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AGL

2013 Sustainability Performance Report

An overview of AGL's sustainability strategy and 2013 performance is available in AGL's 2013 Annual Report.

Feedback

To provide feedback on AGL's sustainability performance or on any aspect of this report, please contact:

Manager Sustainability Strategy
AGL Energy Limited
Locked Bag 1837
St Leonards NSW 2065
Telephone: + 61 2 9921 2999
Email: **sustainability@agl.com.au**

Alternatively, you can visit the AGL Blog and join the conversation at aglblog.com.au

Cover photo: The wind farm is located on three private properties that are also used for cattle and sheep grazing.

This page: Therese and Andrew at AGL's trial to assess if water from CSG wells can be beneficially used for agricultural irrigation.

Contents

Introduction

About AGL

AGL Energy Limited (AGL) is an ASX 50 listed company with over 3.5 million customer accounts and 2,757 employees. AGL operates Retail, Merchant Energy and Upstream Gas businesses in New South Wales, Victoria, South Australia and Queensland. In the last eight years, AGL has invested more than $3 billion in renewable energy generation making AGL the largest developer of renewable energy assets in Australia over that period.

AGL's integrated business strategy

AGL has a vertically integrated strategy whereby it sources gas and electricity to supply its energy customers. This strategy provides access to multiple profit pools and provides a natural hedge between upstream supply of energy and customers' demand for energy.

Upstream supply – renewable and thermal generation

Merchant Energy manages AGL's power generation assets and wholesale energy sourcing portfolio. Merchant Energy also manages energy sales to AGL's major customers and other energy retailers and provides energy efficiency services.

AGL has a diverse power generation portfolio, including baseload, intermediate and peaking generation plants spread across traditional thermal (coal and gas) as well as renewable sources (including hydro, wind, solar, landfill gas and biomass). Renewable energy generation assets comprise around 32% of AGL's operated generation portfolios. More information on AGL's renewable assets is available in the Sustainable energy chapter of this report.

Strategic direction: AGL has a strategic objective to increase control of peaking and renewable electricity generation to be more self-sufficient in meeting customer needs and the mandatory Renewable Energy Target.

Upstream supply – gas production

Upstream Gas is responsible for managing the growth of AGL's upstream gas portfolio to secure long-term, sustainable and market-competitive gas supplies for customers and to meet power generation requirements.

AGL owns and/or operates coal seam gas exploration and production projects in six petroleum basins across New South Wales and Queensland. The investments that make up AGL's upstream gas portfolio include:

> Camden Gas Project: 100% interest, operated by AGL
> Hunter Gas Project: 100% interest, operated by AGL
> Gloucester Gas Project: 100% interest, operated by AGL
> Galilee Gas Project: 50% joint venture interest, operated by AGL
> Silver Springs Project: mainly 100% interests in multiple tenaments, operated by AGL
> Moranbah Gas Project: 50% joint venture interest, not operated by AGL
> Spring Gully Gas Project: 0.0375–0.75% joint venture interests, operated by Origin Energy.

In Queensland, Upstream Gas manages the Silver Springs Gas Storage project which uses a depleted reservoir in the Surat Basin to store gas underground. In New South Wales, construction of the Newcastle Gas Storage Facility is underway, an above ground, liquefied natural gas facility that AGL will use to manage winter peak demand for gas from 2015.

Upstream Gas also manages AGL's 50% incorporated joint venture interest with APA Group to construct the Diamantina and Leichhardt power stations in Mount Isa.

Upstream Gas manages AGL's 35% equity interest in CSM Energy Pty Ltd, a private company aiming to extract gas from mining operations and deliver it to market.

Upstream Gas also manages AGL's 9.9% equity interest in Torrens Energy Limited. AGL and Torrens Energy have entered into a Geothermal Alliance Agreement to jointly commercialise baseload geothermal projects close to the electricity transmission network.

Strategic direction: AGL has strategic objectives to increase direct ownership of gas to meet a substantial proportion of AGL's long-term domestic demand for gas; and to invest in gas storage to provide security of gas supply for customers during periods of peak demand.

Transmission and distribution

Ownership of large-scale electricity or gas transmission and distribution systems that are used to transport energy from upstream supply facilities (gas production and electricity generation) to the end customer is not core to AGL's integrated strategy. AGL does not own gas or electricity distribution networks or electricity transmission networks, but does have some strategic investments in gas transmission infrastructure. AGL owns and operates a very limited number of small natural gas pipelines which connect AGL's production assets at Silver Springs in the Surat Basin in Queensland to one another and to the local hub at Wallumbilla (144 kilometres in total).

Introduction

About AGL

Retail markets

AGL retails natural gas, electricity and energy-related products and services (including solar) to over 3.5 million customer accounts across New South Wales, Victoria, South Australia and Queensland.

In FY2013, the total amount of energy sold to AGL's customers was 29,990 GWh of electricity and 146.4 PJ of gas. An additional 55.0 PJ of gas was sold to wholesale customers or used for generation.

Strategic direction: AGL has strategic objectives to grow its electricity customer base in New South Wales; expand the range of energy efficiency service offerings to help customers manage their energy costs; and provide an excellent experience for customers.

Corporate support

AGL's Merchant Energy, Upstream Gas and Retail Energy businesses are supported by a full complement of corporate services.

Projects under development and construction

AGL has a range of projects in different stages of development to deliver strategic depth and flexibility to its electricity generation, gas production and storage portfolios.

During FY2013, AGL commenced operation of the 420 MW Macarthur Wind Farm in Victoria.

As at 30 June 2013, AGL had no further renewable generation under construction. While further renewable and gas-fired generation development opportunities are being considered, the uncertainty around the future of key government policies is preventing financial commitments being made.

AGL is currently constructing the Newcastle Gas Storage Facility Project at Tomago in New South Wales.

Investments and divestments

There were no material acquisitions or divestments in FY2013.

On 15 July 2013, AGL announced its intention to acquire Australian Power and Gas Company Limited (APG). The transaction was completed in October 2013.

Energy Production

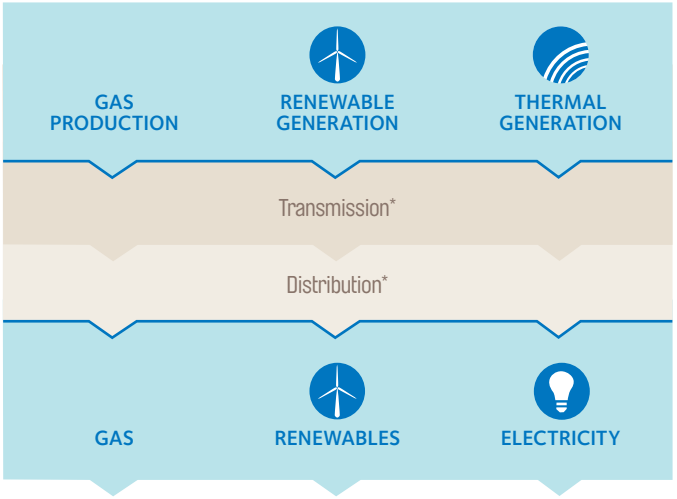
Upstream supply

Strategic Objectives

> Increase direct ownership of gas to meet a substantial proportion of AGL's long-term domestic demand for gas.

> Invest in gas storage to provide security of gas supply for our customers during periods of peak demand.

> Increase control of peaking and renewable electricity generation to be more self-sufficient in meeting customer needs and the mandatory Renewable Energy Target.



Downstream demand

Strategic Objectives

> Grow our electricity customer base in New South Wales.

> Expand the range of energy efficiency service offering to help our customers manage their energy costs.

> Provide an excellent experience for our customers.

Retail Markets

* AGL does not own gas or electricity transmission or distribution networks, but has some strategic investments in gas transmission infrastructure.

Introduction

Location of significant assets

Hydro Electric Power Stations

>Dartmouth Power Station

Location	Victoria
Capacity	180 MW

>Kiewa Scheme

Location	Victoria
Capacity	391 MW

>Eildon Power Station

Location	Victoria
Capacity	135 MW

Wind Farms

>AGL Hallett 1 Wind Farm

Location	South Australia
Capacity	94.5 MW

>AGL Hallett 2 Wind Farm

Location	South Australia
Capacity	71.4 MW

>AGL Hallett 4 Wind Farm

Location	South Australia
Capacity	132.3 MW

>AGL Hallett 5 Wind Farm

Location	South Australia
Capacity	52.5 MW

>Wattle Point Wind Farm

Location	South Australia
Capacity	90.8 MW

>Oaklands Hill Wind Farm

Location	Victoria
Capacity	63 MW

>Macarthur Wind Farm

Location	Victoria
Capacity	420 MW

>Silverton Wind Farm (proposed)

Location	New South Wales
Capacity	300 MW (Stage 1)

Solar Projects

>Broken Hill Solar Project (in development)

Location	New South Wales
Capacity	53 MW

>Nyngan Solar Project (in development)

Location	New South Wales
Capacity	102 MW

Thermal Power Stations

>AGL Loy Yang

Location	Victoria
Fuel type	Coal
Capacity	2,210 MW

>Somerton Power Station

Location	Victoria
Fuel type	Gas
Capacity	150 MW

>AGL Torrens

Location	South Australia
Fuel type	Gas
Capacity	1,280 MW

>Oakey Power Station

Location	Queensland
Fuel type	Gas/Diesel
Capacity	282 MW

Not operated by AGL

>Yabulu Power Station (50% interest)

Location	Queensland
Fuel type	Gas
Capacity	121 MW (50% of 242 MW)

Not operated by AGL

>Diamantina Joint Venture (Diamantina Power Station and Leichhardt Power Station) (50% interest) (under construction)

Location	Queensland
Fuel type	Gas/Diesel
Capacity	151 MW (50% of 302 MW)

Not operated by AGL

Gas Storage

>Newcastle Gas Storage Facility (under construction)

Location	New South Wales
Capacity	1.5 PJ

>Silver Springs Gas Storage

Location	Queensland
Capacity	35 PJ

Upstream Gas Projects

>Gloucester Gas Project[2]

Location	New South Wales
Reserves (2P)	454 PJ

>Camden Gas Project[2]

Location	New South Wales
Reserves (2P)	50 PJ

>Hunter Gas Project[2]

Location	New South Wales
Reserves (2P)	0 PJ

>Moranbah Gas Project (50% interest)

Location	Queensland
Reserves (2P)	291 PJ

Not operated by AGL

>ATP 1103 Exploration Project (50% interest)[3]

Location	Queensland
Reserves (2P)	868 PJ

Not operated by AGL

>Silver Springs Gas Project

Location	Queensland
Reserves (2P)	58 PJ

>Galilee Gas Project (50% interest)

Location	Queensland

2C resources only

The assets listed above and displayed on the map opposite comprise upstream gas projects with 2P reserves[1] or 2C resources[1] and power generation assets larger than 50 MW as at 30 June 2013. Operated as well as partly owned or non-operated assets are included.

Notes

1 2P, or proved plus probable reserves, are those quantities of gas that are estimated with equal certainty to be greater than or less than actual commercially recoverable quantities. 2C resources are considered not yet commercially recoverable. Consistent with new ASX Listing Rules reporting requirements, gas reserves are now reported net of 'lease fuel', i.e. net of estimated own use fuel consumption upstream of the point of sale.

2 Estimated reserves based on Mining SEPP changes. For more detail, refer to pages 57 and 58 of the 2013 Annual Report.

3 Under a 50-year project agreement that commenced in 2000, AGL has no effective exploration rights (or ongoing cost obligations) within exploration tenement ATP 1103 as these were assigned to Arrow Energy Limited. However, AGL is entitled to participate up to a 50% interest in any commercial development by contributing its share of past costs.

For more information on how we source energy visit our website **agl.com.au**

Operating

Projects being developed/constructed

Operated by AGL

Not operated by AGL

Introduction

About this report

AGL publishes sustainability performance data annually so that stakeholders can gain an understanding of the social, environmental and economic challenges and opportunities that face the organisation and the industry and the steps that AGL is taking to enhance the long-term value of the business.

Report scope

This report covers the performance of the AGL group of companies (AGL Energy Limited and its wholly owned Australian subsidiaries) (AGL) and the activities and facilities in Australia over which AGL had operational control for all, or part, of the financial year ended 30 June 2013 (FY2013). All data in this report relates to FY2013 unless otherwise stated. The performance of AGL Loy Yang is excluded from some data series where comparable data is not available or where targets or trends are relevant only to the continuing operations of AGL prior to the acquisition on 29 June 2012. These instances are clearly identified.

Together, the 2013 Sustainability Performance Report and the 2013 Annual Report provide the full account of AGL's performance for the period.

Where information regarding AGL's partially owned and non-operated investments is material, available and relevant, it is included and clearly referenced. This report excludes the performance of franchise *AGL Smarter Living* stores and tradespeople.

The performance of joint ventures which are not operated by AGL is excluded.

AGL's previous Sustainability Performance Report was released on 17 December 2012, covering the 2012 financial year (FY2012). AGL has published sustainability reports since FY2004 and historical reports are available on the AGL website at agl.com.au

Report structure

AGL's annual sustainability reporting comprises two main elements:

1. **2013 Annual Report:** Sustainability performance information is incorporated within the Annual Report to provide a broader account of AGL's overall performance to shareholders and other stakeholders. Pages 22 to 42 of the Annual Report document AGL's performance against the 12 strategic sustainability indicators and targets that were set in 2012.
2. **2013 Sustainability Performance Report (this report):** This report provides detailed performance data across a wider range of subject areas. It has been prepared for stakeholders who have a special or detailed interest in particular aspects of AGL's sustainability performance.

   This report is available online only.

Global reporting initiative

The Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G3) and the GRI Electric Utility Sector Supplement were used in the preparation of this report. These documents provide guidance for organisations to use as the basis for disclosure about their sustainability performance, providing a universally applicable, generally acceptable and comparable framework that helps stakeholders understand reported information.

A full GRI content index is included on pages 99 to 110 of this report.

AGL has self-assessed the extent to which the GRI G3 guidelines have been applied in the preparation of this report. AGL also engaged Deloitte Touche Tomatsu (Deloitte) to complete a third-party GRI 'Application Level' assessment of the report. The Assurance Statement from Deloitte is included on pages 95 to 97 of this report.

It is AGL's intention to report against the new GRI G4 guidelines from FY2014.

For further information about the GRI guidelines and application levels, refer to the GRI website at globalreporting.org

Assurance

Deloitte was engaged to undertake limited assurance of the 2013 sustainability performance data in this report in accordance with the *Australian Standards on Assurance Engagements ASAE 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information (ASAE 3000)*. The assurance comprised:

> assurance over the application of AA1000 principles in managing and reporting sustainability performance

> assurance over selected sustainability indicators, namely the FY2013 performance against the FY2013 target for the 12 strategic sustainability indicators contained within this and the 2013 Annual Report, as well as selected greenhouse gas emission, safety and environmental data

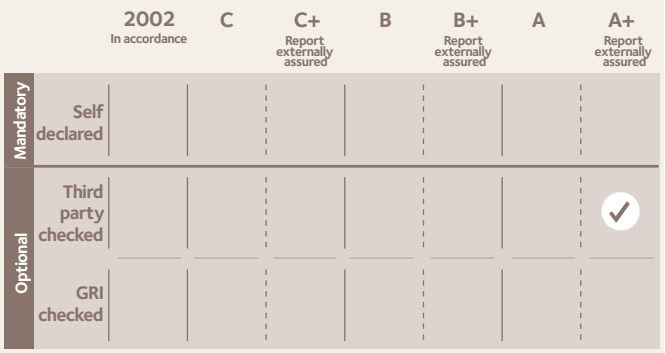
> comparison of the content of the report against the criteria for a GRI self-declaration at 'A+' level.

The Assurance Statement from Deloitte is included on pages 95 to 97 of this report.

In addition, AGL has sourced further assurance about data accuracy and reliability through the following mechanism:

> Data in the Economic section of the report includes financial information from AGL's audited 2013 Financial Report. The full financial report is available on the AGL website at agl.com.au

GRI application level



Introduction

About this report

How to read this report

Performance data in this report has been structured into six chapters, representing the categorisation of AGL's sustainability risks: Economic, Customers, Community, People and safety, Sustainable energy (formerly Climate Change) and Environment.

Within each chapter, two focus areas have been identified. Together, these 12 focus areas represent those issues considered to be the most material sustainability challenges for AGL.

A vision has been stated for each of the 12 focus areas. These visions are designed to help guide decision making. Short-term targets for FY2013 were published for each indicator in the 2012 Annual Report and 2012 Sustainability Performance Report. Performance against each of the FY2013 targets and new targets for FY2014 are reported within this report and the 2013 Annual Report.

The body of this report contains additional detail about each focus area, including AGL's management approach and further supporting data.

A set of subject areas that influence overall performance in each focus area has also been identified. Performance data for each of these subject areas is available in the body of the report. A roadmap showing the subject areas for each focus area is provided on the introductory page to each chapter of this report.

This year AGL has also published a series of case studies which explore particular sustainability challenges in more detail. These case studies are available to download separately from this report.

Consultation about this report

AGL engages with different stakeholder groups on a regular basis, as outlined in the Stakeholder engagement section of this report (pages 12 to 15).

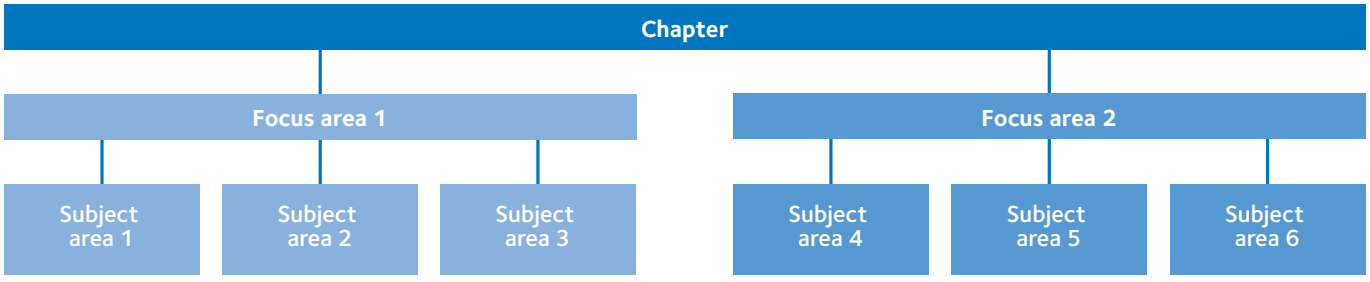
Specific comment on the content of this report was also sought from the AGL Climate Change Council and the AGL Customer Council.

> Feedback received from the AGL Climate Change Council regarding the Sustainable Energy chapter included recommendations to clarify some of the statements made and to consider other possible future carbon policies that could require faster decarbonisation.

> Feedback received from the AGL Customer Council regarding the Customer chapter included recommendations that AGL clarifies for stakeholders that hardship customers are considered the same way as other customers in terms of ensuring a good customer experience. Accordingly, it has been specifically stated that hardship customers are separated out in the customer chapter for strategic purposes only.

Stakeholders are also encouraged to provide feedback to AGL on its sustainability strategy and reporting via the contact details provided on the inside cover of this report.

Reporting model



Chapter
Each chapter has an overarching goal, to guide long-term performance.

Focus areas
Within each chapter two focus areas have been identified which are considered to be material sustainability challenges for AGL.

To guide decision making and drive performance in each of the 12 focus areas:
> a long-term vision has been stated
> a one-year performance target has been set.

Subject areas
Success in each of the 12 focus areas is driven by performance in other subject areas. Where available, performance data is provided.

AGL recognises that there is not always a linear relationship between the identified 'subject areas' and 'focus areas' and that each subject area may have an influence on performance in more than one focus area.

Introduction

Sustainability blueprint

Economic

Performance summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Ongoing profitability				
Industry leading earnings profile based on sustainable business practices	Underlying profit[1]: **$590–640 million**	Underlying profit[1]: **$598.3 million**	✓	Underlying profit[1]: **$560–610 million**
Sustainable growth				
Solid returns from AGL's existing and new business activities	Improvement in return on funds employed	Adjusted EBIT: Funds Employed: **12.9%**[2]	✓	Credit rating: **BBB**

Customers

Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Customer experience				
Top ranking energy company for customer satisfaction.	To have a higher annual mean customer satisfaction score than our competitors.	Customer satisfaction score: AGL's score was higher than that of our major competitors, at: **6.92**[3]	✓	To have a higher annual mean customer satisfaction score than our competitors.
Customers in hardship				
Recognised industry leader in customer hardship policy.	5% reduction in the ratio of average energy debt of *Staying Connected* customers to average NEM household electricity bill.	Reduction in ratio of energy debt of *Staying Connected* customers to average AGL household energy bill, adjusted for movements in the electricity price index[4]: **10%**	✓	5% reduction in the ratio of average energy debt of *Staying Connected* customers to average NEM household electricity bill.

Community

Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Community engagement				
AGL will earn a 'social licence' to develop upstream gas and power development projects.	Delivery of promises made to the community[5]. **100%**	All promises made to the community were met, although there were some environmental compliance breaches[6].	✓	Measure AGL's investment in local businesses, including an analysis of job creation and financial contributions to the local community.
Community contribution				
Social Return on Investment (SROI) measured and at target levels.	Establish framework for Social Return on Investment (SROI) analysis, with outputs of *Energy for Life* strategic partnerships measured annually.	Community contribution SROI framework established for AGL's major strategic partners, The Smith Family and St Vincent de Paul.	✓	Measure outputs of *Energy for Life* strategic partnerships in accordance with SROI framework developed in FY2013.

Notes

1 Underlying profit reflects the actual performance of AGL's business by adjusting statutory profit (reported in accordance with Australian Accounting Standards) by fair value movements and one-off significant items.
2 This represents an increase of 1.3 percentage points from FY2012 (11.6%).
3 As determined by a quarterly survey prepared by an independent third party provider.
4 The National Electricity Market (NEM) average household electricity bill has been adjusted for electricity price inflation, as measured by the Consumer Price Index, Australia, June 2013.
5 Promises to the community are defined as commitments made to the community, over and above legal and contractual requirements under land purchase agreements, access and compensation agreements, conditions of project approvals and environmental licenses.

In 2010, AGL established a framework for sustainability reporting. Twelve strategic indicators of success were developed, together with visions to guide performance in the longer term. Performance data as well as forward targets for each indicator have been published since 2010. An account of performance against each of the FY2013 sustainability targets is detailed below, together with new commitments for FY2014.

People and safety

Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Employee engagement				
Engagement score maintained at global 'Best Performing Zone' level	Further improvement in employee engagement.	Engagement score[7]: **77%**	✓	Engagement score: **Achieve score above ORC International Best Performing Zone.**
Health and Safety				
Zero harm	Total Injury Frequency Rate[8]: **<4.9**	Total Injury Frequency Rate: **5.9**	✗	Total Injury Frequency Rate[8]: **<5.0**

Sustainable energy

Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Carbon exposure				
Continuing to lower the emissions intensity of AGL.	Emissions intensity of investments in new generation capacity lower than 0.7 tonnes per MWh.	No new generation investments made.[9]	✓	Develop a cost curve of material energy efficiency and greenhouse gas emissions abatement opportunities at AGL's existing operational assets.
Sustainable generation sources				
Australia's largest renewable energy company.	Increase renewable investment capacity to 1,740 MW.	AGL's operated renewable generation capacity was **1,740 MW** at 30 June 2013	✓	Invest in 155 MW of renewable energy projects.

Environment

Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Environmental risk				
To have an environmental risk profile that is As Low As Reasonably Practicable (ALARP).	100% of approved risk register actions for the highest residual environmental risks implemented in accordance with targeted milestones.	96% of actions (or 60 of 62) were implemented in accordance with targeted milestones: **96%**	✗	100% of approved risk register actions for the highest residual environmental risks implemented in accordance with targeted milestones.
Water management				
To be recognised as a prudent and responsible user of water that seeks to minimise the adverse impact of its operations on local water resources.	Increase number of dedicated monitoring bores and stream gauging sites relative to overall number of CSG wells/sites.	The number of dedicated monitoring bores and stream gauging sites increased from 73 (61 monitoring bores to 12 stream gauging sites) from 1 July 2012 to 103 (88 monitoring bores to 15 stream gauging sites) at 30 June 2013. This represents an increase in the ratio of water monitoring sites to gas wells from 0.45 to 0.63.	✓	Analysis of significant water usage across business units and development of KPI's for water usage and wastewater reduction by end June 2014.

Notes

6 Environmental non compliances are dealt with separately in the Environment chapter of this report.
7 AGL Loy Yang was included in the FY2013 employee engagement survey.
8 The FY2013 target related to safety does not include AGL Loy Yang in FY2013 due to the need to integrate AGL Loy Yang's safety management systems with those of AGL. The FY2014 target includes AGL Loy Yang and is based on a revised methodology for calculating TIFR, as outlined on page 60.
9 While AGL did not announce or commit to any new power station developments in FY2013, it did commission the Macarthur Wind Farm and the Qenos cogeneration plant during the year and construction continued on the Diamantina Power Station (where AGL has a 50% share of an incorporated Joint Venture). All of these projects have emissions intensities well below the 0.7 tCO_2e/MWh threshold.

Introduction

Governance and management

Governance and management

Best practice corporate governance standards support sustainable performance by AGL over time.

Sustainability and corporate governance

AGL's governance structures and processes are consistent with the Australian Securities Exchange (ASX) Corporate Governance Council's 'Corporate Governance Principles and Recommendations – 2nd Edition' issued in August 2007. The eight ASX principles are:

> **Principle 1:** Lay solid foundations for management and oversight
> **Principle 2:** Structure the Board to add value
> **Principle 3:** Promote ethical and responsible decision making
> **Principle 4:** Safeguard integrity in financial reporting
> **Principle 5:** Make timely and balanced disclosure
> **Principle 6:** Respect the rights of shareholders
> **Principle 7:** Recognise and manage risk
> **Principle 8:** Remunerate fairly and responsibly.

AGL's Annual Report includes a full statement disclosing the extent to which AGL has adopted and met the ASX principles and recommendations. The AGL Annual Report is available at www.2013annualreport.agl.com.au

AGL Board and AGL Board Committees

At 30 June 2013, the AGL Board comprised seven independent non-executive directors (including the Chairman of the Board) and one executive director who is the Managing Director and CEO. Detailed information about the structure, responsibility and experience of the AGL Board is included in AGL's Annual Report.

The Board has established four standing committees of its members that meet regularly to oversee key risks affecting the business.

Safety, Sustainability and Corporate Responsibility Committee

The Safety, Sustainability and Corporate Responsibility Committee operates under a formal Charter, which requires it to oversee promotion across AGL of the principles of safety, sustainability and corporate responsibility as the foundations of good management and good business. The Committee meets on a quarterly basis, visiting various AGL locations, to oversee and review:

> AGL's actions to meet its obligations to maintain the health and safety of its people
> the social, environmental and ethical impact of AGL's policies and practices
> initiatives to enhance AGL's sustainable business practices and reputation as a responsible corporate citizen
> the integration of safety, sustainability and corporate responsibility in the formulation of AGL's corporate strategy, risk management framework, and people and culture priorities.

A suite of internal sustainability key performance indicators is reported to the Committee at each meeting.

The Safety, Sustainability and Corporate Responsibility Committee Charter is available at agl.com.au/SSCR

Audit and Risk Management Committee

The primary function of the Audit and Risk Management Committee is to assist the Board in fulfilling its responsibilities to provide shareholders with timely and reliable financial reports and to protect the interests of shareholders, customers, employees and the broader community through the effective identification, assessment, monitoring and management of risks. The Committee operates under a formal Charter.

The Audit and Risk Management Committee Charter is available at agl.com.au/ARMC

People and Performance Committee

The People and Performance Committee convenes at least twice yearly to oversee the appropriate recruitment, retention and remuneration of directors, senior managers and other employees with the capabilities necessary to promote AGL.

The People and Performance Committee Charter is available at agl.com.au/PPC

Nominations Committee

The primary function of the Nominations Committee is to assist the Board in fulfilling its responsibilities to Shareholders through the appropriate recruitment, retention and education of Directors.

The Nominations Committee Charter is available at agl.com.au

Sustainability management structure

The AGL executive team builds sustainability considerations into business strategy and day-to-day operations.

Responsibility for AGL's sustainability strategy lies within the Economic Policy and Sustainability team within the Corporate Affairs business unit. This team is responsible for developing sustainability strategy and policy, liaising with the business on these policies and reporting progress on sustainability issues.

Key systems and policies

A range of formal policies, plans and management systems govern AGL's day-to-day operations.

Risk management

AGL recognises that risk is dynamic and is inherent in all external and internal operating environments. AGL integrates risk management practices into all business processes and operations to drive consistent, effective and accountable action, decision making and management practice.

AGL has an integrated approach to Enterprise Risk Management which is consistent with the International Standard for Risk Management (ISO 31000), the COSO Framework and ASX Corporate Governance Principles. The AGL Board has ultimate responsibility for overseeing the performance of AGL, including monitoring risk management and internal control systems. AGL's Risk Management Policy sets out the objectives and accountabilities for the management of risk within AGL. Key aspects of AGL's approach to risk management are outlined in the Economic chapter of this report.

AGL's Risk Management Policy is available at agl.com.au/RiskPolicy

Introduction

Code of conduct

AGL's Code of Conduct (the Code) sets out a number of overarching principles of ethical behaviour aligned with AGL's core values. The Code applies to directors, employees and contractors working on behalf of AGL.

The Code is administered by the AGL Ethics Panel. The Ethics Panel comprises the Company Secretary, Group Head of People and Culture, General Counsel, Head of Group Audit and an independent person with expertise in managing employee grievances. The responsibilities of the Ethics Panel include putting in place procedures for distribution of, and compliance with, the Code; investigation and reporting of any alleged breaches of the Code; and recommending to the Board any changes required to support the effectiveness of the Code.

The payment of membership fees and subscriptions to political parties is addressed in the Code. The political networking forums in which AGL participates are outlined in the Stakeholder engagement section of this report.

AGL's Code of Conduct is available at agl.com.au/CodeofConduct

Health, safety and environmental management

AGL's health, safety and environmental management system (Life Guard) is based on the recognised standards AS/NZS/ ISO 14001 (Environmental Management Systems) and AS/NZS 4801 (Occupational Health and Safety Systems). Life Guard sets the corporate standards and requirements for health, safety and environmental management for all aspects of AGL's business. Life Guard committees monitor and drive performance improvement and compliance with Life Guard.

AGL's Health, Safety and Environment Policy is available at agl.com.au/HSEpolicy

Market disclosure

The Market Disclosure Policy outlines how AGL manages continuous disclosure obligations and communication with capital markets. An internal Market Disclosure Committee is responsible for ensuring that all AGL announcements are timely; contain clearly written, material information; and are objective and factual, to allow investors to assess the consequences of information on their investment decisions.

AGL's Market Disclosure Policy is available at http://www.agl.com.au/Downloads/Market Disclosure Plan 2010.pdf

Privacy

AGL's Privacy Statement and companion internal document, the Privacy Policy, outline AGL's responsibilities and commitments in relation to the privacy of customers, shareholders, employees and other stakeholders. The Statement is consistent with the National Privacy Principles, as documented in the *Privacy Act 1988* (Cth).

AGL's Privacy Statement is available at agl.com.au/Privacy

Legislative compliance

AGL is committed to embedding compliance risk management practices within broader risk management and governance frameworks and integrating it in all business processes and operations to drive consistent, effective and accountable decision making. The Compliance Policy and Plan cover legislative requirements, management responsibilities, training, reporting on compliance and provision for internal audit. AGL's approach to compliance is consistent with the Australian Standard on Compliance Programs (AS 3806-2006).

AGL's Compliance Policy is available at agl.com.au/CompliancePolicy

Public policy advocacy

AGL aims to provide stakeholders with access to the right information so that the effects of energy market and climate change policy on both AGL's business and AGL's customers are fully understood. AGL participates in the development of public policy by providing submissions, consulting with government, participating in government networking events and by speaking at government inquiries.

AGL also works with a number of energy industry associations to provide common industry and business positions to governments on energy market and climate change policy issues. However, there are occasions where AGL's position differs from the association to which it belongs. Where possible, AGL informs stakeholders of this difference of opinion to avoid confusion. Copies of AGL's submissions are publicly available on relevant government department websites. Selected submissions are also published on AGL's corporate blog at aglblog.com.au

Introduction

Stakeholder engagement

Stakeholder engagement

Engaging in constructive dialogue with stakeholders keeps AGL responsive to issues important to customers, employees, investors, regulators and the wider community.

Regular interaction with stakeholders, whether through formal or informal channels, ensures that the annual sustainability blueprint remains relevant to AGL's overall business strategy and contributes to the ongoing success of the company.

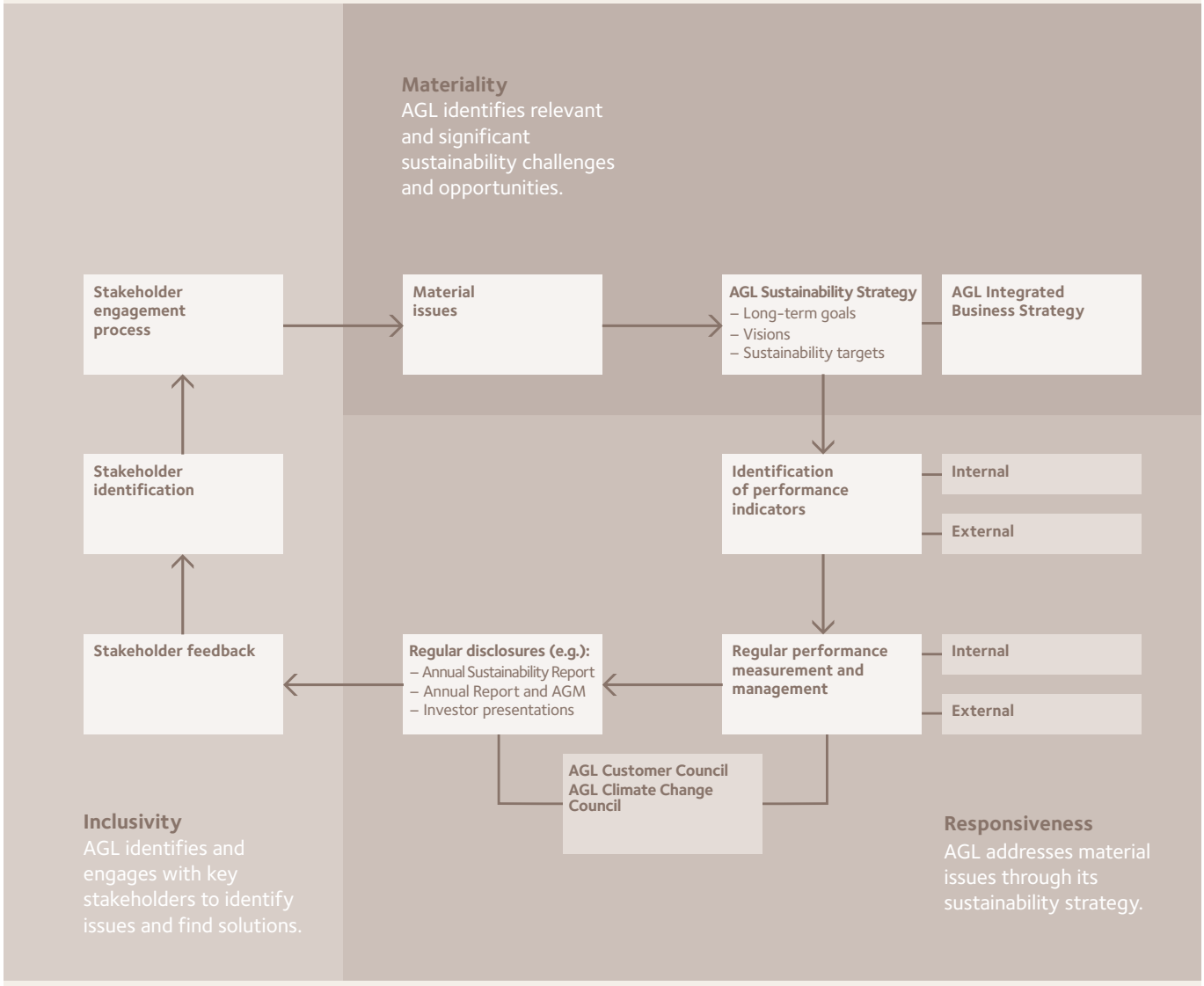
AA1000 principles

AGL incorporates the principles of inclusivity, materiality and responsiveness, as shown in the diagram below.

The AA1000 principles are:

> **Inclusivity:** An organisation shall be inclusive
> **Materiality:** An organisation shall identify its material issues
> **Responsiveness:** An organisation shall respond to stakeholder issues that affect its performance.

Integration of AA1000 principles



Introduction

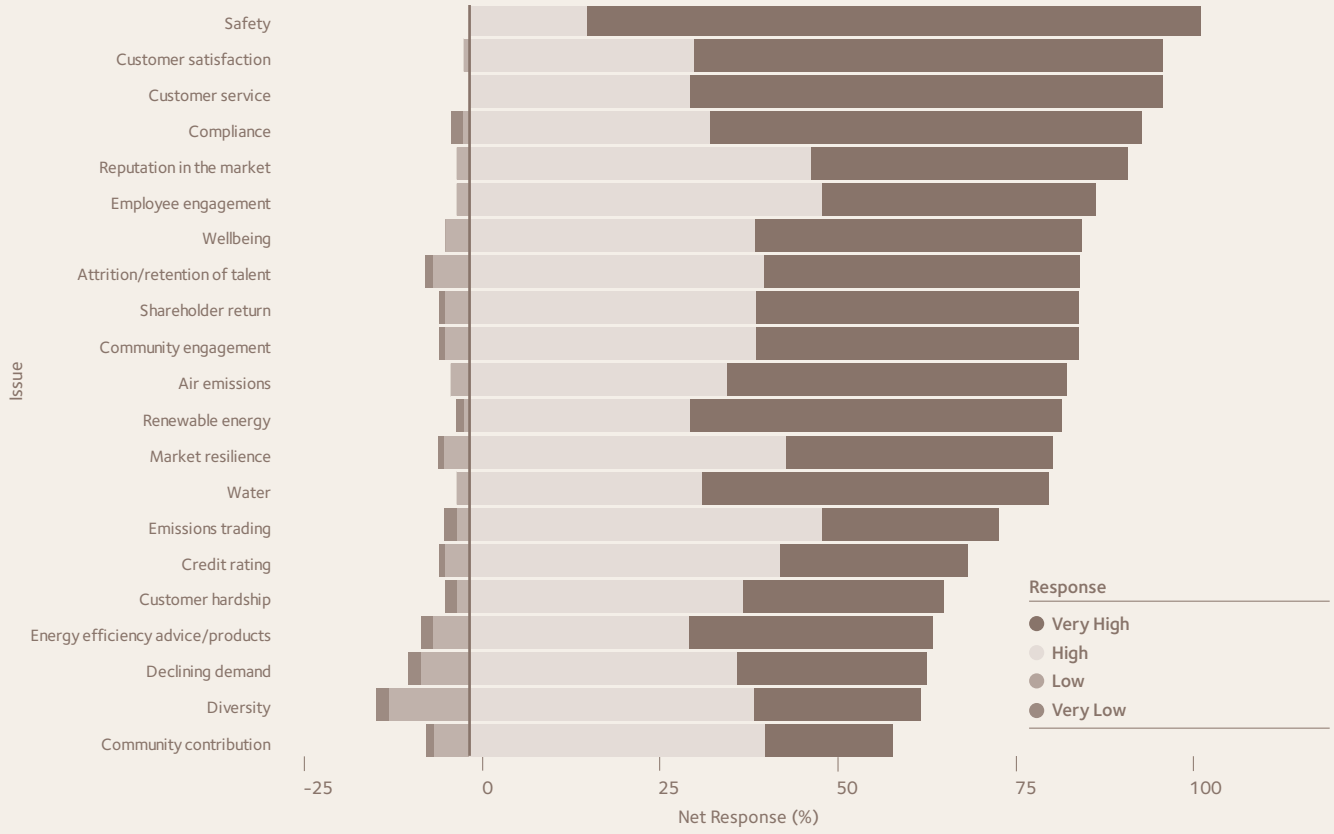
Materiality review

During April and May 2013, AGL surveyed a number of stakeholders (both internal and external) to gauge their views on AGL's material issues and the level of importance they attach to them. In a number of instances, there was a direct correlation between the level of concern expressed by stakeholders with respect to an issue and the current or potential risk posed by that issue to AGL's business.

The list that follows is a summary of the issues highlighted during the materiality review.

- **Workplace health and safety:** Ensuring that employees stay safe at work every day. In the materiality survey, this ranked as the issue of most importance to respondents, the majority of whom were employees. Refer to the People and safety chapter.
- **Customer experience:** Meeting the needs and expectations of customers. This issue ranked second after workplace safety in the materiality survey. Refer to the Customer chapter.
- **Environmental impact:** Complying with legislative and licence obligations with respect to the environmental impact of AGL's operations. Again, this was an issue ranked of high importance by respondents to the materiality survey. Refer to the Environment chapter.
- **Climate change and renewable energy:** Reducing the financial risks associated with existing and emerging climate change policies; and positioning the organisation in terms of low greenhouse gas emitting energy generation and supply. Refer to the Sustainable energy chapter.
- **Financial hardship:** Assisting low-income and vulnerable consumers to maintain access to energy. Refer to the Customer chapter.
- **Community engagement and contribution:** Listening to the concerns of stakeholders in the communities where AGL operates and develops infrastructure projects; and contributing to the broader communities where AGL employees live and work. Refer to the Community chapter.
- **Energy market structure:** Adjusting AGL's business strategy to ensure successful adaptation to an energy market which is in a period of significant transformation, particularly in terms of energy policy uncertainty and the increasing penetration of distribution generation. Refer to the Economic and Sustainable energy chapters.
- **Workplace diversity and attracting/retaining talent:** Ensuring that AGL has an engaged, diverse and inclusive workforce now and into the future. Refer to the People and safety chapter.
- **Ongoing profitability:** Ensuring that AGL continues to deliver solid returns from existing and new business activities. Refer to the Economic chapter.

Materiality survey results[1]



Note

1 This is a net stacked distribution plot, which has the neutral responses removed and shows the trend of the net percentage of responses (plot constructed using IR version 3.0.1 (R–project.org) and ggplot 2 (ggplot2.org)).

Introduction

Our Stakeholders And What They Said	How We Engaged
Employees To remain competitive AGL requires a high performance culture where people are safe, engaged, accountable, empowered, recognised and rewarded.	
The key issues for AGL employees include: workplace safety; career development and training; appropriate remuneration and recognition; personal wellbeing; and a fair, equitable and inclusive workplace. Employee engagement surveys show that company reputation and corporate responsibility are important issues for AGL employees.	The AGL Engagement Survey is undertaken annually and provides employees with the opportunity to give feedback about the organisation. AGL uses a 360° feedback program for senior leaders throughout the business. AGL Senior Leadership Group forums are used throughout the year to inform and update leaders across the business about the key priorities, projects and issues of each business group. AGL holds 'CEO roundtable' events, which provide AGL's CEO with an informal opportunity to meet employees at all levels and to directly hear and discuss successes, challenges, issues and achievements. Twice-yearly Employee Roadshows are held to present financial results, operational highlights and strategic priorities. A 'Diversity Big Day Out' is held for employees where information and training is provided around diversity and work/life balance. Feedback is also sought on other mechanisms that AGL could utilise to encourage and promote diversity; for example, a company-wide Diversity and Inclusion Census was run in FY2013.
Investment Community In addition to market disclosure obligations, AGL recognises the importance of engaging with the investment community about the non-financial risks and opportunities that may influence the company's performance and growth in the longer term.	
Investors are increasingly interested in AGL's responses to environmental, social and governance risks. Around 50% of all funds under management by Australian asset managers fall under a UN PRI commitment to integrate sustainability considerations into their analyses. AGL's preparations for a carbon-constrained future are of particular interest to analysts.	The Annual General Meeting (AGM) provides shareholders with the opportunity to review financial results and to vote on a range of issues. The AGM also provides the opportunity for shareholders to ask questions of AGL's Directors and senior executives concerning performance and strategy. AGL makes regular announcements to the ASX concerning significant matters including financial results, acquisitions and divestments. AGL publishes an Annual Report and Sustainability Performance Report each year to provide AGL's stakeholders (including investors) with relevant financial and non-financial results for the year, and to provide a summary of AGL's business strategies and plans for the next year. Producing an Annual Report is a legal requirement for AGL. Shareholders are able to provide direct feedback on the results contained within the report at the Annual General Meeting. AGL voluntarily publishes an annual Sustainability Performance Report to provide a broader spectrum of information regarding social, environmental and economic performance. AGL participates in the Dow Jones Sustainability Index, the Carbon Disclosure Project and the FTSE4Good Index. These tools are used by the investment community to collect relevant non-financial performance information to facilitate informed investment decisions. AGL conducts semi-annual independent qualitative and quantitative surveys of equity investors and analysts, allowing these stakeholders to provide unattributed feedback on management, strategy, disclosure, financial performance and balance sheet structure. Other engagement mechanisms include: institutional investor and equity analyst events, including: domestic and international 'roadshows'; presentations to stock brokers and industry conferences; and investor tours of assets and operations.
Government AGL's business is affected by the policy decisions and other announcements of Federal and State Ministers and their departments. Governments have a responsibility to ensure the accessibility of essential services, such as energy, along with the development of energy infrastructure in accordance with their own policy principles. These principles can include consideration of climate change impacts and sustainability.	
State and Federal governments are concerned with a wide range of issues including: the development of energy infrastructure, climate change and renewable energy policies, coal seam gas, energy prices, and reliability of energy supply.	AGL's Government Affairs team has regular dialogue with relevant State and Federal governments in relation to a range of policy issues – including meetings, policy submissions (both directly and via industry associations), attendance at events and the provision of briefings. AGL's Government Affairs team has strong relationships with many Ministerial offices, especially with those whose electorates include AGL projects. AGL is a member of Labor and Liberal political networking forums where these are established in each state where AGL operates. These comprise Progressive Business Victoria (ALP), Progressive Business South Australia (ALP), Business Dialogue New South Wales (ALP) and the Millennium Forum New South Wales (Liberal).
Regulators Regulators are responsible for price regulation and monitoring compliance against jurisdictional and national energy regulations. Regulatory decisions can have a significant impact on AGL's business.	
The key issues for energy regulators include: reliability; affordability of energy supply; efficient investment in utility infrastructure; and compliance against consumer protections and other parts of the regulatory framework.	AGL engages with New South Wales, Victorian, Queensland and South Australian energy regulatory bodies and national bodies such as the Australian Energy Regulator, Australian Energy Market Operator and the Australian Energy Market Commission, including direct engagement and activities undertaken as part of industry associations.
Investment Partners, Joint Ventures and Suppliers AGL has a range of investments in upstream electricity generation and gas production.	
AGL has business relationships with investment partners and suppliers.	The mechanisms for engagement with investment partners, joint ventures and suppliers vary, but can include meetings and correspondence, as well as more formal arrangements such as representation on the ActewAGL Board.

Introduction

Our Stakeholders And What They Said	How We Engaged
Energy Industry AGL plays an active role in leading industry support for renewable and greenhouse initiatives within the Australian energy industry.	
The business impacts of energy policy are a primary concern for the Australian energy industry.	During FY2013, AGL participated in the Business Council of Australia, the Private Generators Group, the Australian Financial Markets Association, the Energy Retailers Association of Australia and the Clean Energy Council. AGL is also a member of the Energy Supply Association of Australia (esaa) and is a signatory to the esaa Sustainable Practice Framework.
	AGL's CEO, Michael Fraser, is the current chair of the Clean Energy Council. AGL also has representation on the Board of the Energy Retailers Association of Australia.
Customers To maintain and improve market share within Australia's highly competitive energy market, it is essential that AGL responds to customer feedback and constantly seeks to improve the level of customer service provided. AGL endeavours to work collaboratively with governments and the community sector to support customers who are experiencing difficulty accessing and affording essential services such as energy.	
Customers are concerned with the cost of energy; improving energy efficiency in their homes and businesses; the quality of AGL's customer service; billing (for example, timeliness or accuracy); and the impact, perceived or real, of government policy, such as the carbon tax.	The AGL Customer Council meets on a quarterly basis and is briefed on a wide range of matters that affect AGL customers and the communities in which AGL operates.
	In November 2009, AGL launched the Customer Connections program which provides opportunities for AGL to interact with small groups of customers in an open discussion about their experiences with AGL. In FY2013, AGL held three customer face to face sessions. The main objective of the Customer Face 2 Face Events is to 'humanise' the customer through providing an opportunity for employees from all areas and levels of the business to listen to customers, face to face, in a non-transactional environment (usually over dinner) about their experience and expectations.
	The AGL Customer Charter outlines AGL's commitment and timeframes for responding promptly to phone and written enquiries. AGL's Customer Advocacy team also deals directly with customer concerns.
	The account management of AGL's major commercial and industrial customers is approached on a customer-preferred basis; however mechanisms include face-to-face meetings, executive engagement, dedicated communications, general correspondence and carbon briefings.
	Other feedback mechanisms available to customers include an online information request facility and social media such as Twitter and Facebook.
Local Communities The success of AGL is shaped and measured not only by financial outcomes, but also by the social and environmental impact that actions have on the wider community. Effective engagement with the community on development projects is vital to AGL's long-term success. Only by engaging the community at every stage of the development process, with transparency, accountability and regular communication, is AGL able to deliver and operate projects with the respect and support of the community.	
The key issues for local communities include the environmental, social and economic impacts of developments and infrastructure.	As part of the development approval and construction processes for each major project, AGL consults with the local community and obtains feedback.
	Community Consultation Committees (CCCs) are in place for a number of upstream gas projects, including the Camden Gas Project, the Hunter Gas Project, the Gloucester Gas Project and the Newcastle Gas Storage Facility. Each CCC is chaired by an independent chairperson and includes local council appointed representatives, local residents, local environment groups and AGL representatives. The CCCs form a key forum for community involvement.
	AGL has opened information centres in two areas with significant operations. In South Australia, the Burra Information Centre is located near to the Hallett wind farms. In New South Wales, the Hunter Customer Service and Information Centre provide information on coal seam gas operations in the area. The information centres are a focal point for local community engagement concerning the construction and operation of infrastructure.
	AGL's website provides detailed information on individual energy projects. Refer to the 'How we source energy' page on the AGL website for further information. (agl.com.au/about-agl/how-we-source-energy)
	AGL is increasingly using social media to communicate and engage with the community. The AGL Blog is a forum for AGL to provide timely and accessible information to interested stakeholders on a broad range of issues, such as: AGL's customer focused initiatives, key external presentations by employees, AGL's economic working papers and rapidly evolving energy policies. The AGL Blog is updated frequently, with around 84 blog posts by AGL contributors in FY2013. The blog was visited by 8,064 unique visitors in FY2013.
Non-Government Organisations (NGOs) AGL engages with NGOs to understand the causes which they represent and to find constructive ways to work together to deliver mutually beneficial outcomes.	
NGOs represent a range of community interests, including social welfare and environmental conservation.	The AGL Climate Change Council includes representatives from AGL and NGOs such as WWF-Australia, Australian Conservation Foundation and The Climate Institute. The Climate Change Council meets quarterly to enable discussion and constructive dialogue on a range of issues relating to climate change, including government policy, emission reduction targets and program implementation.
	AGL is a member of The Climate Institute Climate Partners Network. As a Climate Partner, AGL is a constituent of a collective of leading businesses working together to promote climate change solutions and transition Australia to a low-carbon, clean energy economy.
	The AGL Customer Council includes representatives from the following NGOs and community groups: Consumer Action Law Centre, Farmers Federation of South Australia, Kildonan UnitingCare, Public Interest Advocacy Centre, Queensland Council of Social Services, St Vincent de Paul Society and UnitingCare Wesley Adelaide.

Economic

Introduction

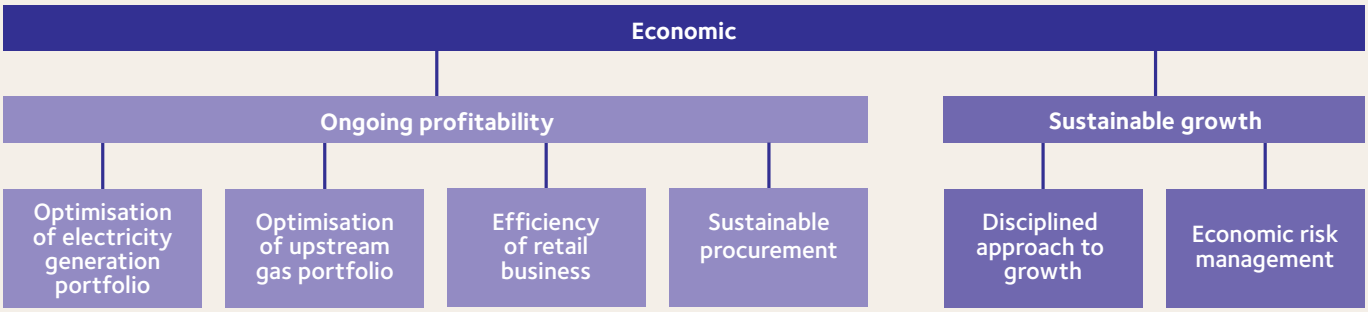
AGL's goal is to enhance the quality of earnings and deliver a satisfactory return for AGL shareholders through sound risk management, diversification of earning streams and continued adherence to disciplined investment processes.

AGL operates in the Australian energy sector – a sector which is currently undergoing unprecedented transformational reform. The operating environment also continues to be impacted by the high cost of capital post the global financial crisis.

The two key focus areas for the Economic chapter of this report are ongoing profitability and sustainable growth.

Ongoing profitability: In a capital constrained environment, shareholder returns as measured by underlying profit[1] are increasingly important. Continued focus on the integrated business strategy and optimising returns from each business unit will position AGL to deliver growth in coming years.

Sustainable growth: A disciplined approach to growth is critical to improving shareholder returns and maintaining sustainable growth.



Performance summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Ongoing profitability				
Industry leading earnings profile based on sustainable business practices.	Underlying profit[1]: **$590–640 million**	Underlying profit[1]: **$598.3 million**	✓	Underlying profit[1]: **$560–610 million**
Sustainable growth				
Solid returns from AGL's existing and new business activities.	Improvement in return on funds employed.	Adjusted EBIT: Funds Employed: **12.9%**[2]	✓	Credit rating: **BBB**

Notes

1 Underlying profit reflects the actual performance of AGL's business by adjusting statutory profit (reported in accordance with Australian Accounting Standards) by fair value movements and one-off significant items.

2 This represents an increase of 1.3 percentage points from FY2012 (11.6%).

Economic

Ongoing profitability

Introduction to ongoing profitability

In an environment impacted by the high cost of capital, shareholder returns as measured by underlying profit are increasingly important. Continued focus on its integrated business strategy will position AGL to deliver growth in coming years.

Approach

AGL retails gas and electricity to residential, small business, commercial and industrial customers. The cost of supply fluctuates with movements in energy prices. AGL's integrated business strategy balances risk between upstream supply of energy and customer demand for energy.

Vertical integration provides AGL with a natural hedge against energy price movements, while providing access to multiple profit pools. Horizontal integration through operating across the National Electricity Market provides further diversification of earnings streams. Benefits flow through to customers in the form of competitive energy costs and to shareholders in the form of dividends resulting from diversified sources of income and improved quality of earnings. This approach is known as the AGL integrated business strategy.

Vision for ongoing profitability: AGL's vision is to have an industry leading earnings profile based on sustainable business practices.

Drivers: Delivery of AGL's integrated business strategy has a direct influence on the underlying profit result and on other financial performance indicators. Optimisation of performance in the three business areas of electricity generation (Merchant Energy), Upstream Gas and Retail Energy is addressed on pages 18 to 21. AGL's centralised, company-wide procurement function which was introduced in 2012 will also promote efficiency and generate financial value for the organisation (page 22).

Performance

AGL delivered an underlying profit of $598.3 million for FY2013, representing an increase of 24% compared to the prior corresponding period. This profit level is in line with the guidance issued to the market in October 2012. The strong underlying profit was largely driven by performance of the Merchant Energy business unit, which saw an improvement in EBIT of 58% on the prior year.

On 23 October 2013, AGL announced a guidance range of $560-610 million for FY2014.

AGL shareholders were paid dividends totalling 63 cents per share for the full financial year FY2013, an increase of two cents per share on the FY2012 dividend. The Dividend Reinvestment Plan (DRP) take-up was 34% which highlights shareholders' commitment to the company's growth plans.

Underlying profit

Economic

Ongoing profitability

Optimisation of electricity generation portfolio

AGL has Australia's largest privately owned, operated and controlled portfolio of renewable generation assets and a pipeline of renewable development opportunities. AGL's integrated business strategy is consistent with a carbon constrained future and is substantially focused on renewable generation investment. This investment is largely driven, to date, by opportunities created by Australia's 20% Renewable Energy Target (RET) legislation.

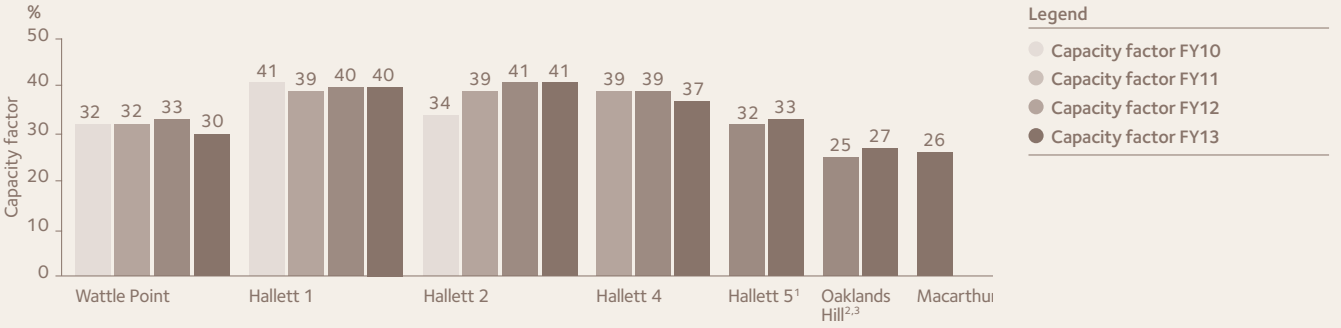
Approach

Over the next decade, it is estimated that the industry will need to spend approximately $30 billion on new renewable generation assets in order to meet targets under the Commonwealth Renewable Energy Target. Based on current customer numbers, AGL would need to invest approximately $5.1 billion if it were to meet its share of the mandated scheme.

For all renewable generation assets, revenue is partly dependent on the value of Large-scale Generation Certificates and partly on the wholesale National Electricity Market price. Higher returns are possible where individual investor costs are lower than the costs associated with the marginal project required to meet the Renewable Energy Target. Through early site selection, AGL has sourced some of the best sites for wind development in the country, allowing for potentially greater returns over the long term.

The policy uncertainty regarding the Renewable Energy Target scheme (due to the legislation including an ongoing two-yearly statutory review) has meant it is unclear what return would be achievable on future renewable projects. It is for this reason that AGL decided to defer future wind farm developments until there is greater policy certainty.

Wind farm generation



Notes

1 Hallett 5 Wind Farm achieved practical completion on 28 February 2012.
2 Oaklands Hill Wind Farm achieved practical completion on 23 March 2012.
3 Oaklands Hill Wind Farm capacity affected by overnight shutdown of nine turbines.
4 Macarthur Wind Farm achieved practical completion on 31 January 2013.

Economic

Ongoing profitability

Performance

The current and future earning potential of AGL's electricity generation portfolio is influenced by many factors, including the operational efficiency of the assets and their availability and ability to start reliably when electricity prices are high.

During FY2013, the operational performance of gas fired and hydro generation assets has been extremely strong. Dartmouth is currently available for 170 MW (95%) and Eilden is available for 110 MW (92%).

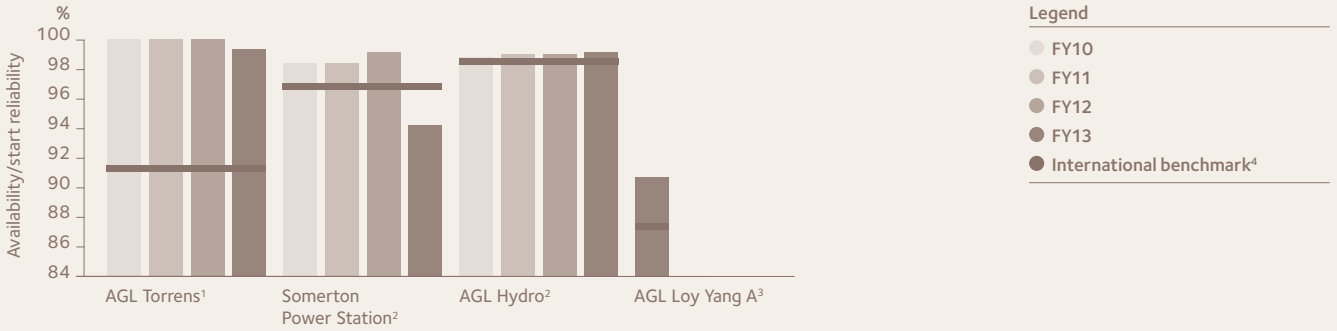
Commercial availability and start reliability of generation assets show strong performance well above international benchmarks, as highlighted in the chart below.

During FY2013, AGL completed the construction of the Macarthur Wind Farm (420 MW). At 30 June 2013, AGL's total renewable generation capacity was 1,740 MW.

The successful integration of AGL Loy Yang during FY2013 significantly increases AGL's generating capacity and output providing more scope to optimise the portfolio.

Construction of the Diamantina (242 MW CCGT) and Leichhardt (60 MW OCGT) gas fired power stations in Mount Isa is underway and is expected to be completed during the first half of FY2014.

Commercial availability/start reliability



Notes

1 Commercial availability is used to measure AGL Torrens performance and represents the percentage of times the plant is available to operate when required.
2 Start reliability is used to measure the performance of Somerton and AGL Hydro. Start reliability is the percentage of times the plant started successfully when asked to start.
3 'Available capacity factor' is used to measure Loy Yang A performance and represents the percentage of time the plant is available to operate.
4 North American Electric Reliability Council Five Year Average. Note that the benchmark for AGL Hydro facilities has been adjusted for the difference in operating regime between the North American fleet and AGL's fleet which operate as peaking plant which increases the frequency of starts and stops.

Economic

Ongoing profitability

Optimisation of upstream gas portfolio

AGL has two strategic objectives focused on managing security of supply for gas customers:

> Gas production at 40-50% of customer demand supported by a 2P gas reserves ratio of 20 times annual production.

> Gas storage to meet 25% of peak day demand.

Approach

AGL's Merchant Energy business unit continues to be a significant purchaser of gas production and gas storage services in the wholesale market. AGL's Upstream Gas group is focusing on building a more diversified domestic gas portfolio to deliver supply duration and flexibility. AGL is targeting its own equity gas production and storage for domestic supply, but will continue to purchase gas from the wholesale market if this achieves superior economic outcomes.

Performance

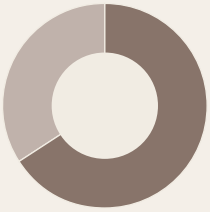
Over the past 12 months, AGL's gas reserves entitlement fell by 341 PJ (16.5%) to 1,729 PJ at the 2P level, and by 486 PJ (12.7%) to 3,326 PJ at the 3P level. This was mainly due to the impact of the proposed amendments to the New South Wales Government's State Environmental Planning Policy (SEPP) (Mining, Petroleum Production and Extractive Industries) on AGL's New South Wales gas projects.

Despite the obstacles in New South Wales, AGL intends to continue its focus on confirming existing gas reserves, adding additional reserves and progressing its gas exploration and development opportunities where it is viable to do so. The potential value creation is substantial, although the contribution to earnings will be limited until the reserves are developed and ready for production and delivery to market from 2017.

It is anticipated that with its equity gas investments and future extensions to some of its existing wholesale contracts, AGL will be able to satisfy supply requirements for its customers well beyond 2017. However, if development of all AGL's New South Wales gas fields is blocked by government policies, this target may not be achievable.

The 1.5 PJ Newcastle Gas Storage Facility has commenced construction and is expected to be completed by mid 2015.

Current gas portfolio



Legend	
Contract	66%
Equity gas	34%
Gas portfolio[1]	2,558 PJ

Future gas portfolio

Legend	
Contract	50%
Equity gas	50%

Note

1 Consistent with new ASX Listing Rules reporting requirements, gas reserves are now reported net of 'lease fuel', i.e. net of estimated own use fuel consumption upstream of the point of sale.

Economic

Ongoing profitability

Efficiency of retail business

Optimisation of AGL's operating model to deliver a 'lowest-cost-to-serve' outcome is crucial, given that retail energy markets in which AGL competes are among the most competitive in the world.

Approach

AGL is focusing on the management and growth of margins, by leveraging its upstream strategy and achieving retail economies of scale through a service platform capable of supporting four to five million customers.

In July 2013, AGL announced a recommended takeover offer for Australian Power and Gas Company Limited (APG). The transaction was completed in October 2013, and has increased AGL's total customers by approximately 10%, effectively achieving the goal of having 800,000 electricity customers in New South Wales.

Performance

During FY2013, total customer accounts increased by 43,459 (1.3%) to just over 3.5 million. Duel fuel customer numbers increased by 52,890 to almost 1.7 million.

High levels of retail competitor activity persisted throughout FY2013. AGL's average national customer churn for FY2013 was 18.4%, compared to an average market churn of 24%.

There was a modest improvement in gross margin per customer, with a 3.3% increase to $200.47. The operating expenditure to gross margin ratio was in line with the prior year at 49.3%. Consumer net bad debt has fallen below 1% of revenue.

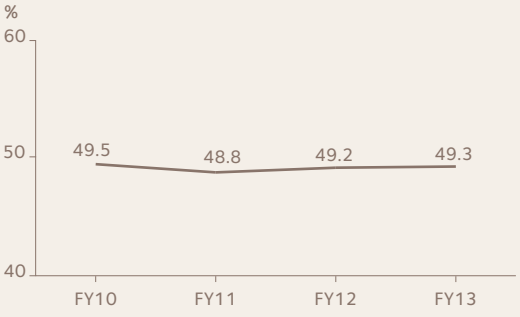
The cost of serving each customer account has decreased by 1.6% compared to FY2012 to $62.34[1]. The cost to acquire or retain per account acquired or retained reduced by 13.5% compared to FY2012 to $71.75[2].

Further information and key data in relation to AGL's performance is included in the Customers chapter of this report.

Notes

1 Cost to serve per customer account = net operating costs less cost to grow divided by average customer accounts.
2 Cost to acquire/retain = cost to win and retain market contracts and transfer customers to AGL divided by contracts acquired plus contracts retained.

Net OPEX to gross margin ratio



Retail markets by state and fuel type

State	Gas	Electricity	Total
NSW	683,330	717,089	1,400,419
Vic.	482,218	610,728	1,092,946
SA	129,192	443,901	573,093
Qld	76,919	374,048	450,967
Total accounts (Net) 30 June 2013	**1,371,659**	**2,145,766**	**3,517,425**
Percentage change from 30 June 2012	-1.3%	3.0%	1.3%

Economic

Ongoing profitability

Sustainable procurement

AGL recognises that embedding sustainability considerations as part of the organisation's procurement processes and strategy is a long-term commitment which will require significant changes to the traditional sourcing approach.

Approach

Prior to the start of CY2012, purchasing at AGL was managed independently by various parts of the organisation. A centralised, company-wide procurement function was introduced in 2012 to ensure consistency in AGL's approach to sourcing, realise synergies, promote efficiency and generate financial value for the organisation.

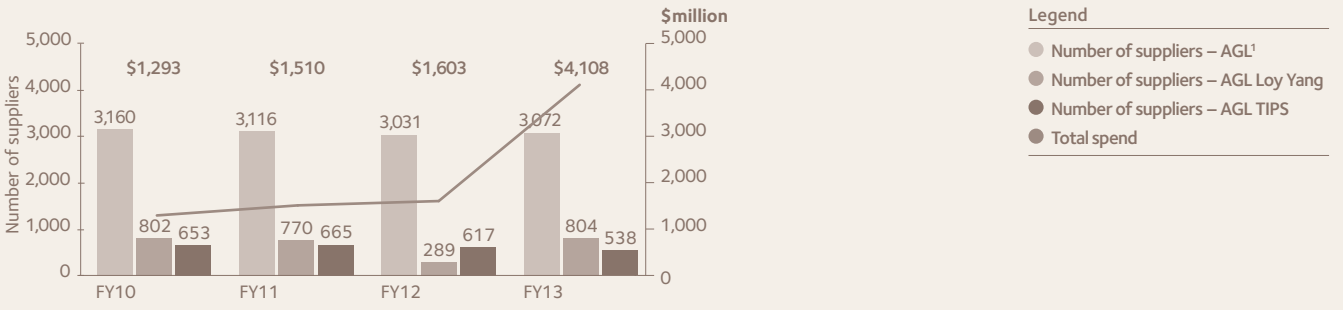
The role of Sustainable Supply Chain Manager was created within AGL's Procurement team in March 2013, with the role's main objective being to ensure sustainability values are an integral part of procurement processes and activities and are aligned with the company's overall sustainability principles and targets.

Performance

AGL's supply chain comprises over 4,000 suppliers worldwide, with a total annual spend of $4,108 million in FY2013.

Further information regarding AGL's approach to sustainable procurement is available in the case study at agl.com.au/sustainability.

Supplier profile



Note

1 Excluding AGL Loy Yang and AGL TIPS.

Economic

Sustainable growth

Introduction to sustainable growth

A continued focus on capital management has enabled AGL to maintain a strong balance sheet.

Approach

The retention of AGL's BBB credit rating along with improved capital efficiency substantially enhances AGL's ability to fund future growth and also provides more favourable borrowing margins and access to different funding markets, domestically and overseas.

Vision for sustainable growth: AGL's vision is to ensure solid returns from AGL's existing and new business activities.

Drivers: Applying a disciplined approach to growth (page 24) and an appropriate economic risk management framework (page 25) are crucial strategies in maintaining a BBB credit rating in the long term.

Performance

Standard & Poor's (S&P) reduced the equity credit content of AGL's Hybrid Notes in April 2013; however this did not have an impact on AGL's long-term credit rating which was reaffirmed at BBB/stable on 21 June 2013.

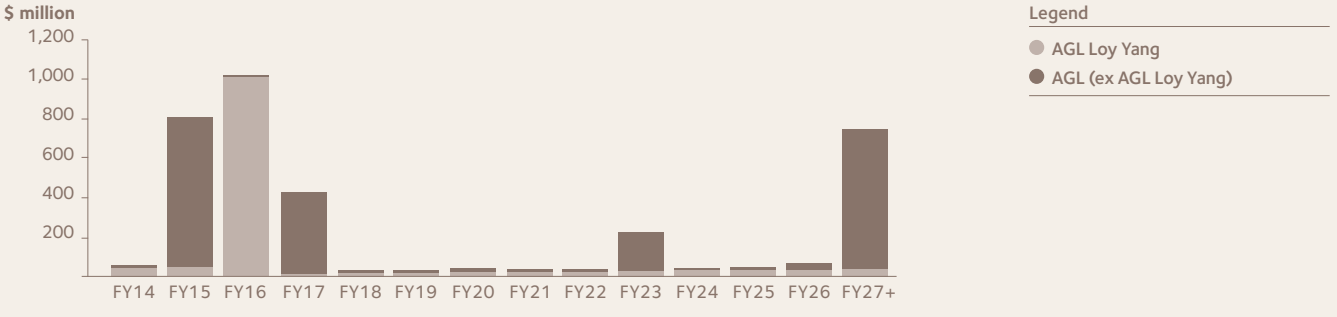
At the start of FY2013, AGL prepaid $1.3 billion of AGL Loy Yang project debt and spent a further $120 million on the purchase of Loy Yang CPI Bonds during H2 FY2013.

In December 2012, AGL entered into a $150 million revolving bilateral loan facility, which as at the end of FY2013 was undrawn. The Danish export credit agency financing, reported in previous years' sustainability reports, is now fully utilised and the amortisation of this funding will commence towards the end of H1 FY2014.

The next refinancing AGL will need to complete is the $600 million Syndicate Term debt that is due to mature at the end of July 2014. This is expected to be refinanced in H2 FY2014.

AGL accesses different capital markets to extend its debt maturity profile and diversify its sources of funding. As at the end of June 2013, the company had outstanding drawn debt of $3.1 billion. The debt maturity profile for the Group's facilities is illustrated below.

Debt maturity



Economic

Sustainable growth

Disciplined approach to growth

A disciplined approach to growth is critical to improving shareholder returns and maintaining sustainable growth.

Approach

AGL's rigorous investment processes, appropriate hurdle rates of return and focus on return on assets (Adjusted EBIT to Funds Employed) will contribute to maintaining a BBB long-term credit rating.

Performance

Adjusted EBIT to Funds Employed

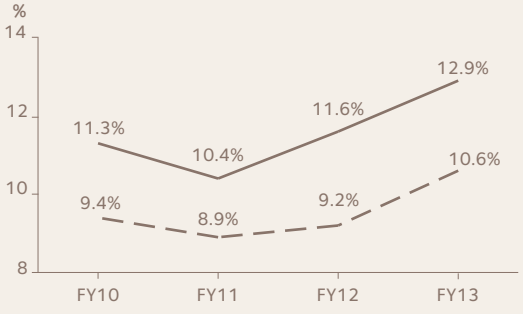
Adjusted EBIT to Funds Employed measures return on investment and the efficiency of AGL's assets. This metric is used to calculate Long-term Incentive Plan entitlements for the AGL executive team and nominated senior leaders to ensure a close alignment with shareholders' interests.

Adjusted EBIT to Funds Employed increased in FY2013 by 1.3 percentage points to 12.9%, due to higher operating EBIT.

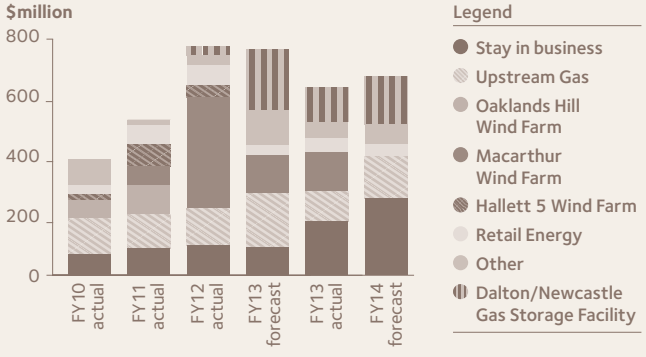
Capital expenditure

AGL has indicative capital commitments for FY2014 of almost $700 million. AGL maintains flexibility to accelerate or defer capital expenditure on its projects depending on market conditions.

EBIT to Funds Employed and Adjusted EBIT to Funds Employed



Capital projects expenditure



Economic

Sustainable growth

Economic risk management

AGL effectively manages economic risks by integrating risk assessment into decision-making and management processes.

Wholesale energy risks – approach and performance

A number of commercial optimisation activities are utilised in AGL's electricity, gas and environmental products portfolio management division, including:

> reducing wholesale electricity costs through optimising load diversity between customer classes and regions

> optimising across the gas and electricity portfolios with arbitrage opportunities provided by gas generation assets

> accelerating or decelerating hedging programs based on AGL's view of future market prices

> employing a variety of instruments including weather derivatives to balance risk and return.

All of these commercial activities have independent risk management oversight to maintain portfolio positions within defined limits. Risk management performance is monitored through a continuous review of hedging contracts, the physical portfolio position and the possible economic outcomes from these positions. A Risk Management Committee of senior business managers meets regularly to review these performance measures.

During FY2013, portfolio projected positions and portfolio projected economic risk measures remained within the required limits of the Wholesale Energy Risk Management Policy. The acquisition of Loy Yang has further assisted in managing wholesale energy risk by reducing the net short position within AGL's electricity portfolio.

Price regulation risks – approach and performance

A key issue in the retail energy industry is the continued regulation of household and small business electricity and gas prices by some state governments. During FY2013, there was significant progress toward deregulation when the South Australian government removed price controls on retail electricity and gas prices from 1 February 2013, and the Queensland government announced its intention to remove electricity price regulation in south-east Queensland by 1 July 2015. With Victoria being the first state in Australia to remove price control on retail electricity prices in FY2009, New South Wales and the Australian Capital Territory remain the only jurisdictions in the National Electricity Market (NEM) which continue to regulate electricity prices. In relation to gas, New South Wales is the only jurisdiction continuing to regulate retail prices at the end of FY2013 in eastern Australia.

During the year, the AEMC commenced a review of competition in the retail electricity and gas markets in New South Wales. In October 2013, the AEMC released its Final Report. The AEMC has found that there is effective competition in the retail electricity and natural gas markets in New South Wales and has recommended the removal of price regulation.

With the introduction of the carbon price from 1 July 2012, retail electricity and gas prices were adjusted for FY2013 reflecting retailer's increased costs under the *Clean Energy Act 2011* (Cth). With retail gas prices, the carbon costs reflected greenhouse gases arising mainly from upstream production and downstream combustion by customers.

AGL actively participates in price review processes in the various jurisdictions in the National Electricity Market. During FY2013, there were major price reviews in New South Wales and Queensland. In New South Wales, price paths for retail electricity from July 2013 to June 2016 were determined by IPART with wholesale energy costs to be reviewed annually. Voluntary Pricing Arrangements for regulated retail gas prices in New South Wales from July 2013 to June 2016 were entered into with IPART but given the arbitration and contract negotiations in progress with wholesale gas suppliers on gas costs beyond FY2014, only retail prices for FY2014 were set, with a further review to be held in FY2014 to determine the price paths for FY2015 and FY2016. In Queensland, the QCA maintained a market based methodology to determine wholesale energy costs for FY2014. In South Australia, AGL undertook to decrease regulated electricity prices from 1 January 2013 in conjunction with retail price deregulation. Regulated prices for customers as at 31 January 2013 were fixed for two years other than for changes in network charges and renewable and energy efficiency scheme costs.

Treasury risks – approach and performance

AGL's activities expose it to a variety of financial risks. These risks include market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk. AGL's overall risk management program focuses on the unpredictability of markets and seeks to manage the impact of these risks on AGL's financial performance, by utilising a range of derivative financial instruments to hedge risk exposures.

During FY2013, hedging thresholds for interest rate, foreign exchange and credit risk were consistent with the Treasury Policy except where approved by the Board. AGL's stated policy is to further diversify its funding sources and lengthen the maturity profile. AGL maintained the appropriate liquidity buffer in accordance with Board approved levels throughout the year.

AGL has a BBB/stable credit rating assigned by Standard & Poor's. AGL manages its balance sheet, financial ratios and risks with the objective of retaining this rating.

Economic

Financial performance summary

Financial performance summary

Detailed financial information is available in AGL's 2013 Annual Report, which is available at www.agl.com.au

Financial performance summary

	FY10	FY11	FY12	FY13
Revenue	6.6b	7.1b	7.5bn	9.7bn
Operating earnings before interest and tax[1]	652.1m	656.5m	730.4m	1,049.3m
Net finance costs	47.5m	37.4m	51.2m	205.5m
Underlying net profit after tax[1]	428.9m	431.1m	482.0m	598.3m
Underlying basic earnings per share	92.5 cps	91.4 cps	100.0 cps[4]	108.8 cps
Total annual dividend[2]	59 cps	60 cps	61 cps	63 cps
Total assets[3]	8.7b	9.7b	14.7b	13.4b
Shareholders' equity	5.8b	6.3b	7.1b	7.3b
Underlying operating cash flow (before interest and tax)	674.1m	715.3m	750.7m	1,232.0m
Total capital expenditure	389.7m	522.6m	767.7m	631.1m
Gearing net debt/(net debt + equity)	6.7%	6.9%	26.1%	27.8%
EBIT to average funds employed return	9.4%	8.9%	9.2%	10.6%
EBIT to average funds employed adjusted return	11.3%	10.4%	11.6%	12.9%

Notes

1 Excluding significant items and fair value movements of financial instruments.
2 Dividends in FY2009, the interim dividend for FY2010 and the final dividend in FY2011 were fully franked. The final dividend for FY2010 and the interim dividend in FY2011 were unfranked. FY2012 and FY2013 dividends were fully franked.
3 Includes derivative financial instrument contracts at fair value.
4 The comparative earnings per share for 2009, 2010 and 2011 have been restated for the bonus element of the one-for-six share rights issue completed in June 2012.

Distribution of revenue

	FY10	FY11	FY12	FY13
Revenue	6,610.7m	7072.5m	7455.6m	9715.7m
Other income[1]	6.4m	0	2.9m	0
Total revenue	6,617.1m	7072.5m	7458.5m	9715.7m
Cost of goods, services, materials and other external costs	–5,895.6m	–5,911.7m	–6333.4m	–8503.6m
Wages, salaries and benefits to employees	–318.1m	–330.6m	–356.4m	–489.7m
Dividends to shareholders	–255.9m	–268.4m	–278.2m	–340.2m
Net interest paid on borrowings	–35.8m	–25.5m	–38.5m	–203.2m
Income tax (expense)/income	–21.5m	–234.9m	–48.0m	–75.3m
Movement in retained earnings	90.2m	301.4m	–310.4m	103.7m

Note

1 Includes profit on sale of non-core assets.

Customers

Introduction

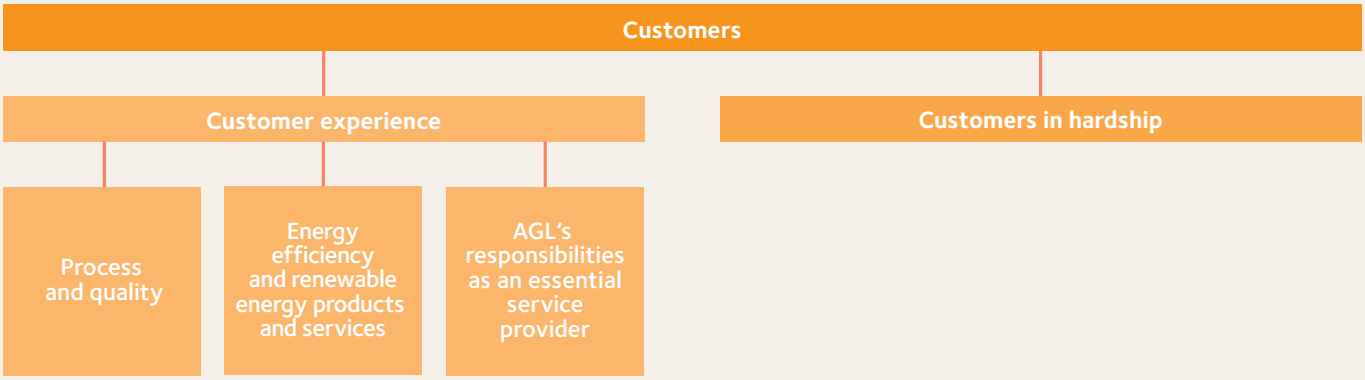
AGL's goal is to be a world-class customer-focused energy company.

AGL operates in a highly competitive environment and it is imperative that value is provided to customers through exceptional customer service and innovation. Providing an experience that meets the needs of customers is necessary in order to drive long-term growth and shareholder value.

The two key focus areas for the Customer chapter of this report are customer experience and customers in hardship.

Customer experience: There are a range of contributing factors that affect customer experience. This section of the report outlines how AGL measures customer experience and provides performance data on some critical aspects of service delivery over the past 12 months (page 29). This chapter also addresses energy efficiency services and small-scale renewable energy products that AGL offers (page 32) and the way in which AGL manages its responsibilities as an essential service provider (page 33). Large-scale renewable investment is addressed in the Sustainable energy chapter.

Customers in hardship: AGL aims to provide all customers with an exceptional customer experience. However, for reporting purposes within this chapter, 'customers in hardship' are treated as a separate area of focus. AGL recognises the importance of assisting vulnerable customers to manage energy consumption and bill payment. AGL addresses this issue from a number of perspectives including information provision, community support and direct assistance through the *Staying Connected* program.



Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Customer experience				
Top ranking energy company for customer satisfaction.	To have a higher annual mean customer satisfaction score than our competitors.	Customer satisfaction score: AGL's score was higher than that of our major competitors, at: **6.92**[1]	✓	To have a higher annual mean customer satisfaction score than our competitors.
Customers in hardship				
Recognised industry leader in customer hardship policy.	5% reduction in the ratio of average energy debt of *Staying Connected* customers to average NEM household electricity bill.	Reduction in ratio of energy debt of *Staying Connected* customers to average AGL household energy bill, adjusted for movements in the electricity price index[2]: **10%**	✓	5% reduction in the ratio of average energy debt of *Staying Connected* customers to average NEM household electricity bill.

Notes

1 As determined by a quarterly survey prepared by an independent third party provider.

2 The National Electricity Market (NEM) average household electricity bill has been adjusted for electricity price inflation, as measured by the Consumer Price Index, Australia, June 2013.

Customers

Customer experience

Introduction to customer experience

AGL measures customer satisfaction to monitor whether initiatives are successful in improving the customer experience.

Approach

The AGL Customer Charter (the Charter) outlines for both customers and employees what customers can expect from AGL. The Charter contains a set of customer promises and defines the standards to which AGL can be held to account.

The Charter is available on the AGL website at agl.com.au/about-agl/what-we-stand-for/our-commitments/customer-charter-and-results

Within the Charter there are four key promises:

> *We will deliver quality service*
> *We will provide value for money*
> *We will understand our customers' needs and deliver to them*
> *We will be there with the answers for our customers.*

AGL uses a range of measures to assess whether the Charter promises are being met, including 'after call' surveys and speaking directly with customers. From the information acquired, root-cause analysis is undertaken to understand the drivers of customer dissatisfaction, as well as where processes can be modified to improve the customer experience.

Vision for customer experience: AGL's vision is to be the top ranking energy company for customer satisfaction, by delivering on a range of initiatives and continuous improvement programs throughout the Retail Energy business.

Drivers: This section of the report includes information on how AGL monitors customer experience and satisfaction (page 29), the types of energy efficiency and renewable energy products and services offered to customers (page 32), and the ways in which AGL addresses its responsibilities as an essential service provider (page 33).

Performance

AGL measures customer satisfaction each quarter to gauge whether customers are being provided with the standard of service committed to in the Charter and whether initiatives to improve customer service have been successful.

During FY2013, AGL's customer satisfaction score averaged 6.92 (up from 6.68 in FY2012), with a score of 7.02 in the fourth quarter of FY2013 (up from 6.88 in the corresponding quarter of FY2012). This is the highest average customer satisfaction score that AGL has received since monitoring of overall satisfaction levels commenced four years ago.

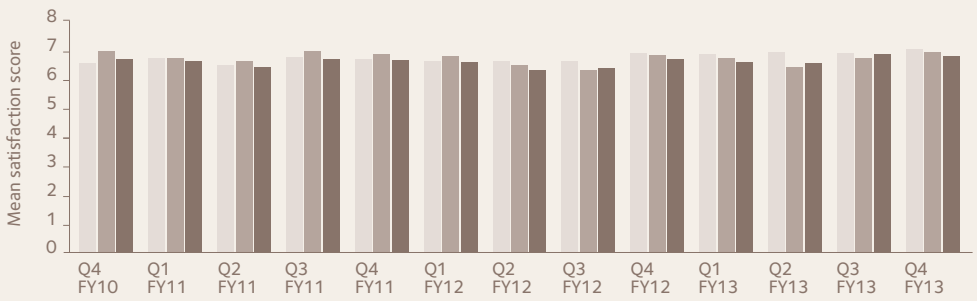
The customer satisfaction score results reflect responses to the question of how satisfied customers are with the service provided by their energy supplier on a scale of 0 to 10 (where 0 is not satisfied, 5 is neutral and 10 is extremely satisfied).

Positive service experiences are the key reason for customer satisfaction with AGL, with customer dissatisfaction being largely driven by the cost of energy.

Throughout FY2013, AGL implemented a number of programs and initiatives designed to improve customer experience:

> **Exited door-knocking:** AGL's research shows that the majority of customers (including non-AGL customers) dislike the practice of door-to-door sales. AGL has therefore ceased this practice in the residential market.
> **Launched My AGL IQ:** AGL purpose built My AGL IQ, a website that gives customers the ability to track their energy usage, set goals to help lower their energy bills and save on their energy usage.
> **Introduced monthly billing:** monthly billing has been introduced to provide residential and small business customers with more flexibility in terms of payment. Customers are able to nominate a preferred day of the month to receive their bills (with their usage calculated on a self-read if their property does not have a smart meter installed), enabling them to co-ordinate their bills with their income cycle.
> **Expanded social media presence:** to encourage customers to share information and answer each other's questions, AGL Crowd Assist was launched on Facebook, providing a forum for customers to talk to each other. YouTube clips on topics such as bill smoothing and affordability were also launched, leveraging AGL's social media presence to engage customers further.

Customer satisfaction score



Note

1 Denotes main brand (inclusive of New South Wales acquisitions).

Customers

Customer experience

Process and quality

AGL measures success in customer experience using a range of performance indicators and by participating in external benchmarking programs.

Customer Charter Metrics

AGL's Customer Charter Metrics were established to enable AGL to measure the customer experience. A number of the Customer Charter Metrics are supported by 'service level commitments' which are published periodically on the AGL website, enabling both AGL and stakeholders to measure and track achievement of Customer Charter promises.

We will respond to you

AGL's FY2013 target for customer service centres was for 75% of calls to be answered by customer service representatives within 30 seconds during normal business hours. AGL was unable to meet this target overall for FY2013, with the performance levels achieved each quarter being 57.96%, 77.31%, 75.71% and 85.26%. Call volumes were higher than usual in the first quarter of FY2013, directly correlating with the introduction of the carbon price and the One Big Switch campaign.

We will always try to resolve your enquiry first time

AGL aims to have customer service representatives resolve a customer's enquiry on the first call. For FY2013, the percentage of enquiries resolved during the first call was 81.18% (FY2013 average). The average score in FY2012 was 81.32%.

We can help you move

AGL aims to help a customer move premises by raising the customer's move request with the energy distributor within 24 hours of application. Energy regulations in some jurisdictions stipulate the timeframe within which the retailer must raise a customer's request for connection with the relevant distributor, ranging from the next business day (Victoria) and within two hours (New South Wales electricity).

In FY2013, AGL set a target to raise 95% of move requests within 24 hours. This level of service was consistently met.

We will connect your energy supply

AGL promises to work with a customer's distributor in order to determine the availability of supply. On average, new connections take up to 15 days depending on access and availability of supply.

In FY2013, the average number of business days taken to connect energy supply was 13.67.

We will bill you on time

In FY2013, AGL billed 99.68% of its residential and small business customers on time – which effectively means that customers were billed every three months (and every two months for gas customers in Victoria). AGL has therefore exceeded its target of billing 99% of customers on time.

We will help those having difficulty paying

AGL recognises that bill smoothing can assist customers to manage their energy costs better. As at the end of FY2013, more than 150,000 customers were on the bill smoothing program, up from more than 120,000 customers as at the end of FY2012.

Customer Charter commitments

Customer Charter	Our promise	FY2012: Average	FY2012: Year end	FY2013: Average	FY2013: Year end
We will respond to you	We will answer your calls promptly during normal business hours.	75.99% of calls answered within 30 seconds.	78.40% of calls answered within 30 seconds.	74.06% of calls answered within 30 seconds.	85.26% of calls answered within 30 seconds.
	We will always try to resolve your enquiry first time.	81.32% of calls resolved during first call.	82.00% of calls resolved during first call.	81.18% of calls resolved during first call.	81% of calls resolved during first call.
We can help you move	Let us know at least three business days before you move and we can arrange supply of energy to the property to which you are moving.	95.93% customers connected with energy when three business days notice of move provided.	95.86% customers connected with energy when three business days notice of move provided.	95.94% customers connected with energy when three business days notice of move provided.	96.32% customers connected with energy when three business days notice of move provided.
We will connect your energy supply	On average, new connections take 15 business days subject to access and availability of supply.	Average new connection took 12 business days[1].	Average new connection took 12 business days[1].	Average new connection took 13.67 business days[1].	Average new connection took 13.82 business days[1].
We will bill you on time	If you're a residential or small business customer, we will send a bill at least every three months (every two months for Victoria gas).	Bills issued to 99.75% of customers on time.	Bills issued to 99.82% of customers on time.	Bills issued to 99.61% of customers on time.	Bills issued to 99.74% of customers on time.
We will help those having difficulty paying	If you're a residential customer you also have the option of bill smoothing.	108,314 customers on bill smoothing program.	120,216 customers on bill smoothing program.	143,397 customers on bill smoothing program.	152,003 customers on bill smoothing program.

Note

1 The results exclude South Australian electricity customers, where an appointment system is used and is outside of AGL's control.

Customers

Customer experience

Ombudsman complaints

AGL has two key indicators in relation to Ombudsman complaints: total complaints per 10,000 customers; and market share of complaints as a comparison against AGL's customer share in the market. The absolute numbers of complaints are also tracked to understand movements in particular jurisdictions.

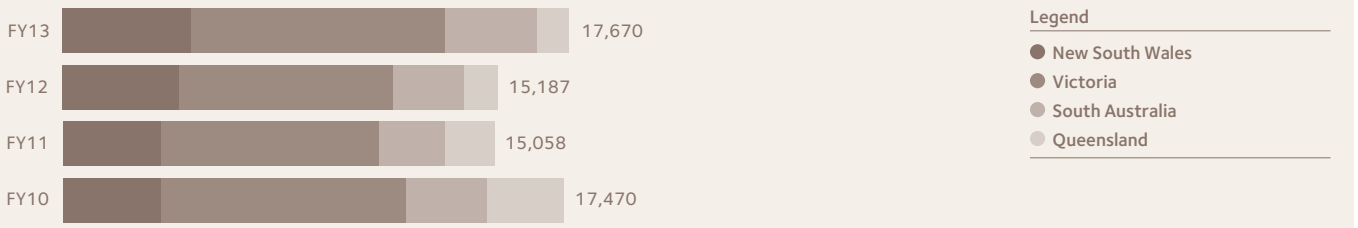
In the quarter ending 30 June 2013, AGL received 47.83 complaints per 10,000 customers, a 20.8% increase compared to the corresponding quarter of FY2012.

In regard to absolute volumes, AGL received a total of 17,670 Ombudsman complaints during FY2013. This represents an overall increase in total Ombudsman complaints of 14% compared to FY2012, with the largest changes experienced in Victoria (16% increase) and South Australia (23% increase).

Despite the increase in complaint volumes, which was experienced industry wide, AGL's national market share of Ombudsman complaints in FY2013 was 12.65% compared to 17.53% at the end of FY2012.

Ombudsman complaints provide AGL with an insight into areas of the business that require improvement. Root-cause analysis of Ombudsman complaints is undertaken and fed back into the business in order to improve processes. In FY2013, the majority of Ombudsman complaints related to high bills (particularly in response to tariff changes), disconnection for non-payment, credit default and solar energy. It is clear from complaints analysis that increasing numbers of customers are finding it difficult to pay their energy bills.

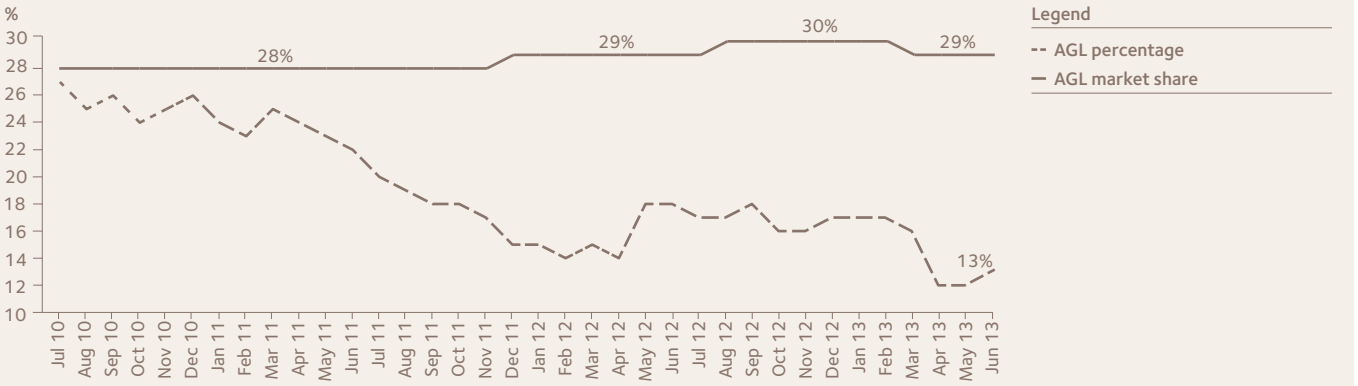
Ombudsman complaints[1,2,3]



Notes

1 Reported figures represent complaints to the various state Ombudsman Offices that are provided to AGL for resolution. Enquiries, complaints referred to other agencies or instances where the customer has been advised by the Ombudsman to contact AGL directly are not included.
2 ActewAGL complaints are excluded.
3 Data includes Ombudsman complaints related to PowerDirect.

Ombudsman complaints (percentage of market share)[1,2,3]



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2 ActewAGL complaints are excluded.
3 Data includes Ombudsman complaints related to PowerDirect.

Customers

Customer experience

Net Promoter Score

Net Promoter Score (NPS) is a widely used measure of customer loyalty and is based on how likely a customer would be to recommend AGL as an energy provider. AGL's NPS is measured quarterly via an external survey that asks customers across all energy retailers "On a scale of 0-10, how likely is it that you would recommend Retailer X to a friend or colleague?"

The NPS is calculated by subtracting the percentage of 0s to 6s from the percentage of 9s and 10s.

AGL's average NPS for FY2013 was –32.7, an increase of five points compared to the FY2012 average of –37.7. In the final quarter of FY2013, AGL's NPS peaked at –26.3, compared to a peak score of –30.5 in FY2012.

Customer Services Benchmarking Australia (CSBA)

AGL benchmarks the customer service provided in all three customer service centres via an external program. CSBA conducts mystery shopping calls to customer service centres and provides quarterly reports ranking AGL's performance against other energy and utility companies.

In the fourth quarter of FY2013, AGL was ranked third out of the energy companies surveyed, compared to fifth in the corresponding quarter of FY2012. This was the best score obtained by AGL since it commenced using this measure in FY2011. The improvement in AGL's ranking can largely be attributed to an improvement in average connection time (meaning that customers did not have long to wait before being connected with a Customer Service Representative).

Customers

Customer experience

Energy efficiency and renewable energy products and services

Helping customers better manage their energy use is a core part of AGL's retail strategy. Reducing energy consumption is of increasing importance to all customers, be they residential or business customers. AGL is committed to assisting customers to 'live smarter' by providing practical and affordable solutions to help them reduce energy use, manage their household energy budget and enhance comfort levels within the home. AGL launched the '*AGL Smarter Living*' centre and store websites in FY2012, where customers can access energy efficiency advice and purchase products online.

During FY2013, AGL extended the *AGL Smarter Living* brand to incorporate retail stores as well as appliance servicing, maintenance and repair services (see aglsmarterliving.com.au).

In an Australian first, *AGL Smarter Living* brings together energy efficiency advice, products, appliances and services online, in-home and in store. During the year, 10 *AGL Smarter Living* stores opened across South Australia, New South Wales, Victoria and Queensland, where customers are able to access face-to-face advice and purchase efficient appliances. *AGL Smarter Living* also utilises an extensive network of licensed tradespeople such as plumbers and electricians to provide installation, maintenance and repairs.

Energy efficiency

AGL met all of its regulated targets under the Victorian Energy Savings Initiative, the South Australian Residential Energy Efficiency Scheme and the New South Wales Energy Savings Scheme for the 2012 calendar year.[1]

During FY2013, AGL visited 75,176 small business and residential premises in South Australia and Victoria, installing 536,697 compact fluorescent light bulbs, 157,181 standby power control devices (power-boards and switches), 28,410 low-flow showerheads and 2,621 door seals. This equates to delivering to 837,934 tonnes of CO_2e abatement, as calculated in accordance with the energy efficiency scheme regulations.

In the 2012 calendar year, 2,802 household energy audits were conducted in low-income households in South Australia – a number in excess of AGL's regulated target of 2,519 audits pursuant to the South Australian Residential Energy Efficiency scheme.

The Energy Services business unit within Merchant Energy provides strategic consulting advice and develops and implements projects to assist customers to improve their energy productivity. Over the past few years, AGL has observed an increased interest in, and demand for, reducing energy costs, improving energy efficiency and reducing impacts of carbon pricing policies amongst larger customers.

Energy Services delivers projects and advice across a range of areas for a number of commercial, manufacturing and industrial customers, including:

> design, construction, operation and maintenance of embedded generation, including landfill gas generation and cogeneration
> compressed natural gas (CNG) refuelling for public buses and private vehicles
> design, installation, upgrading and ongoing maintenance of steam and hot water boilers
> thermal and electrical efficiency upgrades (e.g. chiller and lighting upgrades and power factor correction)
> energy and greenhouse gas emissions reporting and data management
> abatement certificate creation
> energy contracting.

In FY2013, AGL executed an eight-year agreement to supply compressed natural gas at the STA Bus depots at Port Botany, Ryde, Waverly and Leichhardt and to undertake infrastructure upgrades to the CNG refuelling facilities at Ryde and Port Botany depots.

During FY2013, over 200 Energy Services projects were commenced or underway, ranging in size and type. Examples include:

> a power factor correction project conducted for a large manufacturer to minimise network demand charges and improve electrical efficiency. With a payback period of just 18 months (67% return on investment) it is estimated that the company will save $78,000 on network demand charges, via reduced demand by 939 kVA and increasing the power factor from 0.67 to 0.99.
> a chiller replacement and Building Management System (BMS) upgrade for a hotel to achieve energy and cost savings. AGL was engaged to undertake the design, project management and equipment installation works, following an energy audit in 2008. Overall, the project has resulted in electricity savings of more than 800 MWh per annum, equating to over $100,000 in cost savings each year and a payback period of around three to four years.

Rooftop solar photovoltaic (PV)

In FY2013, AGL Solar installed 11.3 MW of residential solar PV, which is a 25% increase on the previous year. This growth in volume (particularly in Queensland and New South Wales) was achieved in a challenging market, in which state-based feed-in tariffs and Federal Government small-scale technology certificates multipliers were reduced.

During the year, AGL Solar focused on improving customer experience, reducing the average time from registration to installation of the solar PV system from 60 days to 40 days. AGL undertook post-installation surveys in July 2013 with more than 200 customers, with 85% of customers surveyed stated that they were 'satisfied' or 'very satisfied' with their experience with AGL Solar.

Other highlights for FY2013 included launching into the Tasmanian market, as well as working closely with the Upstream Gas business unit to install a 20 kW solar power system at the Australian Stockman's Hall of Fame in July 2013 (refer to page 41).

Note

1 For the state-based energy efficiency schemes, the regulatory compliance year is managed on a calendar year basis. Data in this report, however, reflects FY2013 performance unless otherwise specified.

Customers

Customer experience

AGL's responsibilities as an essential service provider

The essential nature of the services and products provided by AGL requires a responsible approach to disconnection; sales and marketing; and accessibility of information, including the availability of concessions.

Wrongful disconnections

In each of the jurisdictions in which AGL retails energy, there are regulations governing the processes which must be followed when disconnecting a customer for non-payment of an account[1]. In Victoria, energy legislation prohibits disconnection of residential customers other than in accordance with the terms and conditions of the customer's contract. Retailers are required to pay customers $250 per day for every day they are off supply after having been wrongfully disconnected, subject to a prescribed cap of $3,500. In Queensland, customers can claim a Guaranteed Service Level payment of $130 from Energex (the distributor) in the event of a wrongful disconnection. In other states, there are no retailer payment amounts stipulated in the regulations for disconnection errors; accordingly, AGL compensates customers on a fair and reasonable basis for any loss of food, costs of alternative accommodation and/or damage to electrical appliances, based on receipts provided.

During FY2013, AGL received and assessed a total of 739 complaints concerning potential wrongful disconnections in Victoria and Queensland. After investigation, AGL made wrongful disconnection payments to 159 customers in Victoria, a decrease of 6.5% compared to 170 customers in FY2012. Thirty customers were found to have been wrongfully disconnected in Queensland, less than half the number in FY2012. This decrease is attributed, in part, to robust root-cause analysis and subsequently working with AGL's credit and disconnection team to ensure processes are constantly improved and communications with customers enable them to feel comfortable discussing payment difficulties.

In South Australia, AGL reported 14 wrongful disconnections to the regulator, for the period February to June 2013 (since the adoption of the National Energy Customer Framework).

The major causes of wrongful disconnections across all jurisdictions were:

- notifications for disconnection not being sent within the required regulatory time frames, often due to the fact that AGL had not updated the correct mailing and/or service address details for the customer
- customer showing signs of hardship or payment difficulty, but not being given the full assistance required by the regulations prior to disconnection.

Responsible sales and marketing

During FY2013, AGL withdrew from unsolicited energy plan door-to-door sales to residential customers, firstly in Queensland and South Australia in October 2012, followed by New South Wales and Victoria in February 2013.

Independent research commissioned by AGL, prior to making the decision to withdraw, showed that 69% of energy decision-makers had negative attitudes towards energy door-to-door sales people. Furthermore, only 6% of respondents reported having a positive experience the last time an energy door-to-door sales person approached them. Of those respondents stating it was a negative experience, 67% felt the experience was also intrusive.

Although AGL has exited unsolicited residential door-to-door sales, AGL has continued to focus on continuous improvement of quality and compliance processes across all other sales channels. New sales scripts have been designed to inform customers more clearly about product features, benefits and contractual rights and obligations. Processes have also been re-designed to ensure better visibility and resolution of complaints and an improved capacity to identify root cause issues.

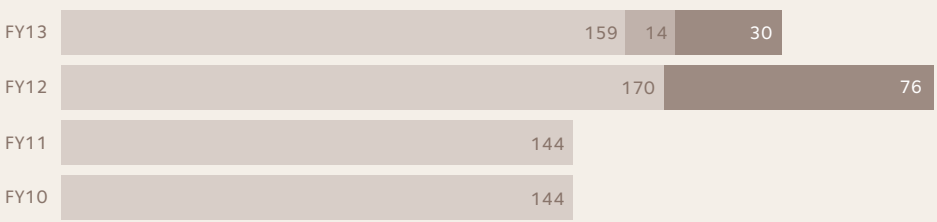
Accessibility

AGL continues to provide a free translator service so that customers are able to access important information on AGL's services and products, regardless of whether English is their primary language. In addition, AGL has energy efficiency brochures available for customers in 10 different languages.

Note

1 Prior to the adoption of the National Energy Customer Framework (NECF), there was no formal reporting (i.e. to the regulator) of wrongful disconnection investigations outside of Victoria and Queensland. Since November 2011, AGL has been collecting data internally on wrongful disconnections in New South Wales and South Australia. Formal reporting to the regulator for disconnection investigations in South Australia commenced in February 2013. New South Wales adopted NECF on 1 July 2013, therefore wrongful disconnections in this state will be reported in the FY2014 Sustainability Performance Report.

Wrongful disconnections (Victoria, South Australia and Queensland)



Legend

Number of wrongful disconnections in Victoria, South Australia and Queensland for both gas and electricity accounts.

- Victoria
- South Australia
- Queensland

Note

1 Data for South Australia only covers the period 1 February to 30 June 2013.

Customers

Customers in hardship

Customers in hardship

As an essential service provider, AGL recognises the importance of providing assistance to vulnerable customers to help them manage their energy use and meet their payments.

Approach

Energy prices have risen in real terms in recent years. This has contributed to increased financial pressure on low-income households in particular.

As a major retailer, AGL recognises the role it must play in assisting vulnerable customers to access energy. AGL supports the implementation of a shared responsibility model, where customers, industry, government and the community sector work collaboratively to achieve the best possible outcome for customers experiencing financial hardship.

For more than a decade, AGL's hardship program, *Staying Connected*, has been assisting customers experiencing financial disadvantage. AGL works collaboratively with community partners and industry peers to develop innovative improvements in assisting customers who are struggling to manage their energy costs.

Understanding that it is has a direct role to play in assisting hardship customers, AGL takes a multifaceted approach to the management of these customers, by:

> creating an environment in which customers feel confident in discussing their payment difficulties. Early engagement with customers before they find themselves in acute payment difficulty may better assist them to manage their energy debt
> facilitating customer access to appropriate government and community support mechanisms
> aligning AGL's *Energy for Life* program to specifically address the issues associated with energy related debt (for further information see page 46)

Staying Connected is designed to provide assistance to customers experiencing financial hardship to the extent that they are unable to make payments as required under AGL's standard credit guidelines. While participating in the program, customers are protected from disconnection and are offered a range of services, including payment plans and home energy audits.

At the forefront of the challenges associated with assisting customers experiencing financial hardship are the customers for whom hardship is an enduring and long-term systemic issue, with seemingly no foreseeable resolution.

It is important that policy makers embrace the shared responsibility model and urgently consider whether the current assistance frameworks – from retailer hardship programs to jurisdictional concessions schemes – are adequately meeting the needs and expectations of the most vulnerable members of the community. AGL believes that consideration should be given to lifting Commonwealth Government funded income support for those people most in need.

Vision for customers in hardship: AGL's vision is to be a recognised industry leader in customer hardship policy.

Performance

At the end of FY2013, 13,509 customers were participating in the *Staying Connected* program. This represents an increase of 64% compared to the 8,213 customers participating in FY2012. One reason for the increase in numbers is the fact that more customers appear to be experiencing financial stress. Another contributing factor is that process improvements in the Customer Service Centres have resulted in more customers being identified earlier in the payment cycle and placed on the program.

One measure used to assess the effectiveness of the *Staying Connected* program is to monitor the average level of debt of participants over a 12-month period. In FY2012, AGL identified inherent limitations in this measure due to the increasing costs of energy and other external factors in the broader economy, which affected *Staying Connected* participants' capacity to pay. In response, the customers in hardship target was adjusted in FY2013 to reflect real (rather than nominal) changes in customer debt levels.

While AGL recorded an increase in the number of customers accessing the *Staying Connected* program in FY2013, the overall average debt levels of *Staying Connected* participants decreased. During FY2013, the average level of energy debt (adjusted for electricity price inflation) among *Staying Connected* participants dropped from $1,464 to $1,326, representing a 10% decrease in the relative level of debt per customer.

Focusing on identifying customers earlier in the debt cycle contributed to the lower relative level of debt per customer. Customers are able to return to a sustainable energy position more quickly if they enter the program with a lower debt level. The increase in actual *Staying Connected* customer numbers reflects the ongoing pressure that many customers are under to meet day-to-day costs of living.

The increase in program participants in FY2013 has given rise to operational challenges. Individual case management could no longer be sustained and, as a result, AGL has moved away from this model, with *Staying Connected* case managers now rotating between performing inbound and outbound calls. One benefit of this approach is that customers are able to speak directly with any case manager when they call. Under the previous model customers could only deal with their assigned case manager. In addition, outbound processes have been streamlined to more effectively target those customers who are not participating fully in the program. Unfortunately, lack of participation by some customers is an ongoing issue. While for many of the customers on the program energy hardship is but one of a number of difficulties they are facing in their lives, unless customers remain in contact and maintain their payment plans, it is difficult to assist them in the longer term.

One of the key goals of the *Staying Connected* program is to keep customers engaged and regularly communicating with us. One of the ways AGL achieves this is through financial incentives and debt waiver. In FY2013, AGL applied $960,000 to 3,910 customer accounts in order to reduce the customer's debt position and to acknowledge the customer's improved payment behaviour.

Other indicators AGL uses to track the success of *Staying Connected* include the time it takes for a customer to return to a sustainable energy consumption position and the number of times each participant has joined the *Staying Connected* program.

Customers

Customers in hardship

Of the *Staying Connected* participants as at 30 June 2013, 14.48% have been on the program for two or more years. Approximately 18.87% of *Staying Connected* participants were customers returning to the program.

AGL continues to offer *Staying Connected* participants energy efficiency advice and customers are referred to the Commonwealth Government's Home Energy Savers Scheme (HESS), as well as state based efficiency programs for home energy audits.

During FY2013, AGL restructured its assistance to financial counselling organisations in order to achieve a nationally consistent model which is designed to integrate with Federal Government assistance programs. As a result, AGL provided $650,000 of funding to a range of community organisations in Queensland, New South Wales, Victoria and South Australia. The recipient organisations are providers of the HESS program and they have been funded to further the objectives of this program.

AGL Advocacy work

During FY2013, AGL maintained an open dialogue with customers and consumer representatives in order to encourage mutual understanding and awareness of customer issues.

The AGL Customer Council continued to meet quarterly to discuss AGL's performance and broader energy policy. Matters discussed included: improving transparency in energy contracts to enable customers to more easily understand and compare energy offers; the possibility of a national concessions framework; and the shared responsibility model and the roles required of the various stakeholders within that model.

AGL recognises the need to work with community and consumer organisations on a range of issues that impact consumers. Typically, the resolution of many of these issues involves ongoing discussion and negotiation with consumers, industry, governments and the community sector.

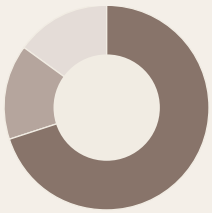
During FY2013, AGL:

> participated in a number of national forums to promote access to essential services, including national affordability summits in Canberra and Sydney hosted by community organisations

> presented at the National Microfinance Conference and the National Credit Conference for Energy and Water

> provided community organisations and financial counsellors in the various states in which AGL retails energy with information about the *Staying Connected* program. These forums provided AGL employees with face-to-face feedback on the program and suggestions for improvement.

Number of years on *Staying Connected* program



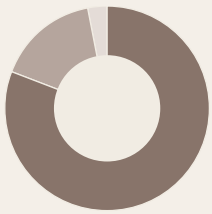
Legend

1 year or less	70%
1 to 2 years	15%
2 or more years	15%

Note

Data is based on *Staying Connected* population at 30 June 2013.

Staying Connected return customers



Legend

First time *Staying Connected* customer	81%
Return *Staying Connected* customer (second time)	16%
Multiple *Staying Connected* customer	3%

Note

Data is based on *Staying Connected* population at 30 June 2013.

Community

Introduction

AGL's goal is to connect our business and employees with the community in ways which make a genuine positive contribution, engage our people and strengthen our business.

The success of AGL is measured not only by its financial performance, but also by the social and environmental impacts that company decisions and actions have on the wider community.

AGL has a responsibility to engage with the community to develop mutually beneficial energy projects; and to sensitively manage associated environmental, social and financial outcomes. By engaging communities during the entire project life-cycle, AGL aims to achieve and maintain a 'social licence to operate'.

The varied nature of AGL's development projects necessitates a tailored approach to community engagement. AGL bases its activities on the needs of individual communities and projects. AGL aims to establish constructive working relationships and multidirectional communication channels with community stakeholders including; customers, government groups, asset owners, local community groups, indigenous groups, businesses, residents and local media. AGL also supports local communities through sponsorships, providing financial and in-kind support for issues important to those communities.

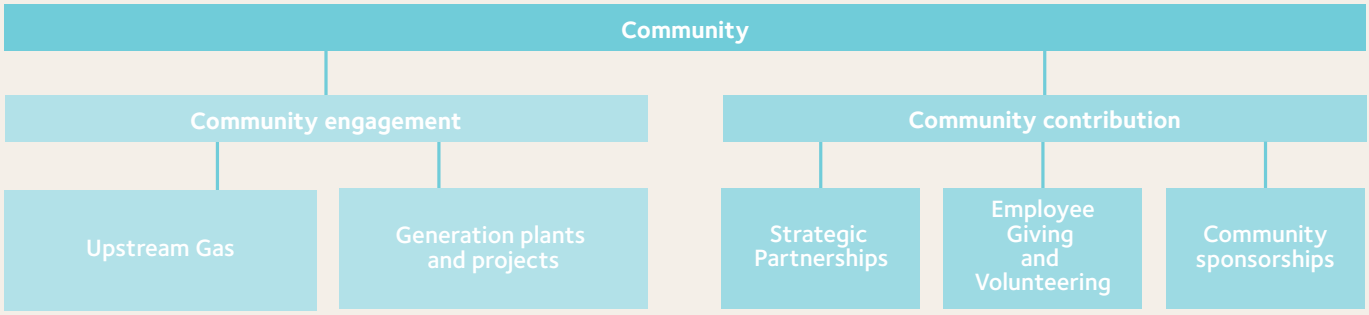
To build on engagement with the local communities in which AGL owns and/or operates assets, AGL's corporate citizenship program *Energy for Life* seeks to make a genuine contribution to the wider community. This integrated program provides a platform to link employees with community and charity organisations important to both them and AGL.

Energy for Life comprises Employee Giving and Employee Volunteering initiatives, as well as four Strategic Partnership programs.

The two key focus areas for the Community chapter of this report are community engagement and community contribution.

Community engagement: AGL's ability to develop successful projects is linked in many ways to the relationship with the local community. Trust and reliability are two key factors in building sustainable long-term relationships. AGL assesses effectiveness in this area by measuring and delivering on promises made to the community. 'Doing what you say you'll do' is vital to the success of new developments, the expansion of existing infrastructure and ongoing operations.

Community contribution: AGL has an opportunity to positively contribute to local communities and community causes. Community contributions are the measured investments made to local communities through direct investment, sponsorships, Employee Giving and Volunteering and Strategic Partnerships[1].



Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Community engagement				
AGL will earn a 'social licence' to develop upstream gas and power development projects.	Delivery of promises made to the community[2]: **100%**	All promises made to the community were met, although there were some environmental compliance breaches[3].	✓	Measure AGL's investment in local businesses, including an analysis of job creation and financial contributions to the local community.
Community contribution				
Social Return on Investment (SROI) measured and at target levels.	Establish framework for Social Return on Investment (SROI) analysis, with outputs of *Energy for Life* strategic partnerships measured annually.	Community contribution SROI framework established for AGL's major strategic partners, The Smith Family and St Vincent de Paul.	✓	Measure outputs of *Energy for Life* strategic partnerships in accordance with SROI framework developed in FY2013.

Notes

1 All community contributions are rounded to the nearest $100.
2 Promises to the community are defined as commitments made to the community, over and above legal and contractual requirements under land purchase agreements, access and compensation agreements, conditions of project approvals and environmental licences.
3 Environmental non-compliances are dealt with separately in the Environment chapter of this report.

Community

Community engagement

Introduction to community engagement

AGL has long recognised that to achieve and maintain a social licence to operate it must engage in a meaningful and authentic way with communities and all other stakeholders.

Approach

AGL understands that genuine engagement with stakeholders is essential for sustainable development. As AGL continues to develop new power generation and coal seam gas production projects, it has an increasing presence in the local community. Communities adjacent to AGL projects (and the broader community generally) often have views and questions about how AGL's activities may interact with their way of life, their livelihoods and their local environment.

AGL is committed to listening and providing comprehensive and accurate information to communities, as well as facilitating adequate opportunities for communities to give feedback and raise concerns. Community engagement mechanisms employed by AGL include:

> community meetings
> community consultative committees
> newsletters and factsheets
> project websites
> participation in community events
> dedicated information centres
> site visits, briefings and workshops.

During FY2014, Upstream Gas will also be investing in online community engagement strategies to reach a wider community audience.

AGL also supports local communities, creates employment opportunities, provides facilities and enhances existing services, including health, education and welfare, through contributions to local, regional and national economies. To complement engagement with the regional communities in which AGL owns and/or operates assets, AGL's *Energy for Life* program seeks to make a genuine contribution to the wider community (page 45).

Vision for community engagement: AGL's vision is to earn a 'social licence' to develop upstream gas and power development projects.

Drivers: Listening, understanding and responding to community concerns, effective communication and constructive community engagement across all Upstream Gas projects (page 38) and generation plants and projects (page 42) are essential for maintaining AGL's social licence to operate.

Performance

AGL has many obligations that it must fulfil under its project permits, many of which are to meet state and federal requirements.

AGL also makes other commitments that provide benefits to individuals and communities as a whole. These are referred to as 'promises' and are considered irreversible declarations that an activity will be completed.

During FY2013, promises made to the community were met.[1] Some of the promises that were activated to benefit the community included undertaking additional water testing, sponsoring community activities, making school presentations and providing additional infrastructure at individual properties.

Throughout FY2013, AGL committed further resources to meet the growing needs of community engagement. In addition to dedicated community relations positions in Upstream Gas and Merchant Energy, a new digital team has been established and dedicated resources have been committed to developing online community investment policies and practices.

The Safety, Sustainability and Corporate Responsibility Committee, a sub-committee of the AGL Board, which meets quarterly, visits AGL's operational and development sites to understand in greater detail the views of the local communities.

Note

1 Promises to the community are defined as commitments made to the community over and above legal and contractual requirements under land purchase agreements, access and compensation agreements, conditions of project approvals and environmental licences. There were some environmental compliance breaches during FY2013 (refer to the Environment chapter).

Community

Community engagement

Upstream Gas

AGL is committed to ensuring that coal seam gas (CSG) exploration and production activities minimise impacts on the environment and the community and can co-exist with other land uses. AGL recognises the importance of co-operative engagement with community stakeholders.

Approach

To engage the community and effectively respond to community concerns, AGL consults with landowners, neighbours, residents, local councils and relevant government agencies during all stages of the project life-cycle.

AGL has developed six key principles for engagement that are general statements of good practice. These principles do not prescribe specific ways to engage; many factors, including the type, scale and location of each individual operation, create unique conditions requiring a nuanced application of the principles to achieve the most practical outcome.

1. **Knowing where you stand** – We want to understand the communities in which we operate. We combine a local presence and knowledge to understand our impact upon communities.
2. **Creating a digital mirror** – We use current technology to provide opportunities for whole communities to be informed and involved in our projects. An online engagement website will be an integral part of reaching as many people as possible.
3. **Keeping it local** – We aim to employ local people, involve local communities and build local relationships. We seek feedback from the communities in which we operate, to improve the way we work together for their long-term interest.
4. **Showing not telling** – We provide opportunities for communities to see and experience how we operate, including running site tours, equipment inspections and site-based community information centres.
5. **Doing what we say we'll do** – We want to deliver on our promises to the community and be trusted to do so. We record, measure and report on our commitments to ensure we are keeping them.
6. **Continuous improvement** – We continuously review and improve our internal communication strategies and activities at all levels of our company, so that the whole of AGL is informed, engaged and committed to the promises we make.

AGL acknowledges the significant levels of concern in rural and regional communities surrounding the Australian CSG industry, particularly in relation to issues such as land access and water resources.

AGL believes that greater levels of community engagement can effectively address these concerns. By committing additional, locally based community relations resources, AGL is working towards achieving greater levels of community engagement.

Over the past 12 months AGL has participated in, delivered or supported more than 250 different community engagement activities across coal seam gas projects.

AGL enables interested community members to access relevant information through regular community meetings, drop-in sessions, field days, site visits, newsletters, newspaper advertising, email updates, Community Consultative Committees (CCCs) and one-on-one conversations with stakeholders. Dedicated sections on AGL's website provide project information including meeting minutes and other relevant documentation such as Environmental Assessment reports.

Community

Community engagement

Performance

Over the past 12 months AGL has significantly increased community relations efforts across all upstream gas project areas, with a focus on providing good quality and local information.

Camden Gas Project

The Camden Gas Project in the Macarthur region of New South Wales consists of low-pressure underground gas gathering lines and the Rosalind Park Gas Plant. At the end of FY2013, there were 144 wells, of which 96 were operational and producing natural gas.

AGL has committed to provide regular project updates to the community and stakeholders as well as opportunities to engage in meaningful ways. Examples of commitments made to the community include:

> AGL initiated the first fugitive emissions monitoring program in New South Wales to directly address community concerns around potential health impacts. A community consultation group was established to help shape the program and share information. The first phase of the program ran for three months with weekly monitoring undertaken at 25 locations across the Wollondilly, Camden and Campbelltown local government areas. The results are now being reviewed by the CSIRO and will be shared with the consultation group and the community when available.

> AGL initiated an expanded ground water monitoring program to further enhance the understanding of water in the project area. The results will be shared with the community and stakeholders when available.

In 2009, AGL submitted a planning application to the New South Wales Department of Planning for the Camden North Expansion area. AGL has consistently said that it proposes to use horizontal drilling on wells in the Camden North Expansion area, which do not require hydraulic fracturing. Notwithstanding this, AGL's planning application covers a range of drilling techniques which will be selected based on geology, environmental and other constraints. However, on 29 December 2012, an article was published in the Sydney Morning Herald stating that AGL had 'ruled out using the controversial fracking technique at its proposed 66-well gasfield between Liverpool and Campbelltown'. As part of AGL's commitment to provide information to the community the claim was corrected by advising the members of the CCC and placing paid advertorials in local papers to clarify that hydraulic fracturing may be used over the life of the project, as per the planning application.

Other key community engagement initiatives undertaken during FY2013 included:

> Participating in and sponsoring the Camden and Campbelltown regional shows

> Joining with Wollondilly Council and Wollondilly Nursery in a regeneration activity on Wollondilly Council Land

> Supporting community initiatives and events coordinated by the Camden Chamber of Commerce and Narellan Chamber of Commerce

> Holding regular open days which provided members of the public, government, the media and other key stakeholders with the opportunity to meet the project team and tour the Camden Gas project.

Note that information relating to environmental non-compliances is included in the Environment chapter of this report.

Hunter Gas Project

The Hunter Gas Project has continued to focus on achieving a social licence to operate during FY2013. The AGL Information Centre, located in the main street of Singleton in the heart of the Hunter Gas Project area, has been open each working day between 10:00am and 4:00pm, with 229 people visiting the Centre during FY2013.

Visitors to the information centre have included State Members of Parliament and staff as well as local council, media and internal stakeholders. Three after-hours open house sessions have also been held during FY2013 to provide access to people whose hours are restricted due to work commitments.

Eleven community information sessions have been held throughout the project area during FY2013 covering a diverse range of topics, including seismic surveys, groundwater and core hole activities.

In response to the community's preference for communication, the Hunter Gas Project's Community Relations team have also completed four activity-related doorknocking activities and 15 letter box drops.

In March and April 2013, the Hunter Gas Project hosted over 250 people on site tours showcasing the Yellow Rock core hole drilling activity. Attendees were able to see a core hole being drilled, learn about the importance of exploration and understand the activities forecast for the Hunter Gas Project. A large feature of this showcase included the groundwater monitoring bores and water studies that have been undertaken in the Hunter since 2009. The showcase provided an opportunity for approximately 150 high school students to learn about energy sources, geology and hydrogeology, with AGL customising the showcase to the school curriculum.

The Hunter Community Consultative Committee held five meetings during FY2013. Members of the Committee also attended the Yellow Rock core hole showcase tour and have actively continued their review of groundwater monitoring, community consultation and the Hunter Project activities. During the year presentations to the Committee have been made by the Office of Coal Seam Gas and the Land and Water Commissioner.

FY2013 saw coal seam gas activities and agriculture operating side by side as water monitoring bores and the Yellow Rock 1 core hole were drilled without disturbing adjacent cattle operations.

To complement AGL's commitment to demonstrating co-existence between agriculture, viticulture and coal seam gas exploration, AGL awarded the inaugural 2012 AGL Wine Excellence Scholarship to Daniel Binet.

Community

Community engagement

Gloucester Gas Project

In late FY2011, the Environmental Defender's Office, representing the Barrington Gloucester Stroud Preservation Alliance, lodged an appeal against the project approval for AGL's Gloucester Gas Project, which was granted by the NSW Independent Planning Assessment Commission in March 2011. In August 2012, the Land and Environment Court handed down its decision, upholding the approvals granted under Part 3A of the *Environmental Planning and Assessment Act 1979* (NSW) for the Gloucester Gas Project's overall Concept Plan and Stage 1 Development.

The handing down of that decision fulfilled a commitment made by AGL in December 2011, promising to defer the Waukivory exploration program until an independently peer reviewed hydrogeological study of the Stage 1 area had been completed and the results made public; and the Land and Environment Court decision was handed down.

In October 2012, AGL recommenced the Waukviory Pilot and drilled four wells. A range of community engagement activities were undertaken, including regular doorknocking of neighbours, assessment of rig lighting impacts on neighbours (and making adjustments where appropriate), establishing truck movement guidelines to minimise impact on a local business and site visits to the Waukivory drill sites for the Gloucester CCC members and neighbours.

The Gloucester CCC met on six occasions in FY2013. Issues raised by the Gloucester CCC during FY2013 included concerns and questions around groundwater, work program activities, aeromagnetic surveys, hydraulic fracturing and drilling, and fugitive emissions.

AGL's commitment to community engagement included the establishment of a regular column in the local Gloucester and Dungog papers. In FY2013, AGL published 23 Community Updates, three work program updates and two newsletters for the Gloucester and surrounding communities.

Six community information sessions were held to discuss work program activities. Drill rig site visits were undertaken during drilling activities at Waukivory and Pontilands, as well as during the Waukivory 3 workover. A media tour also took place at the AGL Tiedman's property to provide an introduction to AGL's Gloucester Irrigation Trial (refer below).

AGL accepted an invitation from the Barrington Gloucester Stroud Preservation Alliance to speak at a community meeting attended by more than 300 people in May 2013. The meeting was hosted by Gloucester Shire Council.

During FY2013, AGL committed to an ongoing dialogue with Gloucester Shire Council with a series of meetings held in the second half of the year which have resulted in the drafting of a co-operative agreement between the two organisations which was finalised in early September 2013. The agreement includes the appointment of a Water Scientist at Gloucester Shire Council, funded by AGL, with the council co-ordinating a series of water studies.

During FY2013, AGL commenced an irrigation trial. A crop of triticale on AGL's property at Gloucester was irrigated with a blend of produced and fresh water to explore beneficial re-use options for produced water. The triticale will be baled and turned into silage to feed AGL's herd of almost 200 Hereford heifers on the Gloucester properties.

AGL continued facilitating a youth development program at Gloucester during FY2013. The aim of the program is to mentor young people using community volunteers. During the reporting period AGL worked with the mentors and young people to assist them to take up local volunteering projects. During FY2013, AGL also provided support to the local branch of the Westpac Rescue Helicopter support group and sponsorship for a number of community events, including the Gloucester Show, Stroud Show, Gloucester Chamber of Commerce Chill Out Festival, the Science and Engineering Challenge and Stratford Public School breakfast program. In recognition of a shortage of medical practitioners in regional communities AGL continued its commitment to fund accommodation costs for one local doctor for a period of 12 months. The doctor is continuing to practice in Gloucester after the financial support from AGL was finalised in March 2013.

Community

Community engagement

Galilee Gas Project

AGL is the operator of the Galilee Gas Project, a 50/50 CSG exploration joint venture with Galilee Energy Ltd.

AGL and Galilee Energy Ltd are both members of the Galilee Basin Operators' Forum (GBOF), a group of CSG operators in the Galilee Basin. In November 2010 the GBOF engaged leading independent environmental consultancy RPS to research and prepare a baseline water assessment report for development of a regional Galilee Basin aquifer model. This baseline report is publicly available and can be used for comparative purposes in the future.

In accordance with the *Water Act 2000* (Qld), AGL prepared an Underground Water Impact Report (UWIR) relating to its coal seam gas exploration activities at the Glenaras Production Pilot within Authority to Prospect (ATP) 529P.

The UWIR provides information on the hydrogeology of the region and assesses any potential impacts on underground water as a result of water extraction during AGL's coal seam gas exploration activities in the area. The UWIR also provides water monitoring and mitigation strategies.

The report found that the expected impact on shallow sandstone aquifers of the Great Artesian Basin as a result of the Glenaras Production Pilot would be negligible.

Copies of the UWIR were sent to all landowners within the ATP seeking their feedback. This allowed the Galilee team to respond to landowners' questions regarding the hydrogeological impacts of the project and alleviate individual concerns.

The UWIR report was approved by the Queensland Government Department of Environment and Heritage Protection (DEHP) on 11 January 2013 and came into effect on 1 February 2013. A set of conditions has also been issued by DEHP, which ensures the obligations outlined in the UWIR are enforceable.

During FY2013, AGL announced a seven year energy efficiency partnership with the Australian Stockman's Hall of Fame. This partnership includes the installation of 80 photovoltaic solar panels (20 kW) to help the museum offset up to a quarter of the electricity consumed at its Cattleman's Restaurant and Grill and cool storage facilities, by generating around 28,800 kWh annually. In addition to the solar panels, a Building Management System will also be installed to manage the museum's energy demand and save up to an additional 30% of the museum's power bill, which equates to a saving of up to $55,000 per year.

Other community initiatives during FY2012 as part of the Galilee Gas Project included:

> Sponsorship of the Muttaburra Sheep Show
> Participation in the Annual Longreach Show
> Hosting community field days at Glenaras Station, near Longreach
> Presentations at local council forums and rural media events.

Newcastle Gas Storage Facility Project

AGL is currently developing the Newcastle Gas Storage Facility Project (NGSF) at Tomago, New South Wales (NSW). The NGSF is required to meet AGL's peak gas market requirements over winter and to provide additional security of gas supply during supply disruption events.

A Community Consultative Committee (CCC) was established in FY2013, comprising representatives of key stakeholder groups who have a demonstrable interest in, or connection to, the NGSF. Terms of Reference for the CCC were developed in August 2012 and four meetings were held during FY2013. In May 2013, members of the CCC attended a site visit to see the development of the NGSF project first hand.

The NGSF project team have also demonstrated their hands on approach to supporting local community initiatives by:

> assisting the Hunter Region Botanic Gardens obtain aerial photos
> volunteering with the local Riding for the Disabled
> assisting the Hunter Region Botanic Gardens to reduce their energy use through the donation and installation of a 4 kW solar panel system.

AGL looks forward to supporting the local community in FY2014 with the launch of a small grants program for community initiatives.

Community

Community engagement

Generation plants and projects

AGL is a long-term owner/operator of electricity generation assets and is committed to being a valued member of the local community. While some of our projects have been operational in the community for a relatively long period of time (for example, AGL Torrens and AGL Hydro assets), we understand that new projects require sustained community engagement activities to ensure community acceptance.

Approach

The community is a key stakeholder in AGL's power development projects. AGL manages power development and construction projects in accordance with a project management framework that addresses community consultation as an important part of the project communications plan. AGL's approach to community engagement is based on the needs of the local community and the nature of individual projects.

AGL's Power Development group has established a Community Charter that publicly sets the objectives for community engagement for construction projects:

> **Principle 1:** We will deliver on our promises to the community – with actions, not words.

> **Principle 2:** We will endeavour to respond to all queries within five working days.

> **Principle 3:** We may not be able to solve all perceived problems put to us, but we will investigate, aim to find a solution and communicate the outcomes.

> **Principle 4:** We are committed to being a valuable member of the community by using our resources to build a stronger local community.

> **Principle 5:** We will leave a positive legacy in the community that extends beyond the life of the project.

These principles are captured in community engagement plans which are developed as part of the communication plan for each project.

Performance

Operating generation projects

Hallett wind farms

With four wind farm projects situated in the Hallett region of South Australia, AGL has a significant presence in the local community.

The AGL Information Centre in Burra is recognised within the local community as the place to obtain information and provide feedback on the Hallett wind farm projects. Visitor numbers and feedback from the community received through this Centre as well as other channels is measured. During FY2013, over 3,500 people visited the Centre.

Through the AGL Hallett Wind Farm Community Fund, AGL is providing annual grants to local community based projects and groups. AGL is providing $15,000 for each wind farm (following development approval) each year for 25 years, indexed at CPI. Since the inception of the AGL Hallett Wind Farm Community Fund, more than $300,000 has been donated to community organisations.

In FY2013, $77,463 was donated to a range of community projects, including funding the establishment of a community kitchen garden at the Burra Community School, funding the construction of a shelter over the Jamestown Memorial Park playground, and providing assistance with veterinarian expenses for an animal rescue service.

Macarthur Wind Farm

During FY2013, AGL commenced operation of the 420 MW Macarthur Wind Farm. The $1 billion project has the capacity to power more than 220,000 average Victorian homes and abate more than 1.7 million tonnes of greenhouse gases every year.

A Community Engagement Committee which was initially set up by Moyne Shire Council to assist AGL to share information with the community about AGL's construction activities in the area has continued to function as part of AGL's ongoing operation of the asset. The Committee meets monthly and provides a forum for AGL and the community to share information, operational updates, advice about community funding and other community involvement.

AGL wind farm and solar plant community funds [1,2]

Notes

1 Amounts are rounded to the nearest $100.
2 Amounts relate to actual expenditure in the financial year.
3 Includes an FY2014 allocation (over-payed in FY2013) to one community group.

Community

Community engagement

As part of the construction phase AGL and (then) joint venture partner Meridian Energy committed to contributing combined funding of $100,000 to a Macarthur Wind Farm Community Fund and worked with Moyne Shire and community representatives to ensure that funding was allocated to the maximum benefit of the local community. During FY2013, $14,000 worth of investment was made in the local community, in addition to the $85,700 contributed in FY2012. Further, the volunteer fire brigades of two surrounding towns, Hawkesdale and Willatook, have been allocated a one-off grant totalling $40,000.[1]

Macarthur Wind Farm is becoming an important part of the area's tourism appeal as it serves as a special location for car rallies, bike rides and races. AGL has also committed to funding the establishment of a public wind farm viewing area to be constructed by the local council for the benefit of the local community and visitors to the area.

As with AGL's other assets, community support is central to success and with this in mind, and following concerns raised about the noise associated with the operation of the wind farm by some in the community, AGL engaged in a large noise monitoring program prior to the wind farm commencing operation and through to full operation.

An infrasound monitoring program was voluntarily commissioned by AGL. The program, which commenced in August 2013 and was conducted by Resonate Acoustics, measured infrasound and low frequency noise at residences located approximately 2.7 and 1.8 kilometres from the nearest turbine before any turbines were operating and continued through until all 140 turbines were operating. The monitoring demonstrates that there was no measurable change in the infrasound levels measured before and after construction of the Macarthur Wind Farm. The report has been peer reviewed by low frequency acoustic expert, Dr Geoff Leventhall, and the findings are further supported by similar studies conducted by the South Australian Environment Protection Authority[2].

In addition to both the infrasound monitoring above and AGL's formal obligations under the Planning Permit to conduct noise monitoring following construction completion, AGL voluntarily undertook additional noise monitoring at 25 neighbouring properties between October 2012 and May 2013 (since the first operation of a wind turbine at Macarthur Wind Farm and through to full operation of the asset) in order to confirm that the wind farm was compliant with noise regulations. The results confirm compliance in all respects.

The Resonate Acoustics's Infrasound Low Frequency Noise Operational Monitoring report and AGL's noise monitoring data from the compliance noise assessment are accessible on AGL's website via agl.com.au/macarthur

Oaklands Hill Wind Farm

Located in the vicinity of the Grampians National Park, Oaklands Hill Wind Farm contains 32 2.1 MW wind turbines across four landowner properties.

AGL has worked closely with the Glenthompson Progress Association throughout development, construction and now operation of the wind farm. During construction, AGL initially established a community fund valued at $50,000 to support local projects and working with the Progress Association and others, AGL increased the fund to over $120,000 after reviewing project submissions. AGL has also committed to providing ongoing funding to community projects during the operational phase of the wind farm. During FY2013, this included $20,000 funding for a walking path around the Glenthompson village. The volunteer fire brigade of Glenthompson has also been allocated a one-off grant totalling $13,000.[3]

In addition to the community fund, each year for 25 years (commencing in 2010) AGL has committed $10,000 towards improving salinity management, with the first four years of funding having been paid up front to establish the project. A similar annual payment of $10,000 for each of the 25 years (commencing 2010) is also committed towards improving brolga habitat in the region.

Although the wind farm has gained broad community support and been proven to operate in accordance with all required noise standards and permit conditions, a small number of residents have voiced concern about noise associated with the wind farm. Notwithstanding compliance, and acknowledging that some tonal sound was emanating from some of the wind turbines, AGL elected to turn off some wind turbines during night-time, pending further reduction and/or removal of the tones observed. Remedial works are scheduled for the end of this year. In FY2014 turbines will be returned to full operation.

AGL Hydro

AGL has a significant presence within the Victorian Alpine Region, operating four hydro electric power stations as part of the Kiewa scheme. AGL is also a large employer in the region with almost 70 employees (by headcount) based at AGL's Mt Beauty office.

During FY2013, AGL sponsored the Kangaroo Hoppet in the Bogong High Plains of Victoria's Alpine National Park. The Kangaroo Hoppet is Australia's premier long distance cross-country ski race and is part of the Worldloppet – an International series of cross-country ski races.

AGL Hydro continues to sponsor local sporting clubs, schools, community organisations, the local hospital and community events centred around Mt Beauty.

Notes

1 This amount has not been paid in FY2013. Payment will be made in FY2014 subject to like-for-like funding agreements being met.

2 Environment Protection Authority and Resonate Acoustics, Infrasound levels near windfarms and in other environments, January 2013. The report concluded that: *"... the level of infrasound at houses near the wind turbines assessed is no greater than that experienced in other urban and rural environments and that the contribution of wind turbines to the measured infrasound levels is insignificant in comparison with the background level of infrasound in the environment."*

3 This amount has not been paid in FY2013. Payment will be made in FY2014 subject to like-for-like funding agreements being met.

Community

Community engagement

As discussed in the Environment chapter of this report, during FY2013 AGL removed willows on AGL property adjacent to the Mt Beauty regulating pondage as part of a broader eradication plan.

Willows are classified as a weed of national significance and under the *Catchment and Land Protection Act* (1994) there is an obligation for property occupiers to manage weeds on their property. AGL engaged Ecology Australia to undertake an assessment of the willows, which found that there would be a net environmental benefit arising from removing the willows in the long term, once the area restabilises and regenerates.

Prior to removing the willows, AGL discussed their removal with the Alpine Shire, Parks Victoria and the local catchment management authority and also placed notices in local newspapers. However, upon commencement of the works, there was a large community reaction which culminated in a public meeting being held. AGL attended the meeting to explain the rationale for the willow removal. AGL also noted that the willows in question were not located on community land; the willows were located on land owned by AGL that AGL allows the community to access for public benefit.

A revegetation program has been undertaken with Australian natives and compatible deciduous species. Further information is provided in the Environment chapter.

AGL Loy Yang

AGL Loy Yang offers financial and other support to community groups in the Latrobe Valley region under the AGL Loy Yang Community Support Program. This program is administered by an employee committee, which operates within stringent criteria to ensure funds and in-kind donations are distributed to projects or initiatives that have a clear community benefit. In FY2013, the Program provided over $80,000 in support to organisations and initiatives such as The Smith Family Gippsland Education Partnership and various community sports clubs.

Projects under development

Community Consultative Committees

Community Consultative Committees have been established for the Coopers Gap Wind Farm and Silverton Wind Farm projects. The CCCs are independently chaired and comprise representatives from the local community and other key stakeholders, such as local councils and Aboriginal land councils.

The Silverton and Coopers Gap CCCs met regularly during FY2013, eight times and 10 times respectively. Information on each project, including CCC minutes and community presentations, is available on the AGL website at agl.com.au

During FY2013, the Silverton and Coopers Gap CCC members, landowners and other extended community members were invited to tour AGL's operating wind farms in the Hallett region. This provided an opportunity to meet with local businesses, landowners, technicians and project managers.

In December 2012, a research survey[1] was conducted by Qdos Research in the local area and broader Queensland to gain a greater understanding of community attitudes towards the Coopers Gap Wind Farm. According to this survey, 63% of local respondents supported the development of the proposed wind farm. Of greatest concern to local residents was the impact on property values (39% expect negative impacts) although the majority believe the wind farm will either make no difference or will have positive impacts (50%).

Committees will also be established for AGL's solar plants in Broken Hill and Nyngan in New South Wales. As part of the environmental assessment process, community information sessions were held for these projects in November 2012 and April 2013 respectively.

Other projects

In October 2012, AGL indicated that it was suspending development of the gas-fired plant at Dalton due to market conditions. State and Federal government approvals remain valid for the next five years.

Following the end of the financial year, in August 2013 AGL announced that the proposed Leaf's Gully gas-fired power station will not proceed. The economic viability of this project has been under review for some time in light of the latest supply and demand outlook in the National Electricity Market. There is a large surplus of electricity supply in New South Wales and there is no requirement for additional capacity to be built in the short-term.

Note

1 The survey is available on the AGL website at agl.com.au/~/media/AGL/About%20AGL/Documents/How%20We%20Source%20Energy/Wind%20Community/Coopers%20Gap%20Wind%20Farm/AGL%20REPORT%20Coopers%20Gap%20Wind%20Farm%20community%20survey%20results.pdf

Community

Community contribution

Introduction to community contribution

Contributing to the communities in which employees live and work brings benefits to both AGL and the community.

Communities benefit from the receipt of in-kind and financial support and AGL benefits through improvements to employee engagement that can come from Employee Volunteering and Employee Giving initiatives and from strengthening relationships within the community.

Approach

AGL's community citizenship program, *Energy for Life*, builds on AGL's local community engagement strategy, providing opportunities for employees to give something back to the broader communities in which they live and work.

The *Energy for Life* program was revitalised in FY2012 to provide a more effective response to emerging sustainability risks, especially with respect to energy-related financial hardship in the community.

AGL is committed to rigorous measurement and reporting on its community investments and is moving towards a target of social return on investment for community contributions. This approach is embodied in AGL's public reporting and evidence-based approach to the development of strategic partnerships.

AGL breaks down community contributions by charitable cause (i.e. social welfare, environment, emergency relief, health or other) and by motivation for investment (i.e. charitable donation, community investment or commercial initiative).

AGL also breaks down its community contribution according to the three *Energy for Life* program areas (Employee Volunteering, Employee Giving and Strategic Partnerships), as well as the support provided to the local community through the wind farm and solar community funds, other local community initiatives, contributions arising from key retail sponsorships and other charitable donations.

In recognition of the contribution employees make to AGL's level of total community investment, a key measure of the success of and engagement with the *Energy for Life* program is the value of the community contribution arising from employee participation in Employee Volunteering and Employee Giving initiatives (page 47).

Vision for community contribution: AGL's vision is to have social return on investment measured and at target levels.

Drivers: The success of AGL's community contribution is influenced by engaging employees in the Employee Volunteering and Employee Giving initiatives (page 47) and by developing and implementing strategic partnerships that leverage the skills and strengths of AGL and its employees (page 46). This integrated approach has been developed to strengthen long-term relationships between employees and charity partners.

Performance

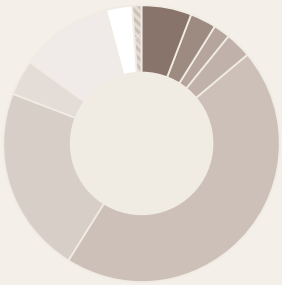
AGL's total community investment (including cash, staff volunteering and in-kind contributions) in FY2013 has been valued at $2,967,000. Compared to the previous year, the total community investment by AGL has increased by over 30%, with $2,259,900 having been invested in FY2012[1].

The value of AGL community contributions made through Employee Giving and Events (AGL matching component only) and Employee Volunteering increased to $422,300 for FY2013, from $310,100 in FY2012.

Note

1 Until FY2012, AGL was a member of the London Benchmarking Group (Australia & New Zealand) (LBG) and used the LBG model to value community contribution. In FY2012 and FY2013, AGL continued to use the methodology from FY2011 to allow comparability and trend analysis.

Community contribution by program area[1]



Legend	
AGL wind farm and solar plant community funds	6%
AGL Loy Yang Community Support Program	3%
AGL Hydro	2%
Upstream Gas	3%
Retail sponsorships	45%
Energy for Life Strategic Partnerships	22%
Employee Giving and Events[1]	4%
Employee Volunteering	11%
Sponsorships	3%
Donations – other	1%
Total value of investment[2]	$2,967,000

Notes

1 Represents AGL's matched funding only, not the donations given by employees.
2 Total value of investment rounded to nearest $100.

Community

Community contribution

Strategic Partnerships

During FY2012 following an internal review of the *Energy for Life* program, AGL established a strategic framework for community contributions, entering into several long-term strategic partnerships.

Approach

AGL has developed partnerships with The Smith Family, St Vincent de Paul and the Cancer Council to provide support to families experiencing financial hardship. These partnerships all aim to alleviate hardship in some form, but vary in their approach, reflecting the need to address capacity building, prevention and crisis support. The partnerships address the issue of hardship within the context of AGL providing an essential service. Importantly, the initiatives complement, rather than substitute, ongoing commitments to addressing hardship through regulatory obligations and existing hardship programs such as *Staying Connected* (refer to page 34).

In addition, AGL developed a partnership with the Julian Burton Burns Trust to educate the community about burns prevention. As a provider of electricity and gas, AGL believes that the Burns Trust can play a critical role in educating the community about the safe use of hot water and other potential burn hazards.

AGL is committed to analysing the benefits of the *Energy for Life* strategic partnerships in greater depth. Using a Social Return on Investment (SROI) framework, the inputs (investment), outputs (activities undertaken), outcomes (the benefits) and impact (overall value) of the program will be identified and valued over time.

In FY2013, AGL, in collaboration with The Smith Family and St Vincent de Paul, identified the outputs and outcomes of material investments made through AGL's Strategic Partnerships. The datasets to be used in analysis in future years were also identified through this process.

Undertaking this process will allow reporting on the ultimate dollar value of the partnerships and also enables both partners to build a more holistic understanding of the material impact of the partnership initiatives over time. It is hoped this feedback loop of information will also provide insights into the effectiveness of activities over time.

A paper written by AGL employees on the evidence-based approach taken to establish the revitalised *Energy for Life* program was published in the August 2013 edition of the *Sustainability, Accounting, Management and Policy Journal*.

Performance

St Vincent de Paul

AGL's five-year partnership with St Vincent de Paul is focused on providing financial support to the St Vincent de Paul Society to help its members and volunteers deliver direct financial and non-financial assistance to people in regions identified as 'at risk of hardship'. This support could be in the form of alternate accommodation, food vouchers and hampers, utility bill payments, education, prescription medicine or transportation expenses.

During FY2012, AGL developed an Energy Advice Pack for St Vincent de Paul volunteers to distribute to clients experiencing financial hardship. The pack explains the concessions available in each state, as well as tips and advice on how to save energy. The packs have been distributed to Queensland volunteers. During FY2014, packs will also be distributed in New South Wales, Victoria and South Australia. The pack is available on the AGL Blog[1].

In FY2013, AGL contributed over $366,000 to St Vincent de Paul under this partnership agreement.

The Smith Family

AGL's six-year partnership with The Smith Family is focused on breaking the poverty cycle by supporting the education of children in disadvantaged areas around Australia. AGL is providing funding to support 340 school-aged students for a period of six years through the Smith Family's Learning for Life program. AGL employees are also involved in an online student mentoring program (i-Track) with The Smith Family.

In FY2013, AGL contributed over $217,000 to The Smith Family under this partnership agreement.

The Cancer Council

AGL's partnership with The Cancer Council provides funding for the Cancer Council Financial Assistance Program. Through the Program, families affected by cancer can apply for a one-off grant from the Cancer Council to cover necessary living costs. Responding to unforseen situations such as a cancer diagnosis can affect the financial position of many households and their ability to pay for the day-to-day cost of living (including energy bills).

In FY2013, AGL contributed $30,000 to The Cancer Council under this partnership agreement.

Julian Burton Burns Trust

As an electricity and gas retailer, AGL has a responsibility to promote safety around the workplace and around the home. Research from the National Burn Registry has demonstrated scalding from hot water is one of the most common causes of burns around the home. AGL is partnering with the Burns Trust to support the targeting of burn prevention and education through South Australia's BurnSafe Schools Program.

In FY2013, AGL contributed $19,250 to Julian Burton Burns Trust under this partnership agreement.

Note

1 http://www.aglblog.com.au/wp-content/uploads/2013/06/BaseInfoEnergyAdvicePack2013-QLD-updated.pdf

Community

Community contribution

Employee Volunteering and Employee Giving

AGL provides opportunities for employees to make a genuine contribution to the community – by volunteering time and/or by providing direct financial donations to causes that they feel passionate about.

Employee Volunteering

AGL's Employee Volunteering program gives all employees the opportunity to take one day of paid volunteering leave each year to support community causes and charitable organisations.

As well as delivering social outcomes for the community, volunteering provides business benefits to AGL – by engaging employees, promoting teamwork and building morale.

AGL provides the flexibility for employees to take volunteering leave in a variety of ways, including team projects, pursuing individual interests and participating in AGL-led initiatives. In FY2013, volunteering activities ranged from providing support to aged care facilities, undertaking conservation projects, assisting crisis support facilities, and preparing food for the homeless.

AGL set a target to achieve a participation rate of 27% (by headcount) for Employee Volunteering in FY2013[1]. This target was exceeded with 37% of the workforce recording a volunteering leave day. For FY2014, AGL has set a target to achieve 35% of the workforce (by headcount) recording a volunteering leave day[2].

During FY2013, 793 employees contributed 6,009 hours of service to community services and organisations, compared to 4,182 hours in FY2012.

The 6,009 hours of volunteering leave taken in FY2013 has been valued[3] at $313,000.

Notes

1 This target does not include AGL Loy Yang employees.
2 The target for FY2014 includes AGL Loy Yang employees.
3 Until FY2012, AGL was a member of the London Benchmarking Group (Australia & New Zealand) (LBG) and used the LBG model to value community contribution. In FY2012 and FY2013, AGL continued to use the methodology from FY2011 to allow comparability and trend analysis.

Employee Volunteering

Notes

1 Participation rates are determined by comparing the total number of employees that recorded volunteering leave each financial year with the total number of employees (by headcount) as at 30 June in the corresponding year.
2 FY2013 participation rate does not include AGL Loy Yang employees. FY2014 target includes AGL Loy Yang employees.

Community

Community contribution

Employee Giving

AGL employees can elect to make regular payroll contributions to selected charity partners through the *Energy for Life* program. AGL enables employees to double the impact of financial contributions to these charitable organisations by matching employee contributions to a total maximum of $200,000 per year.

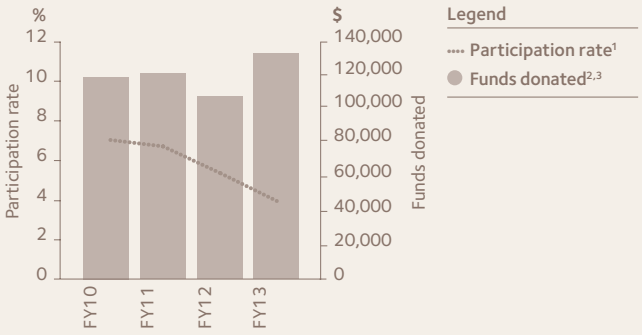
AGL's 14 charity partners comprise: Australian Marine Wildlife Research and Rescue Organisation, beyondblue, Cancer Council Australia, Careflight Rescue, CanTeen, CARE Australia, Habitat for Humanity Australia, Julian Burton Burns Trust, Kids Helpline, RSPCA, St Vincent de Paul, The Salvation Army, The Smith Family and WWF-Australia. Donations to these charity partners through Employee Giving totalled $131,200 in FY2013 (including employee donations and AGL's matched contribution), a 24% increase from FY2012, when $105,900 was donated.

During FY2013, the average monthly participation rate in Employee Giving was 5.21%, a slight decrease compared to the FY2012 rate of 6.39%.

In addition to funds raised through payroll giving in FY2013, AGL employees raised $115,800 through charity partner fundraising events such as Movember, Australia's Biggest Morning Tea and Walk In Her Shoes. These employee-raised funds were then matched dollar for dollar by AGL (up to $5,000 per event), with the value of AGL's contribution amounting to $42,400.

This brings the total donations in FY2013 to AGL's charity partners through Employee Giving, fundraising events and matching to $289,400, an increase of $107,400 when compared with last year's total of $182,000.

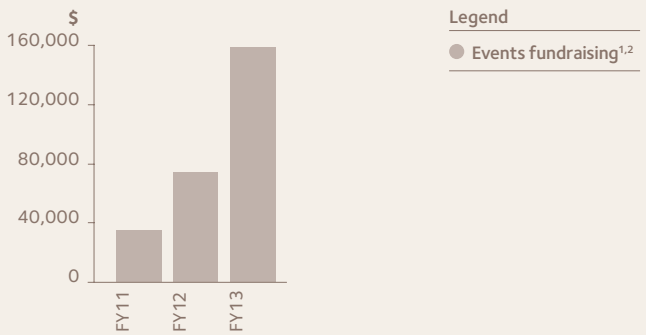
Employee Giving



Notes

1 Average monthly participation rate.
2 Includes AGL matching.
3 Funds raised rounded to the nearest $100.

Employee Fundraising Events



Notes

1 Includes AGL matching.
2 Funds raised rounded to the nearest $100.

Community

Community contribution

Community sponsorships

AGL sponsors key events in local communities to build stronger relationships with the communities in which AGL operates.

Sunshine Coast Helicopter Rescue Service

Since FY2009, AGL has been the naming rights sponsor of the Sunshine Coast Helicopter Rescue Service (the Service) to help ongoing vital rescue, medical and search missions throughout south-east and central Queensland. AGL provides the Service with regular funding for ongoing operations and enables Queensland-based customers to donate to the Service through their AGL account.

AGL currently has 13,200 active customers making contributions via their electricity bill to the Service. During FY2013, AGL customers in Queensland contributed over $235,900. Over the lifetime of the relationship between AGL and the Service, AGL customers have contributed over $1,500,000.

In late 2012, RACQ approached AGL with an offer to contribute a significant amount of funding to the Service and as a result, adopt the naming rights sponsorship. AGL and RACQ worked together to enable this change (to commence in FY2014), to provide a much needed uplift to the Service's funding. AGL will continue its support of the Service as a major sponsor and AGL's Queensland customers will still be able to donate to the Service through their electricity bills.

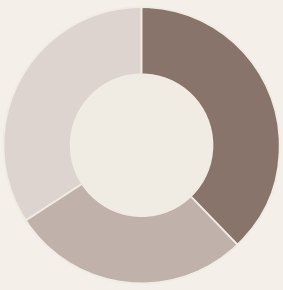
Other sponsorships

In FY2010, AGL entered into a four-year sponsorship of the Giant Panda exhibit at Adelaide Zoo in South Australia. In FY2010, AGL donated and installed a solar PV system for the Giant Panda exhibit. The system generates 50% of the energy required for the exhibit and reduces carbon emissions by 14.4 tonnes CO_2e annually.

In conjunction with the Heritage Council of Victoria, the Melbourne Restoration Fund and public donations, AGL assisted in the restoration of the iconic 'Skipping Girl' neon display in Melbourne in late FY2009 and AGL supplied 100% GreenPower Accredited Renewable Energy to power the sign and annual maintenance funding as part of a five-year sponsorship. In February 2012, AGL donated and installed a solar power system to the iconic Skipping Girl sign so she can keep 'skipping on sunshine' for many years to come.

AGL also sponsors other organisations and initiatives, including the Historic Houses Trust of New South Wales and the Clean Energy Council's Clean Energy Week 2013.

Community contribution by motivation for investment[1]



Legend	
Charitable donation	38%
Community investment	28%
Commercial initiative	34%
Total value of investment[2]	$2,967,000

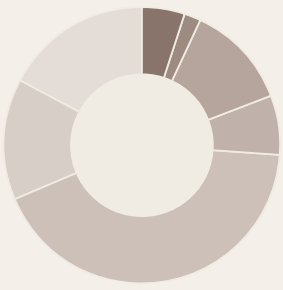
Notes

1 The motivation types are based on the London Benchmarking Group framework and comprise:
- > Charitable donation – If the contribution is made out of a sense of moral responsibility or in response to society's expectations.
- > Community investment – If the contribution is made out of a belief that companies have a long-term interest in fostering a healthy community in which they operate. This is often considered enlightened self-interest.
- > Commercial initiative – If the contribution is part of a program that is designed to provide direct benefits to the company, including stronger brand image, increased profitability, reduced costs and improved customer loyalty.

AGL is no longer a member of the London Benchmarking Group Australia, but continues to use a consistent methodology to determine community investment.

2 Total value of investment rounded to the nearest $100.

Community contribution by charitable cause[1]



Legend	
Arts and culture	5%
Economic development	2%
Education and young people	12%
Environment	7%
Health	42%
Social welfare	14%
Other	17%
Total value of investment[2]	$2,967,000

Notes

1 Represents the value of AGL's community contribution by subject focus (charitable cause).

2 Total value of investment rounded to the nearest $100.

People and safety

Introduction

AGL's goal is to engage our employees in ways that support our business, grow their skills and deliver outstanding results in a safe and sustainable way.

Employees are critical to the delivery of AGL's business strategies and to achieving the organisation's vision of creating energy solutions for the communities of today and tomorrow. It is important to create a safe, inclusive and engaging work environment where employees can contribute to delivering a positive customer experience.

The AGL Values that underpin business at AGL are:

> One Team
> Delivery
> Authentic
> Vitality
> Safe and Sustainable.

The way in which employees live these values shapes the perception of the AGL brand as well as influencing stakeholders' day-to-day experiences and interactions with AGL.

A safe and secure work environment is a key element of AGL's strategy. AGL has adopted a broad view of workplace health and safety encompassing not only the physical safety of employees, but also the overall health of employees, including emotional and financial wellbeing.

The two key focus areas for the People and safety chapter of this report are employee engagement and health and safety.

Employee engagement: In the context of a rapidly changing energy industry, maintaining and improving employee engagement is increasingly important for attracting and retaining talented employees and, ultimately, for the delivery of business results.

Health and safety: Health and safety performance is indicative of the values that underpin an organisation, the business 'culture', and the effectiveness of health and safety policies and procedures. Health and safety performance is also a significant influencing factor for employee engagement.

Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Employee engagement				
Engagement score maintained at global 'Best Performing Zone' level	Further improvement in employee engagement.	Engagement score[1]: **77%**	✓	Engagement score: **Achieve score above ORC International Best Performing Zone.**
Health and safety				
Zero harm	Total Injury Frequency Rate[2]: **<4.9**	Total Injury Frequency Rate: **5.9**	✗	Total Injury Frequency Rate[3]: **<5.0**

Notes

1 AGL Loy Yang was included in the FY2013 employee engagement survey.
2 The target related to safety does not include AGL Loy Yang in FY2013 due to the need to integrate AGL Loy Yang's safety management systems with those of AGL.
3. The FY2014 target includes AGL Loy Lang, and is based on a revised methodology for calculating TIFR, as outlined on page 60.

People and safety

Employee engagement

Introduction to employee engagement

Employee engagement measures the degree to which employees are connected to the company they work for, and is a core metric for measuring the health and success of the organisation.

Approach

AGL undertakes an annual employee engagement survey which measures employee advocacy ('say'), employee commitment ('stay') and employee discretionary effort ('strive'). The 2013 survey also included a number of questions to identify the key drivers that are important to employees, such as employment experience, career opportunities, leadership, change management, stakeholder focus, safety, wellbeing and diversity. Additionally, a measure of 'sustainable engagement' was incorporated which is affected by wellbeing and resilience.

AGL uses the survey results to assess the extent to which the initiatives that have been put in place since the last survey are making a difference to employees' employment experience. The results also help to identify areas for continued focus which are then incorporated into action plans.

Vision for employee engagement: Engagement score maintained at global 'Best Performing Zone' level .

Drivers: Improving performance in key areas such as diversity and inclusion (page 52), talent acquisition and development (page 54), and reward and recognition (page 57) influences the engagement of employees over the long term. Health and safety (pages 60 to 63) also has a strong influence on employee engagement.

Performance

AGL set a target to further increase employee engagement with the aim of being positioned in the ORC International 'Best Performing Zone' (a high performance external global engagement benchmark). In 2013, AGL's engagement score increased to 77%, an improvement of seven percentage points compared to 2012. Improvement was experienced across all business units and AGL was also identified as having a high level of sustainable engagement.

Initiatives to improve employee engagement that were implemented in FY2013 included:

> enhanced career development support and opportunities (e.g. implementation of career development frameworks, job rotations and development moves)

> improved approach to communication (e.g. more regular business updates and communication forums to enable information sharing)

> more structured approach for planning and resourcing (e.g. workforce resource and capacity planning undertaken to ensure appropriate resources to manage workload and delivery of projects).

Employee engagement continues to be a focus for AGL, with the success of initiatives in this area driven and measured through employee Performance and Development Reviews. In FY2014, senior leaders will be measured on both AGL maintaining its position in the ORC International 'Best Performing Zone' and the delivery of engagement action plans. Operational leaders and employees will be measured on their contribution to business unit specific engagement action plans and other initiatives that aim to positively impact on employee engagement.

Employee engagement[1,2,3]

Notes

1 The FY2013 employee engagement survey was conducted in May–June 2013 with an overall response rate of 81%.
2 Engagement scores and targets up to and including FY2011 reported in previous sustainability performance reports were based on Aon Hewitt methodolody. Engagement scores and targets for FY2012 and onwards are based on ORC International methodology.
3 FY2012 data does not include AGL Loy Yang.

People and safety

Employee engagement

Diversity and inclusion

AGL values the diversity in its workforce and recognises that diversity is supported and enhanced by an inclusive workplace culture.

Approach

An inclusive workplace where all employees feel safe and confident to contribute their ideas and perspectives, facilitates more creative, innovative and effective solutions for achieving AGL's business objectives.

A diverse workforce and an inclusive workplace culture are attractive to potential employees and provide AGL with an edge when competing for talent and in retaining talented people. A diverse workforce with its broad range of experience and perspectives, also has a better ability to understand and engage AGL's customers and the communities in which it works.

AGL's approach to Diversity and Inclusion comprises the following components:

> AGL Diversity and Inclusion Council (chaired by the Managing Director)
> AGL Ethics Panel
> AGL Code of Conduct and AGL Values
> Diversity and Inclusion Policy
> issues resolution – AGL Ethics Line; Workplace Issues Resolution Guidelines, Employee Assistance Program
> education and training (induction and refresher compliance training and inclusive leadership training)
> metrics and performance tracking.

In FY2013, AGL continued to focus on women in the workplace, flexibility and carers needs, and embedding an inclusive workplace culture. AGL also undertook its first Diversity and Inclusion Census, a company-wide survey which has provided further insights into the diversity of AGL's workforce, as well as employees' experience of AGL's different workplaces.

Seventy-five per cent of AGL employees responded to the Census and the findings have been a key input into the next phase of AGL's diversity and inclusion strategy.

Women in the workplace

AGL monitors gender diversity at each level of the organisation, in particular the representation of women in leadership. AGL faces similar challenges to other Australian organisations in retaining and realising the potential of its female leaders who have the capability and aspiration to move into senior leadership positions. In addition many of the roles that offer the critical experiences and career pathways for future AGL leaders are non-traditional occupations for women and so the female talent pool is small relative to the male talent pool.

Of the leaders at AGL, 31% (headcount basis) are female; a decrease from 35% in FY2012 (prior to the acquisition of AGL Loy Yang). This is lower than the overall proportion of women in AGL's workforce (now 37% and previously 46% in FY2012 prior to the acquisition of AGL Loy Yang).

In FY2012, AGL set its first public gender diversity target to increase the percentage of women in its top 300 positions (top 15% of positions) to 38% by 30 June 2015. The target aimed to increase the representation of women in a group that includes all of AGL's critical business roles and roles that are on the pathway to executive leadership, particularly in the operational businesses of Merchant Energy and Upstream Gas where the representation of women was less than 40%.

After 12 months and excluding the impact of the AGL Loy Yang acquisition, women represent 34% of the target group, an increase of 1 percentage point. In addition, AGL achieved a significant uplift in the representation of women in the top 8% of positions. Women now represent 28% of this group, an increase of four percentage points since 1 July 2012.

AGL will continue to implement initiatives to increase the number of women in leadership positions. AGL has set a target to increase the percentage of female appointments to its senior leadership pipeline to 50% by 30 June 2016.

This new three-year target includes AGL Loy Yang. It aims to resolve the challenges of the existing lag metric where progress in lifting the representation of women in the target group was effectively hidden by the acquisition of a large, male-dominated business (AGL Loy Yang). AGL will continue to track and report on the percentage of women in its Senior Leadership pipeline but the target will be aligned to a lead indicator of performance, being the appointment rate of women to this group.

The target for each of AGL's businesses will be based on current gender diversity, female appointment rate and relative challenge to source and appoint qualified women.

AGL continues to monitor gender pay equity through various forums including the Diversity and Inclusion Council and the People and Performance sub-committee of the Board. AGL's most recent pay equity analysis was completed in May 2013. AGL's gender pay gap was below the Australian benchmark pay gap of 17.6% in all but one senior leader grouping.

Gender pay equity analytics and reporting are embedded in AGL's annual remuneration review system and supporting processes ensure gender equity is at the forefront of leaders' remuneration decisions. AGL's diversity and inclusion strategy includes initiatives to address the drivers behind AGL's gender pay equity gap, including attracting and retaining women in the Merchant Energy and Upstream Gas businesses (which offer non-traditional roles and career paths for women), and developing women for senior leadership.

People and safety

Employee engagement

AGL held a series of events for its Women's Networks which were established in the North Sydney and Melbourne offices in CY2012. Hosted by senior female leaders, the quarterly events attract groups of up to 70 women who come together to learn from and meet women from other business units. New networking opportunities for women from AGL Loy Yang and the Upstream Gas business are being modelled on these successful networks.

AGL holds annual diversity conferences to provide education, skills and networking opportunities to advance women in the workplace. AGL's third annual conference was held in November 2012 and was attended by 100 employees from across the business (including women and men) and focused on the opportunities and challenges for women working in non-traditional career paths in AGL's Merchant Energy and Upstream Gas business units as well as AGL's broadening diversity agenda.

AGL is compliant with the new *Workplace Gender Equality Act 2012* (Cth) and is well positioned to report under the new Gender Equity Indicators established by the Act in 2014.

AGL continued to hold its Employer of Choice for Women citation which was awarded in 2012 by the Equal Opportunity for Women in the Workplace Agency (now called the Workplace Gender Equality Agency).

During FY2013, 62 women were due to come back from maternity leave. Of these, 19 (31%) returned to full-time employment, 38 (61%) returned to work on a part-time basis and 5 (8%) chose not to return to work (down from 17% in FY2012).

Inclusive workplace

AGL recognises that all people working in or visiting AGL workplaces have the right to be treated with respect and fairness and to enjoy an environment free of discrimination, harassment, bullying and other unlawful behaviour.

AGL's Diversity and Inclusion Policy covers the rights and obligations of employees and leaders under state and federal anti-discrimination and occupational health and safety legislation.

AGL encourages employees to speak up about unacceptable and unlawful behaviour and commits to resolve issues effectively and as quickly as possible. During FY2013, AGL addressed 13 issues relating to unacceptable behaviour in the workplace (compared to eight issues in FY2012). Seven of these issues were substantiated following investigation in accordance with AGL's Workplace Issues Resolution Guidelines. Disciplinary actions (in the form of dismissal, formal warnings and additional training) were taken.

AGL's Ethics Panel continues to serve as a forum for addressing systemic issues related to employee behaviour in the context of the AGL Code of Conduct. The independent Ethics Panel member provides an Ethics Line service, acting as a last resort contact point for potential breaches of the Code and to investigate matters in an impartial and independent manner.

Flexibility and carers' needs

AGL's FY2013 Diversity and Inclusion Census identified that 49% of AGL employees had worked flexibly in the previous 12 months. Flexible working arrangements included part-time work, job sharing, compressed working weeks, flexible start and finish times and telecommuting. The Census results show that employees regard flexibility as the most important focus area of AGL's diversity strategy and that flexible work is becoming an increasingly accepted way of working at AGL, and that it is supported by leaders. In FY2014, AGL will continue to build leader and employee capability to successfully manage flexible work and identify barriers to and ways to support flexible work; particularly in operational sites.

Forty-three per cent of respondents to the Census identified that they were carers, with 35% of respondents caring for children. In CY2012, AGL successfully piloted new programs to support employees who are parents. Run as a series of facilitated workshops over five to six months, employees received coaching, practical tools and support to help them successfully navigate their dual roles at work and at home. Employees form strong supportive networks that continue after the formal program concludes and participants are continuing to meet regularly. Three programs are underway in AGL in CY2013.

Flexible work arrangements utilisation rates

Flexible work arrangements	Percentage of employees using flexible work arrangements[1,2]
Part-time	6%
Job share	0%
Flexible start/finish times	30%
Compressed working hours	3%
Working from home/telecommuting	22%
Have not used flexible work arrangements	51%

Notes

1 The FY2013 Diversity and Inclusion Census was conducted in November 2012 with an overall response rate of 75%.
2 The Census was issued to all permanent and maximum term AGL employees (excluding AGL Loy Yang).

People and safety

Employee engagement

Talent acquisition and development

Attracting and retaining the right people and developing their skills and talents is one of the most critical challenges and opportunities AGL faces in meeting its strategic objectives.

Competition for experienced and talented employees in the energy sector presents a strategic opportunity and threat for AGL. The energy industry is rapidly changing due to government deregulation, climate change policies and the development of renewable energy technology. Having the right people with the right skills in place will be a key enabler for AGL in responding to these challenges.

Talent acquisition

The strength of a good employer brand lies in the ability to attract the right people with the right skills who are the right fit for the business. The business benefits through decreased attrition rates and customers benefit by dealing with enthusiastic and engaged employees. In turn, a positive customer experience is reflected in AGL's bottom line and in shareholder value.

AGL offers a work environment which is stimulating, collaborative and productive. AGL supports the aspirations of employees who seek to develop their careers at AGL – whether moving up through leadership roles in the organisation or by expanding their skills and experience as specialists in their chosen fields.

The AGL Employment Value Proposition (EVP) describes the unique and compelling rewards and benefits (tangible and intangible) offered by AGL, in return for the skills, capabilities and experiences that employees bring to the organisation. Communicating the EVP to employees and external candidate market helps the business attract and retain the right people. During FY2013, AGL undertook a major research project to segment EVPs for each business unit to reflect the differentiated EVPs that exist across the business.

'AGL Careers', an outsourced team of on-site recruitment specialists, continues to deliver strong results with leader satisfaction in the service increasing to 96% (FY2012: 93%) and a 96% direct hire rate resulting in significant cost savings from the limited use of external recruitment agencies. Forty-six per cent of all vacancies are being filled by current employees which indicates a high level of internal mobility. During FY2013, AGL expanded the scope of AGL Careers to include all temp and contractor recruitment, delivering substantial costs savings in its first 12 months.

During FY2013, AGL further enhanced its social media presence by creating a Facebook application specifically for Careers to assist in promoting AGL's Employer Brand and increasing AGL's visibility in the market for candidate attraction.

Talent management

AGL's Talent Management Program comprises four key areas – identifying critical roles, succession planning, building talent pipelines and talent metrics.

Identifying critical roles continues to be a focus to ensure there is an identified pipeline of talent. If vacant these roles pose a significant business risk because they are key to AGL's new business development, revenue generation or operational management. Typically critical roles are difficult to fill quickly with either an external hire or a ready internal successor. Profiling of critical roles is being undertaken to enable 'role success' to be defined and then used to develop and source talent. This process has initially targeted roles that are critical to fulfilling AGL's growth strategy and roles that will drive competitive advantage and profitability. Additionally, a number of new senior critical roles have been created to support the new direction of AGL's strategy, with a need to grow expertise in operational excellence, innovation and new business models.

To ensure the sustainability of AGL's most critical business functions it is a requirement that all senior critical roles have a succession plan in place to ensure that there is a pipeline of key talent being actively developed in the capability areas required for role success. An outcome of the succession planning process has been the appointment of internal successors to two of AGL's executive roles in FY2013.

Compliance training

Compliance Area	Completion Rate[1,2]
Code of Conduct	96%
Diversity and Inclusion	95%
Health, Safety and Environment	95%
Information Security	95%
Privacy	95%
Risk	95%
Competition and Consumer Act	94%

Notes

1 Data excludes employees on parental leave, new starters and AGL Loy Yang. New starters are those employees who have commenced employment and have four weeks to complete the training from the date of their commencement. This compliance training is a mandatory condition of their employment when they join AGL.

2 Data is for the period 1 July 2012 to 26 March 2013, reflecting the fact that annual compliance training is undertaken by all employees (excluding new starters) between December and February.

People and safety

Employee engagement

Through the people planning sessions there is a focus on defining organisation-wide talent pools and building bench strength. The output from these sessions is a target list of key talent ready for a new role within the next 12 months, as well as upcoming opportunities such as projects, secondments and role vacancies. This has enabled proactive career planning for key individuals needing critical experiences or representing a retention risk.

A talent metrics scorecard is used to ensure the talent management program minimises risks such as key resource risk and vacancy risk, as well as focusing on gender diversity.

AGL continually seeks ways to enhance its approach to talent management and achieve an integrated strategy when it comes to identifying and developing talent. The next iteration of the talent management program is the transition online, which will provide an opportunity to continue to incorporate best practice into AGL's talent management approach as well as improving visibility of, and reporting on, talent data. The talent management online functionality will be implemented across the business during FY2014.

Induction

AGL runs a structured ten week induction program for all new employees that includes receiving a comprehensive information and welcome pack, completing eight compulsory compliance training modules and attending a Corporate Welcome Day (a full day, face-to-face workshop offered at AGL's major sites). During FY2013, 707 employees attended an AGL Corporate Welcome Day (this includes a series of condensed events held for new team members from the Loy Yang acquisition). AGL also has a mandatory one-day induction workshop for all leaders, whether new to leadership or new to AGL, which introduces them to AGL leadership capabilities, expectations and development opportunities.

Providing adequate learning and development opportunities is critical to ensuring that customer service employees deliver a quality customer experience. All new hires in customer service roles receive a thorough three-week induction in relevant processes, systems and service skills prior to any customer contact. Training to develop the competence and confidence of customer services employees is also provided when new process and system enhancements are introduced, to minimise the risk of service levels being impacted during change.

Leadership training and development programs

Program	Purpose	FY2013 participation rate[1]
Leadership In Action Foundations	One-day induction workshop for leaders new to AGL or those newly promoted to leadership roles.	162 leaders
Diploma of Management for Frontline Leaders	A one-year professional development program that provides frontline leaders with the knowledge and skills to achieve better performance and increased productivity at the organisational level. Offered through the Australian Institute of Management (AIM).	16 frontline leaders graduated February 2013 24 frontline leaders commenced March 2013
Advanced Diploma of Management for Leaders/ Specialists	Completion of six subjects provides an option for an accredited professional development program for leaders and specialists and a bridge to/from the AGL Academy. Subjects are also offered individually for specialised development. Offered through the Australian Institute of Management (AIM).	3 leaders graduated FY2013 18 leaders commenced FY2013 46 leaders completed individual subjects
Academy for Senior Leaders	Customised residential program to develop experienced leaders' skills and prepare them for greater responsibility.	18 senior leaders
AGL Emerging Frontline Leaders in Customer Services	This customised in-house program was developed to upskill specialists to Team Leader capability in the Customer Services Centres.	17 specialists graduated FY2013 12 specialists commenced FY2013
CEB Human Resources Leadership Academy	This program provides an opportunity for HR professionals to develop leadership skills and business acumen.	2 People & Culture professionals completed
360 degree feedback and coaching program for leaders	This program provides direct feedback and follow-up coaching on how leaders are perceived by their key stakeholders in relation to the AGL Values and the AGL Leadership Capabilities Framework.	87 leaders
Additional Leadership Development Programs based on Career Development (CDP) Outcomes	Performance Management; Influencing Skills (TOYF) Presentation Skills; Productive Thinking; Leading with Emotional Intelligence: Assertiveness Techniques; Project Management; Career Management.	311 leaders
People Centred Implementation (PCI)	This program is AGL's preferred methodology for leaders who facilitate change through people: Foundations and accredited Practitioner levels available.	123 leaders

Note

1 Data includes AGL Loy Yang participants.

People and safety

Employee engagement

Learning and development

AGL's online learning platform, Empower, provides a central portal for the delivery of compliance training and offers employees improved access to learning and development opportunities. In FY2013, all employees[1] were required to complete compliance training via Empower as outlined in the table on page 54.

During FY2013, AGL also continued to deliver and enhance its leadership development programs, as outlined in the table on page 55.

Additional development programs are added to the leadership curriculum each year, based on Career Development Plan outcomes. A major initiative that commenced in FY2013 was the development of a specific induction program for senior non-people leaders entering the business.

Turnover

Total turnover, which includes voluntary and involuntary turnover, for FY2013 was 16.4%, a decrease from 25.8% in FY2012. This decrease reflects both lower voluntary and involuntary turnover in FY2013, compounded by the inclusion of AGL Loy Yang which has a history of minimal employee turnover.

On a comparative basis total turnover at AGL (excluding AGL Loy Yang) fell from 25.8% in FY2012 to 19.2% in FY2013, with voluntary turnover (attrition) falling from 15.9% to 12.3%.

Other factors influencing the reduction in turnover include high levels of engagement, which positively impacts employee perspectives when assessing their current situation against external opportunities, together with the softening of the external job market, which impacts employees' willingness to actively seek alternative employment.

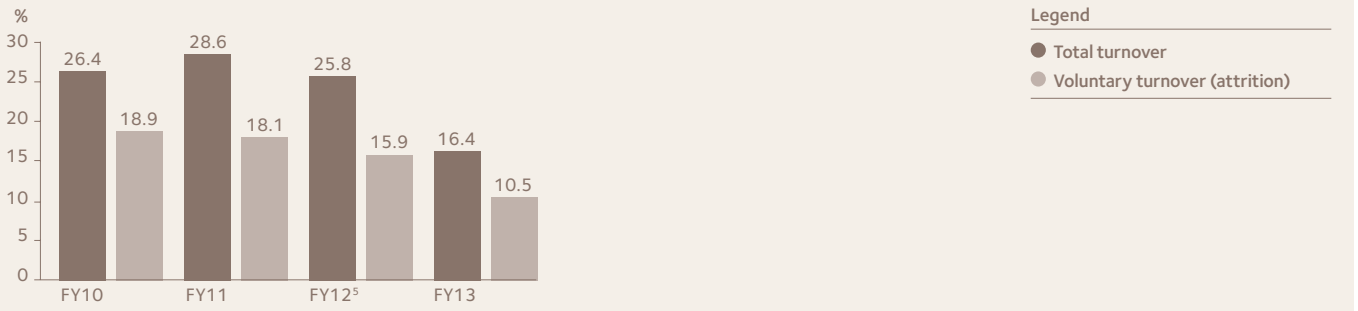
In addition, AGL's improved capacity for accurately communicating the Employment Value Proposition to prospective candidates results in stronger role alignment and employee retention.

Voluntary and involuntary turnover at AGL Loy Yang was 6.1% for FY2013, with an underlying attrition rate of 3.6%. A higher rate of involuntary turnover in FY2013 was a result of structural changes brought about by the acquisition by AGL.

Note

1 Excludes AGL Loy Yang employees.

Voluntary and involuntary turnover[1,2,3,4]



Notes

1 Total number of departures per FTE (full-time equivalent).
2 Data for FY2011 onwards shows turnover as a percentage of FTE at 30 June. Prior to FY2011 turnover is a percentage of the relevant 12 month average FTE.
3 Includes fixed term, permanent full-time and permanent part-time employees on a FTE (full-time equivalent) basis. Excludes casuals, labour hire and contract workers.
4 Data for FY2013 only includes AGL Loy Yang.
5 Data for FY2012 was incorrectly reported in the FY2012 Sustainability Performance Report (table only). The data in the table now reflects the figures that were accurately reported in the text of the FY2012 report.

People and safety

Employee engagement

Reward, recognition and benefits

Providing clear expectations and recognising and rewarding performance and contribution to the business is motivating for employees and critical to achieving AGL's goals and targets.

Performance and Development Review process

AGL's Performance Management Cycle is an important process for creating a high performance organisation, where people take accountability for delivering results and for building the capability needed to progress their careers in AGL.

AGL's Performance and Development Review (PDR) process is used to measure and manage employee performance. The PDR process incorporates measurable objectives, regular (at least monthly) one-to-one conversations between leaders and employees, mid-year and full-year performance reviews, career development planning and stakeholder feedback.

The PDR provides employees with clarity about what is expected of them and links reward and recognition of employees' performance and contribution to the business in a transparent and equitable manner.

To increase the transparency of the PDR process, a company-wide calibration process is undertaken to ensure that performance ratings are applied consistently and equitably.

To ensure employees' efforts are aligned to strategic goals, mandatory objectives are developed and cascaded through the executive team to other layers of leadership (where relevant). The mandatory objectives for FY2013 included financial, health safety and environment, employee engagement and customer satisfaction targets.

In June 2012, AGL transitioned paper-based PDR documents and processes for employees who were not employed under an enterprise bargaining agreement (EBA) onto an online platform, *mycareernet*. Employees covered by EBAs were transitioned to *mycareernet* in June 2013. As the foundation of an integrated talent management system, *mycareernet* provides a central data repository and common, web-based portal for AGL's performance, career and talent processes.

Career development

In the context of a rapidly changing energy industry, being able to offer attractive and challenging careers is critical to attracting and retaining talented employees and, ultimately, to the delivery of business results.

AGL's Career Management Framework is composed of five career factors that need to come together to deliver an employee's long-term career growth. This framework helps leaders in their discussions about employees' career development strengths, gaps and potential career moves, as well as projects or experiences that may be needed for their development.

In addition to the Career Development Framework, there are a range of processes and offerings that enable employees to realise their career aspirations in AGL:

> Career Development Plan
> promotion of internal job opportunities
> career development workshops
> talent management
> assisted education program
> 360 degree feedback
> leadership development
> personal development.

AGL's Position Framework describes the architecture of all positions in AGL, providing an accessible matrix of potential career paths for employees planning their careers at AGL. A hierarchy of work levels defines the 'size' of a position relative to other positions at AGL and categorises each role according to four streams of work, each with a different focus. The Position Framework is underpinned by the Hay job evaluation methodology, an internationally recognised methodology for 'sizing' jobs.

Assisted Education program

AGL supports employees completing formal qualifications at secondary and tertiary level through the Assisted Education program. This program supports employees financially and by allowing time off work to study. During FY2013, AGL provided $98,724 in financial support to 27 employees through this program.

People and safety

Employee engagement

Reward and recognition

Remuneration is a core driver for many employees. AGL regularly benchmarks remuneration broadly to the external market as well as focusing on relevant industry sectors such as resources, key specialist areas such as energy trading and other key roles to ensure remuneration policies are effective in attracting and retaining the right people. Generally total remuneration is targeted within the 50th to 75th percentile market range.

AGL's remuneration system includes a short- and long-term incentive program for senior managers and a short-term incentive for middle and emerging leaders, with payment of the incentive based on achieving a combination of company and individual targets. Currently, 47% of AGL's employees (1,329 people) are eligible to participate in short-term incentive programs, and 0.84% of employees (24 people) are eligible to participate in long-term incentive programs.

All employees (with the exception of defined senior executives and employees with less than 12 months of service) are eligible to participate in the Share Reward Plan, under which employees are invited to take up ownership of up to $1,000 of AGL shares at no personal cost, subject to AGL achieving specific business outcomes. These business outcomes include overall improvement in customer satisfaction, overall improvement in AGL's financial performance including earnings per share (EPS) and overall improvement in AGL's health, safety and environment (HSE) performance. In FY2013, 83% of employees (2,352 people) were invited to participate in the Share Reward Plan. As a result of achievement of these business outcomes, the Board awarded $1,000 of AGL shares to eligible employees (paid in FY2014).

The Customer Service incentive program has both short- and long-term components. Performance is assessed against a monthly scorecard and a short-term incentive is paid to the top 30% of performers each month. The top 30% of performers nationally who achieve a Performance and Development Review (PDR) rating of three or higher at the end of the PDR cycle are also eligible for an annual incentive.

Employee benefits

AGL offers:

> 14 weeks paid parental leave for primary carer (for women and men), which can be taken flexibly (e.g. at half pay; part-time)
> two weeks paid partner leave which can be taken flexibly within the first eight weeks following birth or adoption
> up to two weeks purchased leave
> 25% employee discount on AGL energy usage and service charges
> up to two years salary continuance income protection in the event of an illness or injury
> financial and study leave support for employees pursuing further study through the Assisted Education program
> access to a counselling service for employees and their families
> volunteering leave (Employee Volunteering)
> AGL matched workplace giving program (Employee Giving)
> wellbeing program
> flexible work options
> discounted health insurance
> AGL VIP energy discounts for family and friends
> share reward and share purchase plan
> Living the Values awards
> Service award program
> Social Club.

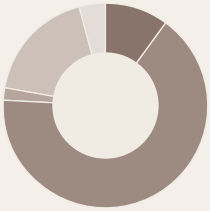
People and safety

Employee engagement

Additional people data

At 30 June 2013, AGL had a total of 2,847 employees corresponding to 2,757 full-time equivalent (FTE) employees. This compares to 2,107 employees (2,004 FTE) at the end of FY2012, reflecting the scale of the Loy Yang acquisition.

AGL workforce

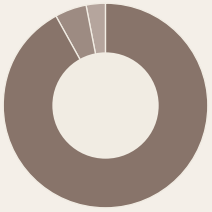


Legend	
State	%
New South Wales	10%
Victoria	66%
Queensland	2%
South Australia	18%
Australian Capital Territory	4%
Total employees (FTE)[1,2]	2,757

Notes

1 Includes fixed term, permanent full-time and permanent part-time employees on a FTE (full-time equivalent) basis as at 30 June 2013. Excludes casuals, labour hire and contract workers.
2 Includes AGL Loy Yang employees.

Employees by employment status



Legend	
Permanent full-time	92%
Permanent part-time	5%
Fixed term full-time	3%
Fixed term part-time	0%
Total employees (FTE)[1,2]	2,757

Notes

1 Includes fixed term, permanent full-time and permanent part-time employees on a FTE (full-time equivalent) basis as at 30 June 2013. Excludes casuals, labour hire and contract workers.
2 Includes AGL Loy Yang employees.

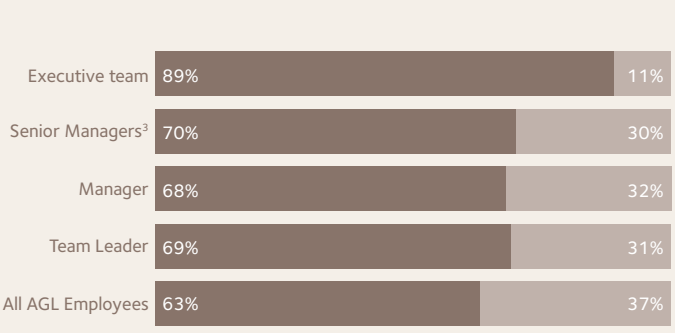
Employees by contract type

Legend	
Awarded	40%
Salaried	60%
Total employees (FTE)[1,2]	2,757

Notes

1 Includes fixed term, permanent full-time and permanent part-time employees on a FTE (full-time equivalent) basis as at 30 June 2013. Excludes casuals, labour hire and contract workers.
2 Includes AGL Loy Yang employees.

Employees by gender[1,2]



Percentage change (females) since FY12[4]
No change
Increased by 1 PP
No change
Decreased by 14 PP
Decreased by 9 PP

Legend

- Males
- Females

Notes

1 Includes fixed term, permanent full-time and permanent part-time employees on a headcount basis as at 30 June 2013. Excludes casuals, labour hire and contract workers.
2 Includes AGL Loy Yang employees.
3 Senior Managers refers to General Managers and Head of Functions.
4 PP = Percentage points.

Employees by age[1,2]

Legend

- Under 24
- 25–34
- 35–44
- 45–54
- 55–64
- 65 and over

Notes

1 Includes fixed term, permanent full-time and permanent part-time employees on a FTE (full-time equivalent) basis as at 30 June 2013. Excludes casuals, labour hire and contract workers.
2 Includes AGL Loy Yang employees.
3 Senior Managers refers to General Managers and Head of Functions.

People and safety

Health and Safety

Introduction to health and safety

AGL's commitment to safety is one of the core values underpinning the way we do business.

Approach

Providing a safe and healthy workplace for employees and contractors is a key priority for AGL. Safety performance is regularly monitored at the AGL Board level through the quarterly meetings of the Safety, Sustainability and Corporate Responsibility Committee. Safety performance is also monitored by the Executive Team and reviewed in leadership and team meetings across the business.

A Health, Safety and Environmental (HSE) Management System (known as 'Life Guard') documents AGL's framework of policies, standards, guidelines and procedures for consistent and continuous improvement in health, safety and environmental performance, and is a key element in ensuring compliance with HSE legislation.

AGL's HSE Strategy and annual HSE Action Plans are built on four cornerstones which are: Leadership, Systematic Approach, HSE Culture and Safe Workplaces and Equipment.

Further details on the implementation of the AGL HSE Strategy can be found on page 62.

AGL assesses workplace risks in consultation with employees and, where appropriate, independent external advisors, and manages these risks by identifying and implementing suitable controls. HSE risks are managed as a component of organisation-wide risks, using the Fully Integrated Risk Management approach. Key HSE risks include: contractor safety management; slips/trips/falls; psychological injury; fatigue; musculoskeletal injury; working remotely; working at heights; flammable gas; electricity; and customer contact hazards.

Vision for health and safety: AGL's vision is to have a zero harm workplace.

Drivers: Safety performance is driven by a systematic approach to safety strategy and a workplace culture that actively embraces safety as a core business value (page 62). Employee Wellbeing (page 63) and Employee Engagement (page 51) are also key drivers of safety performance.

Performance

AGL measures and tracks safety performance using a number of trailing performance indicators based on reported safety incidents. The trailing indicators include Total Injury Frequency Rate (TIFR) and Lost Time Injury Frequency Rate (LTIFR). AGL also tracks leading indicators of Health and Safety to provide insight into trends. The leading indicators include HSE activities in Action Plans, safety and wellbeing conversations and 'near miss' incident reporting.

At AGL an incident is defined as anything that resulted or had the potential to result in an injury or illness to any person, damage to plant, adverse impact to the environment or reputational damage. Incidents that have high potential risk are reported as Significant Incidents. AGL also records 'near misses' which are events that did not result in an injury, but had the potential to do so.

Total injury frequency rate (TIFR)[1]

In FY2013, AGL's TIFR decreased to 5.9 from 6.6 in FY2012. Of the injuries reported:

> A third were 'non-event related' and defined as occupational illnesses, where repetitive exposure resulted in soft tissue damage/joint deterioration or were mental health illnesses (predominantly stress related); and

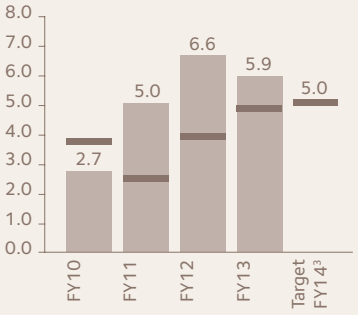
> 45% were a result of a slip, trip or fall.

For FY2014, AGL will separate Occupational Illness Frequency Rate (OIFR) from TIFR. The OIFR incorporates those longer term occupational injuries that are gradual onset and cannot be attributed to a specific event. This will provide a better understanding of the nature of injuries across the organisation. The purpose of capturing injury data is to inform HSE initiatives thereby increasing the granularity of data by splitting out injuries that occur from a single occurrence from those where there is a gradual development of symptoms. This will enable a better understanding of HSE risks and an appropriate allocation of HSE resources.

Note

1 Excluding AGL Loy Yang.

Total injury frequency rate[1,2]



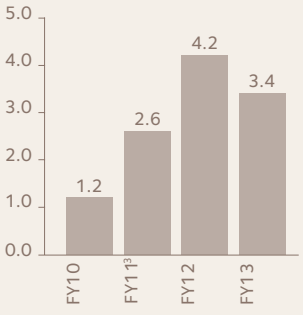
Legend

- TIFR
- Target

Notes

1 Total injury frequency rate (TIFR): Number of lost time cases and medical treatment cases per 1,000,000 exposure hours.
2 Data excludes AGL Loy Yang.
3 FY2014 target is based on a revised methodology for calculating TIFR.

Lost time injury frequency rate[1,2]



Legend

- LTIFR

Notes

1 Lost time injury frequency rate (LTIFR): Number of lost time injuries per 1,000,000 exposure hours.
2 Data excludes AGL Loy Yang.
3 This figure has been adjusted from the figure reported in the FY2011 Sustainability Report, due to the escalation of two injuries from medical treatment injuries to lost time injuries.

People and safety

Health and Safety

Lost time injury frequency rate (LTIFR)[1]

AGL's LTIFR in FY2013 decreased to 3.4 from 4.2 in FY2012. There were 15 lost time injuries during FY2013 compared to 17 in FY2012.

Medical treatment injury frequency rate (MTIFR)[2]

MTIFR for FY2013 increased slightly to 2.5 from 2.4 in FY2012. There were 11 medical treatment injuries during FY2013 compared to 10 in FY2012.

Fatalities

In FY2013 there were no fatalities.

Injury severity rate[3]

In addition to safety indicators that track the frequency of incidents, the tracking and reporting of the lost time injury severity rate provides a measure of the impact of lost time injuries by looking at the amount of time lost, rather than only the frequency at which incidents occur.

The average number of days lost has increased to 25.9, compared to 17.5 in FY2012. This figure reflects a slight increase in the proportion of lost time injuries requiring more than 20 days away from work, when compared with FY2012. The injuries requiring more than 20 days away from work are varied and reflect both office and field environments. They include back, knee and wrist injuries as well as mental illness.

Incidents[4]

Incidents that have the potential to cause significant harm to people, plant, environment or the business are classified and reported as significant incidents.

The number of significant incidents reported in FY2013 was 24, compared to 28 in FY2012. This reduction has been the result of extensive work to address issues relating to electrical safety, work at heights and the safety management of contractors.

Contractor safety performance[5]

AGL monitors and reports the LTIFR of contractors, to provide a more comprehensive representation of AGL's safety performance. In FY2013 the LTIFR for contracted workers was 3.5, which whilst comparable to the LTIFR of 3.4 for AGL employees, is an increase from 1.1 in FY2012. The major factor in this increase is related to improved focus on incident reporting to make sure injuries were recorded.

AGL Loy Yang Safety Performance

The TIFR for AGL Loy Yang was 5.3, a 66% reduction from 15.4 in FY2012. As of 30 June 2013, the power station has been free of lost time injuries for 712 days.

Note

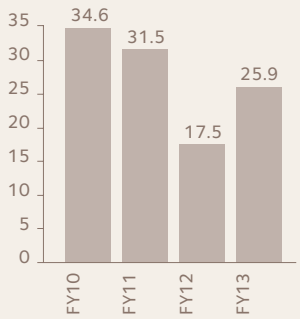
1 Excluding AGL Loy Yang.
2 Excluding AGL Loy Yang.
3 Excluding AGL Loy Yang.
4 Excluding AGL Loy Yang.
5 Excluding contractors engaged by AGL Loy Yang.

Medical treatment injury frequency rate[1,2]

Legend
- MTIFR

Notes
1 Medical treatment injury frequency rate (MTIFR): Number of medical treatments per 1,000,000 exposure hours.
2 Data excludes AGL Loy Yang.
3 This figure has been adjusted from the figure reported in the FY2011 Sustainability Report, due to the escalation of two injuries from medical treatment injuries to lost time injuries.
4 This figure has been adjusted from the figure reported in the FY2012 Sustainability Report.

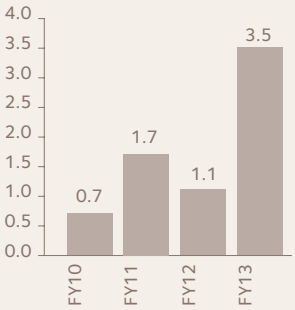
Severity rate[1,2]



Legend
- Severity rate

Notes
1 Severity rate: Average number of days lost per lost time injury recorded within the financial year.
2 Data excludes AGL Loy Yang.

Contractor lost time injury frequency rate[1,2,3]



Legend
- LTIFR

Notes
1 Lost time injury frequency rate (LTIFR): Number of lost time injuries per 1,000,000 exposure hours.
2 Data excludes AGL Loy Yang.
3 The LTIFR for contractors is based on contracted hours submitted by business leaders.

Fatalities

Year	Number
FY10	0
FY11	0
FY12	0
FY13	0

People and safety

Health and Safety

Health, safety and environment strategy

AGL's strategy is based on our commitment to provide a safe workplace with engaged and resilient employees.

AGL understands the importance of having a strong, risk-focused health, safety and environment culture. The AGL Health, Safety and Environmental (HSE) Strategy provides the framework to drive change in HSE culture and performance, assisting AGL in achieving its goal of being a safe and sustainable business.

The HSE Strategy is built on four cornerstones which are:

> leadership;

> active HSE culture;

> safe workplaces and equipment; and

> systematic approach.

The HSE Strategy is enabled through the delivery of the annual HSE Action Plans and is measured through HSE monthly performance reports.

Leadership

Strong and dedicated safety leadership is an essential component of achieving a 'zero-harm' work environment at AGL. An effective safety culture requires commitment, accountability and continuous reinforcement from all levels of management, including the AGL Board.

The AGL Board and Executive Team review safety performance via the monthly Group Performance Report. The Board Safety, Sustainability and Corporate Responsibility Committee also reviews safety performance on a quarterly basis, as well as reviewing audit findings and recommendations, strategic priorities and significant incidents.

Safety is included as an agenda item at all business unit leadership team meetings. In addition, the Merchant Energy and Upstream Gas business units have established HSE Councils as a further mechanism for monitoring safety performance.

Active HSE culture[1]

Improving the safety culture at AGL continued to be a focus during FY2013.

The process for conducting 'safety and wellbeing conversations' has become well-established at AGL. A safety and wellbeing conversation is a tool for ensuring leaders and employees participate in open discussions about safe and healthy behaviour, with a view to challenging and preventing unsafe or unhealthy behaviour.

During FY2013, AGL recorded 1,272 safety and wellbeing conversations across the entire business. Senior leaders discussed the outcomes of safety and wellbeing conversations at leadership team meetings, with the purpose of improving the quality of conversations conducted and highlighting any potential safety improvements. Increased use of the safety and wellbeing conversation process has encouraged senior leaders to engage directly with employees to demonstrate AGL's commitment to safety and employee wellbeing.

New employees and contractors are introduced to the safety culture at AGL through the delivery of induction training. AGL's online induction program was completed by 553 new employees, transferees and contractors as at 30 June 2013. Existing employees with over one year's service are required to complete an annual online refresher in AGL's HSE framework. As at 30 June 2013, 1,882 existing employees and contractors had completed this program, equating to 95% of eligible employees.

During FY2013, 13 workshops were conducted to provide safety training to a total of 105 new and existing leaders at AGL.

Workplaces and equipment[2]

In addition to managing HSE systems, safety culture and leadership, the physical risks present in AGL work environments are assessed and managed continuously. Key risk areas are identified and risk reduction strategies are added to the annual HSE Action Plans.

HSE consultation committees and representatives are an important link in engaging with employees on matters relating to safety, health and the environment; and in delivering the HSE Strategy.

During FY2013, AGL continued to consult with employees on HSE issues with 81 employee representatives on 10 HSE committees.

Systematic approach

AGL takes a systematic approach to the management of HSE and has an overarching Management System, *Life Guard* which is based on the requirements in Australian Standards:

> AS/NZS 4801 (2001): Occupational Health and Safety Management Systems; and

> AS/NZS ISO 14001 (2004): Environmental Management Systems.

Internal and external audits of the *Life Guard* system facilitate a culture of continuous improvement. Audit findings are reflected in HSE Action Plans and improvements to the management system, strategic direction and safety programs.

In FY2013, external auditors completed the final year of a three-year audit cycle of *Life Guard*. Audits were conducted at 12 AGL sites, covering all business units. Topics covered by this year's audits included training and competency, hazard notification, contractor management, risk management and work area safety. The audits recognised the visible commitment of leaders to HSE, the systems in place at sites to ensure effective risk management and the communication with employees on HSE matters. During FY2014, AGL will develop action plans to respond to the auditors' recommendations, initially focusing on addressing the high risk findings.

AGL has annual HSE Action Plans in each business unit, tailored to deliver improvements for specific risk areas. During FY2013, AGL completed 100% of the actions in the HSE Action Plans, delivering improvements in:

> risk management;

> ergonomics;

> HSE systems improvement;

> contractor safety management; and

> HSE training for leaders.

Notes

1 Figures exclude AGL Loy Yang.
2 Figures exclude AGL Loy Yang.

People and safety

Health and Safety

Wellbeing

AGL supports the wellbeing and good health of its people through a range of initiatives and recognises the influence that employee wellbeing can have on employee engagement and on achieving a high performance culture.

Approach

There are many factors that contribute to employee wellbeing. *Wellbeing @AGL* provides programs in three key areas to support employees in making informed choices that will enhance their health and wellbeing.

The wellbeing framework for FY2013 included:

Physical Health

> annual flu vaccinations
> health checks
> fruit at work
> Wellbeing Health Hub – information and programs for better health and wellbeing
> nutrition and lifestyle counselling

Emotional Health

> resilience program
> employee assistance services including the Employee Assistance Program (EAP)
> Mental Health at Work for leaders (in development)

Financial Health

> corporate discount for health insurance
> corporate rates for gym memberships
> financial counselling.

During FY2013, the focus of the wellbeing program was emotional wellbeing. The resilience program was implemented across a number of teams within AGL, with 693 employees participating in the program to 30 June 2013. Continuing the work in this area, a specific program to address the leadership capability of managing mental health in the workplace was developed to pilot stage in FY2013. This will be developed further with a view to roll out across AGL.

The Employee Assistance Program provides confidential and independent counselling for AGL employees and their immediate family members. A new provider was appointed in April 2013, with nutrition and lifestyle counselling and financial counselling now offered as part of the program. A leader hotline is also available through the Employee Assistance Program. AGL leaders have access to support and coaching on people management issues. This service is designed to assist leaders to proactively address issues.

AGL offered health checks to all employees in FY2013, with 901 employees participating in the program. 369 individuals were referred to their doctor as a result of having one or more measurements which fell outside of the healthy reference range. The data captured by the health checks will help to identify physical wellbeing initiatives for FY2014.

Performance

During FY2013, there were 2,979 participants in the various wellbeing initiatives. On an FTE basis, AGL employees each participated in 1.4 wellbeing activities throughout the year, on average.

Wellbeing programs and participation rates[1,2]

Wellbeing activity	FY10 Participation rate	FY11 Participation rate	FY12 Participation rate	FY13 Participation rate
Employee Assistance Programs[3]	7%	9%	5%	5%
Health Checks	37%	N/A	N/A	41%
Fruit at Work[4]	45%	73%	66%	2%
Influenza vaccination (seasonal program)	38%	41%	39%	35%
Resilience Program	N/A	N/A	N/A	32%
Wellbeing Health Hub	N/A	32%	39%	24%

Notes

1 Participation rates for 1 July to 30 June, based on FTE as at 30 June.
2 Data excludes AGL Loy Yang.
3 Money 101 program (FY2010, FY2011) replaced by financial counselling offered as part of the EAP service (FY2012, FY2013). new EAP provider Converge International.
4 FY2010 to FY2012 Fruit at Work participation based on the proportion of the workforce represented by teams that order fruit baskets (FTE). FY2013 Fruit at Work based on average pieces of fruit per person, based on delivery of 4,050 pieces of fruit per week.

Sustainable energy

Introduction

AGL's goal is to invest in cleaner energy forms to reduce the greenhouse gas intensity of energy across the supply chain.

The Australian energy sector is currently undergoing a significant transformation largely as a result of policies introduced by governments to increase renewable energy production and to reduce anthropogenic climate change. Grid electricity demand has fallen in eastern Australia due to lower levels of economic activity, improvements in energy efficiency, growing awareness of energy use as a result of recent electricity tariff increases, and the uptake of household solar PV. Greenhouse gas emissions from electricity generation have also dropped, partly because demand is lower and also because renewable energy and carbon abatement policies have led to growth in renewable and low-emissions generation.

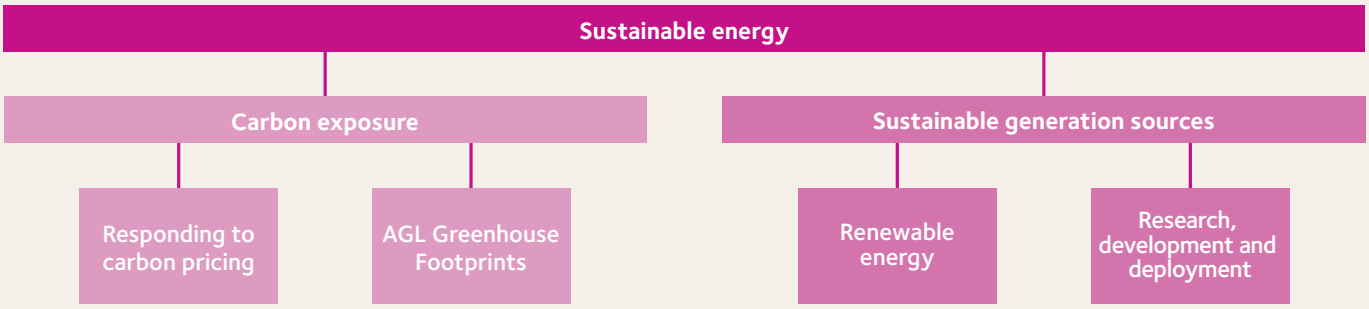
Both major Australian political parties support reducing greenhouse gas emissions by 5% relative to 2000 levels by 2020. While there is currently disagreement about the policy mechanism for reducing emissions, investment in new infrastructure needs to be considered within the context of broad political support for reducing greenhouse gas emissions. That said, existing infrastructure is likely to be used well into the future and AGL's investment in incumbent efficient generation such as the Loy Yang A power station is necessary to ensure security of supply while continuing to invest in new renewable and low emission generation for the future. A challenge for Australia's energy sector is to ensure the orderly entry of new clean and efficient generation plant, and the orderly exit of older, inefficient and high-emitting power stations, to enable a smooth transition to a low-emissions future.

The two key focus areas for the Sustainable energy chapter of this report are carbon exposure and sustainable generation sources.

Carbon exposure: AGL is committed in the interests of Shareholders to reducing the financial risks associated with existing and emerging climate change policies.

To manage these risks the emissions-intensity of new electricity generation plant developed by AGL is included as a key performance indicator. AGL has also committed to identifying material opportunities within its operated assets to improve energy efficiency and/or achieve carbon abatement to position AGL favourably for either a future emissions trading scheme or a centralised abatement acquisition scheme. AGL's greenhouse gas footprints and response to government carbon policies are included in this section of the report.

Sustainable generation sources: The opportunities for AGL to cement a leadership position in low-greenhouse gas emitting energy generation and supply are significant. AGL continues to be Australia's leading investor in renewable energy, leveraging existing policies and positioning the company for future value realisation in the energy supply chain.



Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Carbon exposure				
Continuing to lower the emissions intensity of AGL.	Emissions intensity of investments in new generation capacity lower than 0.7 tonnes per MWh.	No new generation investments made.[1]	✓	Develop a cost curve of material energy efficiency and greenhouse gas emissions abatement opportunities at AGL's existing operational assets.
Sustainable generation sources				
Australia's largest renewable energy company.	Increase renewable investment capacity to 1,740 MW.	AGL's operated renewable generation capacity was **1,740 MW** at 30 June 2013	✓	Invest in 155 MW of renewable energy projects.

Note

1 While AGL did not announce or commit to any new power station developments in FY2013, it did commission the Macarthur Wind Farm and the Qenos cogeneration plant during the year, and construction continued on the Diamantina Power Station (where AGL has a 50% share of an incorporated joint venture). All of these projects have emissions intensities well below the 0.7 tCO_2e/MWh threshold.

Sustainable energy

Introduction

Climate change adaptation risks

Climate change and climate change mitigation policies bring a number of risks and opportunities to AGL's operations and investment strategy.

Extreme weather events and changes in weather patterns present risks to AGL's business, in terms of physical impacts to energy infrastructure as well as financial risks associated with changes in energy demand.

Energy demand risks

Demand for electricity in Australia is correlated to both economic growth and temperature. In the long term, as the economy grows, generally so does demand for energy. In the short term, as temperatures rise, so too does the demand for electricity because of higher utilisation of cooling appliances. Wholesale electricity prices at peak demand times can often increase by several thousand per cent. Electricity demand is likely to become peakier with increased summer air conditioning load. Peakier characteristics of the electricity sector require retailers and integrated energy companies such as AGL to devote significant resources to managing price volatility. AGL's recent acquisitions and investments (such as the Loy Yang A power station) demonstrate strategic efforts to manage price volatility. These commercial risks are being managed by consistently updating forecasts of energy demand based on the latest temperature and other weather data provided by expert third parties; and investing in assets that provide profitable solutions, such as gas and hydro peaking generation and gas storage capabilities.

As a result of the uptake of energy efficiency, the deployment of solar PV panels and general price elasticity of demand, underlying energy demand forecasts have been reduced by the Australian Energy Market Operator. Unfortunately, in the context of climate change, it is likely that peak demand will continue to grow in excess of underlying energy demand. This has a number of negative consequences, including a deterioration of capital stock utilisation rates. In other words, it is the gap in the growth rates of peak demand and underlying energy demand that create problems for consumers and producers. Accordingly, AGL has been a leading advocate for the introduction of smart metering technologies and dynamic pricing to provide incentives to market participants to reduce peak demand[1].

Physical risks to infrastructure

AGL has continued to update physical vulnerability assessments of critical infrastructure. This ongoing assessment is based on key Australian scientific publications which indicate that:

> Australia may become hotter in coming decades, with average temperatures rising by between 0.6 and 1.5 °C by 2030, with the changes being experienced through an increase in the number of hot days.

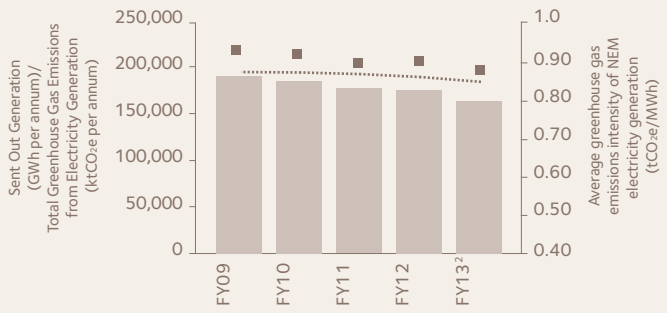
> Much of Australia may become drier in coming decades, with an increase in the number of dry days expected across the country, but a likely increase in intense rainfall events in many areas.

The vulnerability assessments considered the potential risks emerging from issues of water availability, interrupted access to market through transmission being compromised and reliability of plant. Potential opportunities were also evaluated, in particular the value of peaking plant in meeting peakier electricity load at times of high temperatures.

Note

1 For more information see AGL Applied Economic and Policy Research Working Paper No. 24 and AGL Applied Economic and Policy Research Working Paper No. 31 at www.aglblog.com.au

Generation and Greenhouse Gas Emissions in the National Electricity Market



Notes

1 Sent Out generation for NSW, VIC, SA, QLD & TAS as published by the Energy Supply Association of Australia (esaa) annually in the Electricity Gas Australia reports, available http://www.esaa.com.au/ except for FY2013 for which data has not yet been published.

2 FY2013 sent out electricity generation figures as published by the Australian Energy Market Operator (AEMO) for the determination of the National Electricity Market Carbon Dioxide Equivalent Intensity Index (CDEII).

3 Total greenhouse gas emissions from electricity generation in the National Electricity Market, as estimated from generator output in each year and generator-specific emission factors.

Sustainable energy

Introduction

AGL owns a number of power stations and gas production assets in the eastern states of Australia. The adaptation related risks to AGL include both physical damage and reduced supply reliability. Physical damage could result from extreme weather events and bushfires which may reduce operating capacity. AGL has examined the proximity of its assets to coastlines and does not believe that sea level rise poses a significant threat.

When undertaking development of power generation projects, in particular during the preparation of environmental assessments, certain climate change adaptation risks are assessed, including:

> flood studies for areas potentially subject to flooding, considering predicted future rainfalls, and short duration intensity, together with topographical and hydrology details to enable the predictions; and

> predictions of temperatures, wind speeds and solar irradiation based on historical data and predictive methodologies.

Water availability risks

AGL owns a number of hydro electricity generation assets. When these assets were acquired, a key element of the due diligence work undertaken involved long-term hydrology considerations. AGL engaged experts in this field and considered the risks associated with reduced rainfall and changes in rainfall patterns.

Regulatory risks

AGL has identified climate change, and the changing regulatory, economic and social environment impacts associated with the introduction of a carbon price, as a key risk.

Customer

AGL seeks to help its customers use energy more efficiently to lower their energy costs and to reduce their own greenhouse gas emission footprints. Information regarding the ways in which AGL assists its customers to be more energy efficient is found in the Customer chapter of this report.

Sustainable energy

Carbon exposure

Introduction to carbon exposure

In Australia, electricity generation and stationary fuel combustion account for over half of all greenhouse gas emissions. As a result, the energy industry is particularly exposed to climate change mitigation policies. This exposure includes opportunities to make market leading investments in low-emission infrastructure and risks associated with reduction in value of existing high-emitting assets or eventual stranding of assets that cannot compete in a low-carbon future. Managing carbon exposure and associated policy uncertainty is critical to ensuring that AGL can prosper into the future, particularly given the long-term asset life of investments in the electricity and gas sectors.

Australia's carbon pricing mechanism commenced on 1 July 2012, placing for the first time a national price on greenhouse gas emissions from large electricity generation, stationary energy, waste management and industrial facilities, as well as on the natural gas supply chain. The scheme covers around 60% of Australia's greenhouse gas emissions. However, there is ongoing uncertainty on the future of this scheme which may be repealed in the coming year.

AGL's integrated strategy reflects the acceptance of expert scientific advice that significant greenhouse gas emission reductions are required by the middle of this century to stabilise the concentration of CO_2e in the atmosphere and the adoption of a price on carbon to achieve such reductions. AGL's balanced portfolio of thermal and renewable electricity generation plant, upstream gas assets, and electricity and natural gas customer base positions it favourably for current and future carbon mitigation policies including emissions trading or 'Direct Action'.

To get an accurate picture of a company's carbon exposure it is not enough to look solely at the total amount of greenhouse gas emitted from the company's operations. It is also important to consider current and potential future policies in place to reduce emissions, the relative greenhouse intensity of assets compared to the broader industry, economics of reducing greenhouse emissions, opportunities to pass-through carbon costs and any financial assistance, grants or subsidies available. Greenhouse performance is both a function of the company's greenhouse gas emissions footprints and how its business strategy will contribute to the overall greenhouse intensity of Australia's economy into the future.

On 29 June 2012, AGL completed the acquisition of the Loy Yang A Power Station and adjacent mine in the Latrobe Valley in Victoria. The power station is one of the largest point source greenhouse gas emitters in Australia and the acquisition has increased AGL's operational greenhouse gas emissions by around 20 million tonnes per annum (a ten-fold increase) and therefore materially impacts on AGL's carbon exposure. It is important to note that this does not represent an increase in total emissions from the Australian electricity generation sector, but rather a reallocation of emissions from one organisation to another. The total emissions from AGL Loy Yang are expected to remain reasonably constant year on year.

Approach

In FY2013, AGL committed to investing in or building new generation assets with emissions intensities below 0.7 tCO_2e per megawatt-hour. New thermal generation plant built today could have an active asset life of 40 years or more, so investing in new plant with high emissions intensities (such as conventional coal fired power stations) presents unacceptable risks of asset stranding in a carbon-constrained future energy market. By focusing on the intensity of investments in new power generation capacity, there remains scope for AGL to acquire an incumbent power station, at the same time as delivering on a longer-term vision to lower the emissions intensity of AGL.

In FY2014, AGL will develop a cost curve of material energy efficiency and greenhouse gas emissions abatement opportunities at existing operational assets. Understanding the availability and cost of abatement opportunities will enable AGL to meet potential emission reduction targets pursuant to future government carbon policy.

Vision for carbon risk: AGL's vision is to lower the emissions intensity of AGL and the broader Australian energy sector.

Drivers: AGL benchmarks the emissions intensity of new electricity generation developed and built by AGL as an indicator of future economic impacts. AGL also uses three approaches for measuring and communicating the greenhouse gas impact of its business: an Operational Footprint (page 71), an Equity Footprint (page 73) and an Energy Supply Footprint (page 74).

Performance

During FY2013, AGL commenced operation of two new electricity generation assets: the 420 MW Macarthur Wind Farm in Victoria and the 21 MW natural gas cogeneration unit located at the Qenos Altona facility. The greenhouse gas intensities of both of these projects are well below the AGL 0.7 tCO_2e per megawatt-hour limit. Based on operation to date the intensities of these projects are approximately 0 and 0.4 tCO_2e/MWh sent out, respectively.

Sustainable energy

Carbon exposure

Carbon price

"AGL wants to see the bipartisan emission reduction target achieved at the lowest cost to our customers and all Australian families and businesses", AGL CEO and MD, Michael Fraser.

Approach

In November 2011, the Federal Parliament passed the *Clean Energy Act 2011* (Cth), which introduced a price on carbon from 1 July 2012 as part of the *Clean Energy Future* legislative package. The scheme is designed to operate at a fixed price for the first three years and then transition to a cap and trade emissions trading scheme from July 2015. FY2013 was the first year of operation for the scheme, and the fixed carbon price was $23/tCO$_2$e.

However, there is significant uncertainty about the longevity of the scheme. There is clear disagreement between the two major political parties about the mechanism to reduce emissions, although there is agreement in relation to the public policy objective – a 5% reduction of emissions by 2020 relative to 2000 levels.

AGL is well prepared to participate in emission reduction activities. The National Greenhouse and Energy Reporting Scheme requires AGL to disclose scope 1 and scope 2 emissions. Although a compliance obligation, this reporting protocol directly feeds into AGL's investment strategy and risk management.

Carbon Price Implementation

Under the *Clean Energy Act*, AGL and a number of its subsidiaries incur direct carbon liabilities, arising from emissive facilities (primarily electricity generation), participation in joint ventures and the embodied emissions associated with natural gas supply to customers. In FY2013, AGL had 16 'liable entities' within its corporate group, with liabilities totalling 25.3 million tCO$_2$e. At the fixed price of $23 per tonne, the cost of this liability would be $582 million.

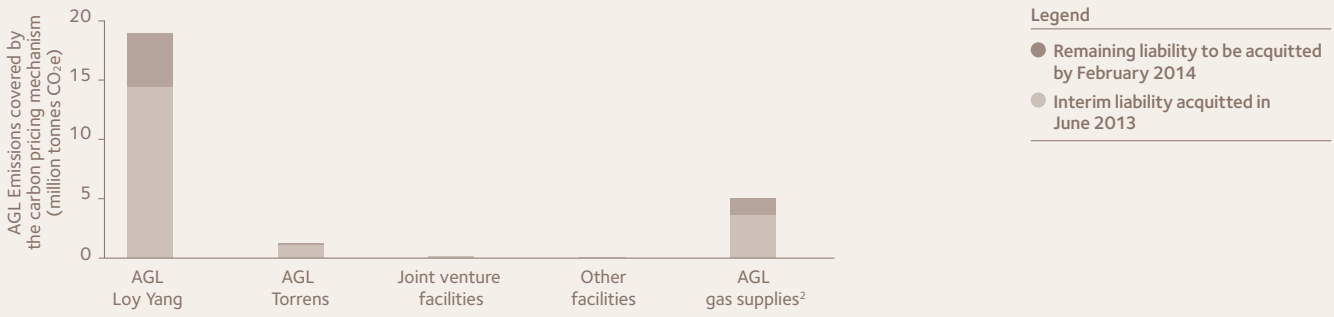
In June 2013, AGL acquitted its interim liability for the FY2013 compliance year, equivalent to approximately 75% of the liability incurred during the year. AGL surrendered a total of 19.2 million eligible carbon units, including almost 650,000 Australian Carbon Credit Units registered under the Carbon Farming Initiative program, thereby discharging its obligations under the scheme. The remaining 25% of the FY2013 liability is due to be acquitted before 1 February 2014.

Additionally, as a net purchaser of electricity and gas in Australia's wholesale markets, AGL estimates the carbon price has resulted in additional supply chain costs of approximately $1 billion in its first year as those producers seek to recover their costs for paying a carbon price for their own direct emissions. Subsequently, energy consumers have also faced uplifts in energy prices as the cost of emissions is passed through the energy supply chain. After several years of ongoing detailed analysis, AGL had a thorough understanding of these aggregated impacts on its business, enabling a successful transition to a carbon pricing environment.

Energy Security Fund

The Energy Security Fund was also established as part of the *Clean Energy Future* legislative package. The Energy Security Fund provides assistance to highly emissions intensive coal-fired generators over a period of six years on the introduction of the carbon price mechanism. The assistance package was designed to compensate the owners of eligible assets for the longer-term deterioration of asset value and reduction in asset life, and to promote energy security under a carbon pricing environment. It is important to note that these impacts of decarbonisation are likely to be similar under either an emissions trading or 'Direct Action' policy setting, as decarbonisation of Australia's energy industry will inevitably reduce asset value of existing power stations with higher greenhouse gas emissions and little technical opportunities to cut emissions cost-effectively.

AGL's Carbon Liability under the Clean Energy Act FY2013[1]



Notes

1 AGL's carbon liability under the Clean Energy Act carbon pricing mechanism includes covered scope 1 emissions from large facilities operated by AGL, AGL's proportional share of facility emissions operated on behalf of AGL's joint ventures and the emissions embodied in natural gas supplied by AGL.
2 Greenhouse gas emissions embodied in the volume of natural gas supplied by AGL to end-users, including residential, commercial and industrial customers.

Sustainable energy

Carbon exposure

As the operator of the AGL Loy Yang Power Station, Great Energy Alliance Corporation Pty Ltd (GEAC), a subsidiary of AGL, is eligible for assistance under the Energy Security Fund:

> In June 2012, GEAC received a payment of $240.1 million.

> No cash assistance was issued under the Energy Security Fund during FY2013.

> On 2 September 2013, GEAC received free carbon units totalling approximately 10 million tCO_2e, after meeting the requirements of the Power System Reliability test applied in April 2013, submitting its 2013 Clean Energy Investment Plan to the Minister for Resources and Energy ahead of the 15 August 2013 deadline.

International emissions trading

AGL does not have facilities operating outside of Australia. As such, AGL is not engaged in international emissions trading.

Sustainable energy

Carbon exposure

AGL Greenhouse Footprints

A summary of AGL's three greenhouse footprints is presented below. Further detail about each footprint is provided in the following pages.

Operational Footprint[1,2]

The Operational Footprint covers the emissions from activities and assets that AGL operates. The Operational Footprint increased by over 10 times compared to FY2012, to 20.55 million tonnes following the acquisition of the Loy Yang A Power Station and Mine.

FY2013	**20.55** $MtCO_2e$
FY2012	**1.60** $MtCO_2e$
FY2011	**1.60** $MtCO_2e$

Equity Footprint

The Equity Footprint sets out AGL's share (by percentage investment) of the emissions from fully or partly owned assets. The Equity Footprint has more than doubled since FY2012 as AGL's share of Loy Yang A has increased from 32.5% to 100%.

FY2013	**20.6** $MtCO_2e$
FY2012	**8.4** $MtCO_2e$
FY2011	**8.0** $MtCO_2e$

Energy Supply Footprint

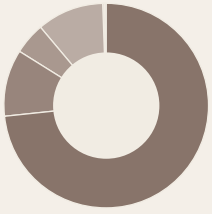
The Energy Supply Footprint estimates the supply chain greenhouse gas emissions associated with the electricity and gas AGL sells to its customers. The Energy Supply Footprint decreased by 6% in FY2012, due to both a decrease in energy supply volumes and a decrease in emissions intensity of electricity compared to FY2012.

FY2013	**44.2** $MtCO_2e$
FY2012	**46.9** $MtCO_2e$
FY2011	**49.2** $MtCO_2e$

Notes

1 AGL's Operational Footprint includes scope 1 and scope 2 emissions only. Scope 3 emissions were included in this footprint in previous Sustainability Reports, therefore historical emissions have been recalculated to include only scope 1 and scope 2 emissions.
2 Generation and emissions associated with the Loy Yang A Power Station and mine are excluded from the operational footprint for FY2012, since AGL's acquisition took place so late in the financial year (29 June 2012). This data is included in FY2013, for the first full year of AGL's operation.
3 The FY2012 supply footprint has been updated since it was published in the 2012 AGL Sustainability Report, to reflect new emissions data published in the Australian National Greenhouse Accounts.

Output and intensity of AGL operated electricity generation assets[1,2]



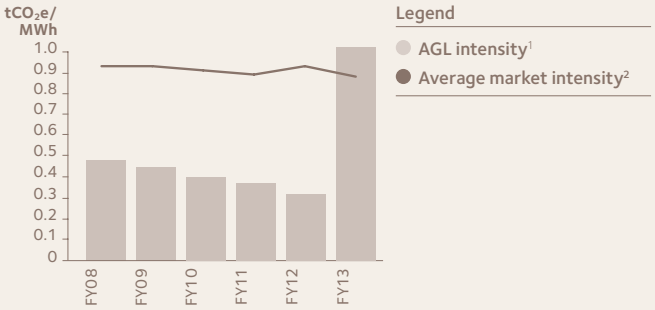
Generation intensity
1.01 tCO_2e/MWh

Legend	%
Coal	74%
Gas	11%
Hydro	5%
Wind	11%
Solar	0.001%
Biomass, Biogas and Landfill gas	0.5%
Diesel	0.004%
Total output	**20,174 GWh**

Notes

1 These figures relate to the sent-out greenhouse gas emissions (scope 1 and scope 2) intensity of generation assets over which AGL has operational control, regardless of who owns the asset. Assets where AGL controls or has rights to the electricity output only are not included.
2 Figures may not sum to 100% due to rounding.

Intensity of AGL operated electricity generation assets[3]



Notes

1 These figures relate to the sent-out greenhouse gas emissions (scope 1 and scope 2) intensity of generation assets over which AGL has operational control, regardless of who owns the asset. Assets where AGL controls or has rights to the electricity output only are not included.
2 For FY2008, FY2009, FY2010 and FY2011, the market average intensity is as published in National Greenhouse Accounts (NGA) Factors published by the Department of Industry, Innovation,Climate Change, Science, Research and Tertiary Education (July 2013) as the Australia-wide scope 2 greenhouse gas emissions intensity factor. For FY2012 and FY2013 the average market intensity is the weighted average Carbon Dioxide Equivalent Intensity Index of the National Electricity Market, as determined from data published by AEMO.
3 Generation and emissions associated with the Loy Yang A power station and mine are excluded from this data for FY2012, since AGL's acquisition took place so late in the financial year (29 June 2012). This data is included in FY2013, for the first full year of AGL's operation.

Sustainable energy

Carbon exposure

Operational Footprint

The Operational Footprint covers the emissions from activities and assets that AGL operates.

Performance

The Operational Footprint has increased by approximately 10 times due to AGL's acquisition of the Loy Yang A power station and mine, from 1.6 million tCO_2e in FY2012 to 20.55 million tCO_2e in FY2013.

As a result of the acquisition, the greenhouse intensity of electricity produced from AGL's operated electricity generation portfolio has also increased significantly, from 0.31 tCO_2e/MWh (sent-out) in FY2012, to 1.01 tCO_2e/MWh (sent-out) in FY2013. AGL Loy Yang provided 74% of all AGL operated electricity generation in FY2013, so had a strong influence on the weighted average greenhouse gas intensity, despite a 35% increase in renewable generation compared to FY2012. During FY2013 the electricity sent out from AGL's operated assets increased by over three times compared to the previous year, while the associated greenhouse gas emissions increased by over 12 times.

Apart from the Loy Yang acquisition, emissions from other power generation decreased by 12%, emissions from corporate activities remained fairly constant, emissions from oil and gas exploration, storage and production increased by around 16% and emissions from LPG production and project construction increased modestly.

Electricity generation

On 29 June 2012, AGL finalised the acquisition of the Loy Yang A Power Station and adjacent brown coal mine. Given that the acquisition occurred so late in the financial year, the emissions from this facility have therefore been included in the AGL Operational Footprint for FY2013 for the first time. This power station operates at the low end of the emissions intensity range of 1.2 to 1.5 tCO_2e/MWh for Victorian coal fired generators, and is considered to be one of the most efficient among these generators.

AGL's operational footprint in FY2013 is dominated by greenhouse gas emissions from AGL Loy Yang. In FY2013, the greenhouse gas emissions from the Loy Yang A Power Station, mine and office totalled 19.1 million tCO_2e (Scope 1 and Scope 2), a decrease of 6% compared to FY2012, when greenhouse gas emissions were 20.4 million tCO_2e. The emissions intensity of electricity generated decreased by 2% from 1.31 tCO_2e/ MWh in FY2012 to 1.29 tCO_2e/MWh in FY2013.

AGL's portfolio of gas fired power generation includes the Torrens Island Power Station (1,280 MW intermediate generation plant) and the Somerton Power Station (150 MW peaking plant), as well as embedded natural gas fired cogeneration plants at Coopers and Symex, and the 12 MW embedded coal seam gas fired power station at Moranbah. In FY2013, emissions from these assets decreased by 12% to 1,238 $ktCO_2e$ compared to 1,395 $ktCO_2e$ in FY2012. This drop is in line with the reduction in generation output from Torrens Island of 12%. Emissions from the Somerton Power Station decreased by 30%, commensurate with the decrease in generation sent out from that facility. As a peaking power station, generation output from Somerton can fluctuate significantly year to year, depending on demand.

Emissions from renewable generation assets are, by their nature, small compared to other types of generation. AGL's operated renewable generation portfolio includes hydro generation assets in Victoria and New South Wales, and the Wattle Point and Hallett wind farms in South Australia. During FY2013, emissions from these facilities totalled 26 $ktCO_2e$.

The commissioning of the Macarthur Wind Farm, and the first full year of operation for the Oaklands Hill and Bluff (Hallett 5) Wind Farms contributed to a marked increase in renewable generation compared with FY2012. In FY2013, sent-out renewable generation from AGL's operated assets increased by 35% compared to FY2012, to a total of 3,199 GWh. In particular, FY2013 saw large increases in wind and hydro generation, which increased by 53% and 13% respectively, compared to the previous year. This follows the large increase in AGL's renewable generation in FY2012 and FY2011 (which increased by 33% and 24% respectively, as compared to the previous year in each case).

The AGL Energy Services division within Merchant Energy operates a variety of other 'embedded' generation facilities, including landfill gas, biomass and biogas generation facilities and the Wilpena Pound Solar/Diesel facility. Emissions from these facilities decreased by around 5% to 8 $ktCO_2e$ in FY2013, compared to the previous year. This was largely due to a 24% reduction in generation sent out from the Werribee biogas generator.

Hydrocarbon Extractions (HC Extractions)

AGL owns the HC Extractions facility at Kurnell, New South Wales. HC Extractions produces LPG and naphtha from oil refinery waste gas. HC Extractions greenhouse gas emissions result from natural gas use, electricity consumption and minor emissions associated with fugitive emissions at the site. Greenhouse gas emissions for FY2013 were 28 $ktCO_2e$, remaining fairly constant compared to FY2012.

Upstream Gas

Greenhouse gas emissions from AGL's Upstream Gas projects increased by 16% compared to FY2012, to 40 $ktCO_2e$. These emissions largely arise from AGL's operations at the Camden Gas Project in New South Wales, and at the Silver Springs Storage Project and oil and gas production fields in the Surat Basin in Queensland.

Emissions from the Camden Gas Project increased by 4% to 19 $ktCO_2e$ compared to 18 $ktCO_2e$ in FY2012, with gas production at the facility decreasing by 7% over the same period. Emissions from the Silver Springs Gas Storage project and related oil and gas production increased by 16% to 17 $ktCO_2e$, compared to 15 $ktCO_2e$ in FY2012. AGL acquired the Surat assets during the Mosaic Oil takeover in 2010 and converted the Silver Springs depleted gas reservoir into a gas storage facility, which commenced operation in 2011. While net oil and gas production from the Surat assets decreased slightly from 1 PJ in FY2012 to 0.9 PJ in FY2013, greenhouse gas emissions from the Silver Springs storage compressor (which compresses gas prior to injection into the reservoir) increased from 8 $ktCO_2e$ to 10 $ktCO_2e$.

AGL's gas development projects in the Gloucester and Hunter regions in New South Wales continued to have low levels of activity during FY2013, and as a result, the associated greenhouse gas emissions were 2 $ktCO_2e$ for FY2013. Emissions at the Hunter project arose from contractor activities at the sites (such as drilling water bores and core holes), and the use of fuel and electricity at AGL's properties in the region. At Gloucester emissions also resulted from the drilling of wells, well workovers, minor venting from equipment and instrumentation and the flaring of the very small volumes of gas produced.

Sustainable energy

Carbon exposure

AGL continued oil production at its small ATP1056P project in the Cooper Basin in Queensland, which resulted in emissions of 0.4 $ktCO_2e$ in FY2013 (compared to 0.3 $ktCO_2e$ in FY2012). AGL also continued to operate the Galilee Gas Project at Longreach in Queensland, where emissions remained constant at 1 $ktCO_2e$ compared to FY2013.

During FY2013, fugitive emissions (vents and leaks) from AGL's upstream oil and gas production totalled 3 $ktCO_2e$, or 7% of all emissions from these facilities. Additionally, 2 $ktCO_2e$ arose from gas flaring, and 1 $ktCO_2e$ from the operation of gas transmission pipelines. The majority of emissions from these facilities are as a result of the use of electricity, and the combustion of fuel gas and liquid fuels to operate vehicles, compressors, generators and other equipment.

AGL's Upstream Gas business has historically had low greenhouse gas emissions, because most of the projects have been in their initial stages of exploration and well testing. Upstream Gas emissions account for less than 1% of AGL's total Operational Footprint. AGL expects Upstream Gas emissions to increase over time as projects progress from exploration and testing to production.

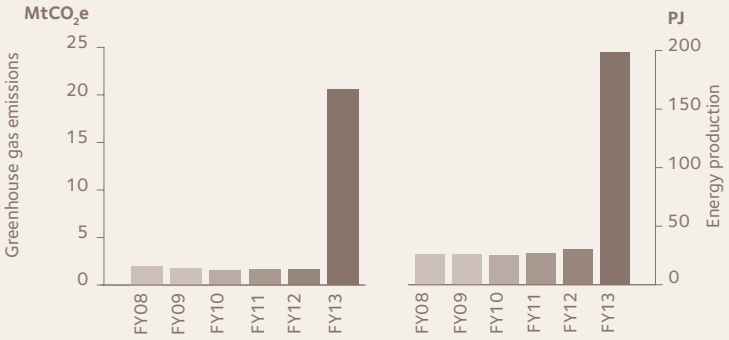
Retail and Corporate

AGL manages a number of office facilities where employees carry out services related to the provision of gas and electricity to customers, and provide corporate services to support the broader business. Activities contained in this data included electricity use and vehicle transport. During FY2013, corporate activities resulted in 5 $ktCO_2e$ of greenhouse gas emissions.

Scope 3 emissions

Scope 3 emissions are classified as indirect emissions (other than associated with the purchase of steam/heat or electricity) that occur outside an organisation's direct boundary. The primary sources of scope 3 emissions from AGL's operated activities are from the purchase of fuel (mainly natural gas) and electricity. In FY2013, AGL's scope 3 emissions were 365 $ktCO_2e$, which represents an increase of 10% from 332 $ktCO_2e$ in FY2012. 70% of scope 3 emissions resulted from natural gas and coal seam gas combusted in AGL's gas-fired generation assets, and 11% resulted from the electricity purchased from the grid.

Operational Footprint: Greenhouse gas emissions and net energy production[1,2]

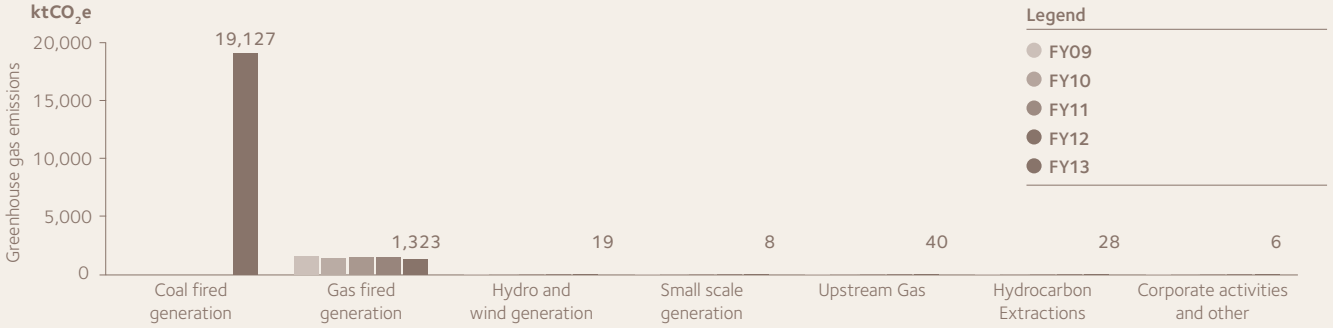


Notes

1 Includes scope 1 and 2 greenhouse gas emissions and net energy production for assets where AGL had operational control during the period. This does not include Oakey or Yabulu power stations, or AGL's non-operated Upstream Gas joint ventures. Greenhouse gas emissions and energy production have been calculated in accordance with the National Greenhouse and Energy Report Act methodologies. Net energy production includes the sent-out generation from AGL's operated power stations, cogeneration steam production, oil and gas sales from operated Upstream Gas assets, coal from the AGL Loy Yang mine provided to third parties and the production of LPG, naphtha, hydrogen and return gas at the Hydrocarbon Extraction facility. It does not include any energy production for use within the facility.

2 Generation and emissions associated with the Loy Yang A power station and mine are excluded from the operational footprint for FY2012, since AGL's acquisition took place so late in the financial year (29 June 2012). This data is included in FY2013, for the first full year of AGL's operation.

Operational Footprint: Greenhouse gas emissions by activity type[1,2]



Notes

1 Includes scope 1 and 2 greenhouse gas emissions for assets where AGL had operational control. This does not include Oakey or Yabulu power stations, or AGL's non-operated Upstream Gas joint ventures. While emissions from AGL's corporate and retail activities have been included (calculated in accordance with the National Greenhouse and Energy Reporting Act) it should be noted that these emissions have been partially offset by purchasing GreenPower at AGL's major offices in Sydney, Melbourne and Mount Beauty.

2 Generation and emissions associated with the Loy Yang A power station and mine are excluded from the operational footprint for FY2012, since AGL's acquisition took place so late in the financial year (29 June 2012). This data is included in FY2013, for the first full year of AGL's operation.

Sustainable energy

Carbon exposure

Equity Footprint

The Equity Footprint sets out AGL's share (by percentage investment level) of the emissions from fully or partially owned entities. The Equity Footprint indicates to AGL shareholders the greenhouse gas impacts associated with their investment.

Performance

In FY2013 the Equity Footprint more than doubled from 8.4 $MtCO_2e$ in FY2012 to 20.6 $MtCO_2e$, as a result of AGL increasing its ownership of the Loy Yang Power Station from 32.5% to 100% on 29 June 2012. FY2013 is therefore the first full year that the Equity Footprint reflects this increased ownership.

The greenhouse intensity of electricity produced from electricity generation assets that AGL fully or partly owned in FY2013 was 1.11 tCO_2e/MWh (sent-out), an increase of 17% compared to FY2012. This intensity is dominated by AGL's equity share of Loy Yang A Power Station, which provided around 81% of AGL's equity share of electricity generation during FY2013 (up from 59% in FY2012 due to the increase in Loy Yang ownership).

The emissions and generation from the operation of AGL's Wattle Point, Hallett 1, Hallett 2, Hallett 4, Hallett 5 and Oaklands Hill wind farms are not included in this footprint as they are operated but not owned by AGL. AGL's 50% share of the Macarthur Wind Farm is included.

Included interests

The Equity Footprint includes each facility in AGL's Operational Footprint, apart from the AGL wind farms (which are generally operated but not owned by AGL), with the exception of the Macarthur Wind Farm, which AGL operates and retains a 50% interest.

The emissions from AGL's operated joint ventures are included in the Equity Footprint, proportional to AGL's share of ownership. The Equity Footprint also includes estimates of the emissions from AGL's construction projects prior to completion and/or AGL operation, including wind farms, the Diamantina Power Station and emissions from AGL's Energy Services assets that are not part of AGL's operated facilities (such as the Qenos cogeneration unit, landfill gas flares, Compressed Natural Gas bus refueling sites and the Isis Bagasse biomass cogeneration site).

The Moranbah Gas Project is a joint venture between AGL and Arrow Energy subsidiaries, which produces coal seam gas from the Bowen Basin in Queensland (AGL has a 50% interest in the project). FY2013 greenhouse gas emissions from these activities have been calculated by Arrow Energy, in accordance with the National Greenhouse and Energy Reporting regulatory framework.

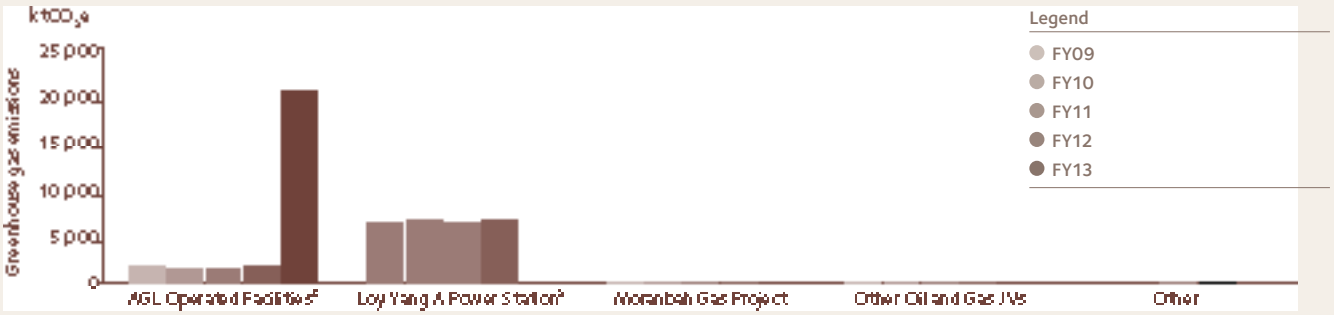
AGL also holds a 50% interest in Energy Infrastructure Management (EIM) which operates a range of gas infrastructure assets, including a number of pipelines. AGL's equity share of these emissions has been estimated based on information provided by EIM.

AGL's other oil and gas interests include a 33.33% interest in the Lytton Crude Oil Terminal in Queensland, and production licenses in the Surat and Bowen Basins in Queensland and (non-operated) exploration permits in the Taranaki basin in New Zealand (which have low or negligible emissions). Any significant emissions from these assets have been estimated from information provided by Santos and IOR Terminal.

During the reporting period, AGL also had equity interests in CSM Energy, Central Queensland Energy Joint Venture, Mascotte Joint Venture, and Torrens Energy. AGL has assumed that the greenhouse gas emissions associated with the minimal activities associated with these projects are negligible.

In addition, AGL has a 50% interest in the ActewAGL Retail Partnership, which includes the operation of the retail electricity, gas and water businesses of ActewAGL. Minimal greenhouse emissions result from office based activities for the ActewAGL partnership.

Equity Footprint: Greenhouse gas emissions[1]



Notes

1 Includes scope 1 and scope 2 greenhouse gas emissions from assets that AGL owns fully or in part (by percentage ownership).
2 For the FY2012 Equity Footprint, greenhouse gas emissions for the Loy Yang A Power Station and associated assets are included in the AGL Equity Footprint on an equity share of 32.5% until 28 June 2012, and 100% thereafter.
3 For FY2013 AGL owned and operated the Loy Yang A Power Station and Mine for the full year, so the associated greenhouse gas emissions are included in the "AGL Operated Facilities" category. Historical data for the asset is presented separately for previous years (when AGL had a 32.5% equity share but did not operate the facility).

Sustainable energy

Carbon exposure

Energy Supply Footprint[1]

The Energy Supply Footprint is an estimate of the total supply chain greenhouse gas emissions associated with the electricity and gas supplied by AGL to its customers. The Energy Supply Footprint covers greenhouse gas emissions resulting from the production, transportation, distribution and consumption of electricity and gas.

Electricity Supply Footprint

Greenhouse gas emissions are produced during the generation of electricity (primarily carbon dioxide) from the combustion of fossil fuels such as coal and natural gas. Energy losses occur across the energy supply system (transmission and distribution systems, and power stations' auxiliary loads).

Power stations therefore have to generate more electricity than is used by end-use consumers to cover the losses associated with the transmission and distribution networks used to deliver electricity to the customers. The direct (physical) emissions occur at the point of generation (power stations), where the fuel is combusted. There are few direct emissions from transmission and distribution, and there are no direct greenhouse gas emissions at the consumer end of the supply chain.

The Energy Supply Footprint emissions associated with the provision of electricity to AGL's customers in FY2013 has decreased by 10% to 31.9 $MtCO_2e$ compared to the previous year. This is largely due to a decrease in AGL's electricity sales volumes during the period (down to 30 TWh in FY2013 compared to 33 TWh in FY2012) as well as a general reduction in the greenhouse gas intensity of electricity generation across the National Energy Market (as documented in the National Greenhouse Accounts factors).

Gas Supply Footprint

In the case of gas supply, greenhouse gas emissions arise from production and processing at gas fields, transmission, distribution, and when gas is combusted by AGL's customers in their homes and businesses.

During gas production, there is some venting of carbon dioxide and methane at the gas field, minor fugitive emissions during processing, and the combustion of some natural gas to operate processing equipment. Further emissions occur during transmission and distribution, comprising fugitive emissions and emissions arising from the use of additional natural gas in compressors along the pipelines.

At the consumer end of the supply chain, the combustion of natural gas produces the bulk of the supply chain greenhouse gas emissions.

The Energy Supply Footprint emissions associated with the provision of gas to AGL's customers has increased by 8% compared to FY2012 to 12.2 $MtCO_2e$, in line with an 8% increase in gas supply volumes. The intensity of supply to AGL customers in FY2013 has remained relatively constant compared with FY2012.

Note

1 The Gas Supply Footprint includes all supply chain and combustion emissions associated with the supply of electricity and natural gas by AGL Energy and its wholly owned subsidiaries to mass market, commercial and industrial, and wholesale customers. Electricity and gas supplied by ActewAGL (of which AGL is a 50% partner) are excluded from the Supply Footprint. Emissions associated with the wholesale supply of natural gas (by AGL) to AGL-operated power stations are also excluded, to avoid double counting (the Electricity Supply Footprint includes upstream and generation emissions from supplying electricity). These scope 1 and scope 3 emissions are included in AGL's Operational Footprint.

Electricity Supply Footprint[1,2]

Source	Emissions ($MtCO_2e$)				
	FY09	FY10	FY11	FY12	FY13
Generation	35.1	34.7	33.2	32.2	28.7
Transmission and distribution	2.8	3.5	3.3	3.4	3.2
Consumption	0.0	0.0	0.0	0.0	0.0
Total	**37.9**	**38.2**	**36.5**	**35.6**	**31.9**

Notes

1 The Electricity Supply Footprint estimates the life cycle greenhouse gas emissions associated with the electricity that AGL sold to its customers during the period. Estimates are calculated using emission factors published by the Commonwealth Department of Climate Change and Energy Efficiency.
2 Values may not sum to the total due to rounding.

Gas Supply Footprint[1,2,4]

Source	Emissions ($MtCO_2e$)				
	FY09	FY10	FY11	FY12[3]	FY13
Production	2.0	1.9	1.7	1.4	1.6
Transmission and distribution	1.3	1.2	1.2	1.5	1.6
Consumption	9.4	9.6	9.7	8.4	9.1
Total	**12.7**	**12.7**	**12.6**	**11.4**	**12.2**

Notes

1 The Gas Supply Footprint estimates all supply chain and combustion emissions associated with the natural gas that AGL sold to its customers during the period. Estimates are calculated using emission factors and Australian greenhouse gas inventory data published by the Commonwealth Department of Climate Change and Energy Efficiency.
2 During FY2012, AGL became aware that the scope 3 greenhouse gas emission factors published by the Commonwealth for natural gas consumption in each state do not include fugitive emissions from the operation of low pressure distribution networks. AGL has therefore estimated these emissions from data in the Australian Greenhouse Gas Inventory, and has adjusted data reported in previous reporting periods accordingly.
3 The FY2012 Gas Supply Footprint has been updated since its publication in the 2012 AGL Sustainability Report to reflect updated natural gas distribution emission data published in the Australian National Greenhouse Accounts for 2009, 2010 and 2011.
4 Values may not sum to the total due to rounding.

Sustainable energy

Carbon exposure

Greenhouse footprint – supporting information

Supporting information – Operational Footprint

Data preparation and boundaries

Greenhouse gas emissions, energy consumption and energy production data reported as part of the Operational Footprint have been prepared in line with AGL's interpretation of the *National Greenhouse and Energy Reporting Act 2007* (Cth) and supporting regulations.

Notable exceptions are as follows:

> Energy consumption is included in the Operational Footprint only if it is combusted or otherwise disposed or used in an AGL operated facility. Energy that is 'consumed' by way of transformation from one commodity to another, and renewable energy sources (wind, water and solar) are not included in the Operational Footprint consumption values

> All electricity production reported in the Operational Footprint is presented on a 'sent-out' basis (i.e. excluding generation that is consumed within the facility and is not sold to any market or customer)

> Oil and gas energy production is presented on a 'sales' basis, and excludes any production used within the facility, or energy forms that are transformed from one energy commodity to another

> Energy is not included in the Operational Footprint as either consumption or production if the commodity is on-supplied to another user without significant processing or transformation

> Despite inclusion in the AGL Energy Limited 2012 Annual Report under the *National Greenhouse and Energy Reporting Act* (Cth), greenhouse gas emissions, energy production and energy consumption related to the Great Energy Alliance Corporation Pty Limited facilities acquired by AGL on 29 June 2012 are excluded from AGL's FY2012 Operational Footprint (since the acquisition occurred so late in the financial year). These emissions are included in the FY2013 Operational Footprint.

Reporting period

The data presented in the Operational Footprint for FY2013 has been prepared for the reporting period 1 July 2012 to 30 June 2013.

Greenhouse gas emissions estimation methodology

The Operational Footprint has been estimated in line with the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (as amended) published by the Commonwealth of Australia for the FY2013 reporting year, and related guidelines. Unless otherwise indicated, greenhouse gas emissions are the sum of scope 1 and scope 2 greenhouse gas emissions, expressed in tonnes of carbon dioxide equivalents (tCO_2e)

Energy consumption and energy production measurement

The measurement of energy consumption and energy production presented in the Operational Footprint has been carried out in line with the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (as amended) published by the Commonwealth of Australia (unless otherwise indicated and subject to the exceptions noted above). Energy consumption and energy production are all expressed in gigajoules (GJ), unless otherwise indicated.

Organisational boundaries

Greenhouse gas emissions, energy consumption and energy production presented in the Operational Footprint have been reported for the corporate group of AGL Energy Limited (the parent company and its wholly owned Australian subsidiaries), as determined in line with the *National Greenhouse and Energy Reporting Act 2007* (Cth).

Operational boundaries

Greenhouse gas emissions, energy consumption and energy production in the Operational Footprint have been reported for 'facilities' over which AGL has 'operational control', as defined in the *National Greenhouse and Energy Reporting Act 2007* (Cth), within the organisational boundaries.

Energy and greenhouse gas emissions for the Loy Yang A Power Station and associated facilities are excluded from the Operational Footprint for FY2012, but are included for FY2013.

Sustainable energy

Carbon exposure

Scope 3 greenhouse gas emissions

Scope 3 greenhouse gas emissions have been presented separately from the Operational Footprint for FY2013. Scope 3 greenhouse gas emissions have been treated separately as the reporting of this data is not required under the *National Greenhouse and Energy Reporting Act 2007* (Cth). Scope 3 emission sources from AGL's activities include purchase of fuel (mainly natural gas) and electricity use for power stations and office-based activities. Scope 3 emissions from sources such as office waste disposal and travel are negligible and have not been estimated.

Scope 3 emissions have been estimated using emission factors published by the Commonwealth in the *National Greenhouse Accounts Factors* (July 2011).

Supporting information – Equity Footprint

The Equity Footprint sets out AGL's share (by percentage investment level) of the emissions from fully or partially owned entities (in Australia and overseas). AGL considers that the Equity Footprint broadly meets the requirements of the WBCSD/WRI Greenhouse Gas Protocol's 'Equity Share Approach' to greenhouse accounting.

AGL sources data from equity partners, where available, otherwise assumptions are made on the basis of the best available information (including where activity levels for a facility are so low that emissions are assumed to be negligible). Equity Footprint data reported includes scope 1 and scope 2 emissions.

Supporting information – Energy Supply Footprint

The Energy Supply Footprint estimates the life cycle greenhouse gas emissions associated with the supply of electricity and natural gas by AGL to its customers. The Supply Footprint estimates emissions from fuel extraction and processing, electricity generation, transmission, distribution and end use for electricity and natural gas supplied to retail, commercial and wholesale customers by AGL Energy and its wholly owned subsidiaries. Supplies of electricity and gas by ActewAGL are excluded. Electricity sold by AGL's power generation assets into the National Electricity Market is also excluded from this footprint (although all of AGL's purchases from the NEM pool to supply its customers are included). Other goods and services supplied by AGL are not considered.

In preparing the Supply Footprint, AGL employs scope 1, 2 and 3 emission factors published by the Commonwealth Department of Climate Change and Energy Efficiency, as well as emissions data from the Australian National Greenhouse Gas Inventory (relating to the oil and gas sectors for 2009, 2010 and 2011). AGL understands that the state-based scope 3 emission factors published for natural gas in the *National Greenhouse Accounts Factors* (July 2012) do not include the fugitive greenhouse gas emissions from low pressure distribution networks. As a result, AGL has estimated emissions factor for natural gas distribution based upon emissions data published in the Australian Greenhouse Gas Inventory, and gas volume data published by the Energy Supply Association of Australia.

For consistency, the Gas Supply Footprint data from previous years has been adjusted to include similar estimates of natural gas distribution emissions.

Emissions associated with the wholesale supply of natural gas (by AGL) to AGL-operated power stations are also excluded to avoid double counting (the Electricity Supply Footprint includes upstream and generation emissions from supplying electricity). These scope 1 and scope 3 emissions are included in AGL's Operational Footprint.

The model used to estimate the Supply Footprint was redeveloped in FY2011. In FY2012 and FY2013, AGL continued to use this method, and data from prior years has also been recalculated for consistency using this method.

Sustainable energy

Sustainable generation sources

Introduction to sustainable generation sources

AGL continues to focus on investing in new electricity generation that is renewable or low-greenhouse gas intensity.

Approach

AGL's strategy is substantially focused on investing in new renewable generation capacity. This investment is largely driven by opportunities created by Australia's 20% Renewable Energy Target legislation which has bipartisan political support.

Historic investment in renewable energy has positioned AGL to have a relative advantage with the introduction of a carbon price from 1 July 2012. AGL has stated that it will not invest in new coal-fired generation capacity due to the emissions profile being inconsistent with anticipated longer-term requirements in relation to emission reductions. This commitment provides scope for AGL to acquire existing coal-fired generation as emissions from the energy sector remain unchanged, regardless of acquisitions or divestments.

AGL has investments across a wide range of electricity generation technologies. In June 2012, AGL acquired the 67.5% of shares and loan notes issued by Great Energy Alliance Corporation that it did not already own, and became the operator of the Loy Yang A power station. The AGL Loy Yang power station and mine are located in the Latrobe Valley in Victoria, comprising four coal-fired units (2,180 MW in total) and adjacent open-cut brown coal (lignite) mine which provides fuel to the power station on a 'just in time' basis. The mine has sufficient fuel reserves to run AGL Loy Yang for the remainder of its operational life.

AGL's hydroelectricity assets are concentrated around the Victorian and New South Wales border, and provide 796 MW of peak generation capacity. Both gas-fired generation and hydro generation can be quickly switched on. AGL typically deploys this generation in shoulder and peak periods, to put additional supply into a higher-priced wholesale electricity market. In addition to hydroelectricity, AGL owns/operates renewable generators in a range of locations and technologies. Landfill gas generation is scattered around Australia, including the eastern states, Tasmania and Western Australia. AGL's wind generation portfolio is concentrated in South Australia and Victoria, and there are projects in the development pipeline that will diversify the geographical location of wind assets. These renewable assets provide generation across the three categories of base, intermediate and peak electricity duties.

AGL has investments in three gas-fired power stations – the 1,280 MW AGL Torrens power station, the 150 MW Somerton Power Station and the 12 MW Moranbah Power Station. AGL also has a range of prospective renewable and low emission gas generation development options, and this pipeline will sustain AGL's position as Australia's leading integrated renewable energy company.

Vision for energy sources: AGL's vision is to be Australia's largest renewable energy company.

Drivers: AGL's investment decisions are influenced by the Renewable Energy Target, carbon policies, the commercialisation of emerging renewable technologies, as well as the supply/demand dynamics of the wholesale electricity market.

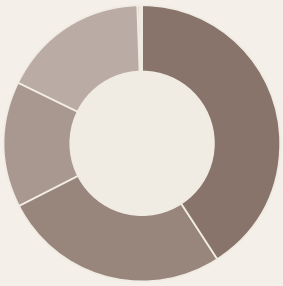
Performance

During FY2013, AGL commenced operation of the 420 MW Macarthur Wind Farm. The $1 billion project has the capacity to power around 220,000 average Victorian homes and abate more than 1 million tonnes of greenhouse gases every year. With the addition of the Macarthur Wind Farm, AGL is now operating 1,740 MW of renewable capacity. As at the end of FY2013, around 32% of AGL's operated generation portfolio was renewable. While this is significantly lower than FY2012 in percentage terms (48%), AGL remains the largest operator and developer of new renewable energy in Australia.

During FY2013, AGL also commissioned a 21 MW natural gas fired cogeneration plant at the Qenos facility in Altona, Victoria. This $45 million project built, owned and operated by AGL, will reduce Qenos' greenhouse gas emissions by over 100,000 tCO_2e per annum through the efficient generation of electricity and steam for use in their manufacturing processes.

During FY2012, AGL was selected by the Commonwealth Government as a successful proponent in the Solar Flagships program, to develop two large scale solar PV projects in New South Wales. During FY2013, this projected was further developed and on 31 July 2013 AGL announced that it had made the final investment decision to proceed with the project.

Installed capacity of operated generation assets[1,2]

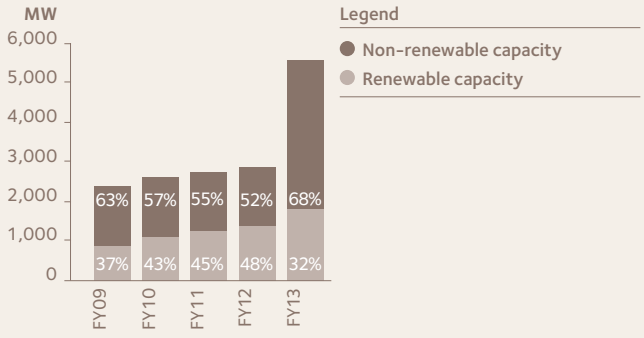


Legend	
Coal	2,210 MW
Gas	1,447 MW
Hydro	796 MW
Wind	925 MW
Landfill gas, biomass and biogas	20 MW
Solar	0.1 MW
Diesel	0.4 MW
Total installed capacity (operational control)	5,398 MW

Notes

1 This breakdown includes only those assets where AGL has operational control, as at 30 June 2012. When these figures are added to those assets where AGL has other ownership or operational interests, including the control of electricity dispatch or equity stake (apportioned by investment level), AGL's total installed capacity is 5,847 MW.
2 Figures may not sum due to rounding.

Installed capacity of operated electricity generation[1,2]



Notes

1 These figures relate to the capacity of electricity generation assets over which AGL has operational control, regardless of who owns the asset. Assets where AGL has rights to the electricity output only are not included.
2 Generation and emissions associated with AGL Loy Yang are excluded from this data for 2012, since AGL's acquisition took place very late in the financial year (29 June 2012). This data is included in FY2013, for the first full year of AGL's operation.

Sustainable energy

Sustainable generation sources

Renewable energy target

Investing in renewable energy delivers an immediate benefit by ensuring AGL contributes its share of meeting Australia's Renewable Energy Target.

Approach

In August 2009, the Commonwealth Government passed legislation introducing a 20% Renewable Energy Target (RET) by 2020 for Australia. The new Large Scale Renewable Energy Target requires 41,000 GWh of renewable generation by 2020 to 2030. Retailers are required to comply with the target by purchasing Large Scale Renewable Energy Certificates (LGCs) created by renewable energy generators. The LRET constitutes the vast majority of the 20% RET by 2020.

The market for LGCs has been oversupplied for a number of years, including FY2013. This was largely a legacy issue associated with the 2010 split of the original Renewable Energy Target into a Small Scale Renewable Energy Scheme (SRES) and the LRET. Significant surplus volumes of certificates created as a result of the installation of small scale solar PV and solar hot water are gradually being used for compliance. AGL expects that new investment will be required over the coming year to ensure that sufficient renewable energy is being produced in 2016 to meet the expanded LRET targets.

As at 30 June 2013, AGL has no further renewable generation under construction. While a pipeline of further renewable and gas-fired generation development opportunities is being considered, the uncertainty around the future of the RET is preventing further investment. During FY2013, the Climate Change Authority conducted a statutory review of the policy; AGL strongly advocated for the policy to remain in its current form. AGL Applied Economic Policy and Research Working Paper No.35 was important in guiding the public policy debate around the costs of ongoing policy uncertainty[1]. However, while the Climate Change Authority's recommendations were adopted by the Commonwealth Government, uncertainty remains due to the biennial statutory review required under the legislation. AGL strongly believes that the 2014 review of the 20% Renewable Energy Target legislation should be the last statutory review undertaken. Given the lead time required for new projects to be approved and constructed, delays could reduce the technical feasibility of building the quantum of renewable generation required, in time to meet the target.

The oversupply of generation capacity in the National Electricity Market (NEM), estimated by AGL to be around 9,000 MW, is also affecting investment in new renewable projects and may jeopardise Australia's ability to meet the RET. Surplus generation capacity in the NEM has supressed wholesale electricity prices, with supply increasing at the same time when demand has dropped. Low forecast electricity prices, combined with RET policy uncertainty and low REC prices makes new investment in renewables intractable. To be a sound investment, over the life of the project the revenue generated by a renewable project (i.e. from the wholesale electricity pool and LGCs) must at least equal its long-run marginal cost. If forecasts suggest that this is unlikely (due to low wholesale prices and low LGC prices), and the investment cannot be made, electricity retailers may face the RET penalty on a transient basis.

Performance

Building new renewable generation

It is estimated that meeting the 20% target by 2020 will require up to $30 billion of investment in new renewable energy generation. As an energy retailer with a significant market share of Australia's electricity consumption, AGL's developments are poised to make a significant contribution to meeting this target. Over the past seven years, AGL has invested over $3 billion dollars in renewable energy generation, making it the largest developer of renewable energy assets in Australia over that period.

In FY2013, AGL completed work on the $1 billion, 420 MW Macarthur Wind Farm in Victoria. This project is one of the southern hemisphere's largest wind farms, producing enough energy annually to power over 200,000 average Victorian households.

Following its success in the Commonwealth Government's Solar Flagships program in FY2012, AGL has continued to develop two large solar projects during FY2013, comprising a 102 MW project at Nyngan and a 53 MW project at Broken Hill. On 31 July 2013 AGL announced that the project would proceed after achieving financial close in respect of funding agreements with the Australian Renewable Energy Agency (ARENA) and the New South Wales Government. The total project cost is approximately $450 million; ARENA will provide $166.7 million and the New South Wales Government will provide $64.9 million. First Solar will provide engineering, procurement and construction services for both projects, using its advanced thin-film PV modules Construction of the project will commence during FY2014 and is scheduled to be completed by FY2016.

AGL has announced that it will defer the appointment of an Engineering, Procurement and Construction (EPC) contractor for the proposed Silverton Wind Farm, approximately 25 kilometres from Broken Hill in western New South Wales as a result of the ongoing uncertainty around the RET. AGL will review its position to appoint a contractor for the wind farm during FY2014.

Securing demand

AGL's strategy of investing in renewable energy is not only in response to government-mandated targets. Consumer-driven demand is also important. As part of managing issues such as legislative risk, AGL has sought to contract renewable electricity supply directly with large consumers that is in addition to mandated targets. AGL has secured significant customer loads for renewable energy, which effectively underwrite new renewable energy projects. AGL has contracts of up to 1 TWh per annum of new renewable energy.

Note

1 Refer to aglblog.com.au

Sustainable energy

Sustainable generation sources

Research, development and deployment

Technology in the energy supply sector is developing quickly. Fuel sources, location of generation, consumption patterns, and the availability of data are all changing.

Approach

With a focus on deployment of technologies that are approaching commercialisation, this year AGL has partnered directly with research institutions and technology proponents to participate in important renewable energy and low carbon programs.

The typical approach taken by AGL in relation to emerging technologies is to leverage existing strengths to invest in and commercialise technologies that are generally well advanced in the development phase.

Solar Flagships

Under the Solar Flagships Program, AGL's project will include a research component under the Education Infrastructure Fund (EIF). The role of the EIF is to build a modern, productive, internationally-competitive Australian economy by supporting world-leading, strategically-focused infrastructure investments that will transform Australian tertiary education and research.

The Nyngan and Broken Hill Solar Plant projects will be affiliated with academic research conducted at the University of Queensland (UQ) and the University of New South Wales (UNSW). The Commonwealth government will provide $40.7 million to UQ and UNSW through the EIF. UQ and UNSW will utilise this funding to construct the following infrastructure:

- **The Gatton PV Pilot Plant** – A 3.275 MW pilot PV plant will be built at UQ's Gatton Campus (~100 kilometres west of Brisbane). The plant will be built with First Solar modules configured in similar size arrays for comparability with the Broken Hill and Nyngan Solar Plants.
- **The UNSW Power Systems Interface Laboratory** – This facility will be housed at UNSW and will research design of solar plant control systems. The lab will be closely integrated with the Gatton site through real-time data streaming.
- **The UQ Data Hub and Power Systems Testing Station** – This facility will be built at UQ's St Lucia Campus and will provide a hub for solar plant modelling and simulation based on data collected from the Gatton pilot plant and the Broken Hill and Nyngan Solar Plants.

Construction of the Gatton Pilot Plant is expected to commence in FY2014 to facilitate knowledge sharing between UQ, UNSW, AGL and First Solar prior to construction of the Broken Hill and Nyngan Solar Plants.

AGL Loy Yang

Both before and since the AGL acquisition of the balance of Great Energy Alliance Corporation (GEAC), research, development and deployment have been conducted into reducing the greenhouse gas emissions from brown coal-fired electricity generation at the Loy Yang A Power Station. New technologies and efficiency improvements will assist in maintaining the competitive performance of AGL Loy Yang.

Performance Optimisation:

The performance of AGL Loy Yang, including its emissions intensity, is affected by many factors such as ambient conditions, coal quality and generation profile. Performance optimisation generally involves maintenance activities which ensure the original design function of the plant is achieved. A recent example has been the program of offline condenser cleans that has resulted in a significant improvement in unit performance and assisted in managing emissions intensity.

AGL is also considering the development of a new coal stockpiling approach that would, amongst other improvements, lead to the use of higher quality coal from the mine in the power station, which in turn would improve the emissions intensity of sent out generation. This significant capital project would take around two years to deliver full benefits.

Investigation is also continuing into ways that the efficiency of AGL Loy Yang could be improved by reducing energy lost in flue gas and cooling water, including its potential re-use to partially dry coal prior to combustion.

Carbon Capture:

The utilisation of post combustion carbon dioxide capture (PCC) technologies on existing power generation facilities has the potential to reduce net emissions of greenhouse gases.

During FY2013, AGL undertook detailed feasibility studies in partnership with Mitsubishi Heavy Industries and WorleyParsons to assess the economic and technical viability of implementing a 500 tonne/day PCC facility. The cost of the study in cash and in-kind contribution was $3 million. The Project received funding support via CarbonNet. The key conclusion from this study was that the implementation of PCC is technically feasible, but not commercially viable without significant financial subsidies.

Given the inability to commercially apply PCC to existing facilities, AGL Loy Yang is continuing to work with CSIRO on a smaller scale pilot project 'coCAPco' to improve the efficiency of capture, and reduce the capital cost of carbon capture for implementation on existing and future brown coal based power generation. The CSIRO coCAPco technology captures both carbon dioxide and sulphur oxides in a single step process to achieve these objectives.

Environment

Introduction

AGL is committed to achieving excellence in environmental management and performance.

A number of AGL's operations have a material environmental footprint and have the potential to interact with, and impact on, various aspects of the environment.

AGL's corporate health, safety and environmental management system, Life Guard, establishes a framework of requirements, policies, environmental standards and compliance guides based on the ISO 14001 Environmental Management Systems standard. Life Guard provides a framework to enable continuous improvement in health, safety and environmental performance and facilitates the pro-active management of environmental risks and compliance responsibilities.

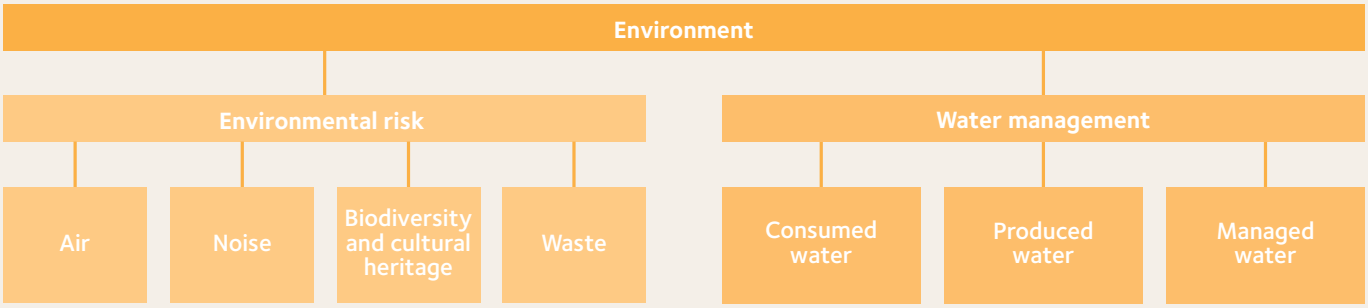
AGL's approach to environmental management is also guided by the AGL Environmental Principles, which are available on the AGL website at agl.com.au/EnvironmentalPrinciples

Key elements of the principles include commitments to:
> meet or exceed statutory obligations;
> report environmental performance consistent with recognised standards;
> provide leadership and actively participate in the policy debate on energy and environmental matters;
> reduce risk and minimise environmental impact; and
> consult with stakeholders on how best to achieve environmental objectives.

AGL's environmental management program is risk-based and driven by a desire to prevent any harm to the environment in areas where AGL operates. Management of water is a particularly critical environmental issue. Governments and communities expect the energy industry to act responsibly so that water resources are not harmed by exploration and development activities, or energy production operations. The two key focus areas for the Environment chapter of this report are therefore environmental risk and water management.

Environmental risk: AGL's environmental program is driven by the environmental risk profile of the business and by regulatory requirements. AGL's long-term vision is to have an environmental risk profile that is 'As Low As Reasonably Practicable'. This aspiration incorporates both the need to operate in an environmentally responsible manner and the need to target resources and efforts on a risk basis.

Water management: Management of water resources is a critical environmental issue facing Australia and one that is relevant to AGL's business. AGL's long-term vision is to be recognised as a prudent and responsible user of water that does not adversely impact on local water resources.



Performance Summary

Vision	Target FY2013	Performance FY2013		Target FY2014
Environmental risk				
To have an environmental risk profile that is As Low As Reasonably Practicable (ALARP).	100% of approved risk register actions for the highest residual environmental risks implemented in accordance with targeted milestones.	96% of actions (or 60 of 62) were implemented in accordance with targeted milestones: **96%**	✗	100% of approved risk register actions for the highest residual environmental risks implemented in accordance with targeted milestones.
Water management				
To be recognised as a prudent and responsible user of water that does not adversely impact on local water resources.	Increase number of dedicated monitoring bores and stream gauging sites relative to overall number of CSG wells/sites.	The number of dedicated monitoring bores and stream gauging sites increased from 73 (61 monitoring bores to 12 stream gauging sites) from 1 July 2012 to 103 (88 monitoring bores to 15 stream gauging sites) at 30 June 2013. This represents an increase in the ratio of water monitoring sites to gas wells from 0.45 to 0.63.	✓	Analysis of significant water usage across business units and development of KPI's for water usage and wastewater reduction by end June 2014.

Environment

Environmental risk

Introduction to environmental risk

The understanding and management of risk is crucial to the ongoing success of any business. The management of environmental risk is particularly important to AGL given the company holds long-term leases on land used by third parties for other purposes and also operates in sensitive environments such as National Parks.

Approach

AGL's approach to the identification of environmental risks is consistent with the approach taken in the ISO 14001 Environmental Management Systems standard. More broadly, AGL's approach to risk management, as outlined in the AGL Risk Management and Assessment Framework, is modelled on the ISO 31000 Risk Management standard. Risks identified via the ISO 14001 'aspects and impacts' approach are assessed from the perspectives of 'inherent risks' and 'treated risks' (which take into consideration existing control measures). This approach enables AGL to identify critical controls. It also helps identify where the highest residual risks remain so resources can be targeted appropriately, or informed decisions can be made about accepting certain risks.

AGL's health, safety and environmental management system, Life Guard, contains standards relating to environmental aspects and impacts, as well as risk management. These standards provide high-level guidance on the environmental risk identification process.

Vision for environmental risk: AGL's long-term vision is to maintain an environmental risk profile that is 'As Low As Reasonably Practicable' (ALARP). This requires continual improvement that is driven by an understanding of risks and a commitment and targeted work program to reduce the highest risk items where practicable.

Drivers: Issues associated with the use and management of water resources are outlined on pages 89 to 93. The key environmental issues of atmospheric emissions, noise, biodiversity and cultural heritage and waste are discussed on pages 82 to 88.

Climate change risks are addressed in the Sustainable energy chapter of this report.

Performance

AGL's key environmental risks are systematically identified and reviewed in workshops run in the Upstream Gas and Merchant Energy business units. The workshops involve a diverse range of operations personnel and environmental specialists. Given internal and external factors result in continuous changes to AGL's environmental risks, risk registers and actions to reduce risks are reviewed on a regular basis to ensure their effectiveness.

To drive the timely completion of actions that have been approved by AGL's management to mitigate AGL's highest residual environmental risks, AGL's environmental risk target for FY2013 was to have 100% of such actions implemented in line with targeted milestones. The target was applied to AGL-operated sites that had environmental risk registers in place as at 1 July 2012, with the exception of AGL Loy Yang which was acquired by AGL on 29 June 2012.

With respect to AGL Loy Yang, much of FY2013 has been focused on completing detailed due diligence and risk reviews and integrating AGL Loy Yang's environmental risk management processes with AGL's. AGL Loy Yang's Risk Manager reports directly to AGL's Merchant Operations Risk Manager so that risks are consistently assessed. All significant risks at AGL Loy Yang were captured in an Environment Improvement Plan, generated pursuant to Victorian Environment Protection Authority (EPA) licensing requirements. The FY2014 environmental risk target includes AGL Loy Yang.

During FY2013, AGL's highest residual environmental risks included risks related to surface water, land and groundwater at a number of power stations. Target actions designed to control these risks were developed and approved and 96% of actions (or 60 of 62) were completed within the allocated timeframes. The two outstanding actions related to an internal review of screen washing practices at AGL Torrens and the necessary actions will be implemented in the first quarter of FY2014.

Some examples of activities completed in FY2013 to reduce environmental risk include:

> conducting a review of fuel and chemical storage and the potential for loss of containment at AGL Hydro
> developing a Fuel Management Procedure for AGL Hydro which outlines environmental management requirements associated with the transport, storage and handling of fuel, including the management of underground petroleum storage systems
> reviewing documentation relating to inspections and monitoring at AGL Torrens and AGL Hydro power stations
> reviewing environmental content within Asset Management Plans for both AGL Torrens and AGL Hydro power stations
> commencing targeted contamination investigations at selected AGL Hydro power stations, as well as continuing remediation work at AGL Torrens.

Overall, AGL's FY2013 environmental risk target was effective in driving the completion of risk register actions, thereby further reducing AGL's environmental risk profile. The target will be maintained in FY2014 and extended to AGL Loy Yang where the highest environmental risks relate to surface water, land, groundwater and air.

Environment

Environmental risk

Environmental incidents and licence compliance

AGL is subject to a range of environmental laws and policies as well as site-specific environmental permits and approvals issued at federal, state and local government levels.

For example, in New South Wales, AGL and other holders of petroleum exploration licences (PEL) are required to pay substantial upfront security deposits. A condition of the PEL is that any disturbed sites must me rehabilitated. In the event this does not occur, the Office of Coal Steam Gas may use the security deposit to rehabilitate the land to their satisfaction. The table below sets out environmental issues and non-compliances that were reported to jurisdictional environmental regulators during FY2013. Corrective actions have been implemented to address each of the issues listed.

As noted in the table below, during FY2013 there were two fines issued by the New South Wales Environment Protection Authority (EPA) to AGL's Rosalind Park Gas Plant (the Plant) (part of AGL's Camden Gas Project) in relation to the limits for air emissions being exceeded and late publication of air emissions monitoring reports.

Furthermore, an enforceable undertaking was agreed to between AGL and the EPA in August 2013 following AGL's breach of its environment protection licence by failing to continuously monitor air emissions at the Plant.

As part of the enforceable undertaking, AGL has committed to pay $150,000 to the University of Western Sydney for the 'Love your Lagoons: Place based learning and environmental action in South-Western Sydney Project'. This project is a multi-council and school wetland environmental education program for the Macarthur region. Further details of the enforceable undertaking are accessible on the EPA website.[1]

Note

1 Refer to epa.nsw.gov.au/prpoeo/enforceableundertakings.html

Reportable environmental non-compliances FY2013

Site	Comment
Rosalind Park Gas Plant, Camden Gas Project, New South Wales	> In July 2012, AGL notified the New South Wales Environment Protection Authority (EPA) that, due to a number of factors including technical problems, the Continuous Emissions Monitoring System at the plant was not operating between 2009 and July 2012, as required by the Environment Protection Licence (EPL). AGL has implemented remedial measures to address the non-compliance and will comply with the enforceable undertaking approved by the EPA on 8 August 2013. > In late 2012, AGL reported a minor breach related to exceedances of the EPL limit for emissions of nitrogen oxides (NOx) that occurred in September, November and December 2012. In March 2013, the EPA issued AGL a penalty infringement notice involving a $1,500 fine for this minor breach. > In February 2013, AGL reported an EPL non-compliance related to the selection of sampling positions for air emissions monitoring. > In July 2013, the EPA issued AGL a penalty infringement notice involving a $1,000 fine for failing to upload air quality monitoring reports to the company's website within 14 days of obtaining monitoring data. All required reports were uploaded as soon as this was brought to AGL's attention.
AGL Loy Yang, Victoria	> On 25 January 2013, during extreme wind conditions, AGL Loy Yang received a complaint from a local landholder when visible fugitive dust migrated off-site. > In May 2013, a licence limit breach occurred when water discharged off-site to Traralgon Creek was contaminated with fire service water due to a pipe blockage. The contamination caused the quality of the discharged water to exceed the site licence limit for turbidity and colour for approximately four hours. > In June 2013, a high rainfall event resulted in an exceedance of the site licence limit for turbidity for water discharged to Traralgon Creek. Review of water quality upstream of AGL's discharge point indicated AGL's discharge was equal to or less than ambient levels. > In June 2013, an ash pipeline failure resulted in a discharge off-site to the adjacent Loy Yang B property.
AGL Torrens, South Australia	> An internal review of water quality monitoring results of marine discharges from AGL Torrens detected elevated levels of some chemicals. These levels exceeded the criteria set out in the South Australian Environment Protection (Water Quality) Policy 2003. AGL submitted a precautionary notification of this exceedance to the South Australian EPA on 17 December 2012. An external expert review of results concluded the environmental impact of the marine discharge is likely to be 'trivial', as defined under the *Environment Protection Act 1993* (SA). > AGL developed a plan to achieve compliance with the policy that was submitted to the EPA in May 2013. > In June 2013, AGL submitted a notification to the EPA relating to contamination in groundwater surrounding the site sewerage treatment plant. The cause and extent of contamination is being investigated
Bogong Village Accommodation, Victoria	> In June 2013, routine monitoring of the Bogong Village wastewater treatment plant detected exceedance of the licence limit for E. Coli.
Silver Springs Oil and Gas, Queensland	> In November 2012, a release of oil and water, estimated at five kilolitres, occurred on the Beechwood-Tinker pipeline. > Also in November 2012, a landholder reported that an oil release occurred on the Tinker pipeline. > In December 2012, a release of produced water, estimated at 10 kilolitres, occurred on the Beechwood-Taylor pipeline.
Moranbah Power Station, Queensland	> Emission testing planned for October 2012 could not be completed in line with the timeframe specified in the Development Approval as engines had mechanical damage and were out of service. Monitoring was completed in November 2012 and results were submitted to the Queensland Department of Environment and Heritage Protection.

Environment

Environmental risk

Air

AGL has a portfolio of power generation plants which are fuelled by the combustion of traditional and non-traditional fuels which result in the emission of combustion products to the atmosphere. Some of AGL's upstream gas assets also produce emissions to air.

Approach

AGL recognises that emissions to air from its plants can potentially contribute to regional airshed environmental issues, so it is important that plants run efficiently and within the parameters set by regulatory licences. Undertaking regular maintenance helps keep equipment running efficiently and AGL monitors emissions to verify compliance with regulatory requirements.

Air emissions are reported to state government regulators as required, and also to the Federal Government's National Pollutant Inventory (NPI) each year. The NPI is a publicly available database of emissions from Australian industrial facilities.

In recent years, analysis of the NPI showed that emissions of nitrogen oxide (NOx), sulphur dioxide (SO_2), carbon monoxide (CO) and particulates (measured as PM_{10}) from AGL's portfolio of operated electricity generation facilities have accounted for less than 2% of emissions for each pollutant type for the electricity generation sector in Australia.

However, following AGL's acquisition of the Loy Yang A power station and mine in late June 2012, air emissions have become a material issue for AGL. Air discharges from AGL Loy Yang power station include particulates and gaseous emissions composed of oxides of nitrogen, carbon and sulphur. These are measured by continuous online analysers.

AGL Loy Yang also measures dust deposition at eight locations around the mine boundary on a monthly basis. Controls for minimising dust from our coal mining operations include:

> using forecast meteorological data to anticipate conditions which may give rise to significant dust

> using water sprays in the mine and on unsealed roads to suppress dust

> applying paper mulch, sourced from a nearby paper mill, to areas of the mine that are known to generate dust

> educating employees about how to operate in ways that reduce dust.

AGL Loy Yang also contributes to the Latrobe Valley Ambient Air Monitoring Network (LVAMN), which co-ordinates the monitoring of ambient air quality across the region and also facilitates annual ambient modelling assessments. Both the monitoring and modelling are undertaken to ensure the regional impacts of air emissions are assessed against quality objectives within the State Environment Protection Policy (Ambient Air Quality).

The LVAMN is operated by Aurecon on behalf of major Latrobe Valley industries with EPA licences for air emissions, namely AGL Loy Yang, Australian Paper and the other power generators. The network consists of three air monitoring stations that monitor ambient concentrations of nitrogen, sulphur, dust and ozone, together with meteorological data. In FY2013, AGL Loy Yang contributed $30,000 to the LVAMN as well as significant in-kind contributions.

Performance

Given AGL acquired the Loy Yang A power station and mine late in FY2012, FY2013 is the first time that air emissions from AGL Loy Yang have been included in AGL's sustainability report.

The EPA licence for AGL Loy Yang includes air emissions limits for gaseous emissions and particulates discharged from the four power station units, as well as amenity-related conditions related to airborne particles (i.e. dust) and visible emissions.

During FY2013, AGL complied with all licence limits related to power station air emissions. However, one non-compliance relating to dust from the mine occurred in January 2013 when, during extreme weather conditions, visible fugitive dust migrated off-site. Following this incident, a detailed review of dust management practices and controls was undertaken, resulting in improvements such as the installation of automated control valves on dust suppressing spray systems.

At AGL Torrens, air emissions were lower than in previous years (in line with the reduction in generation output in FY2013) except for SO_2 emissions. AGL Torrens has the capacity to run on either natural gas or fuel oil. Natural gas is a cleaner fuel and is the primary fuel used. Fuel oil, which has a relatively high sulphur content, provides a back-up option to run if natural gas becomes unavailable and is typically used for short periods of time each year. SO_2 emissions from the power station were slightly higher in FY2013 as more fuel oil was used for testing purposes compared to FY2012.

Air emissions from Somerton Power Station, which is a gas-fired peaking station, were also lower during FY2013, in line with the decrease in power output at Somerton.

At Hydrocarbon Extractions, emissions were comparable with FY2012 levels, except VOC emissions. The plant is usually shut down once per year for maintenance purposes, including repair of pipeline leaks. However, during FY2013 there was no plant shutdown and this resulted in no repair of leaks and higher fugitive VOC emissions.

AGL operates a variety of 'embedded' generation facilities at some of its major customer sites. These facilities include Suncoast Macadamias' biomass plant, Melbourne Water's Werribee biogas plant, Moranbah Power Station, Coopers co-generation plant, Symex co-generation plant and seven landfill gas generation facilities in New South Wales, Western Australia and Tasmania. The reduction in reported NOx, VOC, SO_2 and CO emissions for major customer sites is primarily the result of less generation activity at the Werribee and Symex plants during FY2013. The increase in PM_{10} is mainly due to increased output at Suncoast Macadamias during FY2013.

At Camden Gas Project, gas sales during FY2013 were consistent with previous years. However, in FY2013, estimated VOC emissions were higher due to the inclusion of gas flared from the field in the emissions estimates. Further, SOx emissions were higher due to the inclusion of gas and diesel generators. As detailed on page 82, in recent years air emissions have not been continuously monitored as is required by the site licence and AGL is working to ensure this is corrected.

At the Silver Springs Oil and Gas Project emissions remained fairly constant in FY2013.

Environment

Environmental risk

Air emissions[1,2]

Legend

- AGL Loy Yang[3]
- AGL Torrens
- Somerton Power Station
- Camden Gas Project
- Hydrocarbon Extractions
- Major Customers[4]
- Silver Springs Oil and Gas Project[5]

Notes

1 All figures rounded to two significant figures.

2 Air emission data for AGL sites is publicly reported NPI data (see http://www.npi.gov.au/) with the exception of Hydrocarbon Extractions (HCE). HCE emissions for NOx, PM_{10}, SO_2 and VOC comprise EPA reported data incorporating site-specific emission factors, which are more representative than NPI estimates. CO is not captured in EPA reporting; therefore NPI reported CO emissions are used for HCE.

3 AGL took ownership of Loy Yang in June 2012, hence data is shown for FY2013 only.

4 Major Customer sites for which air emission data is reported comprise: Gosnells Landfill co-generation, Kincumber Landfill, Rockingham Landfill co-generation, Shoalhaven Landfill, Woy Woy Landfill, Suncoast Macadamias, Melbourne Water Werribee biogas unit, Moranbah Power Station, Coopers co-generation plant, Symex co-generation plant, Jackson St Landfill co-generation and McRobbies Gully Landfill.

5 AGL took ownership of Silver Springs Oil and Gas Project in October 2010, hence data is shown for FY2011 and FY2012 only.

Environment

Environmental risk

Noise

The generation of noise is an unavoidable characteristic of some of AGL's business activities, notably generation of electricity, and drilling undertaken as part of upstream gas projects. Many of AGL's projects involve development of rural land that is already occupied and used for other purposes by third parties. The management of noise impacts is vitally important in such settings, where background noise levels are low and amenity expectations are high.

Approach

AGL's coal seam gas projects (CSG) involve drilling wells to extract methane from coal formations deep below the ground. Sometimes drilling needs to be undertaken 24 hours per day, seven days per week. A number of activities are undertaken to minimise the likelihood of off-site noise impacts associated with drilling operations. For example, well locations are selected to avoid the likelihood of causing impacts to sensitive receivers where possible. Acoustic noise walls can be erected on the perimeters of drill sites if necessary. Noise monitoring is also undertaken to ensure drilling operations remain below regulatory compliance limits.

AGL's wind farm projects are typically constructed on land that is used for agricultural purposes. A standard condition of the necessary development consents is that both pre- and post-construction noise monitoring is undertaken to ensure that, once operational, the wind farm meets relevant noise requirements.

AGL takes community concerns about noise issues very seriously and has processes in place to ensure a prompt response to any concerns raised. AGL is committed to engaging with local communities and ensuring that operations meet all regulatory requirements.

Performance

Ensuring there are no adverse noises arising from wind turbines has remained a key focus for AGL during FY2013.

During September and October 2012 AGL worked with the wind turbine supplier for the Hallett 4 Wind Farm to install resonance dampers on some of the turbines, to address a tone that was occasionally audible at a neighbouring residence.

While the Hallett 1 and Oaklands Hill wind farms are compliant with noise requirements, during FY2013 AGL has continued to work with the turbine supplier for these wind farms to address local community concerns about noise. An acoustic treatment is in the process of being developed, and AGL has continued to voluntarily implement operational constraints on some turbines at the Oaklands Hill Wind Farm. AGL has kept the South Australian and Victorian Environment Protection Authorities informed of the steps being taken at these wind farms.

In order to alleviate community concerns regarding noise in relation to the Macarthur Wind Farm, AGL undertook extensive noise monitoring at 25 neighbouring properties between October 2012 and May 2013 to confirm that the wind farm is compliant with noise regulations. Extensive research by AECOM Australia Pty Ltd demonstrates that there was no measurable change in the infrasound levels measured before and after construction of the Macarthur Wind Farm and noise monitoring confirms compliance with Victorian noise regulations. AGL's noise monitoring data from the compliance noise assessment is accessible on AGL's website at agl.com.au/macarthur

Further information is also available in the Community chapter.

Environment

Environmental risk

Biodiversity and cultural heritage

AGL operates and develops energy generation and upstream gas assets on land that, in many cases, has value for reasons of biodiversity and cultural heritage, in addition to its commercial value.

Approach

AGL's HSE management system outlines the requirements for ensuring that all potential impacts on biodiversity and cultural heritage resulting from AGL's activities are identified, assessed and as far as is reasonably practicable, managed and minimised prior to activities being undertaken. All large AGL sites and projects also maintain risk registers which detail site specific risks and risk management measures related to biodiversity and cultural heritage.

Most of AGL's development projects are considered under planning legislation as State-significant major projects and therefore require comprehensive environmental impact assessments including flora and fauna studies and cultural heritage assessments.

Following development approval, projects are undertaken strictly in accordance with approved environmental management plans. Compliance with the requirements of AGL's HSE management system at operational and development sites is audited on a regular basis.

Native flora and fauna (terrestrial and aquatic) is present in the vicinity of most of AGL's development projects. AGL aims to protect biodiversity by limiting the footprint of its activities to already disturbed areas.

Where impacts cannot be avoided, action is taken to offset the impact. For example, in FY2013 AGL managed 280 hectares of land for conservation purposes as part of the Newcastle Gas Storage Facility and the Gloucester Gas Project. The conserved land supports a variety of vegetation communities, such as Spotted Gum-Ironbark woodland, and valuable habitats for ten threatened fauna species listed under the *Threatened Species Conservation Act 1995* (NSW) and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Performance

In FY2013, AGL undertook a number of voluntary activities to support the conservation of biodiversity.

For example, AGL continued to develop its biodiversity register, which documents the biodiversity values of around 40 operational and development sites. The register is reviewed and updated on an annual basis and has helped to ensure actions are prioritised. The biodiversity register was first compiled in 2012 to assist in refining the understanding of biodiversity risks, and identified some information gaps that exist in relation to older assets at AGL Torrens and AGL Hydro.

In FY2013, to gain more current information in relation to the marine environment surrounding AGL Torrens, AGL completed a review of marine environmental data. In FY2014, AGL will undertake biological surveys around Torrens Island. A review of biodiversity data for AGL Hydro assets will be also be undertaken in FY2014.

Information relating to AGL Loy Yang, which has a number of areas of remnant vegetation with high conservation value, is currently being incorporated into the AGL biodiversity register.

AGL also completed a number of practical conservation activities during the year. For example, AGL Hydro cleared 6.6 hectares of willows (which are identified as a significant weed) adjacent to AGL's regulation pond at Mount Beauty, which forms part of AGL's Kiewa Hydro Electric Scheme. The removal will enable the lakeside area to be revegetated with a combination of exotic and endemic species, and the area will eventually be developed into a recreational space for the community and visitors by AGL Hydro and the Alpine Shire Council. Other agencies including Parks Victoria and the North East Catchment Management Authority also carried out willow removal upstream and downstream of AGL's regulating pondage. It is anticipated that the willow removal will produce a material benefit for the biodiversity values of the pondage and the Kiewa River. Further information is provided in the Community chapter.

A number of AGL employees undertook volunteer conservation work with Landcare and other local organisations during FY2013. For instance, in July 2013 members of the AGL Camden Gas Project team worked with Wollondilly Council planting close to 1,000 trees, mulching and putting protective plant guards up along Stonequarry Creek in Picton. The Council is in the process of creating a new sports field and wanted to re-vegetate the creek banks with local eucalypts which are rare in the region.

AGL Biomass Policy

In recognition of the effect that electricity generation can have on biodiversity, AGL has published a Biomass Policy which states that AGL will not source fuel for power generation from native forest or from crops located in areas cleared of native forest after 1990. The policy is available at agl.com.au/BiomassPolicy

Environment

Environmental risk

Waste

AGL's approach to waste management is consistent with the waste management hierarchy, where the approach taken is to, in order of decreasing preference, avoid, reduce, re-use, recycle and responsibly dispose of waste. This approach reduces the impact of activities on the environment, and reduces operating costs and risks.

Approach

AGL's operations produce a variety of different waste streams which are either reused, recycled or disposed of to landfill.

At AGL's industrial sites, opportunities to reuse wastes are sought, and materials such as scrap metal and waste oil are recycled. Hazardous wastes are transported to licensed waste management facilities using regulated waste tracking systems.

The most significant volume of waste handled by AGL in FY2013 was flyash, which is a by-product of the combustion process in coal-fired power stations. AGL Loy Yang manages the disposal of its own flyash, as well as the flyash produced by the neighbouring Loy Yang B Power Station.

Ash is initially collected in the boiler hoppers and electrostatic dust precipitators at both power stations, and is then hydraulically transported into ash ponds on AGL's site. The ash is dewatered in the ponds, excavated and then placed in AGL's mine overburden area, in accordance with the site's EPA licence.

Another significant industrial waste stream for AGL is drilling mud and cuttings produced at Upstream Gas sites. The management of this waste will be an increasingly important issue for coal seam gas projects as these projects move from exploration to production.

At all of AGL's major offices and call centres, waste is segregated and paper, cardboard, metals and other recyclables are collected for recycling.

Water-based waste streams from operational sites and offices are managed as follows:

> a septic system, or discharged to sewer directly or by contractors on behalf of AGL
> discharged to industrial wastewater treatment facilities, either directly or via contractors
> discharged to surface water under EPA licence
> reused or recycled by AGL or a third party.

Cooling water at AGL Torrens that is withdrawn and returned to the source environment chemically unchanged is not regarded as wastewater in this report. The management of this water is discussed on page 93.

Environment

Environmental risk

Performance

Hazardous waste

During FY2013, AGL operational sites generated approximately 492 tonnes of hazardous waste. Around 60% of this waste was waste oil and oily waste that was collected and sent to recycling facilities where it can be cleaned up and reclaimed for use as an alternative fuel. The remaining hazardous waste produced by AGL sites included oily rags, asbestos, waste chemicals and septic sludge.

Non-hazardous waste

In FY2013, AGL disposed of approximately 660,000 tonnes of flyash produced by both AGL Loy Yang and (non-owned and non-operated) Loy Yang B. Approximately two-thirds of this volume can be attributed to AGL Loy Yang.

In addition to flyash, AGL generated approximately 6,410 tonnes of other non-hazardous waste. More than 20% of this other waste comprised drill mud from three coal seam gas projects, which was diverted to a Sydney-based company which uses the drill mud to make a variety of construction materials, including bricks.

The remainder of the non-hazardous waste produced at AGL sites in FY2013 comprised mostly 'general waste' that was disposed to landfill, and materials that were collected for recycling, including paper, cardboard and scrap metal.

Wastewater

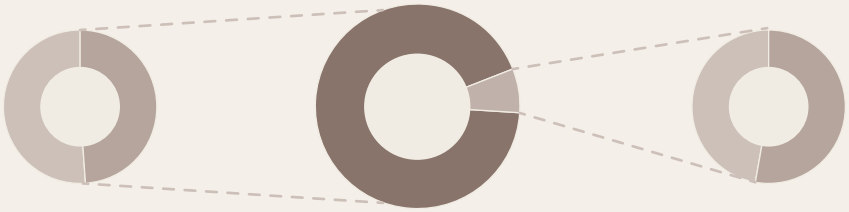
AGL disposed of approximately 9,650 ML of wastewater in FY2013. Most of this wastewater relates to AGL Loy Yang, which discharged approximately 6,020 ML of wastewater from the power station and surrounds to Traralgon Creek and around 3,600 ML of ash water from the ash settling pond to the ocean from Gippsland Water's Saline Waste Outfall Pipeline.

The quality of water discharged to Traralgon Creek is subject to EPA licensing, and the water discharged is generally of a higher quality than the water in the creek upstream of the discharge point. Water in the creek is continually monitored for acidity, temperature, turbidity, colour and conductivity, and monitoring programs continue to indicate that AGL Loy Yang's discharges do not negatively impact on the beneficial uses of Traralgon Creek, which include fishing, stock watering, swimming and irrigation.

During FY2013, two non-compliance events occurred in relation to AGL's discharge to Traralgon Creek. One incident was due to elevated turbidity linked to storm runoff from the overburden area including roads and pond dam embankments, and the other was associated with contaminated fire service water overflowing into the stormwater system.

Smaller volumes of wastewater were discharged from other AGL operational sites and offices in accordance with state and local regulations.

Waste Streams (excluding ash)



Legend	
Non-hazardous waste disposed	49%
Non-hazardous waste re-used	51%

Legend	
Non-hazardous waste	7%
Hazardous waste	93%

Legend	
Hazardous waste disposed	53%
Hazardous waste re-used	47%

Note

Data excludes ash waste from AGL Loy Yang Power Station as AGL manages ash waste for both AGL Loy Yang and (non-owned and non-operated) Loy Yang B.

Environment

Water management

Introduction to water management

The sustainable management of water resources is a critical environmental issue facing Australia and of direct relevance to AGL's business. AGL recognises that governments and communities expect the energy industry to act responsibly so that water resources are not harmed by exploration and development activities, or energy production operations.

Approach

Water is a critical input to AGL's energy generation and oil and gas activities and AGL uses water resources in a broad range of ways.

The most significant volumes of water used by AGL are drawn from surface water bodies and used 'temporarily' (i.e. for non consumptive purposes) by AGL Hydro power stations and AGL Torrens before being returned directly to the source environment. Thousands of gigalitres of water pass through the hydro stations each year to generate power, and hundreds of gigalitres pass through AGL Torrens and AGL Loy Yang each year to cool the steam in the stations' boilers.

AGL draws water from a variety of sources, including from fresh and marine surface waterbodies, aquifers, collected rainwater and from water retailers, for a broad range of consumptive uses. AGL's most significant water consumption occurs at AGL Loy Yang where around 70 ML per day is evaporated to the atmosphere from four cooling towers. This is equivalent to around 28 olympic-sized swimming pools of water.

AGL also produces water from coal seams and conventional oil and gas projects as a by-product of its exploration and production activities. Continued growth of the Upstream Gas business is a core part of AGL's integrated business strategy and as such the management of groundwater brought to the surface (hereafter referred to as produced water) is a key focus of AGL's environmental management program.

The protection of local groundwater and surface water resources in the areas where AGL operates is also a priority for the Upstream Gas business. To determine if coal seam gas (CSG) activities have impacted local groundwater resources, AGL has developed dedicated groundwater and surface water monitoring networks across the portfolio of CSG projects.

Vision for water management: AGL's vision is to be a prudent and responsible user of water that seeks to minimise the adverse impact of its operations on local water resources.

Drivers: Information about consumed water, produced water and managed water across AGL's sites is presented in the following pages.

Performance

AGL recognises that many of its stakeholders are concerned about the management of water, particularly whether CSG activities result in reduced water supplies and degradation of water quality. In light of this, during FY2013 AGL continued to expand water monitoring networks across the Gloucester and Hunter CSG exploration areas in New South Wales and the production gas field at Camden, also in New South Wales.

AGL has also maintained dedicated monitoring locations as part of CSG exploration activities on the 'Glenaras' homestead near Longreach in Queensland, and around the construction of AGL's Newcastle Gas Storage Facility at Tomago in New South Wales.

Eighty-two dedicated groundwater monitoring bores, six perched water monitoring bores, and 15 surface monitoring locations are now operational across the Hunter, Gloucester, Galilee and Camden project areas. In FY2013, 21 new dedicated groundwater monitoring bores and one new perched water monitoring locations were installed and became operational (in the Gloucester, Hunter and Camden project areas). No new surface water monitoring locations were required to be developed in FY2013.

Water monitoring reports are now being produced at least annually for all areas. These reports are tabulated and discussed at AGL's community forums and are made available via AGL's project websites.

Exploration activities were restricted during the year, mostly as a result of government policy and regulatory decisions in New South Wales. AGL's focus was concentrated on establishing additional water monitoring sites to obtain longer term baseline information in advance of new exploration programs.

In the coming years, AGL has plans for new fracture stimulation and flow testing programs in prospective exploration areas. It is important to understand the natural water level and water quality trends prior to commencing these programs. The data is also essential for the development of groundwater models used to assess water resource impacts and any losses from beneficial aquifers and surface water.

Results to date from AGL's monitoring and modelling studies at the Hunter, Gloucester, Galilee and Camden gas project sites indicate that within these areas there is negligible connectivity between groundwater in deep coal seams and beneficial water resources in shallow aquifers and streams. Observed water level trends are mostly natural variations and there are no unexpected water quality trends.

Following an extensive program of works implemented over a number of years, AGL's rigorous CSG water monitoring program is firmly embedded in daily operations, providing an opportunity for AGL to broaden the focus of the strategic water management target in FY2014.

In FY2014, AGL will undertake an analysis of significant water usage across Merchant Energy and Upstream Gas to develop key performance indicators (KPIs) for water usage and wastewater reduction, with the aim of identifying opportunities for improving AGL's water use efficiency.

Due to the highly variable nature of AGL's operations, the KPIs will be established on a site basis, rather than at the group level. The sites that will be the focus of this target are the AGL Loy Yang and AGL Torrens power stations, and Upstream Gas projects that use a material volume of water.

Environment

Water management

Consumed water

Water is an essential resource for AGL's operations. AGL operates in regions where water restrictions are common, and seeks to minimise water consumption where possible.

Approach

AGL Loy Yang accounts for most of AGL's water consumption. The most significant water consumption at AGL Loy Yang is related to the cooling tower system.

Other important uses of water occur at:

> AGL Torrens, primarily for the production of steam. Most of the water consumed at this power station is sourced from an aquifer located 130 metres below the site

> Hydrocarbon Extractions, to cool the process that takes Caltex refinery waste fuel gas to extract LPG and naphtha

> Upstream Gas exploration and production project sites, where water is used to suppress dust, and to lubricate and cool drill bits during drilling operations

> AGL's call centres and offices, for provision of basic amenities.

Performance

During FY2013, AGL consumed approximately 35,200 ML of water. This is equivalent to over 14,000 olympic-sized swimming pools of water. Around 98% of this volume was sourced from ground and surface water for use at AGL Loy Yang, around 1.5% was groundwater extracted for use at AGL Torrens, and the remaining volume comprised mainly potable water purchased from retail water suppliers. A small portion of water was derived from other sources, such as harvested rainwater.

In addition, AGL made important non-consumptive use of water resources. This is discussed separately under 'Managed Water' on page 93.

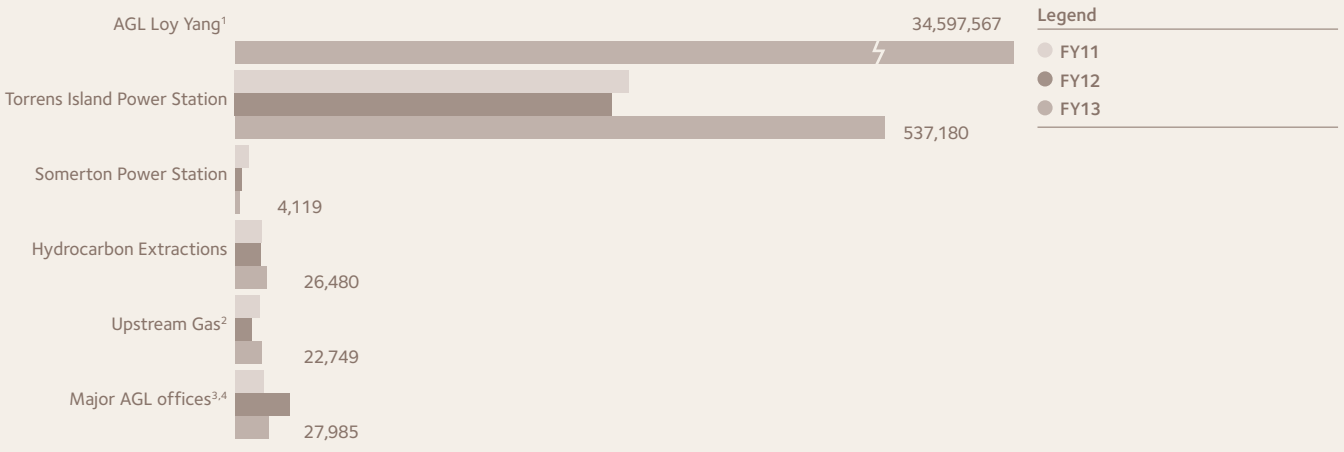
As noted earlier, AGL's most significant water consumption occurs at AGL Loy Yang.

Beneath the AGL Loy Yang site, there are three aquifer systems: a shallow aquifer; an intermediate aquifer; and a deep aquifer. As the aquifer systems under the mine must be depressurised for mine stability, around 12,200 ML of groundwater was extracted in FY2013. The majority of this groundwater was mixed with approximately 21,150 ML of water drawn from the Latrobe River and used as cooling water make-up, wash-down water and fire reserve for the power station.

Gippsland Water supplied a further 1,250 ML of raw water from Moondarra Reservoir which has a capacity of 30,300 ML. After on-site treatment by AGL, this water was used for domestic purposes and replenishment of high quality boiler water.

In FY2013, AGL Loy Yang's total water consumption was almost 34,600 ML or, on average, 2.33 ML per gigawatt hour of electricity sent out to the electricity network.

Water use



Notes

1 FY2013 was the first full year of AGL's ownership of AGL Loy Yang and so there is no water consumption data available for preceding years.
2 Comprises Silver Springs Gas Project, Cooper Basin assets, Camden Gas Project, Gloucester Gas Project, Hunter Gas Project and Galilee Gas Project.
3 In FY2013, major AGL offices included North Sydney (NSW), Canberra (ACT), Brisbane (Qld), Spencer Street and Bourke Street offices in Melbourne and East Burwood (VIC) and Eastwood (SA).
4 Where office buildings are occupied by multiple tenants, AGL's water consumption has typically been estimated based on property management data for the building, pro-rated to reflect the amount of building floor space occupied by AGL.

Environment

Water management

Produced water

Deep groundwater is brought to the surface (or 'produced') as an unavoidable by-product of upstream gas exploration and production activities.

Approach

Coal seam gas projects

Water management is a key component of coal seam gas exploration and production projects, and all of AGL's coal seam gas activities are designed to have a minimal impact on the environment and to protect water resources.

Before the gas can be brought to the surface, water that exists within the coal formation must first be removed so that the gas can 'flow' and be extracted. The quantity of water produced varies depending on the location of the project and also the stage in the production cycle of any given well. Some locations, due to the inherent characteristics of the local geology, produce greater volumes of water per well than similar scale projects located elsewhere.

As a project moves from the exploration stage to the production stage, the number of wells increases substantially. The total volume of water produced from the coal formations increases in the initial years and then decreases as the wellfield reaches maturity.

Currently, only AGL's Camden Gas Project in New South Wales is in commercial production stage. In the future, as some of AGL's exploration projects move into production stage, with more wells operating, the volume of produced water from AGL's operations will increase.

The quality of produced water also varies depending on the location. Produced water varies from low salinity (for example in the Galilee Basin) to moderate salinity in some locations such as in the Hunter, Camden and Gloucester. The salinity of produced water is generally less than one-third of that of seawater. It is safe to use for a variety of purposes (most of which require some form of modification or treatment to reduce the salinity), and AGL is actively seeking to increase the proportion of produced water that is beneficially re-used for environmental or commercial purposes.

To prevent shallow beneficial aquifers from being connected to the deeper coal seam gas water bearing zones/aquifers, AGL uses internationally accepted well construction practices. AGL has dedicated groundwater monitoring networks to monitor the water level and the water quality characteristics of shallow beneficial aquifers, to identify any changes during coal seam gas exploration and production programs and to characterise the groundwater prior to development. Surface water monitoring is also in place where there are surface water bodies nearby.

In Queensland there is a requirement under the *Water Act* (Qld) 2000 for coal seam gas operators to 'make good' any impacts to surrounding water bore owners (in circumstances where groundwater levels decrease). To date, AGL has not had to 'make good' any landowner bores which are within AGL operational areas. No similar provision exists in New South Wales.

Conventional oil and gas projects

Conventional oil and gas exploration and production has been undertaken in Australia for over 60 years, and technology related to all petroleum exploration and production (both conventional and unconventional) has grown from conventional oil and gas technology.

The extraction of gas and hydrocarbon liquids from conventional oil and gas projects requires drilling wells to intersect the target reservoir, usually a section of sandstone that is disconnected from any beneficial water aquifer by hundreds and sometimes thousands of metres. Hydrocarbons produced are either free flowing, or use artificial lift methods (i.e. pumping).

Water produced from conventional projects is significantly lower in volume than CSG operations and generally increases as oil production declines. AGL operates two conventional projects in Queensland, one oil and gas project at Silver Springs (including the Silver Springs Gas Storage Project) and one oil exploration project in the Cooper Basin. The water produced from both these projects is handled through traditional technologies and is managed to prevent impact to both surface and subsurface environments. Water quality is somewhat variable and highly dependent on the source reservoir. Treatment of this water prior to storage and disposal options includes removal of hydrocarbons where necessary. Long-term water management strategies can include evaporation ponds and reinjection to depleted oil and gas reservoirs.

Environment

Water management

Performance

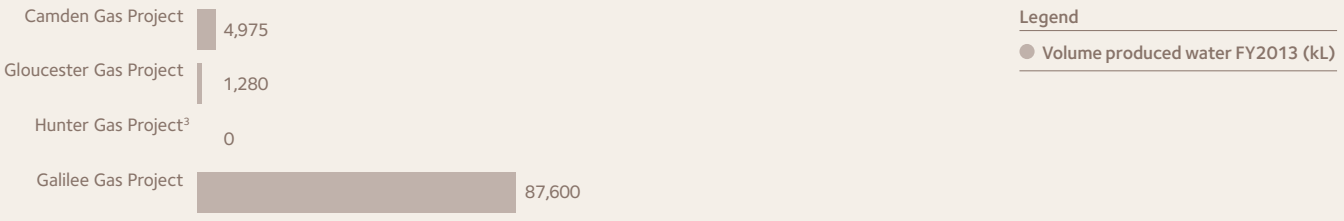
The volume of water produced at each of AGL's coal seam gas projects is monitored. The greatest volume is being produced at the Galilee Gas Project which is located within a geological basin that is characterised by higher formation permeabilities and groundwater yields compared to the other exploration and operation areas held by AGL. The number of wells flow-tested at the Galilee Gas Project area in FY2013 was five, compared to the Camden Gas Project which had 144 wells drilled as at end FY2013, of which 106 were dewatering and producing gas.

The total volume of water produced during FY2013 at all coal seam gas project sites was around 94 ML. This is equivalent to around 38 olympic-sized swimming pools of water being produced over the year. In addition, during FY2012, around 68 ML of water was produced at AGL's conventional oil and gas projects. In FY2013, produced water was either stored on-site in lined, aboveground holding ponds or tanks, or transported off-site for approved recycling and re-use, or disposal.

AGL's Produced Water Management Strategy, which was developed during FY2011, identifies potential re-use options for the Camden, Hunter, Gloucester and Galilee Gas Projects. During FY2013, AGL continued to investigate water treatment technologies for the potential beneficial use of produced water from the Camden Gas Project and the Galilee Gas Project including laboratory trials. AGL will continue with the program of work across these sites during FY2014.

During FY2013, approximately 9 ML of water produced from coal seam gas activities was taken to liquid waste recyclers and treated for re-use in industrial processes. An irrigation trial using produced water commenced at Gloucester in April 2013, with results to date proving successful (see the Community chapter at page 40).

Coal seam gas produced water[1,2]



Notes

1 Produced water comprises natural groundwater generated from coal seams during flow testing and production dewatering. It does not include other water streams (drill water, fracture stimulation/flowback water and brine water) that usually require separate water management.

2 Monitoring data for water production levels is used for Gloucester, Hunter and Galillee gas projects. Produced water data for Camden Gas Project is calculated from recorded volumes removed from the well sites.

3 No water was produced from Hunter exploration project in FY2013 as no pilot testing of production was undertaken.

Environment

Water management

Managed water

In addition to the consumption of water resources, AGL also makes important non-consumptive use of water, including water drawn from the Port Adelaide River to cool AGL Torrens power station, and the water that is passed through AGL Hydro's power stations. AGL takes its responsibilities as a short-term steward of water resources seriously and manages this water carefully.

Approach

AGL's use of water for cooling purposes at AGL Torrens is regulated by its EPA licence. The average temperature increase from the cooling water inlet to the cooling water outlet is required to be less than 10°C. Compliance with this licence requirement is independently audited on a two-yearly basis. The last audit report was issued in early 2013 and submitted to the South Australian EPA. The EPA confirmed to AGL that licence requirements had been satisfied.

AGL Hydro's power generation assets are located across Victoria and New South Wales. The different assets/schemes operate under different water release arrangements as described below:

- **Mountain Streams Scheme (Royston, Rubicon, Lower Rubicon and Rubicon Falls power stations) and the Kiewa Scheme (Bogong, McKay Creek, Clover and West Kiewa power stations), Victoria** – AGL holds non-consumptive bulk water entitlements with the Victorian Department of Sustainability and Environment (DSE) to use all inflows to the catchment for power generation at its power station assets. The entitlement sets minimum and maximum water flows and rates of change of releases, although AGL has discretion within these boundaries as to how and when water is released within the catchments.
- **Dartmouth and Eildon, Victoria** – AGL holds water agreements with Goulburn Murray Water (GMW) to generate electricity from all irrigation releases from these storage dams which are operated by GMW. AGL owns regulating pondage downstream of these power stations. Under the water agreements, GMW specifies what flows it wants in the river system downstream of AGL's regulating pondage. Providing AGL maintains adequate water in its regulating pondages to provide the required irrigation release, AGL maintains flexibility in the timing of generation. AGL also has an annual entitlement of water at these storages that it can call on at any time. In doing so, AGL complies with downstream river management requirements.
- **Cairn Curran and Yarrawonga, Victoria** – AGL holds water agreements with GMW to generate electricity from all irrigation releases from these storage dams, which are operated by GMW. The release of water is dictated by the needs of irrigators.
- **Pindari, Copeton, Burrendong and Glenbawn power stations, New South Wales** – AGL operates these power stations under a water agreement with New South Wales State Water that entitles AGL to generate electricity from all irrigation releases of water from the storages. The release of water is dictated by the needs of irrigators.

Where AGL has discretion for releases of water (i.e. where water release is not dictated by irrigation needs), potential environmental impacts are managed by controlling river discharges to within the agreed rates of rise and fall and minimum and maximum flow rates as specified by the relevant authority or agency.

An important annual activity undertaken in the Mountain Streams and Kiewa schemes is desilting of some of the storages and dams to maintain capacity and, in turn, the operating flexibility within the schemes. The quantity of sediment entering the storages varies annually, depending upon the rainfall patterns and catchment conditions.

AGL conducts de-silting in accordance with a De-silting Management Plan (DMP) approved by the Minister, and the latest plan was approved in August 2012. The DMP is reviewed every five years and annual de-silting activities are monitored through a De-silting Working Group consisting of representatives of AGL, the Environment Protection Authority Victoria, Victorian Department of Environment and Primary Industries (DEPI), Parks Victoria, local catchment authorities and the Freshwater Ecology section of the Arthur Rylah Institute for Environmental Research. The group meets annually to review processes and monitoring data and agree to the annual works program.

To minimise the environmental impact of the de-silting operations, the activity is conducted during higher-flow winter months. Silt is removed by direct flushing into the river system and also by excavation if required. Environmental parameters agreed by the de-silting working group are monitored at a variety of downstream locations at a frequency of 15 minutes to one hour depending on location. This process has been undertaken for more than 15 years and annual studies indicate that there have been no detectable impacts on the ecology of the river system, as indicated by long-term monitoring of macro-invertebrates and blackfish undertaken by the Freshwater Ecology section of the Arthur Rylah Institute for Environmental Research at DSE for AGL.

Performance

During FY2013, AGL made non-consumptive use of approximately 640 GL of water drawn from the Port Adelaide River to cool the AGL Torrens power station (more than the volume of water in Sydney Harbour). This is comparable with the volumes used in FY2012 and FY2011.

More than 6,000 GL of water passed through hydro power stations during FY2013 (equivalent to around 12 times the volume of water in Sydney Harbour), compared to 5,300 GL in FY2012 and 4,000 GL in FY2011. In FY2013, most of the regulated dams at AGL's hydro power stations were filled to capacity and inflows into the Kiewa and Rubicon hydro schemes were around long-term average inflow levels.

During FY2013, automatic turbidity monitoring sites were installed at selected sites on the Kiewa River (Tawonga Bridge and Mongans Bridge) to allow continuous monitoring of turbidity levels during de-silting activities. Over 15 years of environmental monitoring of the de-silting activities has not identified any discernable impact on the downstream aquatic systems.

Assurance Statements

Assurance Statement

Deloitte.

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Independent limited assurance statement to the Management of AGL Energy Limited in relation to the 2013 Sustainability Performance Report

We have carried out a limited assurance engagement on the subject matter detailed below (the 'Subject Matter') presented in AGL Energy Limited's ('AGL') 2013 Sustainability Performance Report in order to state whether anything has come to our attention that would cause us to believe that the Subject Matter has not been reported and presented fairly, in all material respects, in accordance with the reporting criteria described below ('Reporting Criteria').

Subject Matter and Reporting Criteria

The Subject Matter and Reporting Criteria for our limited assurance engagement for the year ended 30 June 2013 is as follows:

Subject Matter	Reporting Criteria
AA1000 Principles AGL's application of AccountAbility's AA1000 AccountAbility Principles Standard ('AA1000 APS') principles in managing and reporting sustainability performance as set out in the Introduction section of the 2013 Sustainability Performance Report.	The principles of 'Inclusivity'; 'Materiality'; and 'Responsiveness' as set out in AA1000 APS.
12 Strategic Sustainability Indicators The FY2013 performance data in respect of AGL's 12 Strategic Sustainability Indicators as contained in the Introduction: Sustainability Blueprint section at pages 8 and 9 of the 2013 Sustainability Performance Report.	AGL's definitions and approaches as described in the Introduction: Sustainability Blueprint of AGL's 2013 Sustainability Performance Report and on AGL's website at www.agl.com.au.
Sustainable energy, safety performance and environment data The following selected sustainability performance data for FY2013 ('Selected Sustainable Energy, People and Safety and Environment Data'): • People and Safety: Health and Safety data (pages 60 – 61): – Total injury frequency rate (page 60) – Lost time injury frequency rate (page 60) – Medical treatment injury frequency rate (page 61) • Sustainable Energy: Carbon exposure data (pages 70 – 76): – Greenhouse gas ('GHG) Operational, Equity and Energy Supply Footprint data (page 70) – Output and intensity of AGL operated electricity generation assets (page 70) • Environment: Environmental risk data (pages 80 –93): – Reportable environmental non compliances FY2013 (page 82) – Air emissions (page 84) – Waste streams (page 88) – Water use (page 90) – Coal seam gas produced water (page 92).	AGL's policies, procedures and methodologies for People and Safety: Health and Safety data and the classification of health and safety incidents as described in the 2013 Sustainability Performance Report and on AGL's website at www.agl.com.au. AGL's definitions and approaches for Sustainable Energy: Carbon exposure data as described in each relevant section of AGL's 2013 Sustainability Performance Report and on AGL's website at www.agl.com.au. AGL's definitions and approaches for Environment: Environmental risk data as described in each relevant section of AGL's 2013 Sustainability Performance Report and on AGL's website at www.agl.com.au.

Assurance Statement

Deloitte.

Subject Matter	Reporting Criteria
GRI application level: 'A+' AGL's self-declared Global Reporting Initiative ('GRI') application level of 'A+'	The GRI Guidelines and related information, publicly available at the GRI's global website at www.globalreporting.com, in particular the requirements to achieve GRI application level 'A+'.

AGL's responsibilities

Management of AGL are responsible for the preparation and presentation of the Subject Matter in the 2013 Sustainability Performance Report in accordance with the Reporting Criteria. This responsibility includes establishing and maintaining internal controls relevant to the preparation and presentation of the Subject Matter in the 2013 Sustainability Performance Report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate reporting criteria; maintaining adequate records and making estimates that are reasonable in the circumstances.

Deloitte's responsibilities

Our responsibility is to express a limited assurance conclusion as to whether we have become aware of any matter causing us to believe that the Subject Matter has not been prepared, in all materials respects, in accordance with the Reporting Criteria.

We conducted our procedures to provide our limited assurance conclusion in accordance with Australian Standards on Assurance Engagements ASAE 3000 '*Assurance Engagements Other than Audits or Reviews of Historical Financial Information*' (ASAE 3000), issued by the Australian Auditing and Assurance Standards Board. The procedures selected depend on our judgment, including an assessment of the risks of material misstatement of the Subject Matter, whether due to fraud or error. In making these risk assessments, we consider internal control relevant to AGL's preparation and presentation of the Subject Matter in the 2013 Sustainability Performance Report in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of AGL's internal controls.

Assurance work performed

In order to form our conclusion we undertook the following limited assurance procedures:

- Review of AGL's own assessment of its application of the AA1000 principles against the criteria for each principle outlined in the AA1000 APS
- Review of AGL's processes relating to stakeholder identification, engagement and responsiveness, including an assessment of stakeholder engagement outcomes and how this process and the outcomes have been presented in the 2013 Sustainability Performance Report
- Review of AGL's process to identify and determine material issues to be included in the 2013 Sustainability Performance Report with examination of underlying assessments and evidence on a sample basis
- Interviews with a selection of AGL executives and senior management, including AGL's sustainability management team concerning the overall governance structure, corporate sustainability strategy and policies used for managing and reporting sustainability performance across the business
- In respect of the 12 Strategic Sustainability Indicators Performance Data and the Selected Sustainable Energy, People and Safety and Environment Data:
  - interviews with a selection of AGL management responsible for the 12 Strategic Sustainability Indicators performance data and the Selected Sustainable Energy, People and Safety and Environment Data to understand the compilation and review processes
  - conducting site visits at a sample of facilities
  - applying analytical and other review procedures including assessing relationships between the reported information and other financial and non-financial data as well as examination of evidence for a small number of transactions or events

Assurance Statement

Deloitte.

- analysing and inspecting on a sample basis, the key systems, processes and procedures and controls relating to the collation, validation, presentation and approval process of the information included in the 2013 Sustainability Performance Report.
- review underlying evidence on a sample basis to corroborate that the information is prepared and reported in line with the relevant reporting criteria.

- Comparison of the content of AGL's 2013 Sustainability Performance Report against the criteria for a GRI self-declaration at 'A+' level

A limited assurance engagement is restricted primarily to enquiries and analytical procedures and the work is substantially less detailed than undertaken for a reasonable assurance engagement. As such the level of assurance is lower than would be the case for a reasonable assurance engagement. We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusion.

Inherent limitations

Non-financial information, including the Subject Matter may be subject to more inherent limitations than financial information, given both its nature and the methods used for determining, calculating and sampling or estimating such information. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. The Subject Matter should be read in the context of AGL's Reporting Criteria as set out in the 2013 Sustainability Performance Report.

Use of our report

Our assurance report has been prepared solely for the Management of AGL. We disclaim any assumption of responsibility for any reliance on this report or on the Subject Matter to which it relates, to any person other than the Management of AGL or for any purpose other than that for which it was prepared.

Independence

In conducting our engagement, we have complied with the independence requirements of APES 110 *Code of Ethics for Professional Accountants*, issued by the Accounting Professional and Ethical Standards Board.

Matters relating to electronic presentation of information

Our limited assurance engagement included web-based information that was available via web links as of the date of this statement. We provide no assurance over changes to the content of the 2013 Sustainability Performance Report after the date of this assurance statement.

Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the Subject Matter has not been prepared and presented fairly, in all material respects, in accordance with the Reporting Criteria.

Deloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

BJ Pollock
Partner
Sydney, 15 November 2013

Global Reporting Initiative (GRI) Index

This report meets the requirements of an 'A+' GRI Application Level.

GRI Index

● Core ● Additional * esaa Sustainable Practice Framework

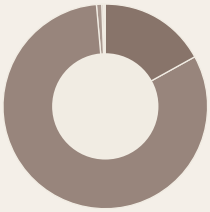
Ref.	Description	Location of disclosure within report	Additional information
Strategy and analysis			
1.1	Statement from the most senior decision maker of the organisation about the relevance of sustainability to the organisation and its strategy.	Annual Report page 10, 11	–
1.2	Description of key impacts, risks and opportunities.	Annual Report page 23, 61	–
Organisational Profile			
2.1	Name of the organisation.	Page 2	–
2.2	Primary brands, products and/or services.	Page 2, 3	–
2.3	Operational structure of the organisation, including major divisions, operating companies, subsidiaries and joint ventures.	Page 2, 3	–
2.4	Location of the organisation's headquarters.	–	101 Miller Street, North Sydney, NSW, Australia
2.5	Number of countries where the organisation operates, and the names of countries with either major operations, or that are specifically relevant to the sustainability issues covered in the report.	Page 6	AGL operates in Australia. AGL outsources some functions to organisations located within India and the Philippines, but has no direct employees in these regions.
2.6	Nature of ownership and legal form.	Annual Report page 92	Shareholding information is available in the 2013 Annual Report (page 92).
2.7	Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries).	Page 4, 5, 21	–
2.8	Scale of reporting organisation, including: Number of employees, net sales (for private sector organisations) or net revenues (for public sector organisations). Total capitalisation broken down in terms of debt and equity (for private sector organisations) and Quantity of products or services provided.	Page 3, 59. Annual Report page 82, 83.	–
2.9	Significant changes during the reporting period regarding size, structure or ownership, including: the location of or changes in operations including facility openings, closings and expansions, and changes in the share capital structure and other capital formation, maintenance and alteration operations (for private sector organisations).	–	There were no material acquisitions or disposals during the financial year ended 30 June 2013.
2.10	Awards received in the reporting period.	Annual Report page 24	–
Report Parameters			
3.1	Reporting period for information provided.	Page 6	–
3.2	Date of most recent previous report (if any).	Page 6	–
3.3	Reporting cycle (annual, biennial, etc.).	Page 6	–
3.4	Contact point for questions regarding the report or its contents.	Inside front cover	–
3.5	Process for defining report content, including: Determining materiality, prioritising topics within the report and identifying stakeholders the organisation expects to use the report.	Page 6, 7, 12, 13, 14, 15	–
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	Page 6	–
3.7	State any specific limitations on the scope or boundary of the report.	Page 6	–
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations.	Page 6	–
3.9	Data measurement techniques and the basis of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	–	Relevant boundary conditions and assumptions are contained within footnotes to graphs and tables.
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	–	Any restatements of previous years' data are identified within footnotes to graphs or tables. The effect of any such re-statements is not considered to be material to stakeholders. The effect of the acquisition of AGL Loy Yang on historical trends has been clearly identified.
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	–	There are no significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report. Any non-material changes are noted.
3.12	Table identifying the location of the Standard Disclosures in the report.	GRI Index	–
3.13	Policy and current practice with regard to seeking external assurance for the report.		It is AGL's intention to continue to have future Sustainability Reports assured to the AA1000 Assurance Standard and/or ASAE 3000 Standard.

GRI Index

Ref.	Description	Location of disclosure within report	Additional information
Governance, commitments and engagement			
4.1*	Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight.	Page 10	–
4.2*	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organisation's management and the reasons for this arrangement).	Annual Report page 46	–
4.3*	For organisations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Annual Report page 52, 53	–
4.4*	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Annual Report page 50	As noted in the Annual Report, shareholders are invited to submit questions to the Chairman prior to, and at, the Annual General Meeting. AGL has also adopted the practice of conducting a poll on each motion being considered at the Annual General Meeting.
4.5*	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance).	Annual Report page 66, 67	–
4.6*	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Annual Report page 45	–
4.7*	Processes for determining the qualifications and expertise of the members of the highest governance body for guiding the organisation's strategy on economic, environmental and social topics.	Annual Report page 47	–
4.8*	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Page 10, 11	Documents include: Safety, Sustainability and Corporate Responsibility Charter, HSE Policy, Environmental Principles, AGL Code of Conduct, Risk Management Policy, Customer Charter, Community Charter.
4.9*	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct and principles.	Annual Report page 50	–
4.10*	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental and social performance.	Annual Report page 46	–
4.11*	Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	–	AGL's Environmental Principles reflect the precautionary approach. AGL's Environmental Principles are available at: agl.com.au/environment/
4.12*	Externally developed economic, environmental and social charters, principles or other initiatives to which the organisation subscribes or endorses.	–	AGL is a signatory to the Energy Supply Association of Australia's Sustainable Practice Framework.
4.13	Memberships in associations and/or national/international advocacy organisations in which the organisation: has positions in governance bodies, participates in projects or committees, provides substantive funding beyond routine membership dues or views membership as strategic.	Page 11, 15	–
4.14*	List of stakeholder groups engaged by the organisation.	Page 14, 15	–
4.15*	Basis for identification and selection of stakeholders with whom to engage.	Page 14, 15	–
4.16*	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Page 14, 15	–
4.17*	Key topics and concerns that have been raised through stakeholder engagement and how the organisation has responded to those key topics and concerns, including through its reporting.	Page 7, 13, 14, 15	–
Management Disclosures			
–	Economic	Economic Chapter	Disclosures on management approaches for **economic performance** and **market presence** are found within the Economic chapter, under the 'Approach' heading on relevant pages.
–	Environmental	Sustainable Energy Chapter	For disclosures on management approaches for **energy** and **emissions** (greenhouse gas emissions) refer to the Sustainable energy chapter, under 'Approach' headings on relevant pages.
		Environment Chapter	Refer to the Environment chapter for disclosures on management approaches for: **materials; water; biodiversity; emissions; effluents and waste; compliance; transport** and **overall**.
		Customer Chapter	Refer to the pages within the Customer chapter which describe energy efficiency and renewable energy products and services, for disclosures on the environmental impacts of **products and services**.

GRI Index

Ref.	Description	Location of disclosure within report	Additional information
–	Labour practices	People & safety chapter	Disclosures on management approaches are contained within the 'Approach' section of relevant pages in the People and safety chapter.
–	Human rights	People & safety chapter	Disclosures on management approaches are contained within the 'Approach' section of relevant pages in the People and safety chapter.
–	Society	Community chapter	Disclosures of management approach for **corruption, public policy, anti-competitive behaviour,** and **compliance** are contained within the Governance and management pages of the report.
		Introduction > Governance and management	**Community** management disclosures are contained with the Community chapter.
–	Product responsibility	Customer chapter	For disclosures on management approaches refer to relevant pages of the Customer chapter.
Performance Indicators			
EU1	Installed capacity, broken down by primary energy source and by regulatory regime.	Page 4, 5, 77	The map on pages 4 and 5 identifies the location and energy source of generation assets larger than 50 MW.
EU2	Net energy output broken down by primary energy source and by regulatory regime.	Page 70	In addition to the electricity generation, AGL's operated power generation assets also produced 297 TJ of energy as steam, provided to AGL's customers from the Coopers and Symex cogeneration facilities.
	Output and intensity of AGL operated electricity generation assets[1,2]		
EU3	Number of residential, industrial, institutional and commercial customer accounts.	Page 21	The total number of retail customer accounts is provided on page 21. AGL has 900 gas and 18,400 electricity large business customer accounts.
EU4	Length of above and underground transmission and distribution lines by regulatory regime.	–	Not applicable. AGL does not control, own or operate any electrical transmission or distribution businesses.
EU5	Allocation of CO_2e emissions allowances or equivalent, broken down by carbon trading framework.	Page 67, 68, 69	Under the *Clean Energy Future* (Cth) package of legislation, which commenced on 1 July 2012, AGL receives emission unit permits. Liabilities, as well as assistance received under the Energy Security Fund, are reported.
EC1*	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Annual Report page 45	The following financial information is contained in the Annual Report: revenues; operating costs; employee compensation; retained earnings; payments to capital providers; and payments to governments. Information on donations and other community investments are on pages 45 to 49 of this report.
EC2*	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	Sustainable energy chapter	Risks and opportunities associated with climate change are addressed in detail in the Sustainable energy chapter.
EC3	Coverage of the organisation's defined benefit plan obligations.	–	Australian law requires 9% of salary to be contributed by employers to complying superannuation funds on behalf of their employees. AGL makes superannuation contributions for all employees and complies with the statutory requirement to contribute a minimum of 9% of salary. AGL's obligations to pay pensions under the superannuation plan are met directly through the fund, and maintained separately from the resources of the organisation. 75.3% of employees are in defined contribution funds (FY2012: 95.4%), and 24.7% in a defined benefit fund (FY2012: 4.6%). The variance from FY2012 is due to the acquisition of AGL Loy Yang, whose employees are primarily in a defined benefit fund.
EC4	Significant financial assistance received from government.		No cash assistance was issued under the Energy Security Fund during FY2013 (refer to page 69). No assistance was received in relation to Solar Flagships during FY2013. During FY2013, AGL received an amount of $11,517,363 in relation to the Australian Government's Research and Development Tax Concession.
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.		Not disclosed due to the wide range of job roles across the organisation. Generally, total remuneration is targeted within the 50th to 75th percentile market range.



Legend	%
South Australia	17
Victoria	82
New South Wales	1
Queensland	0.3
Tasmania	0.1
Western Australia	0.1
Total output	20,174 GWh

Notes

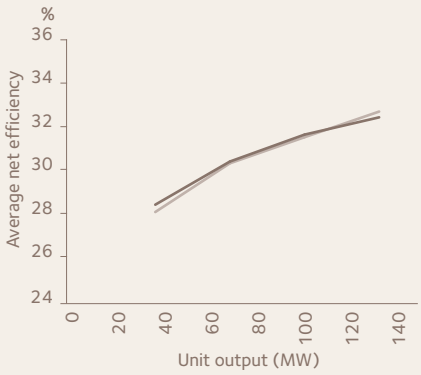
1 These figures relate to the sent-out electricity generation from assets over which AGL has operational control, regardless of who owns the asset. Assets where AGL controls or has rights to the electricity output only are not included.

2 Values may not sum to 100% due to rounding.

GRI Index

Ref.	Description	Location of disclosure within report	Additional information
EC6	Policy, practices and proportion of spending on locally based suppliers at significant locations of operation.		AGL does not have a specific policy mandating the use of locally based suppliers. AGL chooses the supplier who is most appropriate for the job, and this often includes local suppliers.
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	–	AGL's recruitment practice is to ensure that it hires people who are the best fit for the role. In the majority of cases AGL looks to the local community first when hiring people from outside AGL.
EC8*	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro bono engagement.	Community chapter	AGL operates an information centre in Burra (in the Hallett region of South Australia, where AGL operates a number of wind farms), and the Hunter Customer Service and Information Centre in Singleton. AGL also provides support and grants to local community organisations and initiatives in many of the communities where projects are being developed or operated. Examples are included in the Community chapter.
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Community chapter	In 2010 AGL engaged Sinclair Knight Merz to undertake an assessment of the economic impact the Hallett wind farm projects have had, and were likely to have on the mid-north region of South Australia. The results of this study continue to be used to demonstrate the indirect impact of wind farms to other communities where wind farms are being developed. AGL has arranged for presentations from independent property advisers regarding the impact of wind farms on property values to be made to Community Consultative Committees.
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.	–	AEMO publishes an Electricity Statement of Opportunities (ESOO) which provides an assessment of supply adequacy in the National Electricity Market over the next 10 years, highlighting opportunities for generation and demand-side investment. AGL contributes information which feeds into the ESOO but is not obligated to develop capacity to meet projected electricity demand.
EU11*	Average generation efficiency of thermal plants by energy source and by regulatory regime.	–	The efficiency curves for Torrens Island (A & B) Power Station (TIPS), both actual and target, are depicted below. The actual station efficiency for AGL Loy Yang was 26.08% for FY2013.
EU12*	Transmission and distribution losses as a percentage of total energy.	–	Not applicable. AGL does not control, own or operate any electrical transmission or distribution businesses.
EU6*	Management approach to ensure short- and long-term electricity availability and reliability.	–	AGL contributes information to the Australian Energy Market Operator (AEMO). AEMO tracks plant availability to ensure reliability through short- and medium-term availability outlooks.
EU7	Demand-side management programs, including residential, commercial, institutional and industrial programs.	Page 32	–
EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.	Page 79	Activity rather than expenditure is reported.

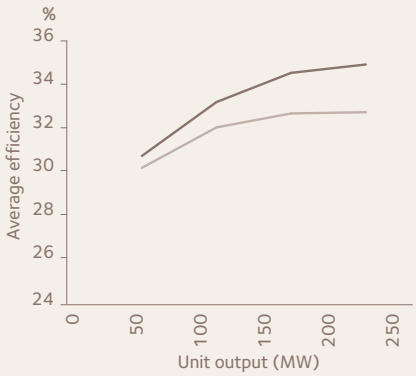
AGL Torrens Island A Station average efficiency FY2013 and Generator Efficiency Standards (GES) best practice target vs unit output



Legend

- A Station FY2012 average efficiency
- GES best practice target for plant age (30+ years)

AGL Torrens Island B Station average efficiency FY2012 and Generator Efficiency Standards (GES) best practice target vs unit output



Legend

- B Station FY2012 average efficiency
- GES best practice target for plant age (30 years)

GRI Index

Ref.	Description	Location of disclosure within report	Additional information
EU9	Provisions for decommissioning of nuclear power sites.	–	Not applicable. AGL does not control, own or operate any nuclear power facilities.
EN1	Materials used by weight and volume.	–	During FY2013, AGL combusted, used or otherwise disposed of almost 19,400,000 tonnes of coal and almost 525,000 tonnes of natural gas (including coal seam gas) in the operation of power generation and upstream gas facilities. Approximately 975 tonnes of paper was used for bill printing, marketing and office use during FY2013. AGL is encouraging customers to utilise its paperless billing system to decrease paper use. AGL introduced paperless billing in April 2011, and as at 30 June 2013, 22% of invoices sent were paperless.
EN2	Percentage of materials used that are recycled input materials.	–	AGL typically purchases office paper with 80% recycled content. AGL does not collect organisation-wide data on the percentage of other materials used that have recycled content.
EN3*	Direct energy consumption by primary energy source.	Page 70	The greenhouse emissions from consumed energy are accounted for in AGL's Greenhouse Gas Footprint. Energy data is also available in AGL's response to the Carbon Disclosure Project, which is available at www.cdproject.net
EN4	Indirect energy consumption by primary energy source.	Page 70	The greenhouse emissions from consumed energy are accounted for in AGL's Greenhouse Gas Footprint. Energy data is also available in AGL's response to the Carbon Disclosure Project, which is available at www.cdproject.net
EN5	Energy saved due to conservation and efficiency improvements.	–	At the AGL Loy Yang Power Station, energy savings are estimated to be almost 3,000,000 GJ for FY2013, achieved through improved condenser performance (following a series of offline condenser cleans), use of improved wear materials on an electric feed pump and the reduction of main stream pressure for Unit 2. In addition, during FY2013, approximately 15,000 GJ of energy was saved at AGL Torrens by repairing compressed air leaks, and improving the process for repair of high pressure feedwater heaters. AGL's Eastwood South Australia office saved approx 210 MWh electricity and 410 GJ gas by implementing new heating, ventilation, and air conditioning (HVAC) and lighting schedules.
EN6*	Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives.	Page 32	–
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Page 32	Given AGL's primary energy usage is very high, AGL focuses its energy efficiency activities on its own operations, rather than supplier's operations, in order to achieve the most material energy savings. Refer to page 32 of the Customer chapter for information on how AGL assists customers to improve their energy efficiency.
EN8*	Total water withdrawal by source.	Page 89, 93	–
EN9	Water sources significantly affected by withdrawal of water.	Page 89, 93	The most significant volumes of water used by AGL are drawn from surface water bodies and used 'temporarily' (ie. for non-consumptive purposes) by AGL's Hydro power stations and AGL Torrens before being returned directly to the source environment. Refer to the Managed water pages of this report for further details.
EN10	Percentage and total volume of water recycled and reused.	Page 90, 93	The majority of water withdrawn for use in operations is recycled, as a large proportion of the water used comprises water withdrawn for cooling water at AGL Torrens and water passed through AGL Hydro power stations. Volumes of water produced at coal seam gas operations and recycled are disclosed in the water use section of the report. During FY2013, approximately 9 ML (or 10%) of water produced from coal seam gas activities was recycled and treated for reuse.

GRI Index

Ref.	Description	Location of disclosure within report	Additional information
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Page 86	AGL assets in or adjacent to protected areas include: Part of AGL's Kiewa Hydro Electric Scheme, in north-east Victoria, operates adjacent to and surrounded by the Victorian Alpine National Park. AGL Torrens is surrounded by water bodies comprising the Port Adelaide River and the Barker Inlet, which are part of a sanctuary of 118 km^2 created under the Adelaide Dolphin Sanctuary Act 2005 (SA) to protect a resident bottlenose dolphin population (see EN25 for further information). AGL's Hydrocarbon Extractions (HCE), located at Kurnell in Sydney, is adjacent to the Caltex oil refinery. HCE encompasses a small plant area of approximately six hectares. Kurnell is primarily an industrial area, located near the Towra Point Nature Reserve and Botany Bay National Park. For AGL's development projects, relevant information regarding sensitive environments is included within environmental impact assessments. Environmental assessments for a number of projects are disclosed on project websites (see: www.agl.com.au/about/EnergySources/upstreamandgenerationprojects/Pages/default.aspx).
EN12*	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Page 86	AGL's activities during FY2013 have not had a significant impact on biodiversity in protected areas and areas of high biodiversity value outside protected areas. Although native flora and fauna is present at a number of AGL development and exploration projects, AGL actively seeks to constrain activities to areas of low environmental significance wherever possible. Where AGL's development projects are in the vicinity of sensitive environments, an Environmental Impact Assessment (EIA) is undertaken with the aim of minimising any impacts. For example, in FY2013 AGL completed an EIA for the Nyngan Solar Plant. The EIA found that the project is not likely to have a significant impact on endangered ecological communities, threatened flora, fauna and migratory species, and that biodiversity impact management prescriptions committed to as part of the project would ensure that any impact is further reduced. Environmental assessments previously completed for a number of AGL projects are available on project websites (see: http://www.agl.com.au/about-agl/how-we-source-energy)
EN13	Habitats protected or restored.	Page 86	As noted above, AGL seeks to protect habitats by limiting the construction and exploration footprints of its development projects to already disturbed areas where possible. Where habitats are affected, AGL takes steps to restore and protect them. For example, in FY2013 AGL managed 280 hectares of land for conservation purposes as part of the Newcastle Gas Storage Facility and Gloucester Gas Projects. This land supports a variety of vegetation communities and valuable habitats for threatened fauna species listed under the Threatened Species Conservation Act 1995 (NSW) and Environment Protection and Biodiversity Conservation Act 1999 (Cth). AGL's Biodiversity Offset Strategy for the Newcastle Gas Storage Facility was approved by the Department of Planning and Infrastructure in August 2013 and can be viewed at: http://www.agl.com.au/about-agl/how-we-source-energy/gas-storage/newcastle-gas-storage-facility-project/environment
EN14*	Strategies, current actions and future plans for managing impacts on biodiversity.	Page 86	–
EN15	Number of IUCN Red List and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	–	In Australia, the *Environmental Protection and Biodiversity Conservation Act 1999* (the EPBC Act) is the national legislation that identifies threatened species. The EPBC Act categories for listed threatened species are broadly in line with IUCN categories. Hundreds of EPBC listed species are present, or have the potential to be present, at more than 14 AGL operated sites. Information on threatened species is documented in site specific flora and fauna assessments and management plans, and consolidated in AGL's Biodiversity Register. AGL has management plans in place to avoid, minimise and mitigate adverse impacts and ensure compliance with EPBC Act requirements.
EN16*	Total direct and indirect greenhouse gas emissions by weight.	Page 70	–
EN17	Other relevant indirect greenhouse gas emissions by weight.		Refer to AGL's CDP submission available at: www.cdproject.com.
EN18*	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Page 67, 77, 78, 79	
EN19	Emissions of ozone depleting substances by weight.	–	During FY2013, AGL used refrigerants classified as ozone depleting substances (ODS) at the Hydrocarbon Extractions (HCE) and small amounts at AGL Torrens. Use of ODS is not considered a material issue for AGL.
EN20*	NOx, SOx, and other significant air emissions by type and weight.	Page 84	–

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Ref.	Description	Location of disclosure within report	Additional information
EN21*	Total water discharge by quality and destination.	Page 93	As outlined on page 93 AGL Torrens cooling water and water passed through AGL Hydro power stations is returned to source effectively immediately, therefore there is negligible impact (other than temperature at Torrens Island which is regulated via an EPA licence). AGL Loy Yang discharges treated wastewater to Traralgon Creek, and saline ash water to Bass Strait via from Gippsland Water's Saline Waste Outfall Pipeline (SWOP). These discharges are subject to EPA licensing and discussed on page 93. In addition, page 92 of the report outlines that more than 90 ML of water was produced at AGL's upstream gas projects during FY2013. Almost all of this water was stored on-site in holding ponds. During FY2013, around 9ML of produced water was treated for reuse in industrial processes.
EN22*	Total weight of waste by type and disposal method.	Page 87, 88	–
EN23	Total number and volume of significant spills.	Page 82	Environmental incidents (including spills) are listed on page 82.
EN24	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III and VIII, and percentage of transported waste shipped internationally.	–	All hazardous waste produced by AGL's operations is transported to licensed waste management facilities using regulated waste tracking systems, except for amounts temporarily stored in authorised storage areas inside AGL's operational sites. Refer to page 88 for further details.
EN25	Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	Page 86, 93	AGL's biodiversity register, discussed on page 86, documents details, such as protected status and biodiversity value, of AGL sites which are located within close proximity to water bodies. The most significant of these sites are the Kiewa Hydro Electric Scheme, which is adjacent to the Alpine National Park, and AGL Torrens, which is surrounded by a 118 km^2 marine sanctuary created under the *Adelaide Dolphin Sanctuary Act 2005* (SA) to protect a resident bottlenose dolphin population. For details on desilting of AGL's hydro scheme water storages and the cooling water discharged at AGL Torrens, refer to page 93.
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Page 32, Environment chapter, Sustainable energy chapter	–
EN27	Percentage of products sold, and their packaging materials that are reclaimed by category.	–	This indicator is not relevant to AGL's core products (gas and electricity).
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Page 82	As outlined on page 82, during FY2013 two fines totalling $2,500 were issued by the New South Wales Environment Protection Authority (EPA) to AGL's Rosalind Park Gas Plant (the Plant). An Enforceable Undertaking was also agreed to between AGL and the NSW EPA following AGL's breach of its Environment Protection Licence (EPL) by failing to continuously monitor air emissions at the Plant. As part of the enforceable undertaking, AGL committed to pay $150,000 to the University of Western Sydney for the "Love your Lagoons: Place based learning and environmental action in South-Western Sydney Project" and also pay the EPA's investigation and legal costs totalling $10,000.
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations and transporting members of the workforce.	Page 74	Greenhouse gas emissions arising from the transmission and distribution of energy are included in the Energy Supply Footprint (page 74). Greenhouse gas emissions arising from employee transportation are not considered to be material in relation to our wider greenhouse gas footprint.
EN30	Total environmental protection expenditures and investments by type.	–	Many of AGL's investments, such as investments in renewable energy, have significant environmental benefits. However, total environmental protection expenditure is not reported.
EU13	Biodiversity of offset habitats compared to the biodiversity of affected areas.	Page 86	Native flora and fauna is present in the vicinity of most of AGL's development projects, and AGL aims to protect biodiversity by limiting the footprint of its activities to already disturbed areas. Where impacts cannot be avoided, action is taken to offset the impact through a direct like-for-like offset for vegetation to be impacted by the project, or through protecting land that has a similar or additional conservation value. Approximately 340 hectares of land is currently managed for conservation purposes to offset impacts of AGL projects on flora and fauna. This includes the 280 hectares of land mentioned at EN13 which relates to the Newcastle Gas Storage Facility and Gloucester Gas Projects.
EU14*	Programs and processes to ensure the availability of a skilled workforce.	Page 54, 55, 56, 57, 58	–
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.	–	Partially disclosed. As at 30 June 2013, 5.7% of AGL employees will be eligible to retire in 5 years time, and a further 14.8% of employees will be eligible to retire in 10 years time (based upon a retirement age of 65 years).

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Ref.	Description	Location of disclosure within report	Additional information
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and sub-contractors.	Page 62	AGL's health, safety and environment policy (http://www.agl.com.au/~/media/AGL/About%20AGL/Documents/Media%20Center/What%20We%20Stand%20For/2012/September/AGL_Health_Safety_and_Environment_Policy_201209.pdf) is applicable to all employees and contractors.
EU17	Days worked by contractor and sub-contractor employees involved in construction, operation and maintenance activities.	–	Contractor hours are reported. In FY2013, 1,700,899 contractor hours were worked (excluding AGL Loy Yang). An additional 894,895 contractor hours were worked at AGL Loy Yang.
EU18*	Percentage of contractor and sub-contractor employees that have undergone relevant health and safety training.	Page 62	
LA1	Total workforce by employment type, employment contract and by region.	Page 59	
LA2*	Total number and rate of employee turnover by age, group, gender and region.	Page 56	Partially reported. While turnover by age, group and business unit is monitored internally, this information is not included in the sustainability report as it is not considered to be material information for external stakeholders.
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Page 58	AGL's employee benefits are accessible to all AGL employees, regardless of their part-time or full-time employment status (although some have eligibility criteria, such as minimum service terms).
LA4	Percentage of employees covered by collective bargaining agreements.	–	AGL is party to eight major Enterprise Bargaining Agreements (EBAs) covering approximately 50.9% of the workforce.
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	–	AGL is party to eight major Enterprise Bargaining Agreements (EBAs) covering approximately 50.9% of the workforce. While no minimum notice period is specified, these agreements document AGL's obligation to consult with employees and their union representatives prior to the implementation of major organisational change that impacts employees' status or future employment with AGL. The remaining (non-EBA) workforce have similar rights under the Fair Work Act (Cth), requiring all employers to consult on major workplace changes prior to implementation.
LA6*	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Page 62	–
LA7*	Rates of injury, occupational diseases, lost days and absenteeism, and number of work related fatalities by region.	Page 60, 61	Regional breakdown of HSE performance information is not reported as this is not considered to be material information for external stakeholders.
LA8	Education, training, counselling, prevention and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Page 63	–
LA9	Health and safety topics covered in formal agreements with trade unions.	–	AGL's Life Guard HSE system is relevant to all employees regardless of whether they are covered by specific union agreements.
LA10*	Average hours of training per year per employee by employee category.	Page 54, 55, 57	This indicator has been partially answered on the basis that AGL does not currently report on training by all employee categories. In FY2013, over 51,202 hours of leadership and development training was undertaken by AGL employees. These figures include customised training programs, managed by AGL's in-house learning and development function. Figure does not include public training programs, seminars, and conferences attended by AGL employees, nor training undertaken by Customer Service Representatives.
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Page 54, 55, 57	Training provided to AGL employees is disclosed on pages 54, 55 and 57 of this report. At this stage, there is no formal training provided to employees who are facing retirement; however, this is something that AGL will look to address in the future given the aging workforce.
LA12	Percentage of employees receiving regular performance and career development reviews.	Page 57	All employees are required to have regular performance and career development reviews at AGL.
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Page 53, 58, 59	Board composition (including the age and gender of each member) is included in the 2013 Annual Report (Directors' Report). Breakdown of employees by gender and age is reported on page 59. The proportion of the workforce identifying as carers is also reported (page 53). A breakdown of the workforce by other indicators of diversity is not included in this report; however, AGL undertook a Diversity and Inclusion Census in FY2013 to improve the understanding of the diversity of AGL's workforce.

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Ref.	Description	Location of disclosure within report	Additional information
LA14*	Ratio of basic salary of men to women by employee category.	Page 52	This indicator has been partially answered, on the basis that the ratio is not currently reported by employee category, but rather an indication of AGL's performance against the Australian benchmark is provided.
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	–	Not applicable. For Australian investments, human rights are protected by law.
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	–	Within AGL's commercial agreements with suppliers (including agreements with overseas suppliers), there are unconditional obligations that require the supplier to comply with internal AGL standards and policies. For example, compliance with AGL's Code of Conduct is a specific obligation in contracts. Overseas suppliers are also bound to comply with external policies and standards that AGL operates to in Australia, including Australian laws, regulations and standards. AGL monitors these obligations throughout the term of the agreement and should there be a breach, AGL would exercise its right of termination associated with these obligations.
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Page 54	The percentage completion rate of employees completing on-line induction and refresher training for Diversity and Inclusion is disclosed and this equates to approximately 945.5 hours of training. The compulsory induction training provides education about discrimination, harassment and other unlawful behaviour.
HR4*	Total number of incidents of discrimination and actions taken.	Page 53	-
HR5*	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	–	AGL complies with Australian legislation regarding human rights in areas including diversity, discrimination, freedom of association, child labour, layoffs and health, safety and environment. AGL supports, in principle, the United Nations Global Compact on human rights for businesses.
HR6	Operations identified as having a significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	–	AGL complies with Australian legislation regarding human rights in areas including diversity, discrimination, freedom of association, child labour, layoffs and health, safety and environment. AGL supports, in principle, the United Nations Global Compact on human rights for businesses.
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour.	–	AGL complies with Australian legislation regarding human rights in areas including diversity, discrimination, freedom of association, child labour, layoffs and health, safety and environment. AGL supports, in principle, the United Nations Global Compact on human rights for businesses.
HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	–	All employees must undertake compulsory induction training, which provides education about discrimination, harassment and other unlawful behaviour.
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	–	Not disclosed.
EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development.	Page 15, Community chapter	–
EU20	Approach to managing the impacts of displacement.	–	AGL sites its development projects to avoid the need to physically displace individuals or communities. See also EU22.
EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans.	–	AGL employs a holistic, integrated and consistent approach to risk management. AGL also maintains a Business Continuity Management Policy and Framework and multiple levels of response plans. AGL has a number of emergency response plans that address key risks. Any scenario that could materially impact AGL operations or reputation would be considered a continuity event and the AGL Code Red response plan would be activated.
EU22	Number of people physically or economically displaced and compensation, broken down by type of project.	–	AGL sites its development projects to avoid the need to physically displace individuals or communities. For wind farms and upstream gas projects AGL makes direct payments to landowners whose land is included in the development site. This provides landowners with additional revenue, with minimal disruption (where possible) to the use of their land.
SO1*	Nature, scope and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting.	Community chapter	–

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Ref.	Description	Location of disclosure within report	Additional information
SO2	Percentage and total number of business units analysed for risks related to corruption.	–	AGL recognises that risk is dynamic and is inherent in all external and internal operating environments and is committed to managing all risks effectively. AGL employs a holistic, integrated and consistent approach to risk management, whereby all risks identified are measured in accordance with the following consequence categories – financial; business interruption; customer impact; reputation; regulatory/legal; environment and community; and, health and safety. An escalation process is in place which will determine the level and urgency of management and/or Board attention in accordance with the assessed materiality level. A full review and assessment of material strategic risks (i.e. Tier 1) occurs annually; however, a proactive continual review process is also in place with quarterly reporting to the Audit and Risk Management Committee. As part of the review process, all business units across the enterprise are assessed on an ongoing basis for material operational risks and issues. AGL's Internal Audit program includes provision for auditing for fraudulent activity. AGL's Risk Management Policy can be found here (http://www.agl.com.au/~/media/AGL/About%20AGL/Documents/Media%20Center/What%20We%20Stand%20For/2011/August/AGL_Risk_Management_Policy_201108.pdf).
SO3	Percentage of employees trained in the organisation's anti-corruption policies and procedures.	Page 54	The AGL Code of Conduct explains: what obligations AGL has to put in place mechanisms to assist employees and contractors to act in accordance with the overarching principles of ethical behaviour; and how AGL's employees and contractors should act consistently with the principles. AGL provides education about discrimination, harassment and other unlawful behaviour through compulsory induction training. Completion rates for Code of Conduct induction and refresher training is disclosed.
SO4	Actions taken in response to incidents of corruption.	–	AGL's Code of Conduct (the Code) sets out a number of overarching principles of ethical behaviour, including the need for employees to act honestly and with integrity. Specifically, employees are not to solicit, accept or offer facilitation payments, bribes, gifts or benefits which may influence, or which would be perceived as influencing, the employee's ability to perform the duties of their employment objectively and impartially. AGL's Ethics Panel (the Panel) investigates potential breaches of the Code. There were no incidents of corruption investigated by the Panel in FY2013.
SO5	Public policy positions and participation in public policy development and lobbying.	Page 11, 24	–
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	–	AGL does not make *ex gratia* donations to any political party or to any individual in or seeking to obtain political office. The way in which AGL manages financial contributions to political parties is guided by the "Managing conflicts of interest" section of the AGL Code of Conduct. AGL meets its obligations to disclose any reportable political donations as required by state and federal legislation, and these disclosures are made publicly available on the websites of the Australian Electoral Commission and its jurisdictional equivalents. During FY2013, AGL paid a total of $29,220 in reportable donations to the Liberal Party (Victorian Division). These payments which were required to be disclosed to the Australian Electoral Commission under the provisions of the *Commonwealth Electoral Act 1918* (Cth) represent the sponsorship fee for membership of the Liberal Party's (Victorian Division) business networking forum, and attendance at various functions. During FY2013, AGL made reportable fundraising contributions of $8,095 to the Liberal National Party (Queensland). These payments are required to be disclosed to the Electoral Commission of Queensland under the *Electoral Act 1992* (Qld). This represents a subscription fee for membership of the Liberal National Party's business networking forum, and attendance at various functions. AGL's activities in FY2013 did not require the reporting of any donations to the NSW Election Funding Authority under its *Election Funding, Expenditure and Disclosures Act* 1981 (NSW). Additional amounts were contributed in FY2013 that did not meet the Australian Electoral Commission threshold for disclosure.
SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcome.	–	AGL does not have any or has not had any legal actions this financial year relating to competitive behaviour, anti-trust or monopoly practices.

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Ref.	Description	Location of disclosure within report	Additional information
SO8*	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	–	During FY2013, AGL was required to pay $1.55 million as a result of door-to-door salespeople breaching the Australian Consumer Law on 1 September 2011 and 3 November 2011.
EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services.	Page 34, 35	–
EU24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services.	Page 33, 34, 35	–
EU25*	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.	–	There were no public fatalities in FY2013.
EU26	Percentage of population unserved in licensed distribution or service areas.	–	Not applicable. AGL does not control, own or operate any electrical transmission or distribution businesses.
EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.	Page 33	AGL reports the number of wrongful disconnections by state in lieu of overall disconnections, as this provides a better reflection of performance. The duration of disconnection is not reported.
EU28	Power outage frequency.	–	Not applicable. AGL does not control, own or operate any electrical transmission or distribution businesses.
EU29	Average power outage duration.	–	Not applicable. AGL does not control, own or operate any electrical transmission or distribution businesses.
EU30	Average plant availability factor by energy source and by regulatory regime.	Page 18, 19	Commercial availability, start reliability and/or capacity factor is reported separately for AGL's generation plants. Where relevant, benchmarks are provided for comparative purposes. Due to the nature of the generation plant, it is not meaningful to provide an average availability factor for each energy source or regulatory regime.
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Page 60, 61, 62	The health and safety impacts of the generation of electricity and gas production at AGL's assets, and the retailing of energy by AGL are addressed by AGL's health, safety and environment management system, Life Guard. AGL is not responsible for energy transmission and distribution of energy to end users.
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Page 60, 61, 62	Health and safety performance of AGL's assets and operations is reported. These incidents relate to the life cycle stages of energy production and retailing. AGL is not responsible for energy transmission and distribution to end users.
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	–	As a generator and retailer of energy, AGL's primary products are gas and electricity. To assist customers, indicative greenhouse gas emissions associated with their consumption of energy are provided on gas and electricity bills, and energy savings tips can be found on AGL's website.
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	–	AGL did not identify any material incidents of non-compliance concerning product and service information and labelling during FY2013.
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Page 28	
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion and sponsorship.	Page 33	All AGL employees are required to complete a compliance training program. The program includes annual on-line *Competition and Consumer Protection Act* training and additional face-to-face training for the Sales and Marketing teams. This training focuses on misleading and deceptive conduct in customer communications and marketing. All external communications, advertising and marketing collateral are subject to sign-off processes, which include approvals from the internal Energy Regulation and Legal teams. As a result of no longer participating in door-to-door sales activities, AGL has ceased being a member of Energy Assured Limited.
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship by type of outcomes.	–	AGL did not identify any material incidents of non-compliance related to marketing communications, including advertising, promotion, and sponsorship during FY2013.
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	–	During FY2013, there have been no substantiated privacy complaints received by the Office of the Privacy Commissioner where AGL has been found to be in breach of the *Privacy Act 1998* (Cth).
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	–	AGL has not had any fines levied by any regulatory body during FY2013 for non-compliance with laws and regulations concerning the provision and use of products and services. In circumstances where an overcharge to customers occurs, AGL ensures that any overcharge is rectified and applied as per regulatory requirements, including any interest or applicable credit.

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esaa Sustainable Practice Framework

Ref.	esaa Principle	Location of disclosure within report	GRI Profile Disclosure/Indicator
1	Maintain good corporate governance practices.	Governance and management	4.1-1.12, EC2, SO8
2	Deliver value to shareholders, customers and the community.	Economic, Customer and Community chapters	EC1, EC8
3	Provide a safe, secure and reliable energy supply.	Economic chapter	EU6, EU25
4	Engage key internal and external stakeholders on significant sustainability matters.	Stakeholder engagement	4.14-4.17
5	Maintain and enhance workforce health, safety, wellbeing and development.	People chapter	LA2, LA6, LA7, LA10, LA14, HR4, EU14, EU18
6	Develop and implement climate change responses.	Climate change chapter	EN3, EN6, EN16, EN18
7	Improve environmental performance and resource efficiency.	Environment chapter	EU11, EU12, EN8, EN12, EN14, EN20, EN21, EN22
8	Foster and support community programs.	Community chapter	SO1
9	Promote measurement and reporting of sustainability performance.	About this report	–

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