy production.

#### INDIRECT ENERGY INTENSITY



#### NET ENERGY CONSUMPTION BY FUEL TYPE (%)



36. There have been a number of small corrections to 2012 direct consumption data that have resulted in the 2012 data being restated. These were as follows: (i) incorrect classification of rental car use as work-use vehicles in Asia. The rental car data has now been included in 2012 data as a Scope 3 emissions source resulting in a decrease in direct energy consumption for Asia from 433 GJ to 91 GJ; (ii) use of an incorrect US energy conversion factor to derive GJ for work-use vehicle fuel consumption. Correction of this factor has led to an increase in the GJ of direct energy from 37,001 GJ to 37,043 GJ; (iii) a minor decrease from 58,524 to 58,491 GJ in NZ data as a result of billing related errors in a small quantity of gas bills that were identified after publication of our 2012 Environmental Dig Deeper; and (iv) use of an incorrect UK energy conversion factor to derive GJ for diesel in the UK. Correction of this factor has led to an decrease in the GJ of direct energy from 74,419 GJ to 74,416 GJ. For further details, refer to Note 3 and associated footnotes on page 21.

37. There has been minor restatement of 2012 Indirect Consumption data to allow for correction of the following numbers: (i) rounding differences between the new reporting system and previously calculated US data. This resulted in a change from 66,080 GJ to 66,083 GJ; and (ii) for NZ a change from 77,025 GJ to 77,110 GJ due to a small number of invoice errors in billing data that were identified after publication of our 2012 Environmental Dig Deeper. For further details, refer to Note 3 and associated footnotes on page 21.

## Dig Deeper

The Group's net energy consumption in 2013 was 1,102,678 GJ – a decrease of around 3.2% when compared with 2012. This was largely due to a decrease in direct energy consumption from (i) combustion of gas (22.2%); and (ii) vehicle fuel (4.1%). This decrease was partially offset by a combined increase in electricity usage across Australia, the US and Asia of 6.2%. Overall, the change in energy consumption from 2012 to 2013 has varied across our regional business operations:

- Net energy consumption for our Australian operations decreased by 6.9% as a result of our tri-generation facility being non-operational for an extended period of time during 2013. As the facility burns natural gas to produce electricity, our direct energy consumption was significantly lower than in 2012, but offset by a corresponding increase in electricity use (indirect consumption). This also impacted our indirect energy production, as the tri-generation facility was not producing electricity during the period it was offline. This also impacted on our overall GHG emissions. Refer to the discussion under Note 3: GHG emissions.
- UK-based energy consumption decreased by about 2.3% compared to 2012. This decrease was due to a combination of (i) energy efficiency initiatives; and (ii) closure of some stores and offices. Our UK operations continued to purchase renewable electricity certified renewable under the UK REGO<sup>38</sup> scheme. A total of 145,398 GJ of renewable electricity was purchased.
- In NZ, net energy consumption decreased by 1.5% as a result of ongoing energy efficiency initiatives across the building portfolio, assisted by onsite metering and programming of building services such as lighting, heating and cooling.
- In the US, our business experienced a 15% increase in net energy consumption. This is attributed to lower winter and higher summer ambient temperatures, which increased energy demand for heating and cooling. However, our NY branch significantly decreased its electricity consumption by installing sub-meters which allowed for accurate measurement rather than theoretical apportionment of energy consumption by the landlord.
- Net energy consumption in Asia increased by 6% as a result of the expansion of our business. However, the growth in energy demand from our Asian operations has been minimised by transitioning into more energy efficient buildings.

At the Group level, net energy intensity decreased in 2013 compared with 2012. Energy intensity per square metre of property space occupied went down from 1.035 GJ/m<sup>2</sup> to 1.022GJ/m<sup>2</sup>, while energy intensity per FTE went down from 25.86 GJ/FTE to 25.65 GJ/FTE. This is a result of our continued focus on energy efficiency and has been achieved even though we had a 2.4% increase in Group FTE.

# Dig Deeper

## Notes to the environmental performance summary

### Note 3: GHG emissions<sup>39</sup>

#### Gross GHG emissions by scope

(tCO <sub>2</sub> -e)	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012 <sup>40</sup>	2013	2012 <sup>41</sup>	2013	2012 <sup>42</sup>	2013	2012	2013	2012 <sup>43</sup>
Total Scope 1 Emissions	<b>20,848</b>	25,460	<b>9,650</b>	14,682	<b>4,344</b>	4,625	<b>4,030</b>	4,046	<b>2,817</b>	2,101	<b>7</b>	6
Total Scope 2 Emissions	<b>177,540</b>	170,857	<b>141,778</b>	134,058	<b>17,992</b>	18,741	<b>2,706</b>	2,934	<b>14,198</b>	14,297	<b>866</b>	827
Total Scope 3 Emissions	<b>112,622</b>	109,241	<b>91,573</b>	89,575	<b>11,131</b>	10,914	<b>4,471</b>	4,516	<b>3,525</b>	2,891	<b>1,922</b>	1,345
<b>Gross GHG emissions</b>	<b>311,010</b>	305,558	<b>243,001</b>	238,315	<b>33,467</b>	34,280	<b>11,207</b>	11,496	<b>20,540</b>	19,289	<b>2,795</b>	2,178

#### Gross GHG emissions by activity

(tCO <sub>2</sub> -e)	Group		Australia	United Kingdom	New Zealand	United States	Asia		
	2013	2012	2013	2013	2013	2013	2013		
<b>Scope 1</b>									
Building-based refrigerants - HVAC, refrigerators			1,790	2,822	1,106	281	158	245	0
Business travel - status-use vehicle fleet			334	453	0	334	0	0	0
Business travel - Work-use vehicles fleet: diesel, petrol, ethanol			8,036	8,355	4,147	339	3,472	71	7
Stationary energy - combustion of fuel: diesel, gas, propane			10,509	13,624	4,304	3,347	359	2,499	0
Status-use vehicle fleet - air conditioning refrigerant			28	47	0	28	0	0	0
Work-use vehicle fleet - air conditioning refrigerant			151	159	93	15	41	2	0
<b>Total Scope 1</b>			<b>20,848</b>	25,460	9,650	4,344	4,030	2,817	7
<b>Scope 2</b>									
Stationary energy – electricity (Total Scope 2)			177,540	170,857	141,778	17,992	2,706	14,198	866
<b>Scope 3</b>									
A4 and A3 paper purchased			599	634	13	322	145	102	17
Base-building energy - combustion of fuel: diesel, gas, propane			1,388	1,652	1,388	0	0	0	0
Base-building energy - electricity			31,802	32,996	31,679	0	123	0	0
Business travel - air			31,145	27,808	23,271	2,451	3,029	967	1,427
Business travel - employee vehicle: work purpose claims			4,315	3,925	1,604	1,884	117	710	0
Business travel - ferry			0	0	0	0	0	0	0
Business travel - hotel stays			4,638	4,352	3,507	332	390	250	159
Business travel - rail			252	199	0	252	0	0	0
Business travel - rental cars			565	585	311	8	29	183	34
Business travel - status-use vehicle fleet			106	125	0	106	0	0	0
Business travel - taxi use			1,668	1,689	1,424	45	171	2	26
Business travel - work-use vehicles fleet: diesel, petrol, ethanol			430	470	328	102	0	0	0
Supplier business travel			187	272	0	187	0	0	0
Transmission losses - base-building energy: diesel, gas, propane, electricity			4,873	4,939	4,860	0	13	0	0
Transmission losses - stationary energy: diesel, gas, propane, electricity			27,006	25,722	20,429	5,133	309	876	259
Waste to landfill			3,619	3,833	2,759	280	145	435	0
Water consumption - estimate (UK only)			29	41	0	29	0	0	0
<b>Total Scope 3</b>			<b>112,622</b>	109,241	91,573	11,131	4,471	3,525	1,922
<b>GROSS GHG EMISSIONS</b>			<b>311,010</b>	305,558	243,001	33,467	11,207	20,540	2,795

39. Historical GHG emissions have been re-stated for all prior years wherever DEFRA electricity GHG emission factors have been applied. This is in accordance with the advice set out by DEFRA in 2013 reporting guidance. DEFRA electricity GHG emissions factors have changed from a 5 year rolling average to a single average for a particular year. The following inventory items have now been restated: (i) Emissions from electricity (indirect energy) in the UK and Asia; and (ii) Emissions from hotel stays – Our hotel stays emissions calculation tool uses electricity emission factors derived from DEFRA. These factors are applied across the Group, thus the change to DEFRA factors impacts hotel stays data reported in all regions and has also resulted in restatement of our Scope 3 GHG emissions total.

40. Australia: 2012 Total Scope 1 GHG emissions have been restated from 14,565 tCO<sub>2</sub>-e to 14,682 tCO<sub>2</sub>-e due to the changes in the data collection process for refrigerants data.

41. UK: Total Scope 1 GHG emissions have been restated from 4,620 to 4,625 tCO<sub>2</sub>-e due to data collection process improvements which have led to a more complete set of 2012 work-use vehicle data. Total Scope 2 GHG emissions have been restated from 19,651 to 18,741, refer to footnote 39 for further detail. Total Scope 3 GHG emissions have been restated from 10,885 to 10,914 tCO<sub>2</sub>-e for the following reasons: (i) an additional 4 tCO<sub>2</sub>-e for hotel stays – refer to footnote 39 for further detail; (ii) a reduction of 112 tCO<sub>2</sub>-e relates to supplier travel due to the previous application of an incorrect GHG emission factor; (iii) an additional 136 tCO<sub>2</sub>-e relates to changes in GHG emissions from electricity use due to changes to DEFRA GHG emission factors – refer to footnote 39 for further detail and (iv) an additional 1 tCO<sub>2</sub>-e for business travel - status-use vehicles due to rounding differences between the new reporting system and data previously calculated.

42. BNZ: Total Scope 2 GHG emissions have been restated from 2,931 to 2,934 tCO<sub>2</sub>-e due to an understatement of electricity use in 2012 as a result of extrapolated data being replaced with actual usage data. Total Scope 3 GHG emissions have been restated from 4,952 to 4,516 tCO<sub>2</sub>-e for the following reasons: (i) an additional 19 tCO<sub>2</sub>-e for hotel stays – refer to footnote 39 for further detail; and (ii) incorrect inclusion of non-office paper in 2012 activity data, which has resulted in a 417 tCO<sub>2</sub>-e overstatement in our reported number in 2012.

43. Asia: Total Scope 1 GHG emissions have been restated from 30 tCO<sub>2</sub>-e to six tCO<sub>2</sub>-e, due to reclassification of activity data from vehicle fleet to rental car use. This has led to a subsequent 15 tCO<sub>2</sub>-e increase in Scope 3 GHG emissions. Total Scope 2 GHG emissions have been restated from 830 to 827 tCO<sub>2</sub>-e, due to changes in DEFRA GHG emission factors – refer to footnote 39. Total Scope 3 GHG emissions have been restated from 1,330 to 1,345 tCO<sub>2</sub>-e. This includes reclassification of rental cars from Scope 1.

# Dig Deeper

The Group's gross GHG emissions in 2013 were 311,010 tCO<sub>2</sub>-e – a 1.8% increase compared with 2012. The key reasons for this were:

- an increase of 7% in business-related travel GHG emissions
- an increase of 6% in GHG emissions from electricity consumption in (i) Australia (due to our tri-generation plant being offline for an extended period<sup>44</sup>) and (ii) Asia (due to business growth).

The upward trends noted above were largely offset by decreases in:

- gas-related GHG emissions from our Australian operations, which decreased by around 45% due to our tri-generation plant being offline)
- fugitive GHG emissions from refrigeration systems, containing gases that have been banned under the Montreal Protocol<sup>45</sup>
- vehicle fleet-related GHG emissions in the UK and Australia, which have together decreased by around 9% as a result of (i) the ongoing transition to smaller, more fuel efficient or hybrid vehicles<sup>46</sup>; and (ii) decreasing fleet size
- electricity-related GHG emissions in the UK (4%) and NZ (8%)
- small decreases in GHG emissions from office paper consumption and waste to landfill.

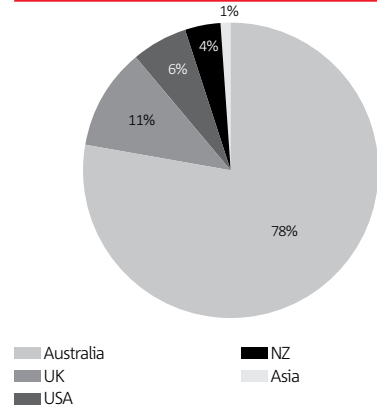
The net GHG emissions from our business in 2013 were 288,396 tCO<sub>2</sub>-e. This net result is 7% lower than our gross GHG emissions due to the purchase of 40,388 MWh of renewable electricity in the UK.

Our Australian business contributes around 78% of the Group's GHG emissions. This is illustrated in the pie chart opposite. The next biggest contributors are our businesses in the UK and the US.

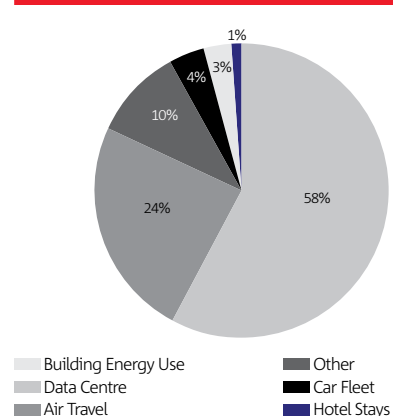
Building related energy use (stationary energy) is the largest combined source of GHG emissions across the Group (around 82%). This includes energy use from our data centres, which represents 24% of the Group's GHG emissions. The next most significant source of GHG emissions are the indirect GHG emissions we generate as a result of our air travel (10%). This is illustrated in the pie chart opposite.

Around 99.2% of the Group's GHG emissions are carbon dioxide due to direct or indirect combustion of fossil fuels. A minor quantity of emissions result from our use of refrigerants in cars, building cooling systems and kitchen refrigerators (~0.6%). This is illustrated in the pie chart opposite.

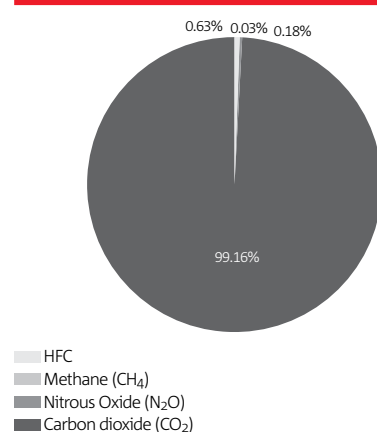
## GROUP GHG EMISSIONS BY REGION (%)



## GROUP GHG EMISSIONS BY GENERATING ACTIVITY (%)



## GROUP GHG EMISSIONS BY GAS TYPE (%)



44. Our tri-generation facility (which uses gas as a fuel source for onsite electricity generation) is a critical infrastructure investment that assists us in reducing GHG emissions that arise from our main Australian data centre. Without this facility in use, we are dependent on sourcing electricity from the Victorian electricity grid. This is a more GHG intensive fuel source than combusting gas in the tri-generation plant.

45. We are phasing out refrigerant gases banned for production under the Montreal Protocol.

46. Refer to page 25 for further discussion about the transitioning of our vehicle fleet to smaller and/or hybrid vehicles.

# Dig Deeper

## Notes to the environmental performance summary

### Note 4: Paper consumption

#### A3 & A4 office paper purchased

	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012 <sup>47</sup>	2013	2012	2013	2012 <sup>47</sup>
Total A3 & A4 office paper purchased (tonnes)	1,440	1,538	911	1,033	297	345	134	141	82	NR	16	19
A3 & A4 office paper purchased containing recycled content (%)	22%	15%	18%	0.03%	0.84%	35%	60%	79%	89%	NR	0%	0%
Total A3 & A4 office paper purchased per FTE (kg/FTE)	33	35	32	36	38	40	29	30	49	NR	35	46

Total purchase of A3 and A4 office paper decreased across the Group by 6.6% in 2013 compared with 2012. Paper purchased per FTE has dropped from 35kg to 33kg per FTE.

This decrease in paper usage has been driven by a range of initiatives to change employee behaviour and reduce paper use within operational processes. Employees are encouraged to utilise technology to view and store documents rather than print. We have also enhanced online communication functionality and are continuing to shift internal reporting to electronic channels. Refer to page 7 for more details on these initiatives.

Additionally, during 2013 our Australian office paper has been transitioned to 100% recycled, carbon neutral, FSC certified paper to support the expansion of recycled paper collection and manufacturing in Australia.

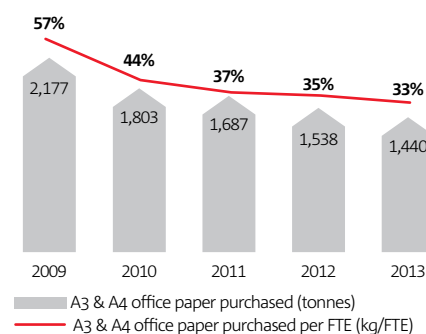
Our A3 and A4 office paper usage in New Zealand has decreased by 5% compared with the same period last year. Key reasons for this are (i) implementation of BNZ's swipe to print program; and (ii) paper reduction initiatives undertaken by BNZ's 'paper cuts' team who have focused on increasing online statement take-up and removal of unnecessary paper from daily office activities.

The majority of A3 and A4 office paper purchased by BNZ is recycled paper (60% of total volume) containing 100% post-consumer waste. BNZ has begun to transition its A3 and A4 office paper to carbon neutral paper. This now represents 27% of total paper volume purchased by BNZ and is the paper of choice in all our major BNZ office buildings.

The majority of the A3 and A4 office paper used by our UK operations was made from virgin paper stock. The small amount of A3 and A4 recycled office paper purchased in 2013 was paper stock manufactured from 100% post-consumer waste.

Across the Group, A3 and A4 office paper purchased is either ECF, PCF or TCF bleached pulp fibre. In addition, our A3 and A4 office paper purchased is FSC, PEFC or SFI<sup>48</sup> certified, to ensure paper pulp is sourced from sustainably managed forestry.

#### A3 & A4 OFFICE PAPER PURCHASED TONNES



47. 2012 paper purchased data for Asia and New Zealand has been restated to exclude non-office paper that was included previously. NZ has been restated from 451 to 141 tonnes. Asia has been restated from 20 to 19 tonnes.

48. Refer to Glossary on page 35 for the definition of these acronyms.

# Dig Deeper

## Notes to the environmental performance summary

### Note 5: Waste to landfill and recycling

#### Total waste produced

tonnes (estimate)	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Total waste to landfill <sup>49</sup>	3,367	3,528	2,509	2,648	255	293	208	201	395	386	NR	NR
Total materials recycled/diverted from landfill	5,566	4,810	2,736	2,868	1,748	1,344	600	583	468	NR	14	15
Total waste generated	8,933	8,338	5,245	5,516	2,003	1,637	808	784	863	386	14	15

#### Recycled materials

tonnes (estimate)	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Paper collected and recycled	4,455	3,797	2,521	2,648	1,028	686	425	450	468	NR	13	13
Other waste recycled	1,111	1,013	215	220	720	658	175	133	0	NR	1	2
Total materials recycled/diverted from landfill	5,566	4,810	2,736	2,868	1,748	1,344	600	583	468	NR	14	15

#### Waste to landfill<sup>50</sup>

(estimate)	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Total waste to landfill per FTE (kg/FTE)	78	80	89	92	54	34	44	42	238	239	NR	NR

Total waste generated across the Group increased by around 7.1% in 2013 compared with 2012. This was due to waste produced by office cleanouts associated with the closure of a number of UK office spaces and branches and the inclusion of recycled paper waste in the US for the first time.

Although total waste generated by the Group increased compared with 2012, the Group's total waste to landfill decreased by 4.6%. This was largely due to improved landfill diversion in the UK and Australia. Over 87% of waste generated by our UK operations in 2013 was recycled directly or through secondary waste sorting. Waste to landfill from BNZ's operations marginally increased compared with 2012 with waste diversion initiatives continuing.

Our Australian operations reported a decrease of around 5% in waste to landfill compared with 2012. This was due to (i) better waste management practices including improvements to recycling signage in commercial buildings; and (ii) continued improvements in data capture methodologies and processes resulting in greater accuracy of data.

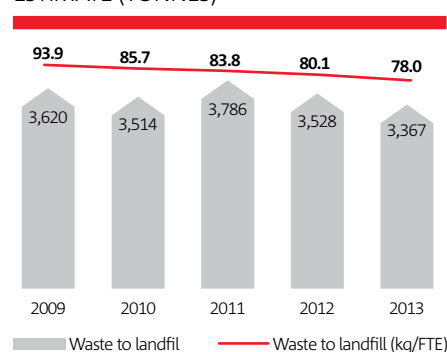
The Group's total recycled materials have increased by around 16%. Our UK business successfully recycled a majority of waste associated with the closure and clean-up of

branches and office spaces during the year.

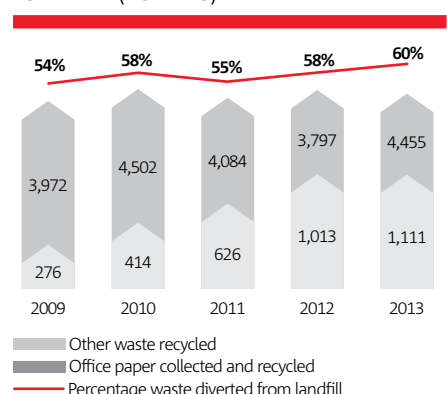
BNZ's 'Sort at Source' program contributed to greater recycling rates in our NZ operations and tighter controls over the collection of waste data improved overall data accuracy. BNZ plans to follow this success with a number of new initiatives in 2014 to reduce overall waste generated and maintain or improve diversion rates.

Our Australian operations achieved an overall reduction (5%) in total waste generated compared with 2012. This aligns with the work we have undertaken with suppliers to reduce packaging associated with office stationery and a reduction in A3 and A4 office paper purchased. It indicates that we are successfully reducing materials usage and generating less waste paper. Employee engagement and behaviours have been a focus during 2013. We have installed standard signage across Australian commercial offices and created a dedicated online waste portal to educate employees about different waste streams. This is complemented by active discussion occurring via our social media channels through which employees are educating each other about proper waste disposal processes.

#### WASTE TO LANDFILL ESTIMATE (TONNES)



#### RECYCLED MATERIALS ESTIMATE (TONNES)





# Dig Deeper

## Notes to the environmental performance summary

### Note 6: Transport and travel

#### Transport and travel

	Group		Australia		United Kingdom <sup>50</sup>		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012 <sup>51</sup>	2013	2012 <sup>52</sup>
No. of work use vehicles	1,697	1,776	970	1,001	169	233	547	532	10	9	1	1
Fuel consumption - work use vehicles (kL)	3,439	3,603	1,824	1,947	138	168	1,443	1,454	31	31	3	3
Total air travel ('000 pkms) <sup>53</sup>	141,177	136,591	103,945	101,987	9,791	10,727	16,350	16,324	4,269	2,867	6,822	4,686
Hotel stays (nights)	87,661	89,309	61,980	58,521	8,756	13,935	9,551	9,829	4,665	4,486	2,709	2,538

Group fleet vehicle fuel consumption for work use vehicles reduced by 5% compared with 2012. This decrease in fuel consumption is consistent with a decreased number of work use vehicles in Australia and UK and our switching over time to lower emission vehicles.

In Australia, the 6% decrease in fuel consumption is consistent with a 3% decrease in the size of the vehicle fleet and an 11% decrease in distance travelled. The transition to hybrid cars in Australia has also contributed to decreased fuel consumption. Hybrid vehicles now represent 63% of the Australian vehicle fleet.

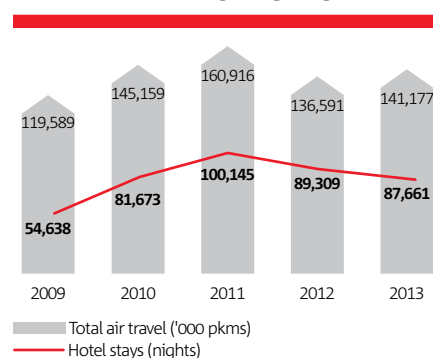
In New Zealand, vehicle fleet numbers increased in 2013 by about 3%. While there has been an increase in the size of the vehicle fleet and the total kilometres travelled, fuel consumption has decreased marginally by about 1%, due to increased numbers of employees selecting fuel efficient diesel cars.

Business related travel emissions have increased across the Group by around 7% compared with 2012.

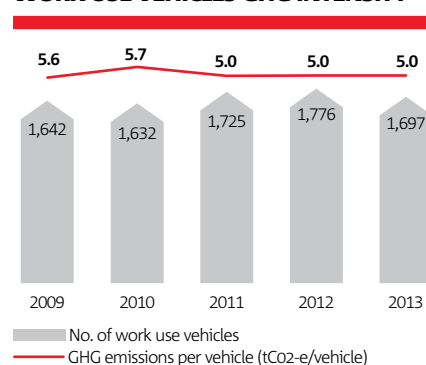
Key reasons for the increase in business travel emissions were:

- a significant increase in air travel (around 9%), which included air travel to support (i) a strategic business review of UK operations; and (ii) planned expansion of our business in Asia
- hotel stay emissions have increased by 6.6% compared to 2012 due to an increase in emission factors, even though the number of hotel stay nights has decreased
- a change to DEFRA air travel emissions factors which now incorporates a distance uplift factor
- a 6% increase in emissions generated through work use of employees' private vehicles.

#### AIR TRAVEL AND HOTEL STAYS



#### WORK USE VEHICLES GHG INTENSITY



50. Fuel consumption in the UK is derived from recorded distance travelled and vehicle efficiency information provided by our UK fleet manager because fuel cards are not used by our UK business.

51. Fuel consumption in the US for 2012 has been amended from 30 kL to 31 kL due to rounding differences between the new reporting system and previous data.

52. The number of work use vehicles in Asia for 2012 has been restated from 2 to 1 due to a rental car being previously classified as work use vehicle. This has also led to restatement of fuel consumption data from 13 kL to 3kL.

53. The unit for air travel is pkms (passenger km travelled). These numbers represent our raw data and do not include uplift calculations applied prior to calculation of GHG emissions. Uplift has been applied to Australian and NZ air travel to account for travel bookings made outside agreed corporate travel providers

# Dig Deeper

## Notes to the environmental performance summary

### Note 7: Water consumption and trade effluent

#### Water consumption<sup>54</sup>

	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Water consumption (kL) – estimate	681,909	677,670	421,083	394,023	84,910	120,428	64,370	58,996	111,546	104,223	NR	NR
Water harvested – estimate (kL)	4,325	1,617	1,902	NR	NR	NR	2,423	1,617	NR	NR	NR	NR
<b>Total water consumption</b>	<b>686,234</b>	<b>679,287</b>	<b>422,985</b>	<b>394,023</b>	<b>84,910</b>	<b>120,428</b>	<b>66,793</b>	<b>60,613</b>	<b>111,546</b>	<b>104,223</b>	<b>NR</b>	<b>NR</b>

The Group's reported water consumption increased by 1% in 2013 compared to 2012.

This minor increase is due to increased consumption in Australia, NZ and the US, which has largely been offset by water reductions in the UK.

Water consumption in Australia has increased by 7% in 2013 compared with 2012. We have restated our 2012 data as a result of replacing accrued estimates with actual invoice data and expect this will also occur for 2013 data given the time lag in the receipt of water usage data. This highlights an issue with data availability for water reporting which we continue to work on to improve the timely receipt of data and accuracy of estimations over time.

Data centres are among the largest water consuming sites in our building portfolios. Water consumption at our main Australian data centre was significantly less this year, as a result of the downtime experienced by our tri-generation facility, which consumes significant volumes of water for heat exchange purposes.

In the US, water consumption increased by around 7% compared with 2012. This increase was largely attributed to warmer temperatures experienced over summer in the mid-west where Great Western Bank (GWB) has its operations. The actual increase experienced by GWB operations was partly offset by restatements to NY data, which occurred as a result of the installation of sub-metering to improve water data accuracy.

Our NZ business experienced a 10% increase in water usage in 2013 compared with 2012. A component of this increase is due to water loss from leaks identified and addressed at a small number of building sites. In addition to leakage, the lack of readily available metered water usage and the timing of invoices from water retailers in NZ necessitates the use of extrapolation techniques to estimate water consumption, which usually results in the overstatement of the current year's data at 30 June.

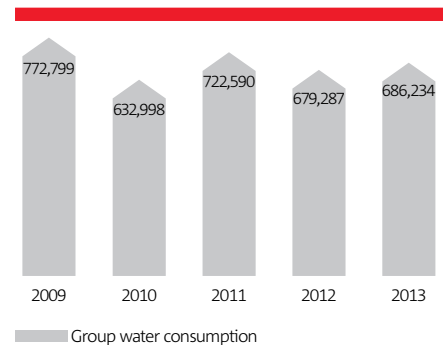
Our UK water consumption decreased by 29% in 2013 compared with 2012. This decrease is attributed to (i) improvements in water efficiency of equipment; (ii) the reducing size of the property portfolio; and (iii) decreasing FTE.

In addition to water efficiency initiatives, in Australia and New Zealand, initiatives for water harvesting have been implemented. A total of 4,325 kL of water was harvested across our NZ and Australian operations, up 167% over last year, partially due to increased rainfall levels during the year.

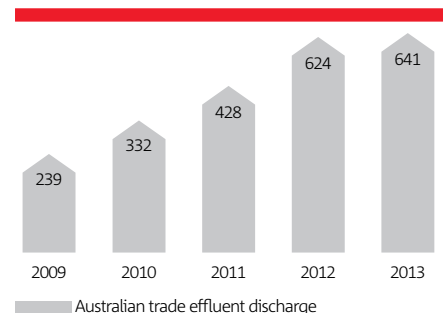
#### Trade Effluent

In Australia, NAB has a number of licences for the discharge of trade effluent from cooling towers at our data centre and some large commercial office buildings. There was a 3% increase in trade effluent discharge from 624 kL<sup>55</sup> in 2012 to 641 kL in 2013. This increase was a result of additional cooling tower cleaning conducted in the 2013 year.

#### GROUP WATER CONSUMPTION ESTIMATE (kL)



#### AUSTRALIAN TRADE EFFLUENT DISCHARGE ESTIMATE (kL)



54. Due to timing of regional water utilities' billing and water metering data often being supplied via a landlord, water consumption involves estimated and extrapolated data which is amended when actual data is received. The following restatements have been made to 2012 water data as a result of access to improved water data in 2013: (i) Australian water consumption has been restated from 427,957 kL to 394,023 kL; (ii) New Zealand water consumption has been restated from 69,123 kL to 58,996 kL; (iii) US water consumption has been restated from 112,395 kL to 104,223 kL; and (iv) actual water data from our NY office was not available for reporting in 2012, therefore, we applied an extrapolation method to estimate 2012 NY water consumption. This data has now been amended to reflect actual usage as data has now become available.

55. Trade effluent in Australia was restated for 2012 from 428 kL to 624 kL due to improvements in the data set available for reporting.

# Dig Deeper

## Notes to the environmental performance summary

### Note 8: Reduction targets

#### Building-based GHG emission targets

(tCO <sub>2</sub> -e emissions)	Group			Australia			United Kingdom			New Zealand		
	2010 Baseline	2013	Target	2010 Baseline	2013	Target	2010 Baseline	2013	Target	2010 Baseline	2013	Target
Annual GHG emissions	207,250	<b>196,092</b>	188,380	172,096	<b>166,511</b>	154,896	30,397	<b>26,460</b>	28,877	4,757	<b>3,121</b>	4,607
Targeted saving in tCO <sub>2</sub> -e		<b>11,158</b>	18,900		<b>5,585</b>	17,200		<b>3,937</b>	1,550		<b>1,636</b>	150
Employee numbers (FTE)	39,550	<b>40,877</b>	40,877	26,149	<b>28,259</b>		8,885	<b>7,910</b>		4,516	<b>4,708</b>	
Annual GHG emissions per FTE	5.24	<b>4.80</b>	4.76	6.58	<b>5.89</b>	5.92	3.42	<b>3.35</b>	3.25	1.05	<b>0.66</b>	1.02
Group GHG emission Reduction (%)		<b>-8.5%</b>	-9.20%		<b>-10.5%</b>	-10.0%		<b>-2.2%</b>	5%		<b>-37.1%</b>	3%

#### Regional resource efficiency targets

Australia (Targets are compared to a 2010 baseline unless otherwise stated)	Units	Baseline	2013	2013 Target	Status
A 10% reduction/FTE in building emissions	tCO <sub>2</sub> -e/ FTE	6.58	5.89	5.92	✓
A 20% reduction/FTE in paper use from 2009 baseline	kg/FTE	186.5	116.3	150.1	✓
A 0% increase/FTE in water use	kL/FTE	15.9	14.97	15.9	✓
A 20% reduction/FTE in waste generated	kg/FTE	192.2	185.6	153.7	✗
United Kingdom (Targets are compared to a 2010 baseline)	Units	Baseline	2013	2013 Target	Status
Achieve target of 700 air miles per FTE	miles/FTE	942	769	700	✗
Achieve a minimum of 90% coverage of water metering across property portfolio	%	88%	90%	90%	✓
Achieve a minimum diversion of waste from landfill of 80%	%	59%	87%	80%	✓
New Zealand (Targets are compared to a 2011 baseline unless otherwise stated)	Units	Baseline	2013	2013 Target	Status
Achieve a 3% reduction in paper usage per FTE	kg/FTE	112.7	90.9	109.3	✓
Increase total waste recycled by 10% per FTE	kg/FTE	118.6	127.4	130.4	✗
Achieve a 5% reduction in waste to landfill	tonnes	268.5	208.1	255.1	✓
Change out of refrigerant R22 by end Dec 2014 <sup>56</sup>	kg	52.3	21.6	0.0	↗
Asia	Units	Baseline	2013	2013 Target	Status
Achieve a 1% reduction in electricity usage (Hong Kong) against a 2011 baseline	GJ	2,246	2,163	2,224	✓

Key to status symbols: ✓ Meets or exceeds target; ↗ Progressing towards target; ✗ Target not achieved

A key component of carbon neutrality is making a commitment to reducing emissions. In 2013 the Group achieved a GHG emissions reduction per FTE of around 8.5% against our target of 9.2%. Our GHG intensity per FTE decreased from 5.24 in 2010 to 4.8 tCO<sub>2</sub>-e/FTE in 2013.

We did not achieve our targeted absolute reduction of 18,900 tCO<sub>2</sub>-e across 2011-2013 instead achieving a reduction of 11,158 tCO<sub>2</sub>-e (~59% of target). Our inability to achieve both our absolute and intensity GHG emissions reduction targets was primarily the result of an increase in GHG emissions from our main Australian data centre due to our tri-generation facility being non-operational for six-months during 2013. Full operation of the tri-generation facility was forecast to contribute significantly to meeting

our targets as it reduces our emissions by around 19,000 tCO<sub>2</sub>-e per annum when it is fully operational. In this context, achieving 59% of our targeted reduction is a significant achievement which demonstrates the effectiveness of our energy efficiency programs across the Group.

Demand for energy across the Group is making achieving reduction targets challenging due to (i) expanding technology needs, particularly in data centres, which are required to deliver digitisation of banking services; (ii) organic growth of our business in Asia; and (iii) the decreasing number of energy efficiency opportunities available given that many of the energy efficiency projects that meet our investment payback criteria have already been implemented.

- FTE numbers for the building-based GHG emissions targets refer to the combined FTE numbers for Australia, NZ and the UK. Regional targets use FTE numbers applicable to each region.

- In Australia, the paper use target refers to A3 and A4 office paper purchased and paper usage associated with customer statements, internal business reports, proprietary printing and purchased note pads.

- Water use refers to water consumption (kL). Further detail reported in Note 7 – Water consumption and trade effluent discharge.

- Waste generated refers to total materials recycled/diverted from landfill and total waste to landfill (tonnes) as reported in Note 5 – Waste to landfill and recycle.

- Diversion of waste from landfill refers to percentage of total waste which has been recycled/diverted from landfill as reported in Note 5 – Waste to landfill and recycle.

- Air miles refers to total air travel ('000 pkms) as reported in Note 6 – Transport and travel.

- Water metering across the property portfolio refers to percentage of total property space occupied (m<sup>2</sup>) where water metering is operational.

## Dig Deeper

### Regional contributions to Group GHG reductions

- Australian operations achieved a 10.5% GHG reduction per FTE (0.5% better than the targeted 10%) from building based emissions due to energy efficiency initiatives and the impact of an increase in FTE numbers since 2010. Increases in GHG emissions from our Australian operations over the three year target period (1 July 2010 to 30 June 2013) came from increasing energy use arising from our digitisation strategy and the extended downtime experienced by our tri-generation facility over the past 12 months.
- UK and NZ operations both exceeded their regional absolute GHG reduction targets over the three year target period (1 July 2010 to 30 June 2013). The two key reasons for the successful achievement of these reductions were (i) our ongoing focus on the implementation of energy efficiency initiatives; and (ii) increased renewable energy content in the electricity grid supply mix in both the UK and NZ. This has meant the GHG emissions associated with electricity usage in these countries have decreased. The reductions achieved in the UK and NZ differ when compared on a GHG intensity per FTE basis. Our NZ operations achieved a significant reduction of 37% per FTE compared to a targeted reduction of 3% per FTE, while our UK operations achieved a 2.2% reduction in GHG per FTE instead of the targeted 5%, despite exceeding the targeted absolute reduction in tCO<sub>2</sub>-e. Our inability to meet the GHG intensity reduction target in the UK was due to the significant drop in FTE that occurred over the three year target period due to changes in business strategy (which were not forecast at the time the target was set).

### Performance against regional resource efficiency targets

In addition to the Group GHG reduction targets, eight of our 11 regional resource efficiency targets have been met. Further detail on our performance against these targets is set out below and in the Table on the previous page. A twelfth target, with a completion date of 31 December 2014, was set by our NZ operations to phase out the refrigerant gas R22<sup>57</sup>.

#### Australia

Our Australian business achieved all its resource efficiency targets, with exception of its waste reduction target. As mentioned above, our Australian GHG intensity target per FTE was exceeded by 0.5%. We also achieved a significant 38% reduction in paper consumption against a target of 20% per FTE from a 2009 baseline. This result was achieved through the successful implementation of NAB's paper reduction program (PaperCuts) which included implementation of a range of strategies focusing on reduction of paper consumption. These initiatives are described in more detail on page 7.

Additionally, our Australian operations achieved a 6% reduction in water consumption per FTE despite increasing demand for water to provide cooling in data centres. This reduction in water use has been achieved through a combination of increased water metering and the implementation of water use reduction initiatives in our buildings.

Our Australian waste reduction target of a 20% reduction per FTE was not achieved in 2013. During the three year target period we considerably refined our waste measurement and reporting processes. This included the installation of direct measurement weighbridges at key commercial sites and site specific waste audits to determine NAB specific waste conversion factors for both commercial and network sites. These refinements resulted in a focus on total measured waste (general waste, co-mingled, paper and cardboard recycling, e-waste recycling and organics). A review of our measured waste over time, using FTE numbers as a normaliser, indicates that the total waste from the sites we are able to measure has reduced by 7.0% per FTE since 2010. This reduction has occurred, notwithstanding the additional waste that has been generated through property relocation associated clean-ups.

During the three year target period (2011-2013), we have seen a transformation of our workplace environment. Close to 60% of employees have transitioned from traditional permanent desks with long-term storage options to flexible working environments with minimal storage. This change in how we work, together with a building consolidation program, saw us dispose of a significantly increased quantity of waste in the 2013 year – particularly in respect of general waste to landfill, and recycling of paper and e-waste.

Looking ahead to 2014-16, we are focusing on increasing our diversion of waste from landfill to recycling and expanding the recycling opportunities available to our employees. Options may include increasing the number of commercial sites with organic waste disposal and the number of recycling alternatives for smaller network sites, thereby reducing our waste to landfill.

57. The R22 refrigerant is incorporated within HVAC (heating, ventilation, and air conditioning) systems.

## Dig Deeper

### United Kingdom

Against a backdrop of significant operational changes to the UK business, which included FTE reductions and changes to the building portfolio, our UK operations have met two of three resource efficiency targets.

Changes to FTE have meant it was challenging to achieve intensity targets. The target to reduce air travel to 700 miles per FTE was not achieved. The target to increase coverage of water metering across the building portfolio to 90% by 30 June 2013 was met, as was the target to achieve a minimum diversion rate of waste from landfill to recycling of 80%, with a diversion of 87% being achieved. This was an excellent result against a backdrop of increased waste disposal associated with office clean-outs as sites were closed over the past 12 months.

### New Zealand

Our NZ business has met two of its three resource efficiency targets ending in 2013 and has been working towards its target to phase out the refrigerant gas R22<sup>58</sup>.

BNZ exceeded both its reduction targets for paper consumption and waste to landfill. Paper use reduced by 20% compared with the target of 3%, while waste to landfill reduced by 22% compared with a targeted 5%. These reductions were achieved as a result of ongoing paper and waste reduction initiatives, which included employee engagement activities. Further information is provided on page 7. The target to increase recycling by 10% for FTE was not achieved, although a net increase of 7% in recycling rates did occur.

### Asia

Our Asian operations exceeded their target to reduce electricity usage in our HK office by 1% over the two year period from 1 July 2011 to 30 June 2013. A reduction of 3.7% was achieved.

<sup>58</sup>. Phase out of R22 may be delayed as the result of increased awareness of seismic resilience of buildings. BNZ has undertaken a review of the standard of existing premises and a program is underway to address identified shortcomings. Depending on the relative risk, this may result in vacation of the site immediately, or at the next lease renewal, or agreed remediation work being undertaken in conjunction with the building owner. This process is not yet complete for all BNZ buildings but it has delayed planned work on HVAC replacement projects in order to avoid unnecessary installations.

# Dig Deeper

## Notes to the environmental performance summary

### Note 9: Offsetting activities

(tCO <sub>2</sub> -e emissions)	Group		Australia		United Kingdom		New Zealand		United States		Asia	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Gross GHG Emissions	311,010	305,558	243,001	238,314	33,467	34,281	11,207	11,496	20,540	19,289	2,795	2,178
GreenPower™	(22,614)	(27,620)	0	(21,760)	(22,614)	(5,860)	0	0	0	0	0	0
Voluntary carbon offsets	(288,396)	(277,938)	(243,001)	(216,554)	(10,853)	(28,421)	(11,207)	(11,496)	(20,540)	(19,289)	(2,795)	(2,178)
<b>Net Emissions</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

A total of 288,396 tCO<sub>2</sub>-e of offsets have been retired to cover Group-wide net GHG emissions occurring in the 2013 reporting period, after accounting for the net reduction in GHG emissions due to our purchase of renewable electricity in the UK (equivalent to a reduction of 22,614 tCO<sub>2</sub>-e).

Additionally, in 2013 we retired 300,245 tCO<sub>2</sub>-e of carbon offsets to cover our expected 2014 GHG emissions across the Group.

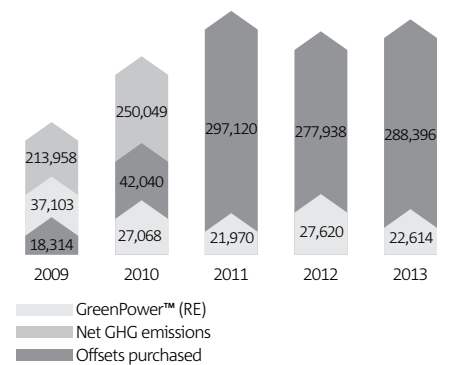
Our requirements for the purchase of quality carbon offsets and the management of our offset portfolio are documented in our *Environmental Reporting and Offsets Management Standard*. The portfolio diversity and quality requirements outlined in this Standard were adhered to for our 2013 and 2014 offset allocations.

Our forward purchasing model for carbon offsets means we calculate our forecast GHG emissions for the 2014 year based on the actual GHG reported in our 2013 carbon inventory and include

adjustments for key activities planned for 2014. We regularly review our forecast GHG emissions for the year against our allocated carbon offsets and reallocate from our retired pool if necessary.

Additionally, a full reconciliation between actual versus forecast emissions is conducted at the end of the future reporting period. Should a shortfall or surplus occur, we reallocate additional retired offsets from our retired pool for the period or reallocate surplus offsets back to the retired pool to be used for future periods. In 2012, we retired 300,402 tCO<sub>2</sub>-e of carbon offsets to cover our expected 2013 GHG emissions. This was adjusted midway through the 2013 year and at 2013 year end to give a total retired offsets allocated to 2013 of 288,396 tCO<sub>2</sub>-e. Subsequently, we reallocated 12,006 tCO<sub>2</sub>-e of offsets from our 2013 forecast allocation to our pool of surplus retired offsets.

**GROUP GHG EMISSIONS**  
(t-CO<sub>2</sub>-e)



# Dig Deeper

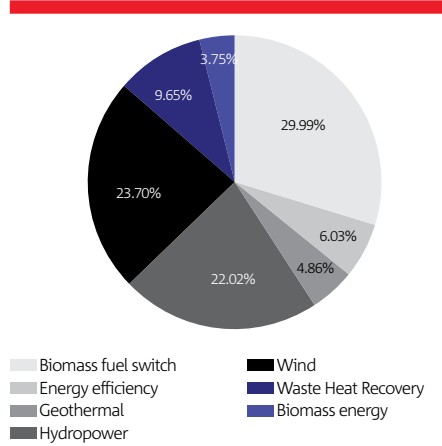
## Co-benefits from offsets

In purchasing our offsets, we look for opportunities that deliver not only accredited and verified emissions reductions, but also benefits relating to health, education, additional environmental benefits and infrastructure for the local communities in the areas in which the offset projects are delivered.

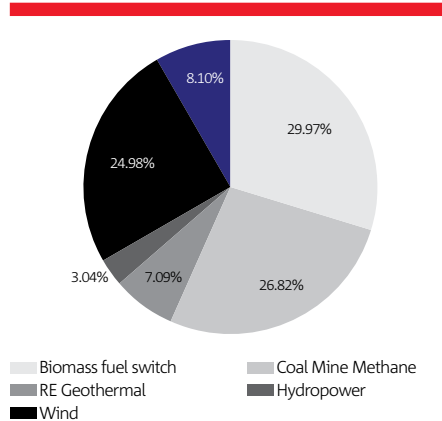
Examples of co-benefits arising from our 2014 offsets portfolio:

1. Geothermal power plant in Indonesia
  - provision of land, educational material and a contribution to the operational costs of a kindergarten
  - health services
  - road infrastructure improvements
  - vocational training for unemployed men and women to work in the garment industry.
2. Wind turbine projects in India
  - provision of an ambulance service
  - health care for employees and local villagers
  - clean drinking water to the neighbouring villages.
3. Thai biomass fuel switch project (where agricultural waste is substituted for fossil fuels)
  - support for small-scale local industries
  - student scholarships
  - mobile health clinics
  - diversified income source for the local farmers supplying the biomass.

**OFFSET PORTFOLIO BY PROJECT TYPE FOR ACTUAL 2013 GHG EMISSIONS (%)**



**OFFSET PORTFOLIO BY PROJECT TYPE FOR 2014 FORECAST GHG EMISSIONS (%)**



# Dig Deeper

## Notes to the environmental performance summary

### Note 10: Assurance and third party certification

We consider independent assurance and third party validation of our performance is important because it provides management and stakeholders with confidence in our reported environmental performance data and information.

#### Third party certification

In Australia and the UK, we've chosen to seek third party certification for our carbon management and carbon neutrality.

In Australia, we've held certification under the National Carbon Offset Standard (NCOS) Carbon Neutral Program since 2010 for the emissions inventory we're monitoring and reporting.

Our Australian operation has undergone its biennial NCOS verification in 2013. A copy of KPMG's verification report is available on our Group website.

In the UK, we've been certified under the Carbon Trust Standard (CTS) since 2008. Our UK operation will complete its recertification by the end of the 2013 calendar year.

We believe these certifications give stakeholders in Australia and the UK extra confidence in the robustness and credibility of our carbon neutral program.

These certifications are held in addition to the independent carbon neutral assurance KPMG conducts across our Group-wide carbon inventory each year.

#### Independent assurance

We undertake a range of assurance processes each year. These include:

- Reasonable level assurance over Scope 1 and 2 data submitted under the Australian Government's *National Greenhouse and Energy Reporting Act 2007*
- Reasonable level assurance over Scope 1 and 2 data submitted under the *UK Government's Carbon Reduction Commitment Energy Efficiency Scheme*
- Limited level assurance over additional Scope 1, 2 and 3 data and information associated with the Group's carbon neutral commitment (not already covered by assurance for regulatory reporting requirements). A copy of this assurance report is included opposite.

Copies of all KPMG's assurance reports are available on our Group website at: **[cr.nab.com.au](http://cr.nab.com.au)**.

A summary of our environmental accreditation and certification is provided on the final page of this Dig Deeper Paper.



# Dig Deeper



## Independent limited assurance report to the National Australia Bank Limited

We have been engaged by the National Australia Bank Limited (NAB) to undertake a limited assurance engagement over specified greenhouse gas (GHG) emissions and offset data of the NAB and its subsidiaries ("NAB Group"). The specified data relates to scope 1, scope 2 and selected scope 3 GHG emissions and offset data relating to NAB operations in Australia, New Zealand, United Kingdom, United States and Asia.

The specified greenhouse gas emissions and offset data have been prepared by the NAB Group for the purpose of assessing its carbon neutrality in accordance with the NAB Group Environmental Reporting and Offset Management Standard and reporting methodologies, which take into account relevant regulatory requirements and government reporting guidelines in jurisdictions in which the NAB Group operates (together referred to as "the Framework"). A summary of the Framework is available on the NAB Group website at [www.nab.com](http://www.nab.com).

The specified GHG emissions and offset data as presented on 8 October 2013 comprises the following:

- Actual consolidated net GHG emissions for the year ended 30 June 2013 of 288,396 tCO<sub>2</sub>-e;
- Actual quantity of carbon offsets purchased and retired of 288,396 tCO<sub>2</sub>-e for the year-ended 30 June 2013;
- Estimated consolidated net GHG emissions for the future year ending 30 June 2014 of 300,245 tCO<sub>2</sub>-e; and
- Actual quantity of carbon offsets purchased and retired of 300,245 tCO<sub>2</sub>-e for the future year-ending 30 June 2014.

### Management's responsibilities

The Management of NAB are responsible for the preparation and presentation of the specified GHG emissions and offset data in accordance with the Framework. This responsibility includes establishing and maintaining internal controls relevant to the preparation and presentation of the specified GHG emissions and offset data that is free from material misstatement, whether due to fraud or error.

### Our responsibility

Our responsibility is to express a limited assurance conclusion to the NAB on the preparation and presentation of the specified GHG emissions and offset data.

We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ISAE 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000) and ISAE 3410 Assurance Engagements on Greenhouse Gas Statements (ISAE 3410), issued by the International Auditing and Assurance Standards Board, in

order to state whether we have become aware of any matter that would lead us to believe that the specified greenhouse gas emissions and offset data has not, in all material respects, been prepared in accordance with the Framework.

ISAE 3000 requires us to comply with the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and to plan and perform the engagement to obtain limited assurance as to whether the specified GHG emissions and offset data is free from material misstatement.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for the management, monitoring and preparation of the specified GHG emissions and offset data, and applying analytical and other evidence gathering procedures, as appropriate. The key procedures we performed were:

- Visits to the following NAB businesses, which were selected on the basis of a risk analysis, including the consideration of both quantitative and qualitative criteria:
  - NAB Australia, Melbourne
  - National Australia Group Europe, United Kingdom
  - Great Western Bank, United States
  - Bank of New Zealand, New Zealand
- Interviews with senior management and relevant employees across the NAB Group concerning the specified GHG emissions and offset data aspects of NAB Group's Environmental Agenda, Carbon Neutral Program and policies for material issues, and the implementation of these across the business
- Interviewing the employees responsible for the collection and reporting of specified GHG emissions and offset data across the NAB Group
- Reviewing the Framework and other relevant documentation, including NAB Group policies, management and reporting structures, documentation and systems used to collect, analyse and aggregate the specified GHG emissions and offset data
- Performing tests on a sample basis of evidence supporting specified GHG emissions and offset data concerning completeness, accuracy and existence
- Undertaking analytical procedures over the specified GHG emissions and offset data
- Understanding the reporting processes for the capture of the GHG emissions and offset data including the consolidation process of the data at the aggregate level

# Dig Deeper

- Reconciliation of the reported consolidated net GHG emissions with the offset data
- Review of the quantity of carbon offsets purchased and retired as at 30 June 2013
- Vouching of carbon offsets purchased to certificates from third party verifiers on a sample basis, to confirm and evidence the retirement of those offsets.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement or an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance so that we would become aware of all significant matters that might be identified in an audit or a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance or audit opinion.

We disclaim any assumption of responsibility for any reliance on this report, or the specified GHG emissions and offset data to which it relates to any person, other than NAB, or for any purpose other than that for which it was prepared.

## Inherent limitations

Non-financial information, such as the specified GHG emissions and offset data, possesses a greater inherent risk of misstatement than financial data, due to the nature of the information and the uncertainties inherent in the methods used for determining such information, including the:

- absence of a significant body of established practice on which to draw that allows for the selection of different but acceptable measurement techniques, particularly with respect to Scope 3 GHG emissions, which can impact comparability. The precision of different measurement techniques may also vary
- nature and methods used to determine such information, as well as the measurement criteria and precision thereof, may change over time. The quantities of GHG emissions derived from estimates may differ to actual emissions

- methodology applied to convert energy data into GHG emissions that is based upon information and factors provided by either independent third parties and/or as detailed in the Framework. Our assurance work has not included an assessment of these emissions factors provided by third parties, in relation to certain GHG emissions.

The limited assurance conclusion expressed in this report has been formed on the above basis.

## Independence

In conducting our limited assurance engagement, we have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

## Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that would lead us to believe that the specified GHG emissions and offset data, as identified above, has not, in all material respects, been prepared and presented in accordance with the Framework.

## Application of the Framework

Without modifying our conclusion, we draw attention to the Framework, which describes the basis of preparation of the specified GHG emissions and offset data. A summary of the Framework is available on the NAB Group website at <http://cr.nab.com.au/> Consideration of the Framework is fundamental to understanding the methods and assumptions applied in the preparation of the specific GHG emissions and offset data.



**KPMG**

Melbourne  
31 October 2013

# Dig Deeper

## Glossary

**Biodiversity:** The variety of flora and fauna – nature’s ‘living’ assets.

**Business as usual:** An estimate of the future pattern of GHG emissions, which assumes that there will be no major changes in attitudes and priorities of governments, business and the community.

**Carbon footprint:** The measure of the impact that activities in a defined carbon inventory will have on the environment; measured in units of carbon dioxide equivalent.

**Carbon inventory:** A defined list of GHG emission sources that an organisation uses to calculate its carbon footprint.

**Carbon offset:** A credit that is purchased to negate an amount of carbon (one tonne) included in a defined carbon footprint.

**Closing the loop:** A concept associated with a ‘circular economy’ where resource use is part of a renewable cycle rather than a ‘take, make, dispose’ model. It incorporates renewable energy, resource efficiency and waste which is prevented, breaks down harmlessly or is reused – thus closing the resource usage loop.

**CO<sub>2</sub>-e (carbon dioxide equivalent):** The common unit of measure for the expression of Greenhouse Gas emissions. Each unit of greenhouse gas has a different global warming potential. Therefore all greenhouse gases are converted back to tonnes (tCO<sub>2</sub>-e) of carbon dioxide equivalent to enable consistent comparison and measurement.

**Certified Emission Reduction (CER):** The tradable instrument under the Kyoto Protocol’s Clean Development Mechanism.

**ECF, PCF or TCF:** Elementally chlorine free, processed chlorine free or totally chlorine free. An environmentally preferable process that uses chlorine dioxide for the bleaching of wood pulp. It doesn’t use elemental chlorine gas during the bleaching process and prevents the formation of dioxins and dioxin-like compounds, which are carcinogenic compounds.

**Ecosystem:** A natural habitat which includes a combination of soil, air, water, flora and fauna, and climate e.g. desert, forest, ocean, grassland.

**Ecosystem services:** Natural services derived from the earth’s natural assets, on which human beings are reliant. Ecosystem services are worth trillions of US dollars per year and provide food, fibre, water, health, energy, climate security and other essential services for everyone. The United Nations 2004 Millennium Ecosystem Assessment (MEA), grouped ecosystem services into four broad categories: provisioning – such as the production of food and water; regulating – such as the control of climate and disease; supporting – such as nutrient cycles and crop pollination; and cultural – such as spiritual and recreational benefits.

**Environmental, Social and Governance (ESG):** Describes the consideration of the Environment, Social and Governance (ESG) factors that impact on the risk and return profile of a company’s operations and investments.

ESG risk incorporates the three main areas of concern that have developed as the central factors in measuring the sustainability and ethical impact of a company’s operations. They can arise directly through a company’s own operations, or indirectly through customers and suppliers. ESG issues include managing the company’s carbon footprint, addressing diversity, human rights and financial inclusion and ensuring there are systems in place to ensure accountability.

**Equator Principles (EPs):** A voluntary set of standards for determining, assessing and managing social and environmental risk in project finance transactions. Equator Principles Financial Institutions (EPFIs) commit to not providing loans to projects where the borrower will not or is unable to comply with their respective social and environmental policies and procedures that implement the EPs. Refer <http://www.equator-principles.com>

**FSC:** Forest Stewardship Council.

**FTE:** Full Time Equivalent. A measure for reporting employee numbers.

**Greenhouse gas (GHG) emissions:** Gaseous pollutants released into the atmosphere that amplify the greenhouse effect. Gases responsible include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

**Natural Capital:** Comprises Earth’s natural assets (biodiversity and ecosystems) and the ecosystem services resulting from them.

**Natural Value:** (Otherwise known as natural capital accounting) is the recognition of the contribution that biodiversity and ecosystem goods and services have on economic sustainability.

**Natural Capital Declaration (NCD):** A statement by financial institutions that recognises that Natural Value poses significant risks and opportunities. The Declaration has been endorsed by 39 global financial institutions to date and is also supported by various NGO’s and Associations. Signatories have committed to implementing natural capital considerations into their businesses and to collaborate in developing shared tools and industry standards by 2020. The Declaration has been convened by United Nations Environment Program Finance Initiative’s (UNEP FI), Global Canopy Programme and The Centre for Sustainability Studies, Guetulio Vargas Foundation. Refer to <http://www.naturalcapitaldeclaration.org/>.

**PEFC:** Program for the Endorsement of Forest Certification

**Project Finance:** A method of funding in which the lender looks primarily to the revenues generated by a single project both as the source of repayment and as security for the exposure.

**Renewable energy:** Energy taken from sources that are renewable, for example, wind, water, solar, geothermal energy and biomass.

**Scope 1 GHG emissions:** This includes direct emissions from within an organisation’s boundary. These emissions are from sources that the organisation owns or controls such as:

- Combustion of fuel in boilers, furnace or generators that are owned or controlled by the reporting company.
- Generation of electricity, steam or heat in equipment that is owned or controlled by the reporting company.
- Business travel in vehicles such as company cars or corporate jets that are owned or controlled by the reporting company. Employee commuting in company-owned or controlled vehicles, such as company cars.

- HFC emissions from company-owned or controlled refrigeration or air-conditioning equipment.

**Scope 2 GHG emissions:** Indirect emissions from electricity that is used by the organisation but is generated outside the organisation’s boundary by another company, such as an electricity provider. This is called ‘purchased electricity’. This includes indirect emissions from consumption of purchased electricity, steam, or heat.

**Scope 3 GHG emissions:** All other indirect emissions that occur outside the boundary of the organisation as a result of the activities of the organisation including indirect emissions from:

- Business travel in non-company-owned or controlled vehicles, such as rental cars, employee cars, rail and commercial planes.
- Combustion of fuel in boilers or furnaces not owned or controlled by the reporting company.
- Employee commuting in vehicles not owned or controlled by the reporting company, such as light rail, rail, buses and employees’ cars.
- Third party production or manufacture of materials and resources used by the reporting company, such as furniture, paper and equipment.
- Indirect losses resulting from the transmission of electricity and other fuels.

**SFI:** Sustainable Forestry Initiative

**Spill:** Accidental release of a hazardous substance that can affect human health, land, vegetation, water bodies, ground water and property.

**Trade effluent:** Waste water discharged from industrial and commercial operations to the sewerage system. This may include waste water discharged from cooling towers, boiler systems, grease traps in kitchen and canteens.

**Tri-generation:** a process in which fuel is combusted to generate electricity, with waste heat being utilised to provide heating and cooling.

# Dig Deeper

## Awards, memberships and certifications

### Recognition we received in 2013:

- Listed as one of the 2013 Global 100 Most Sustainable Corporations in the World by Corporate Knights. NAB was listed as 55, from an initial field of over 4,000 companies.
- Included on the Ethisphere Institute's 2013 list of the 'World's Most Ethical Companies' for the third consecutive year.
- Ranked No. 5 in Newsweek's Worlds Greenest Company rankings – the only Australian company in the top 25 (October 2012).
- Rated 29 out of the top 40 World's Greenest Banks in the 2012 Bloomberg rankings (April 2013).
- Included in the 2013 CDP Climate Disclosure Leadership Index (4th consecutive year in a row).
- Our Company Secretary, Michaela Healey, received the Climate Alliance's Award for Company Secretary of the Year.

### Key 2013 memberships

United Nations Environment Programme Finance Initiative (UNEP FI)  
 CDP – Investor member and Reporter Services  
 Sustainable Business Network (NZ)  
 Water Stewardship Australia  
 Sustainable Business Council (NZ)  
 Sustainable Business Australia  
 Green Building Council of Australia



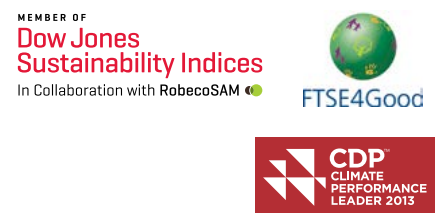
### In 2013 we provided support to:

United Nations Association of Australia (Victoria)  
 Monash Sustainability Institute  
 Global Access Partners  
 Earthwatch Institute  
 Kiwis for kiwi  
 Conservation Volunteers Australia  
 Hong Kong Green Nature Union  
 Hume City Council



### NAB group is included in the following indices and league tables:

Dow Jones Sustainability Index  
 FTSE4Good Index  
 CDP ASX 200 Climate Performance Leadership Index 2013  
 Australia & New Zealand 2012 CDP Carbon Disclosure and Carbon Performance Leadership Indices  
 Bloomberg's 2013 Top 20 World's Greenest Banks rankings  
 Bloomberg Clean Energy BNEF League Tables



### Certifications

National Carbon Offset Standard (AUST)  
 Carbon Trust Standard (UK)  
 ISO 14001 (for our Merrion Way Customer Support Centre)  
 Fair Trade Workplace (Australia and New Zealand)



### We are signatories to:

Australian Government's Fluorocycle Scheme  
 United Nations Global Compact  
 Equator Principles  
 Natural Capital Declaration  
 United Nations Environment Programme Finance Initiative (UNEP FI)

