### **SUSTAINABLE BUSINESS STRATEGY**

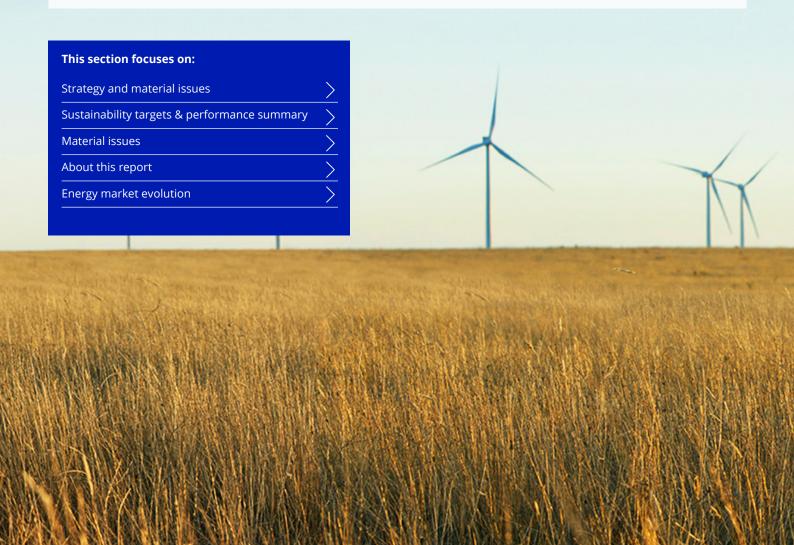
### We're shaping a sustainable energy future for Australia, by taking action to prosper in a carbon-constrained world and becoming a more customer-centric business.

As the largest private coal fired energy generator in Australia, the largest private operator of renewable energy generation assets in Australia and as one of Australia's largest energy retailers, we're uniquely placed to shape a sustainable energy future for Australia.

- We are moving from being a mass retailer to a personalised retailer using smarter solutions, technology and service to empower our customers.
- We are transitioning from being an owner and operator of large generation assets to an orchestrator of large and small assets, allowing energy to be generated, stored and shared by individuals.
- And we are moving to lower-emissions technology. We've set a deadline to close our coal plants and are investing heavily in renewable energy.

We've been committed to sustainability for a long time. In fact, we've been reporting on our sustainability journey since 2004. To us, 'sustainability' simply means thinking about the long-term responsibilities we have to all our stakeholders (our employees, our customers, our investors, and the community) and to the environment in which we all work and live. We think this way because we recognise that our future success and reputational standing is shaped and measured by more than just our economic performance; it is also influenced by the social and environmental consequences of our decisions and actions for all our stakeholders.

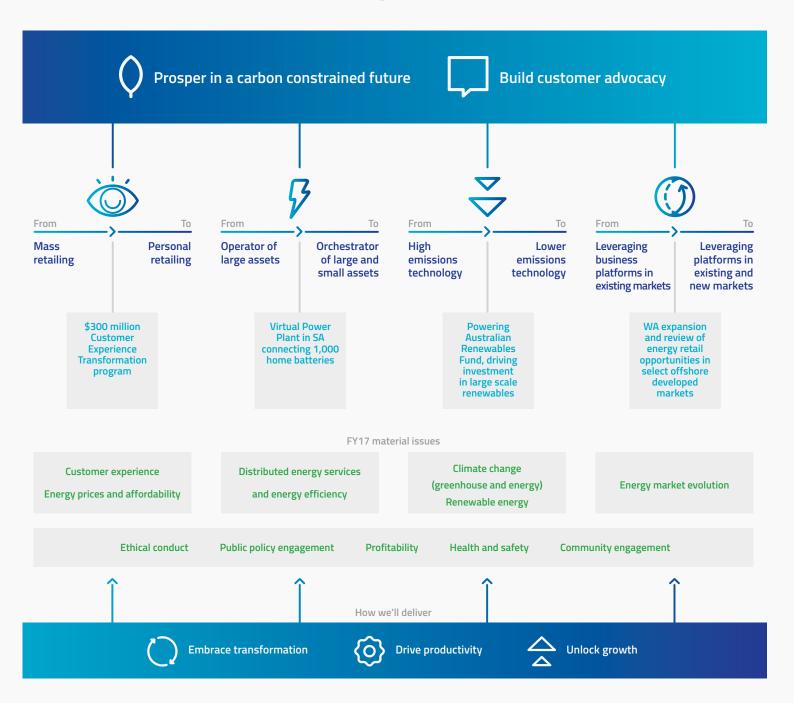
This report provides our stakeholders with an account of our sustainability performance over the last year, and sets goals for the following years. It focuses on the things that matter most to us, and to our stakeholders - our 'material issues' - and aims to provide thought leadership on important and emerging issues for our business, our industry, and the broader community.



Sustainable business strategy

# Strategy and material issues

### AGL's Strategic Imperatives



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Sustainable business strategy

# Sustainability targets & performance summary

We have established targets and commitments to drive performance, behaviours and transparency across a range of sustainability topics. Our scorecard shows how we have performed against the targets we set for FY17, and shows the new targets that have been set to guide our performance in FY18 and beyond.

Further details about how we have performed are available in each section of the report. While we try to keep as much consistency between target metrics year on year, some targets have changed to reflect key metrics used by the business to evaluate performance, or where existing metrics aren't measuring or driving performance as expected.

⚠ Met 🕢 N	Not Met 🎇 In Progress				
Sustainable bu	ısiness strategy				
		FY17 target	FY17 performance	Status	FY18 target
Energy market evolution	Contribute to the development of an electricity market design and regulatory framework that facilitates safe, reliable, affordable and decarbonised electricity supply from centralised and distributed sources	Publish <b>two</b> thought leadership papers which contribute to sustainable market design  More than two thought leadership papers were published in FY17. See the energy market evolution section for details		பி	Publish <b>two</b> thought leadership papers which contribute to a market design that facilitates sustainable, secure, reliable, affordable and decarbonised electricity supply
How we opera	te				
		FY17 target	FY17 performance	Status	FY18 target
Ethical conduct	Act ethically in all activities in accordance with the AGL Code of Conduct	Number of substantiated issues relating to unacceptable behaviour in the workplace: <b>0</b>	Number of substantiated issues relating to unacceptable behaviour in the workplace: 8	$\oslash$	Number of substantiated issues relating to unacceptable behaviour in the workplace ranked as high or greater according to AGL's FIRM risk management process: <b>0</b>
		FY17 target	FY17 performance	Status	FY18 target
Public policy engagement	Engage transparently with governments to facilitate the development of sensible public policy	AGL will publish all material submissions in relation to public policy matters on the AGL Blog	All material submissions in relation to public policy matters are published on the AGL Blog	ப	AGL will publish all material submissions in relation to public policy matters on the AGL Blog
		AGL will annually disclose all groups which it is a member of that may influence public policy	Memberships of industry associations are included in the stakeholder engagement section of this report	பீ	AGL will annually disclose all groups which it is a member of that may influence public policy
		FY17 target	FY17 performance	Status	FY18 target
Corporate governance	Adopt best practice corporate governance	AGL will continue to publish its approach to corporate governance through the annual Corporate Governance Statement	AGL's FY17 Corporate Governance Statement is available on the AGL website	பீ	AGL will continue to publish its approach to corporate governance through the annual Corporate Governance Statement
		FY17 target	FY17 performance	Status	FY18 target
Legislative compliance	Comply with legislative requirements across the organisation	Number of adverse court findings in relation to Australian Consumer Law <sup>1</sup> : <b>0</b>	Number of adverse court findings in relation to Australian Consumer Law¹: <b>0</b>	பீ	Number of legislative non-compliances that result in adverse court findings <sup>2</sup> : <b>0</b>
		Number of fines or penalties in relation to environmental licences <sup>3</sup> : <b>0</b>	Number of fines or penalties in relation to environmental licences <sup>3</sup> : <b>0</b>	மீ	Number of fines or penalties in relation to environmental licences <sup>4</sup> : <b>0</b>
		Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <1.5	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <b>1.0</b>	ப	Environmental Regulatory Reportable Incidents: <b>≤12</b>

Customers					
eustomers		FY17 target	FY17 performance	Status	FY18 target
Customer experience	Provide a superior experience that meets the needs of our customers	Net Promoter Score <sup>6</sup> : Improvement in average annual NPS score compared to FY16 <sup>7</sup>	Net Promoter Score <sup>6</sup> : - <b>18.7</b> , higher than the FY16 score of -19.8	ப	Net promoter score <sup>5</sup> : Improvement in average annual NPS score compared to FY2017 <sup>8</sup>
					RepTrak reputation ranking: Within the top 30 companies in Australia <sup>9</sup>
		FY17 target	FY17 performance	Status	FY18 target
Distributed energy services and energy efficiency	Provide a market-leading range of energy products and services that maximises customer value from distributed energy technologies	Proportion of AGL fleet comprising electric vehicles: <b>10%</b> (by 2018)	We have committed to purchasing 36 electric vehicles (equivalent to 10% of current fleet) by the end of 2018	308	Leading by example by increasing the proportion of electric vehicles in our fleet to at least <b>10%</b>
		Number of smart connections <sup>10</sup> : <b>1 million</b> (by 2020)	Due to changes in AGL's strategic direction, this target will not be continued		
		FY17 target	FY17 performance	Status	FY18 target
Energy prices and affordability	Provide affordable energy solutions for our vulnerable customers	Delivery of commitments under the Affordability Initiative: <b>100%</b>	Delivery of commitments under the Affordability Initiative: <b>100%</b>	மீ	Develop a Social and Economic Inclusion Policy
Community					
		FY17 target	FY17 performance	Status	FY18 target
Community engagement	Work side by side with the community to develop mutually beneficial energy projects	AGL will host at least four community events at each operational/ development site <sup>11</sup> to allow for community views to be raised and discussed in public <sup>12</sup>	At least four events were held at each site, as detailed in the community engagement section	<b>6</b>	AGL will host at least four community events for each operational/development site <sup>13</sup> to allow for community views to be raised and discussed in public <sup>12</sup>
		FY17 target	FY17 performance	Status	FY18 target
Community investment	Contribute to the organisations in our communities that are important to our employees and customers	Employee Volunteering participation rate: <b>35%</b> (head count basis)	Employee Volunteering participation rate: <b>16%</b>	$\oslash$	Employee Volunteering participation rate of AGL's Enterprise Leadership Team: <b>90%</b> (head count basis)
People					
Employee engagement	Maintain an engaged workforce in order to optimise business results				FY18 target  Employee engagement score: ≥ 75%
		FY17 target	FY17 performance	Status	FY18 target
Talent	Attract and retain the right people to meet strategic objectives	Key talent retention: ≥ 80%	Key talent retention: 93%	மீ	Key talent retention: ≥ <b>80%</b>
			FY17 progress	Status	FY18 target
Diversity and inclusion	Build a diverse workforce and inclusive workplace culture		Women in the Senior Leadership Pipeline: <b>38%</b>	305	Women in the Senior Leadership Pipeline: <b>40%</b> (by FY2019)
		FY17 target	FY17 performance	Status	FY18 target
Health and safety	Provide a safe and healthy workplace and eliminate work-related injuries and illnesses	Total injury frequency rate (AGL): < 3.9	Total injury frequency rate (AGL): <b>2.0</b>	மீ	Total injury frequency rate (AGL): <b>≤1.7</b>
		Total injury frequency rate (contractors): < 5.5	Total injury frequency rate (contractors): <b>5.4</b>	மீ	Total injury frequency rate (contractors): <b>≤4.6</b>
Environment		FV47 toward	FV47 noufs	Chata	FV49 toward
Climate change (greenhouse	Progressively decarbonise the energy supply to our customers	Compliance with AGL Greenhouse Gas Policy: 100%	<b>FY17 performance</b> Greenhouse Gas Policy: 100%	Status	Compliance with AGL Greenhouse Gas Policy: 100%
and energy)		Annually offset the greenhouse gas emissions from electricity consumed at AGL's corporate workplaces <sup>14</sup>	2,405 tCO <sub>2</sub> e of Gold Standard abatement was purchased to offset the emissions associated	பீ	Annually offset the greenhouse gas emissions from electricity consumed at AGL's corporate workplaces <sup>14</sup>
			with electricity purchased for AGL's corporate workplaces		Customers signed up to AGL's Future Forests carbon offset product <sup>15</sup> : <b>10,000</b>

		FY17 target	FY17 performance	Status	FY18 target
Renewable energy	Continue to be Australia's leading privately-owned operator of renewable energy	Development of first project to financial close, through the Powering Australian Renewables Fund	Financial close on Silverton Wind Farm achieved 19 January 2017	ப	Development of one additional project through to financial close, via the Powering Australian Renewables Fund
		FY17 target	FY17 performance	Status	FY18 target
Water management	Manage water resources sustainably	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <1.5	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <b>1.0</b>	ப	Environmental Regulatory Reportable Incidents : <b>≤12</b>
		FY17 target	FY17 performance	Status	FY18 target
Air, waste and noise	Minimise our environmental footprint	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <1.5	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <b>1.0</b>	ப	Environmental Regulatory Reportable Incidents: <b>≤12</b>
		FY17 target	FY17 performance	Status	FY18 target
Biodiversity and cultural heritage	Minimise our environmental footprint	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <1.5	Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <b>1.0</b>	ம	Environmental Regulatory Reportable Incidents: <b>≤12</b>
		FY17 target	FY17 performance	Status	FY18 target
Rehabilita- tion	Rehabilitate sites to an appropriate state, with appropriate community consultation, upon cessation of activity	Compliance with AGL Rehabilitation Principles: 100%	Compliance with AGL Rehabilitation Principles: 100% (delivered through the Rehabilitation Report)	மீ	Compliance with AGL Rehabilitation Principles: <b>100%</b>
Economic perfo	ormance				
		FY17 target	FY17 performance	Status	FY18 target
Profitability	Drive value and earnings growth	Underlying Profit: in line with earnings guidance to be released at AGL's FY2016 Annual General Meeting on 28 September 2016	Underlying Profit: <b>\$802 million</b> , slightly above the guidance range of \$720-800 million	₽	Underlying Profit after tax: In line with earnings guidance for FY18
		FY17 target	FY17 performance	Status	FY18 target
Supply chain	Work with our suppliers to ensure sustainability practices are implemented to meet the expectations of AGL and the community	AGL Supplier Agreements signed in FY17 to include the AGL Supplier Code of Conduct: <b>100%</b>	AGL Supplier Agreements signed in FY17 to include the AGL Supplier Code of Conduct: <b>100%</b>	மீ	AGL Supplier Agreements signed in FY18 to include the AGL Supplier Code of Conduct: 100%
					Proportion of material suppliers <sup>16</sup> evaluated for compliance with the AGL Supplier Code of Conduct: <b>80%</b>

- Based on the number of court findings in relation to issues that occurred during FY17.
- Based on the number of court findings in relation to issues that occurred during FY18.
- 3. Based on the number of fines or penalties received in relation to incidents that occurred during FY17.
- 4. Based on the number of fines or penalties received in relation to incidents that occurred during FY18.
- ERRFR involves the number of Environment Regulatory Reported Incidents in a 12 month rolling period, per million hours worked in that 12 month period. The ERRFR target applies to the performance areas of: legislative compliance; water management; air, waste and noise; and biodiversity and cultural heritage.
- 6. Average of four quarterly measurements.
- 7. The average of the net promoter scores achieved over each quarter of FY16 was -19.8.
- 8. The average of the net promoter scores achieved over each quarter of FY17 is -18.7.
- 9. According to the latest RepTrak Pulse Report in FY18.
- 10. Comprises premises with solar PV, batteries and/or digital meters.

- 11. This target applies to operational/development sites that are located within a distance of 5km, by road, of a residential community comprising at least 250 people.
- 12. Given the relatively close proximity of AGL's hydro-electric schemes to each other, these sites are together considered as a single site for the purposes of meeting this target.
- 13. This target applies to operational/development sites located within a distance of 5km, by road, of a residential community comprising at least 250 people, excluding operating facilities that generate less than 0.1 TWh/pa (based on FY16/17 generation figures). Notwithstanding the above restrictions, this target also applies to AGL Macquarie, Newcastle Gas Storage Facility, Silverton Wind Farm and Coopers Gap Wind Farm.
- Corporate workplaces comprise offices under AGL's "operational control" (as defined by the National Greenhouse and Energy Reporting Act 2007).
- 15. This relates to the number of customers who have signed up to Future Forests during FY18.
- 16. A 'material supplier' is defined as a supplier whose spend with AGL is \$15 million or greater per annum, and/or who supplies goods or services that are assessed as very high or extreme risk according to AGL's Fully Integrated Risk Management (FIRM) matrix.

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Sustainable business strategy

### **Material issues**

We recognise the need to balance the desire for broader disclosure on more of our issues with the imperative to provide more focused and accessible information on the issues that are most important to stakeholders.

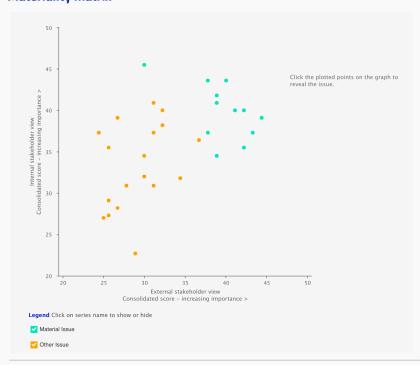


During FY16, we undertook an independent review to gauge what issues matter most to our stakeholders. The output of the review was a materiality matrix, and a list of 12 'material issues' that were used to shape our sustainability reporting framework. To maintain consistency, comparability, and an internal focus on our sustainability priorities, the material issues identified during FY16 have been retained for FY17, however, in the interest of streamlining our material issues, 'energy efficiency' was merged under the broader issue of 'distributed energy services' for reporting purposes, due to the high degree of congruence between the two issues.

In response to feedback received from the AGL Stakeholder Advisory Council about the materiality review (refer to the **stakeholder engagement** section), we've added some further explanation about the process that we undertook in FY16, below. It is our intention to revisit the materiality review during FY18 to confirm our sustainability priorities for FY18 and beyond, to ensure that our report continues to reflect views of our stakeholders, both outside and within our business.

You can explore the results from the materiality review in the matrix below.

#### **Materiality matrix**



#### **Review process**

### 1. Identification of sustainability challenges and stakeholders (FY16)

- 42 sustainability challenges were identified, based on review of stakeholder concerns, sector issues and mega-trends, and AGL's business risks. We engage with stakeholders regularly about all aspects of our business (refer to stakeholder engagement section) and this ongoing dialogue provided us with a robust list of the issues of greatest concern to our stakeholders.
- 11 internal stakeholders and 11 external stakeholders were selected to ensure balance and coverage between themes and issues.

# 2. Ranking of challenges by internal and external stakeholders (independently-facilitated review) (FY16)

- Stakeholders completed a detailed survey ranking the sustainability challenges from 1 to 5 in order of importance.
- Stakeholders participated in detailed oneon-one interviews with the independent facilitator. The purpose of these interviews was to ensure that all stakeholders had a comparable understanding of the ranking criteria, a comparable interpretation of each of the issues that they were asked to rank, and to ensure that there were no further issues of concern that were missed from the list of challenges.

### 3. Issue consolidation and identification of top 12 material issues (FY16)

- Survey and interview results were reviewed, and several similar sustainability challenges were subsequently grouped together into categories, resulting in 30 sustainability issues.
- Internal rankings and external rankings were added together, with the 12 highest scoring issues designated as 'material' for FY16.

#### 4. Validation (FY16)

 Results were presented to the AGL Safety, Sustainability and Corporate Responsibility Committee for validation and approval.

### 5. Confirmation of material issues for FY17

- The proposal to retain FY16's material issues for FY17 was discussed with members of AGL's Stakeholder Advisory Council, and subsequently with members of the Executive Team. Whilst some improvements to the materiality process were suggested, no other issues were recommended for elevating to 'material' status. In the interest of streamlining our material issues, 'energy efficiency' was merged under the broader issue of 'distributed energy services' for reporting purposes, due to the high degree of congruence between the two issues.
- The list of material issues for FY17 was presented to the AGL Safety, Sustainability and Corporate Responsibility Committee for validation and approval.

### 6. Stakeholders who participated in the review (FY16)

- 11 internal stakeholders were selected from the AGL Enterprise Leadership Team and other senior managers to cover the breadth of our operations.
- Members of AGL's Climate Change and Customer Councils (environmental and social NGOs), as well as representatives from the investment community, energy industry, regulators and community committees participated as external stakeholders.

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#### Sustainable business strategy

### **About this report**

### We publish an annual sustainability report to provide a transparent account of our performance in relation to the social, environmental and economic challenges facing our business, our industry and our community.

Key elements of our report comprise:

- · our sustainable business strategy, providing an outline of how our material sustainability issues link to our business strategy
- our material issues, presented in a matrix form showing their relative importance as judged by internal and external stakeholders
- our sustainability targets and performance summary, where our commitments to drive performance are established, tracked and measured
- an outline of how we operate, encapsulating our approach to stakeholder engagement, corporate governance, ethical conduct, legislative compliance and public policy engagement
- performance information about our key sustainability issues, divided into the five subject areas of customers, community, people, environment and economic performance, and
- a centralised data centre, where comprehensive performance data is available to view and download.

### We want this report to be the starting point for many conversations about our performance, policies, and strategic direction.

Options for engaging with us via social media are available at the top of each page.

#### **GRI Sustainability Reporting Standards (GRI Standards)**

This report has been prepared in accordance with the GRI Standards: Core option.

The GRI Standards are designed to be used by organisations to report about their impacts on the economy, the environment and/or society. The GRI Standards were launched in October 2016 to replace the GRI G4 Guidelines, which will be phased out by 1 July 2018. Further information about the GRI Standards is available at the GRI website.

For the purposes of applying the GRI Standards, the material issues we identified have been mapped back to the available topic-specific GRI Standards. The following table outlines which topic-specific GRI Standards (and associated Disclosures) have been used to compile this report, and the topic boundaries for each material issue.

Material issue	GRI Standard	Chosen disclosure(s)	Boundary
-	101 Foundation	-	-
-	102 General Disclosures	All required for Core option	-
-	103 Management Approach	Applied to each material topic	-
Public policy engagement	415 Public Policy	415-1	We engage with governments and public authorities regarding policies that affect customers, communities and the environment in Australia (and globally with respect to climate change policies).
			We engage directly with governments and other stakeholders to facilitate the development of sensible public policy.
Community engagement	413 Local Communities	413-1	Community engagement occurs outside the organisation, with local communities adjacent to AGL's operational and development sites, and with the broader Australian community.
			We engage directly with local communities to develop mutually beneficial energy projects.
Health and safety	403 Health and Safety	403-2	Health and safety is an important issue, within and external to, our organisation. This issue affects our employees, contractors and suppliers.
			We engage directly with the issue of safety.

Material issue	GRI Standard	Chosen disclosure(s)	Boundary
Climate change (greenhouse and energy)	305 Emissions	305-1, 305-2, 305-3, 305-4	The impacts of climate change are experienced within and outside our organisation. Impacts of climate change are also experienced outside the organisation, by customers, communities, and the environment in Australia and globally.
			We engage directly with the issue of climate change. One of our strategic imperatives is to prosper in a carbon constrained economy. This is reflected in our Greenhouse Gas Policy, which sets out clear commitments for our operations and future investments.
Profitability	201 Economic Performance	201-1	Impacts related to AGL's profitability are experienced within and outside the organisation, by AGL's workers, shareholders, customers, local communities, and the broader society and economy.
			We contribute to our organisation's profitability directly, but are conscious of the multitude of other external factors that contribute to our profitability.
Customer experience	NA – but covered by 102-43	NA	Customer experience is relevant to our external stakeholders, including our customers and shareholders.
			We directly impact our customers' experience through our products and services.
Energy prices and affordability	NA	NA	Energy prices and affordability are experienced externally by our customers in the states in which we operate.
			We have some direct control on energy prices and affordability. Other contributing impacts include energy policy, regulation, wholesale energy costs, and transmission costs.
Distributed energy services	NA	NA	Impacts of distributed energy services are experienced externally by our customers in the states in which we operate.
			We contribute directly to the development and deployment of distributed energy services, and contribute indirectly through industry partners and subsidiaries.
Renewable energy	NA	NA	Renewable energy is an important issue within and outside our organisation, to our people, customers, communities and broader Australian society.
			As with the issue of climate change, we engage directly on the issue of renewable energy. One of our strategic imperatives is to prosper in a carbon constrained economy. This is reflected in our Greenhouse Gas Policy, which sets out clear commitments for continued investment in renewable energy sources.
Ethical conduct	NA – but covered by 102-16	NA	Ethical conduct applies within our organisation to our employees, contractors and suppliers. Outside our organisation, ethical conduct applies to all stakeholders, including customers, with whom we deal, regardless of their location.
			We engage directly on ethical conduct but acknowledge that the conduct of our contractors, suppliers and business partners may also impact on ethical conduct.
Energy market evolution	NA	NA	Energy market evolution is experienced internally and outside the organisation. We engage with governments and public authorities regarding policies that affect customers, communities and the environment in Australia (and globally with respect to climate change policies).
			We engage directly with governments and other stakeholders to facilitate the development of sensible energy market policy.

We engaged Deloitte Touche Tohmastu (Deloitte) to provide assurance over our self-declaration that the report was prepared in accordance with the GRI Standards: Core option. Details are provided in the assurance statement.

We have also taken other guidelines into consideration when developing this report, including the Australian Council of Superannuation Investors (ACSI) and the Financial Services Council (FSC) ESG Reporting Guidelines for Australian Companies 2015, published in March 2016.

#### **Boundary and 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 2017 (FY17). All data in this report relates to FY17 unless otherwise stated.

Where information regarding partially owned and non-operated investments is material, available and relevant, it is included and clearly referenced. The performance of joint ventures which we do not operate is also excluded.

We have been publishing an annual sustainability report since FY04, and historical reports are available on our website. Our most recent sustainability report was released on 10 August 2016, covering the financial year ended 30 June 2016 (FY16).

#### Investments and divestments since previous report

No material acquisitions were made during FY17.

During FY17, we completed or announced a number of divestments:

- In FY16, AGL announced its intention to divest the majority of its upstream gas interests (with Camden Gas Project to be exited by 2023). As of 30 June 2017, the Moranbah, Silver Springs and Spring Gully assets have not yet been divested. PEL 285 (Gloucester Gas Project) will be relinquished following completion of the gas well and monitoring bore rehabilitation project.
- On 14 November 2016, AGL sold the Nyngan and Broken Hill solar plants to the Powering Australian Renewables Fund (PARF). AGL will
  continue to operate and maintain the solar farms, and will retain the rights to all Renewable Energy Certificates and electricity output
  until 2021 with both AGL and PARF having an option to extend the offtake for a further five years. For more information about PARF,
  refer to the renewable energy section.
- On 19 January 2017, AGL sold the 200 MW Silverton Wind Farm Project to PARF. AGL will manage the construction of the project on behalf of PARF, will operate the wind farm once complete, and will retain the rights to all Renewable Energy Certificates and electricity output until 2023 with both AGL and PARF having an option to extend the offtake for a further five years.

#### Projects under development and construction

We also have a range of projects in different stages of development to provide strategic depth and flexibility to our electricity generation portfolio and gas customers, alongside delivering reliable and affordable energy to our customers.

During FY17, we prioritised planning and development activities to progress the following projects:

- **Coopers Gap Wind Farm**: The Environmental Impact Statement for the proposed Coopers Gap Wind Farm in Queensland was approved in March 2017. Refer to the **renewable energy** section for further information.
- **LNG Import Facility**: In November 2016, we announced an investment of \$17 million into a feasibility study for a potential LNG Import Facility in Eastern Australia as part of our approach to maintaining future security and stability of gas supply.
- Barker Inlet Power Station: In June 2017, we announced an investment of \$295 million to develop a 210 MW reciprocating engine, gas-fired power station to be built alongside our Torrens Island Power Station in South Australia. Construction is expected to commence in Q1FY18, and the power station is expected to be operational during FY19.

In addition, in March 2017, we applied for a two-year extension to the Project Approval for the proposed Dalton Power Station in southern New South Wales.

During FY17, construction (on behalf of PARF) commenced on the following project:

• Silverton Wind Farm (200 MW), New South Wales. Refer to the renewable energy section for further information.

#### **Assurance**

We engaged Deloitte to undertake limited assurance of the FY17 sustainability performance data in this report in accordance with the Australian Standard 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 performance against the FY17 sustainability targets, as well as selected greenhouse gas emission data and data relating to our material issues.
- Assurance over our self-declaration that the report has been prepared in accordance with the GRI Standards: Core option.

Full details of the assurance process and outcome are included in the assurance statement.

#### Consultation about this report

We incorporate the AA1000 principles of inclusivity, materiality and responsiveness into our stakeholder consultation processes, and engage with different stakeholder groups on a regular basis, as outlined in the stakeholder engagement section of this report.

Regular interaction with stakeholders, whether through formal or informal channels, as well as the specific consultation undertaken through the materiality review, ensures that the focus and content of our annual sustainability reports remain relevant to our overall business strategy and the needs of our stakeholders.

#### **Related information**

Assurance statement

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#### Sustainable business strategy

# **Energy market evolution**

#### **Energy market evolution**

Contribute to the development of an electricity market design and regulatory framework that facilitates sustainable, secure, reliable, affordable and decarbonised electricity supply from centralised and distributed sources.

Status

மீ

FY18 target

FY17 target

Publish two thought leadership papers

which contribute to sustainable market

design	below for details	affordable and decar	affordable and decarbonised electricity supply		
customer expectations Australia's population w energy consumers are l that Australia's populat growth within capital ci proportion of single and will therefore need to s	ets are in a state of transition, as a result of ne and a global commitment to reduce greenhou fill grow and change, and the values, expectation ikely to reflect this. By 2050, the Australian Bur on may grow by more than 50% to 37.6 million ties), and the number of households may grow dicouple households as the population ages. A ervice a far greater number of homes and busi	se gas emissions. Over time, ons and preferences of reau of Statistics estimates in (with the majority of this by even more, with a greater sustralia's energy systems inesses than they do today,	"Australia's e markets are un profound chang by both rapid tec		
and achieving this at th	e lowest possible cost will involve both more e	fficient use of resources	advancement ar		

FY17 performance

More than two thought leadership

papers were published in FY17. See

Policy and regulatory settings that were designed for markets supplied by large, centralised (and mostly thermal) power stations, and with clearly defined generation, transmission, distribution and customers, may no longer be fit for purpose. More than 1.6 million Australian customers now produce their own electricity supply with solar PV1, and new technologies such as digital meters, battery storage and energy management software may give rise to increasingly sophisticated multidirectional flows of energy to, from and between energy customers - blurring the traditional roles of market participants.

and improved utilisation of energy infrastructure. This is discussed in greater detail in Australia's

year as a supplementary report to our FY16 Sustainability Report.

Economic Transformation - AGL's role in a changing society and economy, which was published last

The substantial decarbonisation of Australia's electricity sector is likely to be required to achieve the Commonwealth Government's commitment to reduce greenhouse gas emissions by 26 to 28% by 2030 (relative to 2005 levels), and for emission reductions consistent with limiting global warming to less than 2°C above pre-industrial levels.

In this context, our stakeholders are concerned about energy and climate change policy and

Long-term and integrated energy policies are required if energy markets are to continue to deliver reliable and affordable energy supplies, while contributing to Australia's climate change objectives and facilitating innovation in products and services for energy consumers.

We have echoed this sentiment in a broad range of public consultations and submission processes, and continue to contribute to the policy reform agenda through peer-reviewed economic and policy research. We continue to engage with relevant stakeholders and advocate for constructive public policy during this time of energy market evolution. Refer to the stakeholder engagement and public policy engagement sections for further detail.

For any area of policy reform to be effective, it must be designed with a sufficiently long-term outlook to remain relevant as industry and economic conditions change. In the past, market design and energy policy have focused on providing reliable supplies of energy at the lowest cost. Increasingly, communities expect policy makers to deliver energy security, affordability and environmental sustainability, as well as delivering greater customer choice and control over the products and services they use. Coordinated and integrated policies and market settings are required to jointly pursue these objectives.

The following are key aspects of the energy market and policy reform agenda.



Publish two thought leadership papers which contribute to

a market design that facilitates sustainable, secure, reliable,

"Australia's energy markets are undergoing profound change, driven by both rapid technological advancement and a desire to reduce greenhouse emissions. Customer centricity in this transition is key, as energy is an essential part of everyday lives" - Stephanie Bashir, Senior **Director Public Policy** 

#### Climate change policies and electricity market design

An enduring and sustainable climate change policy framework will be critical to making the investments in electricity supply infrastructure required for the modernisation and decarbonisation of the electricity sector as these assets typically operate across decadal timeframes.

The generation mix in the National Electricity Market is old and relatively emissions intensive. Around 75% of the installed thermal capacity is already operating beyond its original design life. Both renewable and lower-emission fossil fuel generation will form an integral part of the energy mix throughout the transition to a low-emission global economy. A long-term vision and trajectory for this transition is essential, to ensure continued investment in zero-emission energy sources, and the orderly retirement of old and emissions-intensive power stations. Policy to progressively close ageing coal power stations is required to provide sustainable market outcomes for new renewable energy investments.

Our Greenhouse Gas Policy outlines our commitment to contribute to the achievement of Australia's climate change objectives. We have committed to not extending the operating life of any of our coal fired power stations, and that by 2050, we will close all existing coal-fired power stations in our portfolio. We are also committed to continuing to invest in renewable and low-emission technologies, and to continually evolving our suite of distributed energy solutions, which enable customers to directly participate in the transition to a low-emissions future (such as distributed renewable generation, battery storage and demand management products). Furthermore, we will advocate for effective long-term government policy to reduce Australia's emissions, that will enable further investment in renewable and low-emission power generation. Refer to the climate change (greenhouse and energy) section for further information.

Australia's Renewable Energy Target (RET) has been legislated to increase the proportion of renewable electricity supply to 2020, however policy volatility and underlying market conditions have created challenges for renewable energy investments in recent years. To meet the RET, an estimated 5,000 MW of new renewable projects will be required nation-wide, representing over \$10 billion of investment.

During FY16, we announced the development of the Powering Australian Renewables Fund (PARF), an innovative financing vehicle for renewable energy which is intended to develop and own around 1,000 MW of large-scale renewable generation (investment worth \$2 to 3 billion).

PARF has achieved two major milestones since inception. In November 2016, AGL reached financial close on selling its existing 102 MW Nyngan and 53 MW Broken Hill solar plants into the fund, and in January 2017, AGL and PARF reached financial close on the sale and contract for the subsequent construction of the 200 MW Silverton Wind Farm project in western New South Wales. Refer to the renewable energy section for further information.

Over the long-term, other challenges will need to be addressed to achieve electricity sector decarbonisation. Research authored by AGL economists has shown that the interaction between renewable energy targets and energy-only electricity market design may not be sustainable with high penetration of non-firm renewable generation. As more intermittent renewable supply enters the market (such as wind and solar), wholesale electricity prices are likely to become volatile, with very low prices for much of the year and a handful of extreme pricing events (during which generators can recover their fixed costs). Volatility and increasing electricity forward prices have been exacerbated by the worsening challenge of sourcing sufficient, cost-effective gas supplies for use as a generation fuel.

Concerns around rising electricity forward prices are now also accompanied by increased anxiety amongst customers, industry and governments about the ongoing security and reliability of the system. As the generation mix changes, demand for system stability services (such as frequency control, reactive power and inertia) will increase just as the traditional suppliers of these services exit the market. Although caused by a multitude of factors (including a violent storm), the South Australian state-wide blackout of September 2016 has been a catalyst for much of this concern.

It is notable that this and subsequent system events (including material load-shedding during a February heatwave) have prompted governments to propose taking new, more interventionist positions in the energy market. The impact of these interventions must be carefully considered in the context of market signals to investors and the stability of the energy market architecture more broadly. In our view, it is imperative that policy makers consider what long-term and sustainable modifications to existing market design are necessary to support investment certainty in a carbon constrained future and to assure system stability is maintained as increasing levels of variable renewable generation are integrated into the energy system.



We have proposed a number of measures to assist in achieving these outcomes, including a regulated closure rule for ageing thermal plant and new market mechanisms to value the provision of system stability services, such as inertia. More detail on these and other recommendations can be found in our **submission** to the Independent Review into the Future Security of the National Electricity Market (the 'Finkel Review').

#### Energy affordability and vulnerable customers

Electricity is an essential service and consumer protections afforded to energy users ensure that they have access to competitively priced, reliable and high-quality energy supplies. We acknowledge the need to meet community expectations to support vulnerable customers. We support a shared responsibility approach to energy hardship, where energy suppliers, governments and the community sector work together to deliver sustainable improvements.

In FY17 we launched our 'A Fairer Way' package. To ensure that discounts are accessible to those consumers who would benefit most from them, our A Fairer Way package aims to deliver fairer outcomes for all consumers, as well as incentivise broader public engagement with the competitive retail energy market to find the best deal for them.

Throughout FY17, we continued to implement improvements to support vulnerable energy consumers, which were established in the \$6.5 million Affordability Initiative. The Affordability Initiative is a three-year programme launched in December 2014 to proactively identify and support customers experiencing financial hardship. Refer to the **energy prices and affordability** section to read more about this initiative.

The reform of government concession arrangements represents a key opportunity to support customers experiencing financial difficulties – ensuring that for energy concessions in all jurisdictions: eligibility for concessions is targeted based on customer need; an adequate level of support is provided based on energy usage (rather than a flat rate); and programs are easily accessible to those who need them.

#### New energy technologies

Evolving customer preferences are leading a transformation of the electricity industry. Ongoing developments in the cost, availability and capabilities of distributed energy services are enabling customers to exert greater control over their energy usage and demand improved services and a wider range of products from energy service providers. Distributed energy services include digital meters, distributed generation, electric vehicles and battery storage.

In addition to the direct benefits to customers taking-up these technologies, their efficient deployment and use have the potential to unlock system-wide benefits in Australia's energy markets such as improving the utilisation and productivity of existing energy infrastructure, providing system stability services and delivering demand response at times of system constraint.

To realise these benefits, it is important that policy and regulatory frameworks facilitate access to open and competitive markets (for example, grid services markets) and provide competitive neutrality between different technologies, different suppliers and between existing and new energy resources. A key component of protecting the competitive landscape involves the effective ring-fencing of regulated monopolies. Implementing appropriate technology, product and installation standards (based on international standards where possible) will also promote choice and competition, and limit unnecessary overheads, while protecting customers through the transition. These settings will best ensure that customers can select products and services that suit their circumstances from a wide range of options, and share in system-wide value enabled by their choices.

Careful design of network cost-recovery and pricing frameworks is also key to driving efficient network utilisation, efficient adoption of distributed energy technologies and mitigating potential equity issues that arise where those without the ability to adopt distributed technologies are left to bear a disproportionate share of remaining network costs.

Read more about AGL's involvement in this area in the distributed energy services section.

#### AGL Applied Economic and Policy Research working paper series

For several years, AGL economists have authored economic research that provides critical analysis of energy market trends and policy settings to industry stakeholders and policy makers. These articles are submitted to academic journals and are subject to a formal (blind) peer-review process prior to publication.

During FY17 the following new pieces of research were published:

• Reducing the horizons of uncertainty: Setting Australia's post-2030 emission goal: This policy brief, co-authored with The Climate Institute, outlines the role that long-term targets play in setting government policy and guiding business strategies. It also considers the 2050 emissions goals already announced by other countries and the commitments the Australian Government has made to contribute to limiting warming to 1.5-2°C under the Paris Agreement. Together, these mechanisms have been used to guide recommendations of possible next steps for Australia. These include a lead recommendation to define a 2050 emissions target (or target range) for Australia that will provide guidance for business, government and regulatory decisions.

- The Changing Nature of the Australian Electricity Industry: This article considers the implications of the emergence of new distributed energy technologies and a global focus on reducing anthropogenic on the founding assumptions underpinning the design of the National Electricity Market and the restructure of the industry following the Hilmer Reforms of the 1990s. Distributed energy technologies represent a 'partial grid-substitute' requiring, in the authors' view, that policymakers consider whether write-downs of the regulated asset base of monopoly network providers are necessary, and the appropriate role of monopolists and competitive markets in delivering these technologies and the products and services they enable. In relation to climate change, the authors found that there is a need to better integrate electricity market and climate change policy to ensure emissions reductions occur in an orderly and cost-effective manner.
- Access rights and consumer protections in a distributed energy system (published in the book Innovation and Disruption at the Grid's Edge): This chapter explores how consumer protections and grid access rights may need to be redefined in energy markets featuring widespread distributed energy technologies, using Australia's National Electricity Market as a case study. It found that customers with solar PV and battery installations will interact with and depend on the grid in different ways and for potentially different services compared with a customer without these technologies. It concludes that reformed consumer protection frameworks will need to balance innovation and customer choice with universal access to electricity supply.
- Price discrimination in Australia's retail electricity markets: An analysis of Victoria and southeast Queensland: This article examines price dispersion in deregulated markets and associated impacts on consumer welfare. The authors analyse differential retail electricity offer prices in the Australian states of Victoria and Queensland and contrast these with industry average total cost and the marginal cost of retail supply. Consistent with the literature on price dispersion, the analysis demonstrated that Victoria, the National Electricity Market's most mature deregulated market, shows a greater dispersion than the NEMs least mature contestable market, southeast Queensland. It found further that in Victoria the marginal unit produced is priced at marginal cost meeting the key criterion for efficient pricing. However, the authors also identified an episode of inter-consumer misallocation due to high 'standing offers' and concluded that policy initiatives designed to help firms shift vulnerable households from 'standing offer' tariffs are desirable.
- Electricity market design in a decarbonised energy system (under review): This paper critically examines an 'energy-only' market in a high penetration renewables system, with a particular focus on the vertically and horizontally restructured Australian National Energy Market. The authors propose that the 'energy-only' market can indeed work within a decarbonised energy system but extreme pricing volatility within spot markets is likely to be required to ensure system reliability. 'Unintended consequences' of adjacent climate change policies will need to be corrected to ensure: successful retail competition; appropriate new investment is forthcoming; and pricing outcomes are acceptable given political economy constraints. Potential mechanisms identified to address these consequences include requiring ageing thermal plant to provide sufficient notice of closure, requiring intermittent generation to partner with complementary plant (such as OCGT, advanced batteries or pumped hydro) to create a synthetic 'firm' generator, and expanding the role of reliability and security markets.
- Price dispersion in Australian retail electricity markets (under review): Simshauser and Whish-Wilson (2017) articulated that price disperson within the restructured Victorian retail electricity market is welfare enhancing as efficient pricing ensured the marginal unit produced was sold at marginal cost. This article expands on this analysis by considering the heterogeneous nature of electricity consumption when measured by volume sold (kWh). The authors find that customers on 'standing offer' tariffs use 18% less electricity than customers on 'high discount' products, indicating the presence of market segmentation and implicit second-degree price discrimination. Climate change policy and the emergence of new technologies such as household solar PV, battery storage and in-home energy displays will create further price dispersion in Australian electricity markets due to even greater product heterogeneity. The key finding is that policy makers will need to facilitate, rather than prevent, both price and tariff structure dispersion with the objective of improving consumer outcomes.
- Redesigning a 20th century regulatory framework to deliver 21st century energy technology: This article explores how electricity systems are shifting from a once highly centralised regulated model to become more renewable, distributed and consumer-centric. Australia has some of the highest installation rates of embedded renewable electricity generation in the developed world, and the emergence of cost-effective distributed battery storage and energy management systems may fundamentally alter the electricity industry—which has been largely unchanged for decades. Evolutionary economics indicates that firms must adapt to new technologies and market conditions or they will become extinct. The author found that energy markets will only evolve if regulatory frameworks continuously adapt to ensure that consumer preferences for reliability, control and environmental outcomes are able to be achieved at lowest cost concluding that regulators will need to ensure that facilitating efficient consumer decision making is prioritised.

Importantly, the views are those of the authors and not necessarily those of AGL. For more information about economic and policy research authored by AGL economists, visit the AGL Blog.

 $1. \quad http://www.cleanenergyregulator.gov.au/RET/Forms-and-resources/Postcode-data-for-small-scale-installations \#Summary-of-postcode-data-for-small-scale-installations \#Summary-of-postcode-data-fo$ 

#### **Related Information**

AGL Greenhouse Gas Policy

Supplementary Report (FY16): Australia's Economic Transformation

Supplementary Report (FY17): Social and Economic Inclusion

#### In this section

Strategy and material issues Sustainability targets & performance summary Material issues About this report **Energy market evolution** 

### **HOW WE OPERATE**

We recognise that we have responsibilities to all our stakeholders (our employees, customers, investors, and the community) and to the environment in which we live. That's why we hold ourselves to high standards of accountability and behave ethically in our business activities.

Operating honestly, transparently and ethically is of utmost importance to us. This section focuses on how these overarching principles inform the way we operate our business and communicate with our stakeholders:

- **Stakeholder engagement:** A wide variety of people and groups are interested in, or affected by, the decisions that we make. We proactively engage with our stakeholders on relevant issues in ways that are most appropriate to each group.
- **Ethical conduct:** We seek to operate our business and balance stakeholder interests in a way that is ethical, shows integrity, and is transparent.
- **Public policy engagement:** We are committed to the pursuit of evidence-based policy development, with a view to developing sensible policy responses.
- Legislative compliance: We integrate compliance risk management practices in our business processes and operations to drive consistent, effective and accountable decision-making.
- · Corporate governance: Best practice corporate governance principles support sustainable performance by AGL over time.



How we operate

## Stakeholder engagement

We engage in constructive dialogue with our stakeholders to <u>understand and respond</u> to issues that are important to our people, customers, investors, suppliers and partners, regulators, landowners and the wider community.

A summary of the key issues for each of our stakeholder groups is provided below, along with an outline of how we engaged with each group during FY17, and the planned outcomes of that engagement. More information about the way we engage with local communities is available in the **community engagement** section of this report.

During FY17, we established the AGL Stakeholder Advisory Council. Chaired by our CEO and Managing Director, Andy Vesey, the primary function of the Council is to engage with our senior management on effective strategies to manage our business in a responsible, ethical and sustainable manner. External members of the Council were selected to provide expertise across the investment, customer, social services, civil society, government and environmental fields. Council meetings are also attended by a representative from Deloitte, AGL's current financial and non-financial auditor.

The Council met once during FY17, and provided constructive input on several matters, including:

- AGL's approach to determining material sustainability issues. This feedback will be taken into consideration when undertaking subsequent materiality reviews, and further information has been provided in the material issues section of the report to provide a better explanation of our current approach to materiality.
- AGL's approach for selecting future strategic partnerships with charitable organisations as part of the Energy for Life revitalisation process (refer to the community investment section).

The Council will prepare a report for the Board's Safety, Sustainability and Corporate Responsibility Committee following the August 2017 meeting.

#### Key issues for our stakeholders

How we engage with our stakeholders and what we hope to achieve

#### **AGL** people

To remain competitive, we need a high performance and anticipatory culture where people reflect our core values of safe, sustainable, inclusive and focused, and are engaged, accountable, empowered, recognised and rewarded.

The key issues for our people include: workplace safety; career development and training; appropriate remuneration and recognition (including enterprise bargaining agreements); personal wellbeing; and a fair, equitable and inclusive workplace.

The AGL Engagement Survey is undertaken every two years and provides our people with the opportunity to give feedback about the organisation. The Engagement Survey was last undertaken in FY16 and will be next undertaken in FY18. Refer to the **employee engagement** section for further information.

AGL Enterprise Leadership Team (consisting of Executive Team members and their direct reports) forums are conducted throughout the year to discuss key priorities, projects and goals of each business group. Twice-yearly Town Halls are also held to share information with AGL people and invite conversation.

Networks such as AGL Equality and AGL Shine provide opportunities for our people to support the development of a diverse and supportive workplace culture, and Let's Talk lunchtime sessions held at our major offices provide opportunities to explore business priorities and community issues at a more in-depth level.

We also prioritise engagement with our people about their safety and wellbeing. Refer to the **health and safety** section for information about HSE Walks and Technical Interactions.

Our people are supported with a reward and recognition program that acknowledges their contributions and performance.

The key purpose of these engagement activities is to ensure that our people understand our strategic direction and are engaged and safe in the workplace.

#### Investment community

In addition to our periodic and continuous disclosure obligations, we engage with the investment community about the financial and non-financial risks and opportunities that may influence the company's performance and growth in the longer term.

Many investors are increasingly interested in our response to environmental, social and governance risks.

The main environmental, social and governance issues that investors raised this year related to: the intensifying level of political and regulatory scrutiny of the energy industry; AGL's long-term commitments to exit coal fired generation; and the way in which the company remunerates its executives to manage risk, protect value and maximise opportunities at this time of significant change.

We regularly engage with both retail and institutional investors throughout the year. The Annual General Meeting (AGM) provides all shareholders with the opportunity to vote on a range of issues and to raise questions concerning performance and strategy with AGL's Directors and senior executives.

We hold a number of investor briefings each year, which are broadcast live and archived on the AGL website. These briefings include AGL's half-year and full-year results as well as detailed strategy briefings and site visits. In addition, we participate in broker-hosted conferences and undertake regular road-shows to engage with institutional investors in Australia and overseas.

We participate in investor surveys focused on ESG performance, including the CDP Climate Change Program. The investment community uses these tools to collect relevant non-financial performance information to facilitate informed investment decisions.

We participate in a semi-annual qualitative and quantitative survey of the perceptions of equity investors and analysts conducted by an independent third party, which enables these stakeholders to provide unattributed feedback on AGL's Board, management, strategy, financial performance, disclosure and communication. Feedback from these surveys is used to guide AGL's strategy.

The key purpose of AGL's engagement with the investment community is to support AGL's compliance with its continuous disclosure obligations as an ASX-listed business, facilitate investor understanding of our strategic direction and understand and response to investor concerns about our business or our industry more generally.

#### Government

Our business is affected by the policy decisions and commitments of governments at all levels. Governments have a responsibility to ensure the accessibility of essential services, such as energy, along with the development of energy infrastructure in accordance with accepted policy principles. These principles include consideration of climate change impacts and sustainability.

Federal, state and local governments are concerned with a wide range of issues including: the development of energy infrastructure; climate change and renewable energy policies; energy prices; and reliability of energy supply.

We conduct regular dialogue with relevant federal, state and local governments in relation to a range of project-specific and policy issues – including meetings, policy submissions (both directly and via industry associations), attendance at events and the provision of briefings. Further information is available in the **public policy engagement** section of the report.

Where possible, we use peer reviewed research published by AGL economists and other academics to engage with governments around issues related to the energy industry and public policy. This research can be found on the AGL Blog.

During the year, we also engaged the following firms for strategic, communications and policy-related advice:

- Newgate Communications
- Hawker Britton
- Clean Energy Strategies
- FutureEye
- Craig Emerson Economic

Consistent with our Political Donations Policy, we do not use third parties to make direct or indirect political donations. Refer to the public policy engagement section for more information.

The key purpose of our engagement with governments is to inform public policy development with a view to maximising the benefits to our customers, shareholders, and the communities in which we operate.

#### Regulators

Regulators are responsible for economic regulation and monitoring compliance against jurisdictional and national energy regulations, as well as environmental regulation. Regulatory decisions can have a significant impact on our business.

The key issues for regulators include: reliability and affordability of energy supply; efficient investment in utility infrastructure; compliance with consumer protections and other parts of the regulatory framework; compliance with environmental licencing and other requirements.

We engage with regulatory bodies in New South Wales, Victoria, Queensland, South Australia, Western Australia and the Australian Capital Territory, and national bodies such as the Australian Energy Regulator, Australian Energy Market Operator and the Australian Energy Market Commission, including through direct engagement and activities undertaken as part of industry associations.

The key purpose of our engagement with regulators is to inform regulatory developments with a view to balancing the needs of our shareholders, customers and the communities in which we operate. Engaging with regulators also provides us with valuable feedback on our performance, and we also benefit from the expertise of regulators in understanding emerging issues.

#### Investment partners, joint ventures and suppliers

We have a range of investments in electricity generation and retail operations.

We have business relationships with investment partners and suppliers, including, significantly, through the Powering Australian Renewables Fund (PARF).

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 Powering Australian Renewables Fund (PARF), ActewAGL and Sunverge Energy boards.

During FY17 we have been continuing to engage with our suppliers about the AGL Supplier Code of Conduct (refer to the supply chain section). During FY17, we also piloted the introduction of a Lender Code of Conduct questionnaire. This questionnaire was issued to banks for optional completion alongside a debt facility invitation. The questionnaire covers issues such as corporate governance, ethical behaviour, risk management, labour practices, human rights, non-discrimination, health and safety, environmental management, community and supply chain. The questionnaire was broadly well received particularly by those banks who have a strong commitment to their own ESG policies. It is thought to be the first of its kind in the Australian market and has sparked much discussion and interest amongst borrowers and lenders alike

#### **Energy industry and industry associations**

We play an active role in leading industry support for renewable energy and climate change initiatives, as well as the need to ensure reliable and efficient energy infrastructure and markets.

The business impacts of energy policy are a primary concern for the Australian energy industry.

During FY17, AGL participated in several industry associations. AGL paid the following membership fees to these organisations over FY17:

- Business Council of Australia (\$65,000)
- Australian Industry Group (\$25,318)
- Clean Energy Council (\$65,121)
- Australian Energy Council (\$332,222)
- The Carbon Market Institute (\$6,000)
- Sustainable Business Australia (\$0)
- Committee for Economic Development of Australia (\$19,685)
- Australian Financial Market Association (\$31,752)
- Australasian Investor Relations Association (\$13,800)
- Group of 100 (\$0)
- Financial Executives Institute of Australia (\$5,600)
- Alliance to Save Energy (\$18,000)
- Green Building Council (\$0)
- Committee for Gippsland (\$20,000)
- Gippsland Regional Executive Forum (\$2,600)
- Corporate Tax Association (\$13,700)
- Diversity Council Australia (\$6,335)
- Energy Efficiency Council (\$8,000)
- IAP2 Australia (\$1,600)
- Global Compact Network Australia (\$5,000)
- Australian Direct Marketing Association (\$19,382)

We do not make separate payments to these associations for specific projects related to influencing political campaigns. Membership and participation in these bodies is undertaken for the interests of AGL and does not reflect the private interests or preferences of AGL Directors and officers.

Importantly, we do not always agree with the policy positions these associations take, and we aim to clarify this with other stakeholders where appropriate. Areas where our position differs from associations where we are a member is outlined in the **public policy engagement** section.

The key purpose of our engagement with associations and think-tanks is to develop mutually beneficial agreed positions on relevant issues, with a view to maximising the benefits to our shareholders, customers and the communities in which we operate. Such engagement also allows us to receive feedback on our performance and to benefit from the expertise of these organisations in understanding emerging issues.

#### Customers

To maintain and improve market share within Australia's highly competitive energy market, it is essential that we listen and respond to customer feedback and constantly seek to improve the level of customer service that we provide. We aim to work collaboratively with governments and the community sector to support customers who are having trouble accessing affordable energy.

Customers are concerned with the cost of energy; improving energy efficiency and the sustainability of the energy supply to their homes and businesses; customer service quality; and the impact, perceived or real, of government policies.

The AGL Customer Council meets on a quarterly basis to discuss a wide range of matters that affect our customers and the communities in which we operate.

Our Customer Experience team looks for opportunities to interact with small groups of customers in open discussions about their experience in dealing with us. In FY17 we held two 'Customer Face to Face' sessions with 86 customers and 52 AGL people.

As part of our Voice of the Customer satisfaction program, we also undertook nearly 1,000,000 retail customer surveys during FY17. Surveys were conducted by email, phone and automated after-call survey methods, and covered our key customer facing areas, such as inbound Customer Services, New Connections, Consumer Sales and Solar teams. Feedback received from our customers in FY17 was used to inform and improve the customer experience. For example, customer feedback highlighted the need for improved meter read processes, adding impetus to the rollout of digital metering.

The AGL Customer Charter outlines our commitment and timeframes for responding promptly to phone and written enquiries. Our Customer Escalations team also deals directly with customer concerns.

To improve our customers' energy experience, we have been investigating ways that customers can derive more value from their distributed energy resources, including their solar panels and battery storage. In May 2017, we led a project to investigate how 'blockchain' technology could be used to enable households with solar panels, batteries and 'smart' air conditioning to trade or share excess electricity they generate.

Account management and engagement with our 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 energy briefings.

The AGL Community allows the community to connect with us and contribute and collaborate on any matter relating to energy. Other feedback mechanisms available to customers include an online information request facility and social media such as Twitter and Facebook.

#### **Local communities**

Effective engagement with the community on development projects is vital to our long-term success. We can only deliver and operate projects with the respect and support of the community by transparently engaging with the community at every stage of the development process.

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, we engage with impacted communities. Detailed information on individual energy projects is provided on our website.

Community Consultative Committees (CCCs), also known as Community Dialogue Groups (CDGs), are in place for a number of projects, including the Coopers Gap Wind Farm, the Silverton Wind Farm, the Macarthur Wind Farm, the Camden Gas Project, the Newcastle Gas Storage Facility, and AGL Loy Yang. A CDG and a CCC for AGL Macquarie and Dalton Power Project (respectively) are also in the process of being established. Each CCC is chaired by an independent chairperson and includes local council appointed representatives, local residents, local environment groups and AGL representatives. For other operational projects, we meet with the local community on an as needs basis (refer to the community engagement section for more information).

We also use social media to communicate and engage with the community. The AGL Blog is a forum for providing timely and accessible information to interested stakeholders on a broad range of issues, such as: AGL's customer-focused initiatives, key external presentations by our people, published research, and rapidly evolving energy policies. The blog is updated frequently, with 208 blog posts by AGL contributors in FY17. The blog had over 22,300 users and over 52,200 page views during FY17.

The key purpose of our engagement with communities is to listen and engage on relevant issues, with a view to maximising the benefits to our shareholders, customers and to the communities in which we operate. Such engagement also allows us to receive feedback on our performance and benefit from the expertise of communities in contemplating major project decisions and in understanding emerging issues.

#### Non-government organisations (NGOs)

We engage with NGOs to understand the causes that 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 meets regularly to enable discussion and constructive dialogue on a range of issues relating to climate change and carbon policy. Areas of interest include government policy and program implementation, public areas of concern and international policy processes. Attendees include representatives from WWF-Australia, Australian Conservation Foundation, and The Climate Institute (prior to its closure on 30 June 2017).

The AGL Customer Council meets quarterly to discuss a wide range of matters that affect our customers. Attendees include representatives from the following groups: Australian Industry Group, Consumer Action Law Centre, South Australian Farmers Federation, Kildonan UnitingCare, Public Interest Advocacy Centre, Queensland Council of Social Service, St Vincent de Paul Society Victoria and Uniting Communities South Australia.

We engage with NGOs to develop mutually beneficial agreed positions on relevant issues, with a view to maximising the benefits to our shareholders, customers and the communities in which we operate. Such engagement also allows us to receive feedback on our performance and benefit from the expertise of these organisations in understanding emerging issues.

In this section
<u>Stakeholder engagement</u> Ethical conduct Public policy engagement Corporate governance Legislative compliance

#### How we operate

# **Ethical conduct**

#### Ethical conduct Act ethically in all activities in accordance with the AGL Code of Conduct. ⚠ Met ONot met in Progress FY17 target FY17 performance Status FY18 target Number of substantiated issues relating Number of substantiated issues relating Number of substantiated issues relating to unacceptable to unacceptable behaviour in the to unacceptable behaviour in the behaviour in the workplace ranked as high or greater according workplace: 0 workplace: 8 to AGL's FIRM risk management process: 0

Given we have relationships with over 3.6 million customer accounts, and responsibilities to the communities where we operate, it is important to all stakeholders that we behave ethically in all our business activities.

Our behaviour is guided by the AGL Values and the AGL Code of Conduct.

#### **Our values**

AGL's values guide how we deliver value for our customers, communities and other stakeholders while protecting the environment in which we live and work.

During FY17, we refreshed our values to support the evolution of our business to becoming more future-focused:

- Safety and beyond caring about our people, making it safe to speak up.
- Sustainable thinking thinking of the future today, creating a sustainable tomorrow.
- Inclusive of all inclusive of all experiences, united in our success.
- Focused on what matters focused on our customers, going further to deliver value.

Read more about our values in the employee engagement section.

#### **Code of Conduct**

Our Code of Conduct (Code) applies to AGL and its Directors, employees and contractors working on behalf of AGL (all of whom are referred to as 'employees' in the Code).

The Code sets out a number of overarching principles of ethical behaviours which are set out under the following headings:

- · Acting honestly and with integrity
- · Observing the law, voluntary commitments and internal standards
- · Valuing and maintaining professionalism
- · Respecting confidentiality
- Managing conflicts of interest
- · Looking after our employees, and
- Looking after the community.

The Code of Conduct is reviewed by the Board Safety, Sustainability and Corporate Responsibility Committee for endorsement and approval by the Board every two years. During FY17 it was updated to reflect our new values.



"Acting ethically is a core component of our Code of Conduct, and is the backbone of the way a successful organisation operates"

- Stephen McSweeney, People & Culture Business Partner

#### **Ethics Panel**

The Code is administered by the AGL Ethics Panel. The Ethics Panel comprises the General Counsel & Company Secretary, Executive General Manager People and Culture, Head of Group Audit, and an independent person with expertise in managing employee grievances.

- The responsibilities of the Ethics Panel include:
- reviewing the effectiveness of the Code and recommending any changes to the Board Safety, Sustainability and Corporate Responsibility
   Committee for endorsement and approval by the Board
- putting in place procedures for the effective dissemination of, and compliance with, the Code
- where appropriate, investigating any breaches of the Code, and
- reporting breaches of the Code to the Board (or a Committee of the Board to which that responsibility has been delegated).

The independent Ethics Panel member provides the AGL Ethics Line service, acting as contact point available for reporting potential breaches of the Code and to investigate matters in an impartial and independent manner. Anonymity is offered in the use of the AGL Ethics Line.

Any breach of the Code is taken seriously, and may result in a range of disciplinary actions, including coaching, warnings, impacts to the payment of performance incentives, through to dismissal.

#### Induction and training programs

The Code of Conduct is included in the induction pack for all our new starters. We run a structured induction program that requires the completion of seven compulsory compliance training modules. These modules comprise:

- Code of conduct
- Information security essentials
- Privacy
- · Risk management
- Diversity and inclusion
- · Health, safety and environment, and
- Competition and Consumer Act.

Each compliance module includes a quiz to test understanding, with defined pass mark requirements.

On an annual basis, our people are required to complete mandatory compliance training topics. During FY17, 93% of all eligible AGL employees completed this training<sup>1</sup>. Our people are also required to make an annual declaration indicating whether or not they have any actual or potential conflicts of interest.

#### Investigation and resolution of workplace issues

We set clear expectations for leaders and employees about the conduct and behaviour that is expected in our workplaces and in relation to how we conduct business. Sometimes these expectations are not met. Employees and leaders are encouraged to speak up about and resolve issues when they occur. The Workplace Resolution Guidelines provide guidance on how best to resolve workplace issues such as bullying, harassment and discrimination.

Our Whistleblower Protection Policy provides avenues for employees and contractors to report corrupt, illegal or undesirable conduct (including anonymously, confidentially or to an independent third party through the AGL Ethics Line). We are committed to protecting and respecting the rights of a person who reports wrongdoing in good faith. The Policy includes a reporting and investigation mechanism that is objective, confidential and independent which protects the employee from reprisal or disadvantage.

During FY17, we addressed 12 issues relating to unacceptable behaviour in the workplace (compared with 13 in FY16). Eight of these issues<sup>2</sup> were substantiated following investigation in accordance with AGL's Workplace Issues Resolution Guidelines (FY16: four<sup>3</sup>). Disciplinary actions taken included mediation, performance counselling, coaching, education sessions, written warnings and cessation of employment.

#### **Privacy**

We are committed to protecting the privacy of our customers, shareholders and other people who we deal with in our business. We are bound by the Australian Privacy Principles (Principles) contained in the *Privacy Act 1988* (Privacy Act) which are designed to protect the personal information of individuals that interact with us.

Our obligations and commitments regarding privacy are outlined in the AGL Privacy Policy. Customers and other external stakeholders can raise complaints about any aspect of their dealings with us via the complaints mechanisms listed on our website. Complaints are investigated in accordance with the AGL Dispute Resolution Policy and our Feedback and Complaints Management Framework.

We take active measures to secure the customer personal information that we manage on behalf of individuals and to protect this information from misuse, interference and loss, as well as unauthorised access, modification and disclosure. Protection of personal data is achieved through continuous improvement of our IT security capability and existing security controls.

Issues relating to cyber security and privacy are becoming increasingly important to our customers as digital metering and other energy management technologies enable the collection of large volumes of energy data.

We believe that our customers should be provided with easy access to their own consumption data, and that our customers should retain direct control over who is permitted access to their data. Visit the **customer experience** section for information on our Data Policy.

#### Information security

Technology presents many opportunities for our business and our customers, it also gives rise to a number of risks.

We have placed an increased level of focus on addressing our cyber security risks because of our commitment to keep our customer and business information safe.

We are investing in tools, techniques, and training to manage our cyber security risks.

The business is focused on delivering technology innovation and improved user experience, balanced with the need to protect our customers and business.

AGL's Chief Information Security Officer is accountable for delivering our information security program. This wide reaching program has a strong focus on teaching our people how to best protect information and understand the cyber security risks in our connected world.

This year, we have continued to build awareness and educate our people by conducting:

- a security awareness campaign using multiple internal communication channels
- · compulsory information security compliance training, and
- internal phishing email simulations, to assist people in recognising and reporting suspicious emails.

To protect AGL and our customers, we will continue to ensure that we're meeting our legal and regulatory requirements in the areas of information security. Additionally, we are building strong and collaborative relationships with key information security organisations such as CERT Australia, Energy Impact Partners, and Stay Smart Online to help share information on cyber security.

We are also a member of the Board to establish the Joint Cyber Security Centre which is part of the Federal Government's Cyber Security Strategy.

#### **Bribery and corruption**

We do not tolerate any incidence of bribery or corruption committed by people either from within or outside our organisation.

Risk-based anti-bribery and corruption controls are embedded throughout our processes and policies, including within the AGL Code of Conduct and the Fraud and Corruption Risk Control Policy. We also have a comprehensive Anti-Money Laundering / Counter-Terrorism Financing Compliance Program and an Australian Financial Services Licence Compliance Program within our wholesale markets (energy trading) areas. In this regard we conduct regular risk assessments to determine the adequacy of the controls that are in place.

We support a culture of openness and transparency, and together with a number of other mechanisms available for employees to raise risks and issues, we have an independent reporting line and accompanying Whistleblower Policy (refer above), as well as a process for registering and reviewing actual and potential conflicts of interest.

During FY17, there were no confirmed instances of corruption in relation to money laundering, counter terrorism financing or material instances of fraud.

- 1. FY17 compliance training extended into early FY18.
- 2. As of 30 June 2017, one of the 12 issues raised was still being investigated.
- 3. The increase in substaniated issues reported in FY16 (from three to four) reflects a finding made following the close of the FY16 year.

#### **Related Information**

AGL Code of Conduct AGL Dispute Resolution Policy AGL Privacy Policy

Stakeholder engagement **Ethical conduct** Public policy engagement Corporate governance Legislative compliance

#### How we operate

# **Public policy engagement**

#### **Public policy engagement** Engage transparently with governments and other stakeholders to facilitate the development of sensible public policy. ⚠ Met Not met In Progress FY17 target FY17 performance Status FY18 target AGL will publish all material All material submissions in relation to AGL will publish all material submissions in relation to public submissions in relation to public policy public policy matters are published on policy matters on the AGL Blog matters on the AGL Blog the AGL Blog AGL will annually disclose all groups which it is a member of AGL will annually disclose all groups Memberships of industry associations which it is a member of that may are included in the stakeholder that may influence public policy influence public policy engagement section of this report

As a supplier of an essential service to over 3.6 million customer accounts, we believe we have a responsibility to engage with governments at all levels in relation to energy and related policies. In a highly regulated industry such as the energy industry, government decisions have a significant influence on the way we source, produce and price energy and energy-related products, and the way in which we interact with and support our customers.

We provide policy makers with the best available information to help them understand the full implications (both positive and negative) of current and proposed government policies, and to develop sensible policy responses.

We have regular dialogue with relevant federal, state and local governments in relation to a range of policy issues, including with Members of Parliament whose electorates include our projects. Our dialogue with governments occurs through face-to-face and telephone meetings, written policy submissions (both directly and via industry associations), attendance at events, and the provision of briefings.

It is important to our stakeholders that our involvement in public policy development is undertaken transparently and consistently. Our submissions to government processes and research undertaken by our economists are published on the AGL Blog.

#### **Key areas of focus**

The key issues that were the focus of our engagement with government and policy makers during FY17 comprised:

Supporting investment certainty in a carbon constrained future: We have consistently highlighted the need for long-term and stable policy frameworks to drive reductions in greenhouse gas emissions from Australia's energy systems that are consistent with international efforts to limit global warming to no more than 2°C above pre-industrial levels. As Australia's largest source of greenhouse gas emissions, it is expected that the electricity sector will be required to achieve significant emission reductions over the coming decades to meet Australia's international commitments to reduce national greenhouse gas emissions by 26-28% by 2030 on 2005 levels. However, there continues to be uncertainty about the mix of policies that Australia will implement to facilitate the progressive closure of ageing, emissions-intensive power stations, and the development of new renewable and low-emissions capacity, as required to meet its international commitments.

As such, a key focus of our policy advocacy has been on clarifying what we consider to be the necessary elements of a policy suite, which will provide macro-level certainty to support required investment, enable efficient management of existing capital stock and support a community and energy market in transition. Core elements of this policy advocacy have centred around the need for regulation which drives an orderly closure of older emissions-intensive power stations, the implementation of an emissions intensity trading scheme and a long-term carbon budget.



"It's critical that we are transparent in how we engage on issues of public policy" -Tony Chappel, Head of Government & Community Relations The policy brief 'Reducing the horizons of uncertainty: Setting Australia's post-2030 emission goal', co-authored by AGL and The Climate Institute, outlines in more detail the role that long-term targets play in setting government policy and guiding business strategies. Papers¹ by AGL economists and researchers have also explored the importance of the integration of climate change policy with energy market design. AGL's **submission** to the Independent Review into the Future Security of the National Electricity Market (the 'Finkel Review') has further information on the full suite of policies that AGL has advocated for governments to adopt to support investment certainty in a carbon constrained future.

The closure of coal fired generation (and related mines) will affect the regional communities that have relied upon the industry for employment for many years. As a result, we are working with governments, local communities, research organisations, and other industry sectors to identify new opportunities for those regions most affected, including the Latrobe Valley in Victoria and the Hunter Valley in New South Wales. This has included establishing an agreement in March 2017 with the Victorian Government and unions to allow retrenched Hazelwood workers to transfer to our Loy Yang power station and mine, located in the Latrobe Valley.

Supporting the integration of increasing levels of variable renewable generation: Australia's energy markets are undergoing a significant period of transition. Government policies have been introduced to reduce greenhouse gas emissions, incentivise the entry of new renewable generation, and improve energy productivity, and the long-term decarbonisation of electricity generation will continue to be a global theme for many decades. Research by AGL economists has highlighted the need for better integration of energy and climate change policy, and has shown that the interaction of energy-only markets and renewable energy targets may give rise to unsustainable market outcomes. South Australia in particular has seen the entry of significant intermittent renewable generation and the disorderly closure and mothballing of several thermal power stations, making it increasingly reliant upon the interconnector with Victoria for supply at peak times. As the generation mix changes, demand for system stability services (such as frequency, reactive power and inertia) will also increase just as the traditional suppliers of these services exit the market.

Consequently, we continue to concentrate much of our public policy engagement with government and policy makers on exploring complementary measures that will enable the National Electricity Market to accommodate greater levels of variable renewable generation. Options include the introduction of incentives to ensure that new intermittent generation sources become 'firm' and dispatchable, and the use of existing and new supplementary markets to improve security, reliability and system resilience. Our submission to the Finkel Review provides greater detail on these and other potential measures.

Transition to a more decentralised energy system: Customers are seeking to exert more control over their energy supply arrangements than ever before. Australia leads the world with small-scale solar PV installations. Across the country, approximately 17% of households have a solar PV system installed. Installations are expected to continue to grow and, as costs decline, are anticipated to increasingly be accompanied by the installation of a battery energy storage system. Digital meters, smart appliances, smart inverters and intelligent control systems are also entering the market. The emergence and increasing accessibility of these technologies are enabling a range of new energy service offerings by both traditional energy market participants and new entrants.

Through engagement with government and policy makers, we seek to ensure that customers retain choice and control throughout this transition. This includes promoting fit-for-purpose and transparent technology standards and connection processes for distributed energy services, advocating the careful design of network pricing frameworks to drive efficient network utilisation and efficient technology adoption, and supporting regulatory and market frameworks that promote competitive neutrality between different technologies, different suppliers and between existing and new energy resources. A key component of protecting the competitive landscape involves the effective ring-fencing of regulated monopolies.

In addition to allowing customers to more actively manage their own energy needs, distributed energy services are also giving rise to new kinds of demand-side participation and the potential to participate in dynamic programs which deliver system-wide benefits. As a result, the once linear supply chain is becoming increasingly decentralised and bi-directional. Through our policy engagement, we also seek to promote efficient use of decentralised resources to manage broader system needs and to examine the market and competitive frameworks required to enable those outcomes. To learn more about our distributed energy services and energy efficiency technologies, refer to the distributed energy services section of this report.

Our Virtual Power Plant in South Australia offers a useful example of a program which seeks to enable the 'stacking' of multiple values. Over a three-year period, we plan to have one thousand smart, connected energy storage devices installed behind-the-meter at homes and small businesses across metropolitan Adelaide. When aggregated, the batteries will act like a 5 MW solar peaking plant. The project will demonstrate at a commercial scale the value that distributed energy services can provide three groups:

- Consumers can use the batteries to use more of their solar power by storing energy produced during the day that might otherwise be exported to the grid.
- Networks can benefit from peak load shaving and voltage management services that potentially avoid further infrastructure
  expenditure.
- Retailers can benefit from reduced wholesale exposure during peak demand periods, and through the use of the battery to provide synthetic inertia and frequency balancing services.
- Learnings from the trial will be used to inform ongoing consideration of how market and regulatory frameworks may need to evolve to facilitate customer choice and participatory energy services markets which support the overall security and resilience of the system.

• Energy affordability: We support a shared responsibility approach to energy hardship, where energy suppliers, governments and the community sector work together to deliver sustainable improvements for vulnerable customers, to ensure that they can access competitively priced, reliable and high-quality energy supplies. Refer to the energy prices and affordability section for further information.

#### **Submissions**

During FY17, we prepared a range of submissions to government and energy industry bodies across several state and Commonwealth jurisdictions. These included submissions relating to:

- Reviews of retail energy market competition and pricing
- Proposed wholesale electricity market rule changes, including 5-minute settlement, emergency frequency control, demand response and ancillary service markets
- · Reviews of system security, reliability and affordability in a transforming energy sector
- Victoria's transition to metering competition
- Framework for misuse of market power under the Competition and Consumer Act
- · Climate change and renewable energy policies at the Commonwealth and Queensland jurisdictions
- Parliamentary inquiry into the retirement of coal fired generation
- Reviews of the planning, investment and economic regulatory frameworks applying to network businesses
- · Reviews of the competitive framework for new energy services, including ring-fencing of regulated monopolies
- Electricity market transformation, including distribution market models, consumer protections for new energy services and frameworks for stand-alone energy systems
- · Community energy projects
- Regulatory arrangements for solar feed-in tariffs in South Australia and Victoria
- Victorian inquiry into the 'true value' of distributed generation
- Review of South Australia's energy efficiency scheme
- · Vehicle emissions
- Data availability and use
- Regulatory arrangements for customers experiencing payment difficulties
- Improving market processes such as customer transfers, and
- A review to harmonise the start time of the 'gas day' in the Victorian wholesale gas market.

Copies of public submissions are made available on the AGL Blog so that stakeholders are able to view the positions we are taking on various issues.

#### **AGL** research

During FY17, AGL economists published a range of peer-reviewed research papers:

- The Changing Nature of the Australian Electricity Industry (Article published in Economic Papers)
- Price discrimination in Australia's retail electricity markets: An analysis of Victoria and southeast Queensland (Article published in Energy Economics)
- Reducing the horizons of uncertainty: Setting Australia's post-2030 emission goal
- Access rights and consumer protections in a distributed energy system (published in the book Innovation and Disruption at the Grid's Edge)
- Electricity market design in a decarbonised energy system (under review)
- Price dispersion in Australian retail electricity markets (under review)
- Redesigning a 20th century regulatory framework to deliver 21st century energy technology

For further details, refer to the energy market evolution section.

#### **Industry associations**

We are a member of several industry associations including the Business Council of Australia, the Australian Industry Group, the Clean Energy Council, the Australian Energy Council, the Carbon Market Institute and Sustainable Business Australia. A broader list of memberships is also available in the stakeholder engagement section.

Through our membership of industry organisations, we seek to work with other parties to provide a unified industry view on energy and related policies to put to government. Our view may, of course, differ on some issues from those of the industry groups to which we belong. Where this occurs on material issues, we aim to ensure that stakeholders are aware of these differences of view.

During FY17, the key areas where our views differed to those of the industry associations of which we are (or were) a member comprised:

• Climate Change Policy: There is general agreement amongst AGL and its industry associations about the principles that should guide Australia's greenhouse gas emission reduction targets and climate change policy framework. There is also general agreement that Australia's climate change objectives are most efficiently managed at a national level, rather than by states developing jurisdictional targets and policies. There may, however, be some disagreement amongst these associations about the particular mechanisms to achieve these outcomes and the prioritisation of particular principles to guide the policy pathway, with different organisations prioritising industry competitiveness, the use of market-based mechanisms, accelerating the use of renewable energy, energy affordability, policy stability, or the integration of climate change and renewable energy policies. Most organisations agree that a sectoral approach for electricity generation is appropriate. Our Greenhouse Gas Policy states that a range of regulatory and market-based policies is likely to be needed to achieve decarbonisation and modernisation in the electricity sector.

#### **Political donations**

The community very reasonably expects that corporations should not have an undue level of influence on government policy by providing a level of financial contribution to political parties that could result in, or could be seen to result in, preferential treatment.

We are committed to advocacy and engagement with governments that is evidence-based and transparent. All submissions to government inquiries are published on our website.

In FY16, AGL pleaded guilty to offences under the *Environmental Planning and Assessment Act 1979* for failing to disclose certain reportable political donations to the New South Wales Department of Planning and Environment in relation to a number of planning applications made between FY10 and FY14. In January 2017, AGL was fined \$124,000 in the Land and Environment Court of New South Wales in relation to this issue.

The Court found that there was no evidence that the offences were deliberate or committed for financial gain.

We have since adopted a **Political Donations Policy** (August 2015) which prohibits AGL from making political donations. The Political Donations Policy governs the actions of all employees, including Directors and officers of AGL Energy and its subsidiaries. Importantly, the policy covers both direct political donations and payments made to fund political campaigns.

No political donations (monetary or in-kind) were made during FY17, nor were any political donations made through third parties.

1. Refer to The Changing Nature of the Australian Electricity Industry and Electricity market design in a decarbonised energy system (under review).

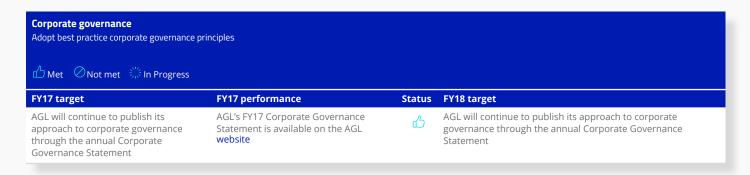
#### **Related Information**

AGL Political Donations Policy
AGL Code of Conduct

Stakeholder engagement Ethical conduct Public policy engagement Corporate governance Legislative compliance

#### How we operate

### **Corporate governance**



The adoption of best practice corporate governance principles is an important element of our sustainability performance.

Our corporate governance arrangements are consistent with the Australian Securities Exchange (ASX) Corporate Governance Council's 'Corporate Governance Principles and Recommendations – 3rd Edition' (ASX Principles) issued in March 2014.

The eight ASX Principles are:

- Principle 1: Lay solid foundations for management and oversight
- Principle 2: Structure the Board to add value
- Principle 3: Act ethically and responsibly
- Principle 4: Safeguard integrity in corporate reporting
- Principle 5: Make timely and balanced disclosure
- Principle 6: Respect the rights of security holders
- Principle 7: Recognise and manage risk
- Principle 8: Remunerate fairly and responsibly

The ASX Principles include as Recommendation 7.4 that "A listed entity should disclose whether it has any material exposure to economic, environmental and social sustainability risks and, if it does, how it manages or intends to manage those risks". This sustainability report provides that information to our stakeholders.

Our annual Corporate Governance Statement discloses the extent to which AGL has adopted and met the ASX Principles. A 'Corporate Governance Summary' section has also been included in the 2017 Annual Report which provides shareholders with an overview of AGL's corporate governance framework, policies and practices.

We recognise that stakeholders are becoming increasingly interested in executive remuneration, including short- and long-term incentivisation schemes, and how remuneration is aligned to shareholder interests. At AGL's 2016 Annual General Meeting, more than 25% of the shares voted in relation to the 2016 Remuneration Report were against the adoption of the 2016 Remuneration Report. This is commonly referred to as a 'first strike'. As a result, we have taken the opportunity to review our remuneration practices. A response to the concerns raised with respect to the 2016 Remuneration Report has been included in the FY17 Remuneration Report.

We will to continue to engage with our stakeholders about our remuneration policies to understand and consider their views.

#### **AGL Board and committees**

As at 30 June 2017:

- the AGL Board comprised eight non-executive Directors and one executive Director, our CEO, Andy Vesey, and
- the proportion of female Directors on the Board was 33%. This meets the target set by the Board that, by 2018, at least 30% of non-executive Directors will be female.



"Good corporate governance helps build trust in the community that we're doing what we say. It's essential for the sustainable growth of our business" – Melinda Hunter, Assistant Company Secretary Detailed information about the structure, responsibility and experience of the AGL Board is included on the AGL website and within the Annual Report.

The Board has established four standing committees that meet regularly to oversee key risks affecting the business. During FY17, each committee set aside time at one of its meetings to review and discuss its performance over the past 12 months. Each committee was satisfied that it had been effective in performing its responsibilities under its Charter (whilst also identifying areas for improvement).

#### Safety, Sustainability and Corporate Responsibility Committee

The Safety, Sustainability and Corporate Responsibility Committee assists the Board in (a) reviewing and overseeing the development and implementation of policies and procedures that enable AGL to operate its business safely, ethically, responsibly and sustainably; and (b) monitoring the decisions and actions of management in achieving AGL's objective to be a safe, ethical, responsible and sustainable organisation. The Committee operates under a formal charter and currently comprises four non-executive, independent Directors. The Committee oversees and reviews, amongst other things:

- AGL's actions to meet its obligation to maintain the health and safety of its people
- the social, environmental and ethical impact of AGL's activities, and the systems for managing compliance with AGL's sustainability 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 matters in the formulation of AGL's strategy, risk management framework, health, safety and environment management systems, and people and culture priorities, and
- · AGL's compliance with all relevant legal and regulatory requirements governing the matters within its responsibilities.

A suite of internal sustainability key performance indicators is reported to the Committee on a quarterly basis.

#### **Audit and Risk Management Committee**

The Audit and Risk Management Committee operates under a formal charter. Its primary function is to assist the Board in fulfilling its responsibilities to provide shareholders with timely and reliable financial reports and to safeguard AGL's interests taking into account the reasonable interests of shareholders, customers, employees, the communities in which AGL operates and other relevant stakeholders through the effective identification, assessment, monitoring and management of risks.

#### **People and Performance Committee**

The People and Performance Committee operates under a formal charter. Its primary function is to assist the Board in fulfilling its responsibilities to shareholders, customers, employees and the broader community through the appropriate recruitment, retention and remuneration of senior managers and other employees with the capabilities and skills necessary to execute AGL's business strategy. The responsibilities of the Committee include, among other things, making recommendations to the Board in relation to:

- the remuneration of Directors
- the remuneration, recruitment, retention and termination policies applicable to AGL's Executive Team
- creating positive employee relations
- guidelines for incentive plans
- the superannuation arrangements in place for AGL employees, and
- AGL employment policy matters.

#### **Nominations Committee**

The Nominations Committee operates under a formal charter. Its primary function is to assist the Board in fulfilling its responsibilities to shareholders through the appropriate recruitment, retention and education of Directors. The responsibilities of the Committee include, among other things:

- reviewing the skills, knowledge and experience a Director should have, having regard to AGL's operating performance, financial position and strategic objectives
- reviewing the structure, size and composition of the Board and Board committees
- developing and implementing a process for evaluating Board, committee and individual Director performance
- developing selection criteria for the appointment of new directors and overseeing arrangements for the effective appointment and induction of new Directors, and
- developing succession plans for non-executive Directors, taking into account the challenges and opportunities facing AGL, and the skills and experience likely to be required in the future.

#### **Related Information**

AGL Corporate Governance Statement AGL Board and Committee Charters

#### In this section

Stakeholder engagement Ethical conduct Public policy engagement Corporate governance Legislative compliance

#### How we operate

# Legislative compliance

Legislative compliance Comply with legislative requirements across the organisation.						
⚠ Met ONot met in Progress						
FY17 target	FY17 performance	Status	FY18 target			
Number of adverse court findings in relation to Australian Consumer Law <sup>1</sup> : <b>0</b>	Number of adverse court findings in relation to Australian Consumer Law¹: <b>0</b>	ம	Number of legislative non-compliances that result in adverse court findings $^2\!\!:\!0$			
Number of fines or penalties in relation to environmental licences <sup>3</sup> : <b>0</b>	Number of fines or penalties in relation to environmental licences <sup>3</sup> : <b>0</b>	ம	Number of fines or penalties in relation to environmental licences <sup>4</sup> : <b>0</b>			
The Environmental Regulatory Reportable Frequency Rate (ERRFR)⁵: <1.5	The Environmental Regulatory Reportable Frequency Rate (ERRFR) <sup>5</sup> : <b>1.0</b>	ம	Environmental Regulatory Reportable Incidents: ≤12			

We are subject to a wide range of compliance obligations, which are comprised of compliance requirements (things we must do, e.g. by law) and compliance commitments (things that we choose to do). Our compliance obligations include, but are not limited to:

- laws and regulations
- permits, licenses and other forms of authorisations
- orders, rules and guidance issued by regulatory agencies
- relevant industry codes and compulsory standards
- judgements of courts and administrative tribunals
- our own organisational requirements including policies and procedures, and
- obligations arising under contractual arrangements with third parties.

We are committed to managing compliance risk effectively and efficiently. In our view, this is pivotal to the ongoing and sustainable growth and success of our business.

We have a comprehensive compliance management framework to manage these requirements. Compliance risk management practices are embedded within our broader risk management and governance frameworks, and integrated into our business processes and operations to drive consistent, effective, and accountable decision making.

The AGL Board is responsible for:

- approving and monitoring the implementation of policies governing AGL's systems of internal compliance, risk management and control, and
- monitoring AGL's compliance with obligations governing AGL's operations.

To assist it in discharging its responsibilities, the AGL Board has established the Audit and Risk Management Committee. Refer to the corporate governance section for more information about our Board committees.

Information about how we identify, manage and review compliance risk is available in our Compliance Management Policy. This policy is aligned with the principles and requirements of the international standard ISO 19600: 2015 Compliance Management Systems, and outlines our expectations for a compliance culture. Accordingly, the policy applies to both legislative requirements and voluntary commitments (such as compliance with our policies and procedures).

We conduct internal reporting, investigation and remediation of compliance-related complaints, breaches, and incidents through established breach reporting and complaints handling processes. This is in addition to mandatory regulatory reporting regimes that we are subject to in various jurisdictions, which require companies to report various categories of non-compliance to relevant regulators.

Our compliance program monitors activities in relation to material compliance obligations – this includes the effectiveness of compliance plans. Compliance reports are provided to the Audit and Risk Management Committee approximately every two months, which provide an overview of activity, issues and breaches in relation to 20 compliance strands.

#### FY17 performance

During FY17, no environmental incidents occurred that have led to AGL paying fines or penalties in relation to environmental licences. Similarly, no issues occurred during FY17 that led to adverse court findings in relation to Australian Consumer Law.

#### **Environmental incidents**

During FY17 we notified the relevant environmental authority of 10 environmental incidents, in accordance with mandatory notification provisions under legislation and/or environmental licences. Of these, six incidents were assessed to have a severity of 'High' or above under our Risk Management and Assessment Framework, and four incidents had a severity of 'Moderate' or 'Low'.

Of the incidents rated as high or above, three related to dust complaints from Flynn residents associated with the Loy Yang mine, two related to uncontrolled discharges from the Ravensworth A ash line, and one related to a dust leak from the Ravensworth A silo. The low risk mandatory notifications related to licence limit exceedances for air or water relating to E. Coli, turbidity or suspended solids.

During FY17, in the interests of transparency and operating to best-practice reporting standards, we also voluntarily notified the relevant environmental authority of 11 additional environmental incidents. Of those voluntarily reported incidents, four related to leaks or uncontrolled discharges, two related to administration, two related to exceedances of licence pH limits, one to discharge equipment failure, one related to a complaint regarding stack emissions, and one related to fauna.

The incidents were investigated, and corrective actions and process improvements implemented to prevent recurrence.

During June 2017, the NSW Environment Protection Authority (EPA) commenced a prosecution against AGL, alleging that AGL had contravened a condition of its environment protection licence. The alleged offence relates to a flood event that occurred in early June 2016 and impacted the Camden Gas Project. As at the date of this report there is no allegation in the proceedings that environmental harm occurred. Proceedings are in progress.

#### **Political donations**

In FY16, AGL pleaded guilty to 11 offences under the *Environmental Planning and Assessment Act 1979* for failing to disclose certain reportable political donations to the New South Wales Department of Planning and Environment in relation to a number of planning applications made between FY10 and FY14. In January 2017, AGL was fined \$124,000 in the Land and Environment Court of New South Wales in relation to this issue. The Court found that there was no evidence that the offences were deliberate or committed for financial gain. Refer to the **public policy engagement** section of the report for further information, and for information about our Political Donations Policy.

#### Inquiries

**ACCC Electricity Inquiry:** On 27 March 2017, the Federal Treasurer directed the ACCC to hold an inquiry into the supply of retail electricity and the competitiveness of retail electricity prices. A preliminary report is due to the Treasurer by 27 September 2017 and a final report by 30 June 2018.

**ACCC Gas Inquiry:** On 19 April 2017 the Australian Government directed the ACCC to conduct a wide-ranging inquiry into the supply of and demand for wholesale gas in Australia, as well as to publish regular information on the supply and pricing of gas for the next three years. AGL is providing information as requested, and will continue for the 3 year duration.

- 1. Based on the number of court findings in relation to issues that occurred during FY17.
- Based on the number of court findings in relation to issues that occurred during FY18.
- 3. Based on the number of fines or penalties received in relation to incidents that occurred during FY17.
- 4. Based on the number of fines or penalties received in relation to incidents that occurred during FY18.
- 5. ERRFR involves the number of Environment Regulatory Reported Incidents in a 12 month rolling period, per million hours worked in that 12 month period. The ERRFR target applies to the performance areas of: legislative compliance; water management; air, waste and noise; and biodiversity and cultural heritage.

#### **Related Information**

AGL Compliance Management Policy AGL Risk Management Policy

#### In this section

Stakeholder engagement Ethical conduct Public policy engagement Corporate governance <u>Legislative compliance</u>



"Our annual compliance training is an integral part of AGL's overall compliance program" - Bec Hunt, Head of Group Risk & Compliance

### **CUSTOMERS**

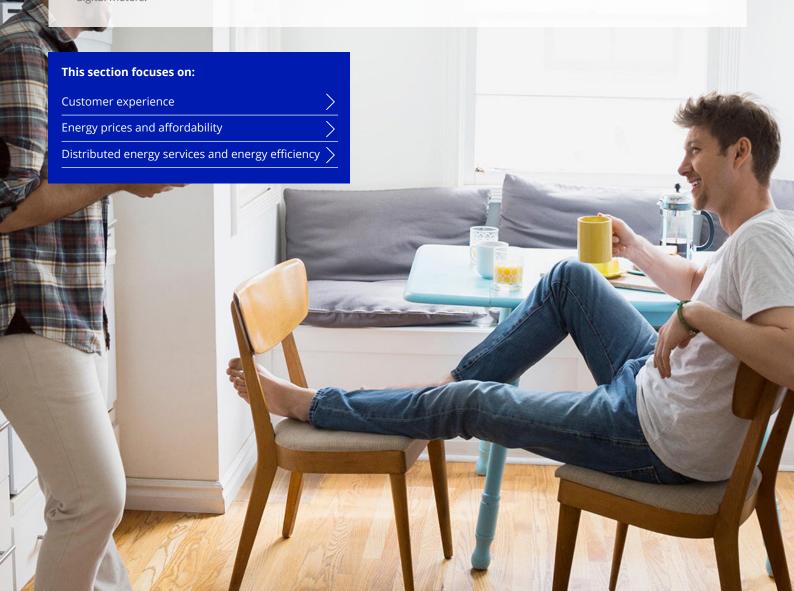
Our customers are at the heart of everything we do. We've launched a customer transformation program to sharpen this customer-centric focus, better anticipate our customers' needs, and engage with them where and how they want, on their terms.

We have one of Australia's largest retail energy and dual fuel customer bases, retailing natural gas, electricity, solar PV and related products and services to over 3.6 million residential and small business customer accounts throughout Australia.

Building customer advocacy is one of our two strategic imperatives. We're moving from being a mass retailer to a personalised retailer – using smarter solutions, technology and service to empower our customers.

This section focuses on:

- **Customer experience:** We operate in a highly competitive retail environment, and we are focused on delivering a consistently superior customer experience that generates long-term value.
- Energy prices and affordability: We understand that energy bills can contribute to the financial difficulties that some of our customers face. We work collaboratively with a range of community and customer stakeholders to provide targeted, effective support.
- **Distributed energy services:** We recognise that to remain competitive in the changing energy landscape, we must innovate and focus on creating a broader suite of energy services for customers, such as solar, storage, demand management services and digital meters.



#### **Customers**

### **Customer experience**

#### **Customer experience** Provide a superior experience that meets the needs of our customers ⚠ Met ONot met in Progress Status FY17 target FY17 performance FY18 target Net Promoter Score<sup>1</sup>: Improvement in Net Promoter Score<sup>1</sup>: -18.7, higher than Net Promoter Score<sup>1</sup>: Improvement in average annual average annual NPS score compared the FY16 score of -19.8 NPS score compared to FY173 to FY162 RepTrak reputation ranking: Within the top 30 companies in Australia4

### In August 2016, we launched a \$300 million customer experience transformation program, designed to deliver our customers an industry-leading digital experience.

This program has been established to deliver an improved end-to-end energy experience for customers, making it easier for customers to engage with their energy, providing peace of mind and convenience. The program is focused on solving customer pain-points and generating new, transformative ideas with leading digital experiences.

We have continued to focus on improving our customer satisfaction throughout FY17, by enhancing our communication channels to make it easier for our customers to interact with us. We've also launched a number of innovative and customer-focused product and service offerings. We operate in a highly competitive retail environment, so improving our customer experience remains a core part of delivering on our strategy. Our **Customer Charter** provides clear standards of service that customers can expect from us on key issues impacting their energy accounts.

Our average annual net promoter score (NPS) and our average annual customer satisfaction score both improved compared to FY16, with NPS increasing to -18.7 from -19.8, and satisfaction increasing to 7.28 from 7.26. Visit our data centre to view our current and historical performance.

We monitor a range of indicators of customer satisfaction to develop strategies to enhance our interface with customers and to continuously improve our product, service, and experience offerings. Visit the data centre to view or download information on the following topics:

- Customer satisfaction score
- Net promoter score
- · Ombudsman complaints
- Customer churn rates
- · Wrongful disconnections

The data centre also contains a breakdown of our customer numbers by location and fuel type.

#### Improved billing and account management

During FY17, we have been focusing on making it easier and more convenient for customers to manage their accounts, personalise their experience and pay their bills. We've delivered a redesigned look and feel across our digital channels, creating a more appealing customer experience. Key initiatives rolled out in FY17 included:

• My Account: In FY17 we launched 'My Account', offering upgraded self-service options for customers using AGL Energy Online. My Account provides a positive experience for customers, offering improved visibility of their gas and electricity use (especially for customers with basic (quarterly read) meters). We migrated AGL Energy Online customers to My Account, with nearly 750,000 users as at the end of June 2017.



-18.7



Customer satisfaction

7.28



Customer churn

16.4%

Our customers churn at a lower rate than the rest of the market (20.2%)

- One Minute Move: Launched in May 2017 to our Victorian residential customers, we are progressively rolling out One Minute Move, allowing customers to quickly transfer their existing plan, billing and account settings when they move to their new premises.
- **Solutions capability:** We have introduced a framework incorporating credit collections and customer service guidelines, accounting for individual customer needs and tailoring appropriate payment options.
- Billing experience enhancement (BEES): BEES is a continuous improvement project designed to streamline our billing processes and ensure that bills are delivered accurately and on time to all our customers. During FY17, the project led to improvements in estimated meter reads, especially in relation to how estimated reads are applied to customers with monthly billing and/or bill smoothing. Enhancements to bill smoothing have provided customers with greater control and additional payment options. More regular bill smoothing reviews will be aligned with individual bill cycles, allowing customers to better manage their accounts. In parallel with the BEES project, we have continued to advocate for metering reform. To learn more see the energy prices and affordability section.
- AGL App: We have expanded the features and improved the functionality of our free AGL App to provide better tools for our customers. We have introduced PayPal as an option for paying bills, and customers are now able to view their billing history. We have also incorporated an alert tool which makes it easier for our customers with digital meters to monitor their energy usage, set usage alerts to stay on track with their energy usage, and predict how much their next bill will be. There has been an overall growth in downloads of the AGL App, and by the end of FY17, we've had over 300,000 downloads, with more than 40% of users accessing the App in any given month.
- **Usage alerts:** We are also piloting proactive usage alerts for customers whereby we advise them via email of changes in their energy use patterns and/or sends them a mid-bill update so customers feel more in control of their energy use, and can manage it accordingly.
- **Pre-due SMS:** We introduced SMS reminders for customers, which are sent three days prior to the due date of the bill. This allows our customers to better plan and manage their bill payments.

These initiatives helped drive increased use of digital self-service channels over FY17, with an average of 150,000 active My Account users per month (up from less than 120,000 in FY16). Online transactions have also increased, with a 44% growth in online sales and retentions compared to FY16.

#### **Engaging with our customers**

We offer a range of options for customers to communicate with us, including:

- Social media: We have a team dedicated to engaging with customers over social media platforms. We have seen an average increase of 45% per quarter in engagement across our Facebook, Twitter and AGL Community pages during FY17, and we have responded to over 16,000 comments and online feedback. Satisfaction<sup>5</sup> from customers communicating via these channels is high, and as at June 2017 was 79%.
- Customer surveys: Feedback from our customers is invaluable for informing decision-making to improve our business. In FY17 we increased opportunities for our customers to provide feedback by expanding our existing after call, email, digital and social media surveys to include more of our customer contact channels. We receive more than 80,000 responses each month in total, and by providing customers with more diverse ways to share their views, this in turn provides us with more opportunities to deliver an improved customer experience, and products and services that are better aligned to our customers' needs.
- **Direct customer feedback:** We also seek feedback from our customers through our Face-to-Face program. During FY17, we hosted lunch events for a group of Seniors Card-holder customers in Victoria and New South Wales, to launch our Seniors Card Partnership Program in both states. Through the conversations that took place over lunch between customers and our employees, we gained valuable insight to our customers' experiences, and identified opportunities to improve the clarity of our bills, and enhance online self-service options.
- **The AGL Community:** This online forum enables customers to use crowd-sourced as well as AGL-curated content (i.e. traditional FAQs) to find answers to their questions quickly.



"Our customers are telling us they want an intuitive, consistent and seamless experience when engaging with us, and that's what we are delivering" – Craig Lauchlan, General Manager Customer Experience Transformation During FY17, we revised and relaunched our Feedback and Complaints Management Framework. The framework outlines our commitment to efficient, effective and consistent management of customer feedback and reflects our core vision, strategic objectives and business value. The framework includes twenty principles that we aspire to, and covers all customer interactions by all parts of our business. The framework ensures that complex matters are referred immediately to more experienced agents so that complaints can be escalated and resolved more quickly. This has resulted in a 13.4% reduction in ombudsman complaints from FY16.

#### Customer data and transparency

We believe that our customers should be provided with easy access to their own consumption data, and that our customers should retain direct control over who is permitted access to their data (other than regulated entities for market settlement and other regulated purposes). We also recognise that the ability to harness insights from customer's data drives product and service innovation, which is in our customers' best interest.

During FY17, we formalised new Data Policy Principles:

- We are committed to managing customer data lawfully and responsibly, and to protecting its unauthorised access.
- We will provide customers (and their authorised representatives) easy access to their energy consumption data.
- We will continue to develop products and services that enable customers to 'make sense' of their energy consumption data and better monitor and manage their energy use.
- We will use customer insights obtained from data to create innovative products and services for customers that will enhance the customer experience.
- We operate as a custodian of customer data and will ensure that customers retain control over who else is permitted access to that data (other than regulated entities for market settlement and other regulated purposes).
- We are committed to responsibly engaging with all our stakeholders (customers, investors, communities, policy-makers and employees) to ensure that our business, and the broader energy industry, continue to collect, use and protect customer data in a manner that is consistent with community expectations, and is in the best interests of customers.

Further information including about how we comply with our legislative requirements can be found in the AGL Privacy Policy, the legislative compliance section and the ethical conduct section.

- 1. Average of four quarterly measurements.
- 2. The average of the net promoter scores achieved over each quarter of FY16 was -19.8.
- 3. The average of the net promoter scores achieved over each quarter of FY17 was -18.7.
- 4. According to the latest RepTrak Pulse Report in FY18.
- 5. Measured as the average score provided by customers, when asked to rank their level of satisfaction using a set 1-5 (AGL Community) or 1-10 (AGL Social Media) scale.
- 6. Customer data means: (a) Personal Information of any AGL customer within the meaning of the Privacy Act (Cth); (b) metering data within the meaning of the National Electricity Rules collected from, or generated by an electricity consumption meter.

#### **Related Information**

AGL Customer Charter
AGL Dispute Resolution Policy

In this section

Customer experience Energy prices and affordability Distributed energy services and energy efficiency

#### **Customers**

# **Energy prices and affordability**



#### **Energy regulation and pricing**

We continue to be a strong supporter of price deregulation because competition delivers innovation and improved consumer outcomes. During FY17, deregulated retail energy prices were in place in all States that we operate in except New South Wales (gas) and parts of north and western Queensland (electricity). Electricity prices in south east Queensland were deregulated in July 2016. New South Wales gas prices were deregulated in July 2017.

In July 2017, we increased electricity and gas prices for our residential and small business customers in New South Wales, South Australia and Queensland. The price changes vary by state, and bill impacts depend on a customer's tariff type, usage, and their existing energy plan. The average price increase (including GST) across AGL's residential electricity customers is estimated at \$5.70 per week in New South Wales, \$2.00 per week in Queensland (in the Energex area), and \$6.70 per week in South Australia.

Any decision to change prices is based on a detailed consideration of a range of factors including costs, market conditions and the value we offer customers. In this instance, retail electricity prices have risen because of significant recent and forecast increases in wholesale market prices. The wholesale price of electricity has increased, largely because of the closure of ageing, low cost, coal fired generators, high gas prices and limited gas availability for gas fired generation, and an uncertain policy environment impacting investment in new capacity. Increases in residential gas prices reflect the high wholesale gas prices, and the limited availability of gas on the east coast of Australia.

We understand that energy bills can comprise a significant proportion of some households' living expenses. That's why we have implemented a range of cost reduction measures to ensure that any price rises are as low as possible. We understand that sustainable energy market deregulation is only possible if customer affordability issues are properly addressed. We have been a proactive industry leader in this area, launching our comprehensive Affordability Initiative in December 2014. Our **Affordability Initiative** is a program of work through which we aim to better understand the issues associated with customers facing financial hardship, and provide targeted and effective support. We built on this with the launch of **A Fairer Way** in 2017.

#### **Electricity network pricing reform**

There continues to be a need for network pricing reform in Australia, so that average-cost volumetric pricing is transitioned to more cost-reflective tariff structures. This will ensure that all customers contribute more equitably to the cost of the delivery of shared network services, and will reduce cross-subsidies between customers. Current energy tariffs result in consumer inequity and economic inefficiencies, as customers pay the same 'average' tariff for all energy use throughout the year, while system costs are primarily driven by demand during peak times. Customers with air conditioning (which increases peak demand) and solar PV (which reduces average energy use supplied by the network, although typically not during peak times) are therefore cross-subsidised by those customers without access to these technologies. For more information, see **research** by our economists on the inequity of flat-rate electricity tariffs.

We advocate strongly for demand tariffs at a network level, as such tariffs price electricity more efficiently, and provide customers with the opportunity to manage costs or recieve benefits through different energy choices. This incentivises demand response in a way that benefits individual customers as well as the wider system - including through the use of new products and technologies, such as battery storage, to manage demand peaks. We will continue to work with our customers and other stakeholders to promote the benefits of network tariff reform.

For more information on pricing access to the network and how it promotes more efficient investment in and use of distributed energy resources, please refer to the **public policy engagement** section.

#### **Energy affordability**

We support a shared-responsibility approach to addressing energy affordability issues across the community, which takes into account the responsibilities and strengths of customers, industry, government and the community sector. We also understand that every household is different and that situations change. As an energy company, we are putting in place mechanisms to better identify, respond to, and change to meet the needs of our customers.

### We are committed to consistently improving our products, services and engagement with vulnerable energy customers.

In FY17 we launched our 'A Fairer Way' package. To ensure that discounts are accessible to those consumers who would benefit most from them, our A Fairer Way package aims to deliver fairer outcomes for all consumers, as well as incentivise broader public engagement with the competitive retail energy market to find consumers the best deal.

Under A Fairer Way:

- customers participating in our hardship program, Staying Connected, will be offered guaranteed (non-conditional) discounts.
- concession card holders and hardship program customers are not charged late fees.
- we will write to customers with a registered concession card who remain on 'old' standing offers, offering to assess their needs and move them to a better plan.
- Victorian customers on a Standard Retail Contract who receive a government energy concession will also automatically receive a 15% discount off their electricity usage charges, which applied from 5 March 2017.

### A Fairer Way delivers a fairer deal for households who rely on affordable and secure energy supplies as they deal with the full spectrum of cost of living pressures.

We encourage our customers to shop around for the best deal, and we support greater focus being placed on government comparison websites to ensure that they are easy to use, provide relevant and accurate information, and that customers are more aware of them.

Throughout FY17, we continued to implement improvements to support vulnerable energy consumers, which were established in our \$6.5 million Affordability Initiative.

From an operational perspective, we have focused on changing our processes to ensure that appropriate support is being provided to vulnerable customers at the right time, from the point of sign-up through to addressing the issues faced by customers with long-term payment difficulties. Early intervention to prevent and reduce debt accrual is a significant focus. For example, we provide our customers with alerts to notify them of high bills in advance, as well as flexible payment arrangements and monthly billing, which provides customers with the option of breaking bills down into smaller and more manageable amounts.

#### Financial counselling resources increased

In response to feedback from the community sector that financial counselling resources are under strain, and acknowledging the important role that counsellors play in assisting customers to address complex debt issues, we have invested \$1.2 million over three years to increase financial counselling resources in Queensland, New South Wales, Victoria and South Australia. We have established partnerships with YFS Logan, Wesley Mission, Kildonan UnitingCare and Uniting Communities, to ensure that additional resources are dedicated to supporting vulnerable consumers, connecting them wherever possible with appropriate support services. Our strategic 'Energy for Life' partnerships complement these financial counselling partnerships in addressing hardship; to learn more, visit the community investment section.



"In an environment of rising electricity prices, it is important for AGL to focus on working with all of our customers to help them manage their energy COSts" – Gabby Sundstrom, Manager AGL Assist



# Integrated partnerships to assist vulnerable consumers with high energy consumption

Research that we released in 2015 highlighted that customers participating in our energy hardship program, Staying Connected, consumed, on average, around 40% more grid-connected electricity per year compared to an average customer base. High energy consumption can be driven by a large number of factors including poor building fabric, large numbers of people in the one home, additional time spent within the home, and home appliances that have a relatively lower upfront capital cost, but are less efficient resulting in greater energy use.

We have been working with community organisations and state governments to develop targeted and integrated pilot programs to help vulnerable customers reduce energy consumption and costs. These programs involve the installation of solar panels and efficient appliances, combined with education programs which target behaviour change to encourage greater energy efficiency. In FY17 we announced a \$1 million partnership with the New South Wales Government to deliver solar energy to assist in reducing energy costs for customers experiencing energy hardship. Through this program we are working with social housing providers to deliver eligible households with solar panels, a digital meter, and an AGL Solar Command energy monitoring system. Tenants will also receive a home energy visit by Kildonan UnitingCare, who will connect them with other social support services and provide information on how to maximise the benefits of their new solar package. This program builds on the \$1.5 million of energy saving partnerships in South Australia and Victoria that were established in FY16.

#### Greater access to information for customers

In FY16, recognising the importance of ensuring customers have access to information about products and services in the energy market, along with where to go for assistance, we funded the joint Queensland Government and Queensland Council of Social Service 'Switched On Communities' program. The program provided grants to local community organisations, which were used to improve information available to Queenslanders in relation to: electricity usage, electricity pricing and contract conditions, how to compare offers to find a better electricity deal and how to access assistance and consumer protections. This program not only provided information available to Queenslanders in general and vulnerable households but also enhanced the knowledge of community sector organisations supporting consumers engage the energy market.

## Support for customers impacted by domestic violence

# AGL's integrated domestic violence policy supports our people and customers who are impacted by domestic violence.

Our customer support policy ensures calls are transferred to hardship specialists, the availability of flexible payment arrangements and debt relief on a case-by-case basis, and additional steps are taken to protect account privacy.

Acknowledging the shared-responsibility of addressing domestic violence across all sectors in the Australian community, AGL was the first corporate to participate in and support the Victorian Government's 'Victoria Against Violence' campaign and the Queensland Government's 'Not Now, Not Ever' campaign.

For information on how we support our people who may be impacted by domestic violence, visit the diversity and inclusion section.

#### FY17 performance

We closely monitor data reflecting key affordability indicators in order to gain insight into our customers' experiences in paying their energy bills, and in order to most effectively structure our customer support programs. Visit the **data centre** to view or download information on:

- the average debt levels of customers on Staying Connected, and
- the number of wrongful disconnections that we have performed over FY17.

#### **Related Information**

Affordability Initiative
A Fairer Way
Supplementary Report (FY17): Social and Economic Inclusion

#### In this section

Customer experience Energy prices and affordability Distributed energy services and energy efficiency

#### **Customers**

# Distributed energy services & energy efficiency

#### Distributed energy services & energy efficiency Provide a market-leading range of energy products and services that maximises customer value from distributed energy technologies. ⚠ Met ONot met in Progress FY18 and FY20 targets FY17 performance Status FY18 target Proportion of AGL fleet comprising electric We have committed to purchasing 36 electric Leading by example by increasing the proportion of vehicles: **10%** (by 2018) vehicles (equivalent to 10% of current fleet) electric vehicles in our fleet to at least 10% by the end of 2018 Due to changes in AGL's strategic direction, Number of smart connections<sup>1</sup>: 1 million (by 2020) this target will not be continued

There are major shifts occurring that are transforming the energy industry from the traditional centralised generation model to a more distributed and integrated energy supply chain (to learn more, refer to the **energy market evolution** section). This significant transformation is being driven by new emerging technologies, evolving policy, and changing customer demands. Consumers are now more energy conscious and energy literate, and expect to be able to actively manage their energy consumption decisions. As the electricity grid continues to modernise, distributed energy resources such as storage and solar PV technology can help facilitate the transition to a more efficiently-operating grid.

We recognise that to remain competitive in this changing landscape, energy companies must innovate and focus on creating a broader suite of energy services for customers, such as solar, storage, demand management services and digital meters.

Proliferation of smart devices, connected homes, technology innovation and personalised customer experiences are key drivers for us as we respond to and drive market need.

During FY17, we focused on the following initiatives:

• Virtual Power Plant (VPP): In August 2016, we announced the launch of what will be the world's largest virtual power plant.

The VPP involves 1,000 connected batteries installed in homes and businesses in South Australia, providing 5 MW of peaking capacity and offering customers the opportunity to save on their energy bills.

Our customers who are participating in the VPP trial are expected to save around \$400 to \$500 per year on their energy bill, in addition to receiving a heavily discounted battery. Partnering with us in the demonstration project are the Federal Government via its renewables funding agency, the Australian Renewable Energy Agency (ARENA), and leading US-based energy storage and management company, Sunverge. In March 2017, the first stage of the VPP went live, allowing orchestration of the energy discharge from the battery into the grid via a cloud-based platform.

- Solar energy trading technology: To improve our customers' energy experience, we have been
  investigating ways that customers can derive more value from distributed energy resources,
  including solar panels and battery storage. In May 2017, we led a project to investigate how
  'blockchain' technology could be used to enable households with solar panels, batteries and 'smart'
  air conditioning to trade or share the excess electricity they generate.
- Solar Smart Plan: We were the first major Australian electricity retailer to launch a solar power purchase agreement (PPA) offer in February 2015: the Solar Smart Plan. Under this plan, customers buy their power from a solar system which is installed on their roof and owned and maintained by AGL for a fixed term. The Solar Smart Plan has been key to our solar customer growth, especially in the commercial and industrial customer segment.



"As a leading energy retailer we see our role as a key provider and enabler of new, customer-centric energy solutions that use innovative technology, including the sharing or trading of energy to advance our low carbon future" – Elisabeth Brinton, Executive General Manager New Energy



Virtual Power Plant 1,000 connected batteries 5 MW capacity

- AGL Solar Command: We developed AGL Solar Command in FY15 to enable monitoring of production from customers' systems. This subscription service can identify potential performance problems and help optimise solar energy generation, savings and energy use. In FY16, this monitoring was made accessible via the AGL Energy App, allowing our customers even greater insight into their energy usage. AGL Solar Command Check was also launched in FY17 (and made available to customer from mid-July 2017). This is a free service, that will enable customers with Active Stream digital meters to receive regular health check status updates giving guidance on the working efficiency of their solar systems.
- Business energy services: AGL offers a range of energy efficiency services designed to help businesses of all sizes reduce energy costs. Our specialists work with business customers to understand their requirements and budget, and design and deliver custom, engineered solutions with professionally project-managed installation. Product and service options include solar PV system installations lowering daytime energy costs, energy efficient LED lighting upgrades to reduce energy consumption, and the use of power factor correction technology to reduce peak power demand.
- Electric vehicles (EVs): We are striving to remove the obstacles to EV ownership and to drive the uptake of electric vehicles in Australia. In November 2016 we launched our 'all you can eat' capped energy plan, enabling EV drivers to charge their vehicle at home as much as they want for \$1 per day (including carbon offsetting). Building on from the pilot program commenced in 2015, we are also continuing to develop EV products for corporate fleets. Our bundled offering is a complete and tailored solution for EVs including needs assessment, charging, procurement options, energy supply, reporting and certification. Through FY17 we continued to scale our business customer offering in line with new EV model launches. We are also committed to purchasing EVs for our own business fleet: in May 2017 we announced at the launch of the Electric Vehicle Council our commitment to purchase 36 plug-in hybrid electric vehicles (PHEVs), to meet our target for 10% of the AGL fleet to be electric by mid-2018.

# **Energy efficiency**

We continue to aim to provide our residential and business customers with a superior choice for competitive and connected products and services that provide them with control, comfort, and convenience in managing their energy efficiently.

# We're focusing significant effort on providing customers with the enabling technology to be able to manage their energy usage efficiently.

We have embraced technological advancements which assist customers to manage their energy usage through significant developments to our mobile apps and MyAccount services including:

- enabling support for all types of meters, both digital and standard, for electricity and gas, so that the apps and MyAccount services can now support all energy customers
- enabling smart meter customers to track up-to-date energy usage and costs as well as viewing bill projections
- enabling customers greater flexibility and functionality to make fast and easy payments, through the ability to securely store credit card and payment details
- releasing of a version of the AGL App for Android devices, and broadening the accessibility of the App to almost all smart phone users, and
- integrating AGL's Solar Command functionality to allow customers to see in real time their solar system health, the energy being produced by the solar system, and the energy being consumed by the premises, thereby allowing customers to optimise utilisation of the energy produced by their solar systems.

We also make energy-saving tips readily available to our customers, including information on our website on practical ways to conserve energy at home. This includes a 'do-it-yourself Energy Audit', which is a fast and effective way for residential customers to identify the largest energy-using appliances in their home.

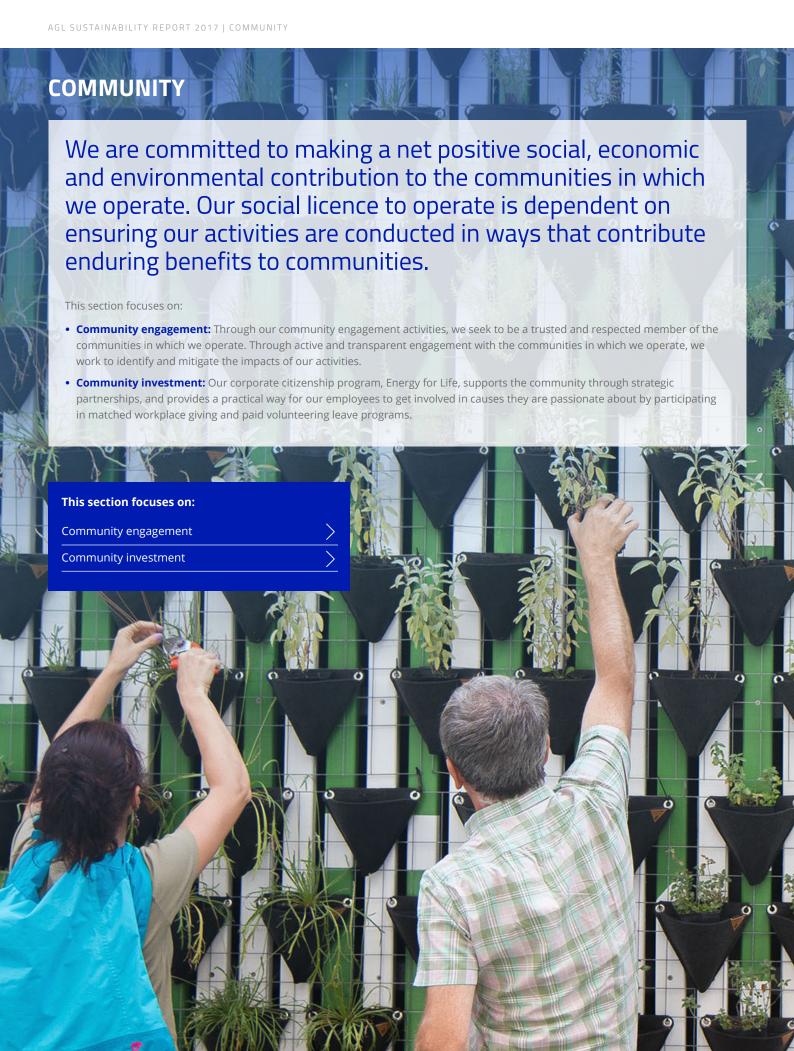
<ol> <li>Com</li> </ol>	nprises r	premises	with	solar	PV.	batteries	and/or	digital digital	meters.

#### **Related Information**

Virtual Power Plant

# In this section

Customer experience Energy prices and affordability <u>Distributed energy services and energy efficiency</u>



## **Community**

# **Community engagement**

Community engagement  Work side by side with the community to develop mutually beneficial energy projects  Met ONot met In Progress					
FY17 targets	FY17 performance	Status	FY18 target		
AGL will host at least four community events at each operational/ development site <sup>1</sup> to allow for community views to be raised and discussed in public <sup>2</sup>	At least four events were held at each site, as detailed below	Ъ	AGL will host at least four community events for each operational/development site <sup>3</sup> to allow for community views to be raised and discussed in public <sup>2</sup>		

# We strive to make a net positive social, economic and environmental contribution to the communities in which we operate.

At AGL, our aim is to be a trusted and respected member of the community. During FY17, we implemented a new Community Engagement Policy which sets the benchmark for how we engage.

Endorsed by our CEO, the Policy sets out our commitments regarding community engagement, including to:

- **Be proactive:** We will engage with communities early and often, so that we understand and respond to their interests and concerns.
- **Be flexible and inclusive:** We will offer a range of engagement opportunities that are tailored to the variety of needs and preferences of the communities in which we operate.
- **Be transparent:** We will act honestly and ethically in all our dealings with the communities in which we operate.
- **Support our employees and contractors to engage well:** We will provide tools, peer support and training to enable our staff to deliver on our commitment.
- **Continuously improve our engagement:** We will evaluate the effectiveness of our engagement and modify it as needed to ensure that our activities address community needs and expectations.

Our Policy is supported by a Community Engagement Management Standard, which outlines the activities and minimum performance requirements required to deliver enduring benefits to the communities in which we operate.

The Policy and Standard are aligned with the International Association of Public Participation (IAP2) Quality Assurance Standard (2015) and the Accountability AA1000 Stakeholder Engagement Standard (2011).

During FY17, we also developed a Complaints Management Framework which provides a consistent approach to managing, recording and responding to complaints and feedback received from members of the community. The framework is consistent with the best practice principles outlined in the Australian and New Zealand Standard *AS/NZS 10002:2014 Guidelines for Complaint Management in Organisations*. We consulted our stakeholders when developing the framework, including the National Wind Farm Commissioner, to ensure that the framework reflects industry best practice. The framework will be placed on public exhibition early in FY18, to enable members of the community to review it and provide input.

We prioritise open, transparent, and honest communication and engagement with local communities through a range of different channels including:

- holding regular Community Consultative Committee (CCC) or Community Dialogue Group (CDG) meetings in many of our project areas
- sharing information about our assets, and being available to answer questions on our 24-hour community complaints and feedback hotline and at our local project offices



"Hosting site visits provides us with a great opportunity to understand the key interests of the community"

Clare Wilkes-Mildren, Senior Manager
 Government & Community Relations

- · hosting community events and site tours
- holding public information sessions
- undertaking regular letter box drops to inform local residents of our activities, and
- publishing electronic newsletters and community updates in local newspapers, on social media and on our website.

During FY17 we set ourselves a target to host at least four community events at each operational or development site. We met this target, as outlined in the table below.

Site	Number of events during FY17
AGL Loy Yang	23
AGL Macquarie	4
AGL Torrens	9
Broken Hill Solar Plant	6
Camden Gas Project	8
Coopers Gap Wind Farm Project	14
Dalton Power Project	4
Gloucester Gas Project	5
Hallett wind farms	6
Hydro power stations (combined)	8
Macarthur Wind Farm	7
Newcastle Gas Storage Facility	5
Nyngan Solar Plant	5
Oaklands Hill Wind Farm	4
Silver Springs Gas Storage / Wallumbilla LPG Plant	9
Silverton Wind Farm	6
Somerton Power Station	4
Wattle Point Wind Farm	6

The following sections outline the approach we have taken to community engagement over FY17, with a focus on our newer projects and those that have generated particularly strong community interest. The **community investment** section provides details on how we support local communities through our various community funds and support programs.

Visit our map for location and other details about each facility and project.

# Renewable generation facilities

#### **Operating wind farms and solar plants**

We operate several wind farms and utility-scale solar plants in Victoria, New South Wales and South Australia. CCCs are in place for our operating wind projects in Victoria and New South Wales. The CCCs aim to foster relationships with the communities, to share information about the projects and to address concerns and topics of interest. In addition to the CCC meetings, we engage with our community in less formal ways, including holding one-on-one meetings, participating in local events and activities.

There has been strong interest amongst these communities about our activities, and strong participation in our engagement activities. We have found that many community members are interested in learning about renewable energy technologies and we have held site tours and other activities to accommodate this interest.

In the case of our wind farms, we continue to actively engage with a small number of stakeholders who are concerned about perceived health impacts associated with infrasound<sup>4</sup> generated by wind turbines. AGL has continued to engage with these community members, the wider local community, and other key stakeholders. During FY17, we facilitated visits by the National Wind Farm Commissioner to our Hallett and Wattle Point wind farms in South Australia, and our Oaklands Hill Wind Farm in Victoria, to observe operations and speak directly with neighbouring landowners. At our Macarthur Wind Farm in Victoria, we have been engaging closely with landowners who remain concerned about our operations.



"All of our wind farms are located in agricultural areas with cropping, sheep and cattle, so creating partnerships with those existing industries is very important to us" – Simon Kelley, Renewables Manager

In addition, we are continuing to support new scientific research into wind turbines and infrasound health impacts, announced by the National Health and Medical Research Council in 2016. For example, we are working with researchers from Flinders University on a study measuring the effects of noise from our Hallett Hill Wind Farm on sleep at neighbouring residences. Refer to the air, waste and noise section for further information.

We have worked closely with the communities of Broken Hill and Nyngan where our solar plants are located, and have received a largely positive reception to our activities. There has been strong community interest in the solar plants, and communities generally value the associated economic and social benefits that the solar plants have delivered.

During FY17 we established a competition to design the viewing platform at the Broken Hill Solar Plant. Partnering with the Broken Hill Art Exchange, the competition drew over 100 entries from artists, designers, architects, and engineers from the local community and nationally. Two of the four finalists were from the Broken Hill community.

At our Nyngan Solar Plant in FY17, we unveiled a viewing platform which provides an opportunity for locals and visitors alike to safely view the solar plant. As part of this, we have worked with the local Aboriginal Land Council to create a bush tucker garden and an Aboriginal leadership program which was delivered across four local schools, from pre-primary to high school. The program had a healthy lifestyle message of 'stay clean, live the dream', which also aligns with AGL's health and safety values. The achievement of these joint programs would not have been possible without the assistance, co-operation and support of the community, neighbours, local council and local businesses.

#### **Hydro-electric facilities**

We operate hydroelectric power stations in Victoria and New South Wales, with the three primary schemes located in the Kiewa, Dartmouth and Eildon catchments. We control the generation from our various hydro sites from a central facility at Mt Beauty, situated in north-east Victoria, which allows us to quickly respond to changes in customer and electricity system requirements.

AGL actively participates in a number of local advisory groups linked to our hydro assets, focused on human health, public safety, environmental management and recreational use of the lakes and other infrastructure associated with the schemes. These groups include the Rubicon Steering Committee, Dartmouth Pondage Advisory Group, the Municipal Emergency Management Planning Committee, and the Bogong Village sub-committee.

AGL hosts visits across the hydro network to improve knowledge of our operations. Groups hosted during FY17 included Engineering Australia, regarding the nomination of the Kiewa Hydroelectric Scheme for heritage recognition, and a tour of Eildon Power station as part of the Water Industry Operators Association's Annual General Meeting.

During FY17, AGL continued to work collaboratively with Alpine Council to support the Mt Beauty Men's Shed. AGL contributed around half the land for the shed site under an agreement with Council. We also contributed skilled labour through our volunteer day, and donated and loaned hardware and equipment to facilitate electrical wiring and renovations of the shed. We have also worked with the shed to reduce its electricity costs by providing discounted solar PV panels and a reduced-rate 'friend of AGL' energy account.

#### Projects under development and construction - Silverton and Coopers Gap wind farms

In May 2017, construction commenced on the 200 MW Silverton Wind Farm in New South Wales. The Coopers Gap Wind Farm in Queensland received planning approval in May 2017.

We engaged with the community during the preparation for construction at Silverton and the planning approvals process for Coopers Gap. At Silverton, key issues raised included minimising construction traffic impacts, operational noise, visual impact and scenic amenity. Key issues raised by the community and addressed in the environmental impact statement (EIS) for Coopers Gap included noise and vibration, visual impact and scenic amenity, shadow flicker from rotating blades, electromagnetic interference, aviation and other hazards and traffic impacts.

At both Silverton and Coopers Gap, we are providing some local residents with free solar systems so that local people receive an energy benefit.

CCCs are in place for both these projects. The meetings are open to the public and continue to be well attended by the local community and key stakeholders. Communities are increasingly interested in the employment and business opportunities generated by projects of this scale. At Silverton, AGL ran two local industry briefings in collaboration with our lead contractor, as part of our commitment to local procurement, which were attended by more than 50 local suppliers. We also continue to engage with members of the community to manage the impacts of construction and operations.

To learn more about our renewable generation portfolio, visit the renewable energy section.

#### Gas production and exploration operations

In FY16 we announced that natural gas exploration and production would no longer be a core business for the company. Over FY17 we continued to engage with the community about the Camden Gas Project, which will remain operational until 2023, and the Gloucester Gas Project, where we are undertaking rehabilitation activities in preparation for ceasing operations.

#### **Camden Gas Project**

We continue to actively engage with the Macarthur community regarding our Camden Gas Project. In November 2016, we announced the schedule for Stage One of the rehabilitation of coal seam gas wells in the Camden Gas Project. Our community engagement supports the full scope of our activities (operations, closure planning, decommissioning and rehabilitation) as we work towards full closure of the project in 2023.

We do this through regular information and website updates, regular briefings and meetings with local community groups and the Camden CCC. Camden CCC meetings are held bi-annually, with quarterly updates provided to members. The Camden Gas Project held its 50th CCC meeting in March 2017.

#### **Gloucester Gas Project**

Our community engagement activities in Gloucester will gradually decline as decommissioning and rehabilitation activities end. While there is no further permanent AGL presence in Gloucester following closure of our Gloucester office in February 2017, we are continuing to engage with landholders, the Gloucester CCC and community members regarding project decommissioning and rehabilitation activities and project milestones.

AGL has established a \$2 million Gloucester Independent Community Legacy Fund to support initiatives that bring long-term, sustainable economic benefit, training, or employment pathways to the greater Gloucester region. During FY17, the independent panel which was set up to administer the Fund awarded grants worth a total of \$1.69 million which are expected to generate over 60 new jobs in the region. The balance of the Fund is expected to be distributed in FY18.

We also continue to contribute funding for a community development consultant in a Regional Strategic Partnership role. Fully funded by AGL, the consultant works with government, businesses, community groups and locals to support organisations to identify and apply for community grants. The role leverages opportunities to enhance local industry and grow the greater Gloucester regional economy. This role also provides advice and support for the Gloucester Independent Community Legacy Fund Panel. Through this position, we have played a major role in securing New South Wales Government investment of \$8.3 million to upgrade major road infrastructure during FY17.

#### Thermal electricity generation facilities

As outlined in the **electricity generation** section, we operate a diverse portfolio of electricity generation assets. However, in line with our Greenhouse Gas Policy commitment not to extend the life of any of our coal fired power stations, we have commenced discussions with communities in the Latrobe Valley (where AGL Loy Yang is located), and in the Hunter area (where AGL Macquarie is located), about how transitional arrangements may be structured over the medium to long term. Liddell and Bayswater power stations in the Hunter Valley are scheduled for closure by 2022 and 2035 respectively, and Loy Yang A Power Station and Mine in the Latrobe Valley are planned to close by 2048. Further discussion is provided in our Rehabilitation Report.

Given this strategic direction, during FY17 we ran an active and open program of engagement with the communities surrounding our thermal generation facilities. We will continue this approach into FY18 as we lead a conversation in the community about planning for the closure of these assets, rehabilitation, and reuse of the sites.

#### Loy Yang A Power Station and Mine

Over FY17, we refined our community engagement process at AGL Loy Yang in line with planning for ongoing operations and site rehabilitation. Following the findings of the Hazelwood Mine Fire Inquiry, the Victorian Department of Economic Development, Jobs, Transport and Resources requested that the most recent Work Plan Variation include a greater focus on community engagement. In accordance with requirements under the *Mineral Resources (Sustainable Development) Act 1990*, we submitted a Work Plan Variation which outlines our engagement approach and this Plan is currently being assessed by the Victorian Government.

In preparing the Plan, we undertook briefings with a wide range of community members and community groups, including Committee 4 Gippsland, Voices of the Valley, Flynn Landcare Group, Traralgon South District Association, neighbouring landholders, and the Latrobe City Council. We also briefed local regulators including the Department of Economic Development, Jobs, Transport and Resources, Southern Rural Water, and the West Gippsland Catchment Management Authority, and also held detailed briefings with local Federal and State MPs.

We undertook activities to obtain feedback from the community on AGL Loy Yang's rehabilitation plans and ongoing environmental management (including fire preparedness and fugitive dust). Engagement activities included our annual community forum which focused on rehabilitation and improving community engagement, targeted stakeholder briefings, site tours, and a pop-up information stand at Traralgon Plaza in July 2016. We also consulted on the Work Plan Variation with the AGL Loy Yang Environment Review Committee (ERC), which is similar in function to CCCs that operate in other jurisdictions. The ERC meets every two months, and considers and discusses the environmental, social and community implications of AGL's Loy Yang power station and mine. We are currently undertaking consultation relating to the creation of a CDG to act as a pathway for information to flow between the organisation and the community. It is envisaged that the CDG will operate alongside the mandated ERC. Feedback from engagement undertaken regarding the work plan variation has been overwhelmingly positive, with participants valuing the opportunity to gain a greater level of information regarding the operations and rehabilitation of the mine.

AGL Loy Yang was a critical contributor to the Committee for Gippsland's Report Our Region Our Future: Securing an economic future for Gippsland and the Latrobe Valley which was released in July 2016. The Report makes recommendations regarding the development of a planned pathway forward, to ensure the future prosperity of the Latrobe Valley with the Victorian Industry Minister welcoming the report at the launch event.

At the invitation of the Victorian Government, AGL Loy Yang has been involved in providing input into the curriculum for the Gippsland Tech School – a high-tech learning environment, with innovative education programs linked with local industry delivering real world learning to students. The curriculum design incorporates elements relating to new energy technologies. Students from eight participating schools across the Gippsland region will be able to access the Tech School for specialised programs. We are working with the program's co-design partner, Foundation for Young Australians, in developing options (prototypes) of how the Gippsland Tech School may run in and across the school curriculum.

During early 2017, we undertook extensive consultation with the community about the movement of Travelling Stacker 4 (TS4) from the overburden site into the base of the mine to prepare for progressive site rehabilitation. The TS4 project cost \$60 million and took over three years to plan. The movement of TS4 along a 19 km path included the disconnection of Basslink and the closure of the Hyland Highway for 48 hours.

In March 2017, Hazelwood Power Station was closed permanently. Recognising the impacts that the closure would have on the local community, in March 2017 AGL became the first power generator to sign an agreement with the Victorian Government to enable retrenched workers at Hazelwood to transition to other Latrobe Valley power generation sites.

#### **AGL** Macquarie

Our engagement activities demonstrate that community support in the Hunter region for Liddell and Bayswater power stations has remained favourable over FY17. AGL Macquarie continues to play an important role in the community, as a large, stable employer, a substantial economic contributor and long-term active community participant.

We recognise the impact that closing Liddell and Bayswater power stations, by 2022 and 2035 respectively, will have on the Hunter community. That's why we established the Hunter Energy Transition Alliance in FY16, bringing together industry, education, government and community partners to help identify future jobs and opportunities for new energy investment and skills development for the Hunter region. In FY17 we released the Hunter Energy Transition Alliance Blueprint Report, setting the foundation and guiding principles for engagement, planning and project development over the coming years.

In addition we engaged the Newcastle Energy Institute, based at the University of Newcastle, to support a Hunter region economic diversification and technology development research and training agenda.

During FY17, we commenced the process to re-establish a CDG. An Expression of Interest process for members has commenced. The CDG will be in important vehicle for community engagement and mutual understanding over the coming years.

As reported in FY16, Lake Liddell was temporarily closed following detection of *Naegleria fowleri* amoeba in the lake. In FY17 the decision was made to permanently close the lake to recreational activity in the interests of public safety. We have assisted with improvements to the Lake Liddell public camping facility, including additional fresh water tank storage, and will continue engagement with the Lake Liddell Recreation Area Trust, Muswellbrook Shire Council and New South Wales Government agencies to assist with the ongoing operation of the recreation area.

#### **Torrens Island Power Station**

Following the 'system black' event on 28 September 2016 in South Australia, we have invested significant energy to engage with all levels of government to advocate for policy reform, communicate commercial challenges and to propose potential solutions. For more information on how we engage with government about challenges facing the energy market, refer to the **public policy engagement** section.

During FY17, AGL deferred plans to mothball four generating units at the Torrens Island Power Station and announced an investment in a gas fired peaking plant at Barker Inlet – both decisions were made to increase energy supply in the state.

Our community engagement activities at Torrens Island Power Station included hosting visits from university groups, eager to learn more about the power station and use it for the basis of their studies. Groups from the University of Adelaide, University of South Australia and Flinders University visited during the year.

The station also expanded on a partnership with the University of Adelaide's Ingenuity program during the year – a program which supports final year Engineering, Maths and Computer Science students to showcase their work. We committed staff expertise to a series of panel discussions, briefing sessions and judging panels in the lead up to the showcase expo.

We also continued our sponsorship of the Australian Marine Wildlife Rescue Organisation (AMWRRO), based on Torrens Island, which undertakes vital rescues and rehabilitation of marine animals. To read more about how we invest in community groups, see the community investment section.

# Proposed gas fired power station in the Upper Lachlan Shire, New South Wales

As identified in the **energy market evolution** section, load shedding events in New South Wales and South Australia during FY17 demonstrated that ensuring secure, reliable and affordable energy supply is a national priority.

In March 2017, AGL lodged an application with the New South Wales Government to extend, for a further two years, the approval for a gas fired peaking plant at Dalton in the Upper Lachlan Shire, southern New South Wales. AGL is examining whether to pursue the plant in order to meet peak energy security needs. The approval was originally granted in July 2012, with a five-year term. The application was on public exhibition until mid-April and 400 submissions were received opposing the proposal. AGL will release a response to submissions report in early FY18 and is undertaking active engagement to understand community views.

From March 2017, AGL undertook an active engagement program to explain the project approvals process and provide accurate information about the proposal. A public meeting was held which was attended by more than 120 people. A CCC is being established under new guidelines released by the New South Wales Department of Planning and Environment with an independent Chair and will hold its first meeting in early FY18.

Information updates were provided to community members within 10 kilometres of the site via a letterbox drop, and door knocking activities, emails and updates on our website were also undertaken.

#### **Economic contributions to local communities**

We invest in the communities in which we operate through local procurement, local employment opportunities and a structured program of community investment. We recognise that these activities can assist communities to thrive, and we are committed to contributing to the ongoing success of these communities.

Visit the **community investment** section to see how we have contributed to local communities through our various Community Funds and Community Support Programs.

- 1. This target applies to operational/development sites that are located within a distance of 5km, by road, of a residential community comprising at least 250 people.
- 2. Given the relatively close proximity of AGL's hydro-electric schemes to each other, these sites are together considered as a single site for the purposes of meeting this target.
- 3. This target applies to operational/development sites located within a distance of 5km, by road, of a residential community comprising at least 250 people, excluding operating facilities that generate less than 0.1 TWh/pa (based on FY16/17 generation figures). Notwithstanding the above restrictions, this target also applies to AGL Macquarie, Newcastle Gas Storage Facility, Silverton Wind Farm and Coopers Gap Wind Farm.
- 4. Infrasound is sound waves below the lower limit of human audibility or below 20 Hz. Sound at or below these levels is considered to be inaudible to the human ear.

# **Related Information**

AGL Asset Map

In this section
Community engagement Community investment

## **Community**

# **Community investment**

Community investment Contribute to the organisations in our communities that are important to our employees and customers  Met Not met In Progress						
FY17 targets	FY17 performance	Status	FY18 target			
Employee Volunteering participation rate: <b>35%</b> (head count basis)	Employee Volunteering participation rate: <b>16%</b> (head count basis)	500	Employee Volunteering participation rate of AGL's Enterprise Leadership Team: <b>90%</b> (head count basis)			

Our corporate citizenship program, Energy for Life, is just one way we are partnering with the community. Established in 2003, Energy for Life supports the community through strategic partnerships, and gives our people the opportunity to get involved in causes they are passionate about by participating in matched workplace giving and paid volunteering leave programs.

During FY17, we established an Energy for Life Leadership Committee (comprised of senior representatives from across our diverse operational sites) to provide visible leadership support and championing of the program right across our business.

## Strategic partnerships

We are investing more than \$3 million over six years from 2012 in Energy for Life strategic partnerships.

Recognising that energy costs can be a cumulative financial stress to those in financial hardship, we established three strategic partnerships with community organisations focusing on the areas of prevention and education; intervention, resource and capacity building; and crisis support.

These partnerships complement ongoing commitments to addressing hardship through regulatory obligations, hardship programs such as Staying Connected and our overarching Affordability Initiative (refer to the energy prices and affordability section of this report).

- The Smith Family: Sharing the belief that education has the power to transform lives and break the cycle of disadvantage, we are supporting the education of 340 school-aged children from disadvantaged backgrounds through The Smith Family's Learning for Life program. In FY17, we contributed nearly \$240,000 to The Smith Family under this partnership agreement. 189 child sponsorship relationships have been established with AGL employees. Our people also support The Smith Family by volunteering their time to mentor students through the iTrack mentor program.
- St Vincent de Paul Society: St Vincent de Paul Society's home visitation program delivers financial and non-financial support to families in need. As well as providing financial support to this program, together with St Vincent de Paul we developed 'Energy Advice Packs' containing information and advice for households about available support, retailer hardship programs and simple tips to save energy around the home. In FY17, we contributed \$350,000 to St Vincent de Paul Society under this partnership agreement.
- Cancer Council Australia: Responding to unforeseen situations like a cancer diagnosis can affect the financial position of many households. We are providing funding for Cancer Council Australia's Financial Assistance Program, which provides grants to families affected by cancer to help cover necessary living costs. In FY17, we contributed \$33,000 to Cancer Council Australia under this partnership agreement.

As part of our commitment to promote safety in the workplace and home, we have also established a partnership with the Julian Burton Burns Trust.



"AGL is proud to support the diverse group of charity partners and the significant contributions they make to the communities in which we all live" – Marg Mitchell, Manager Corporate Responsibility • Julian Burton Burns Trust: Recognising that scalding from hot water is one of the most common causes of burn injury in the home, we are partnering with the Julian Burton Burns Trust to support burn prevention and education through South Australia's BurnSafe Schools Program. In FY17, we contributed \$19,250 to Julian Burton Burns Trust under this partnership agreement.

#### **Employee volunteering**

Our 'Employee Volunteering' program gives our people the opportunity to take one day of paid volunteering leave every 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 our people, promoting teamwork and building morale.

Our people can take volunteering leave in a variety of ways, including getting involved in team projects, pursuing individual interests and participating in AGL-led initiatives. In FY17, AGL's Executive Team spent their volunteering day with Oz Harvest, creating 187 nutritious gourmet meals for people in need. Our CEO, Andy Vesey, as well as Executive General Manager Organisational Transformation Alistair Preston volunteered their time and expertise with Cancer Council NSW. In June 2017, AGL Executive General Manager Lisa Harrington, and General Manager AGL Loy Yang Steve Rieniets participated in the Vinnies CEO Sleepout, raising funds and awareness about homelessness in Australia.

Some other volunteering opportunities that have been taken up by our people over the course of FY17 included sorting and delivering gifts and food hampers to disadvantaged people with The Salvation Army; packing 1,000 candle bags to raise \$20,000 worth of funds to help young people at the Oasis Youth Support Network; and planting 4,500 plants, removing 2,800 wheelbarrow loads of weeds and distributing 7,000 wheelbarrow loads of mulch at the Healesville Sanctuary.

We set ourselves a target for FY17 to achieve a volunteering participation rate of 35% (by headcount). Disappointingly, only 16% of our people recorded a volunteering leave day in FY17, down from 22% in FY16. Despite falling short of our goals, we are proud that this represented 4,386 hours being given to the community by our people.

Through AGL's Affordability Initiative (refer to the energy prices and affordability section), we are working to leverage our existing relationships and programs aimed at long-term alleviation of financial hardship. A 'Train the Trainer' initiative was piloted with St Vincent de Paul Society conferences across Sydney, where our people provided St Vincent de Paul Society volunteers with training on how to read energy bills, available energy concessions and tips and advice on how to save energy.

# Employee giving and fundraising

Our 'Employee Giving' program allows our people to make regular pre-tax payroll contributions to our Energy for Life charity partners. We match these donations dollar-for-dollar (up to an annual cap of \$200,000), effectively helping our people to double the impact of their donations.

The charity partners included in our Employee Giving program are: Australian Marine Wildlife Research and Rescue Organisation, beyondblue, Cancer Council Australia, CARE Australia, Julian Burton Burns Trust, RSPCA, St Vincent de Paul, The Salvation Army, The Smith Family, Westpac Rescue Helicopter Service, White Ribbon Australia and WWF-Australia.

During FY17, the average monthly participation rate in the Employee Giving program was 8.3%, up from the FY16 rate of 7.7%. Donations to these charity partners through the Employee Giving program totalled \$183,000 in FY17 (including donations from our people and AGL's matched contributions), a 4% decrease from FY16 when \$190,700 was donated, reflecting a slight decrease in the average amount donated per participating employee.

In addition to funds raised through Employee Giving, together with our people we raised \$103,600 through charity partner fundraising events in FY17. This year we were proud to be the first corporate to support CARE Australia through their new Disaster Response Depot fundraising platform. Our people donated emergency supplies to 'virtual pallets' to restock CARE Australia's Brisbane warehouse, so that CARE Australia can help communities prepare for and recover from disasters. We raised over \$26,000 for CARE Australia through this fundraiser (including donations from our people together with AGL matching). On the basis that donations made today can have up to seven times the impact of a donation made after a disaster strikes², we are proud that funds raised could provide up to \$182,000 worth of value to vulnerable communities.

Visit our data centre - Employee Giving and event fundraising



#### Valuing our contribution to the community

We invest in the communities in which we operate through local procurement, local employment and a structured program of community investment. We recognise that these activities can assist communities to thrive, and we are committed to contributing to the ongoing success of these communities.

Our community investment activities encompass cash grants, contributions and in-kind support. Community investment priorities are determined through external community consultation, an understanding of the demographic profile and needs and aspirations of the communities in which we operate, operational project plans and identification of project-related and cumulative impacts.

We are evolving our community investment program with a strong focus on shared value outcomes, so that our investment responds to both community needs and aspirations and our strategic business direction. Our refreshed community investment framework, which we will report on next financial year, will be based on robust assessment criteria and be supported by a continuous improvement framework.

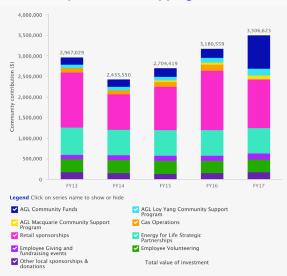
Our community investment (including cash, volunteering and in-kind contributions) in FY17 has been valued<sup>3</sup> at over \$3,506,622, comprising \$3,196,546 in cash donations, \$1,000 in-kind and \$309,076 in time.

We break down our 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 AGL Community Funds, other local community initiatives, contributions arising from key retail and corporate sponsorships, and other charitable donations.

Visit the data centre for a breakdown of our community contributions by **charitable cause** and **motivation for investment**.

- Amounts reported under 'Employee Giving and fundraising events' represents AGL's matched funding only, not the donations given by employees.
- A community fund is a set amount of investment in a specific community in which AGL operates. Funds are allocated through a publicly-advertised expression of interest process which is open to all organisations and associations operating within the community. Community funds do not include ad hoc sponsorships or donations (cash or in-kind).
   A community fund/grant is set up to meet
- A community fund/grant is set up to meet ongoing community engagement and investment commitments whilst we plan to decommission, exit or sell those particular assets. Funds are disbursed on an ad hoc basis rather than through a publicly advertised expression of interest process. Prior to FY17, the Camden, Gloucester and Newcastle Gas Storage Facility contributions were classified as community funds rather than funds/grants.

# Community contribution by program area



# View in data centre

- 1. Energy Advice Packs are updated periodically. Visit the AGL Blog for the most recent version of the packs.
- 2. https://www.care.org.au/depot-learn-more/
- Until FY12, AGL was a member of the London Benchmarking Group (Australia and New Zealand) (LBG) and used the LBG model to value community contribution. Since FY12, AGL has continued to use the methodology from FY11 to allow comparability and trend analysis.

#### **Related Information**

**Energy for Life** 

# In this section

Community engagement **Community investment** 

Community contribution by program area

# **PEOPLE**

A diverse and inclusive workforce is a key enabler of a successful organisation. We invest in our people so we can deliver on our strategy.

This section focuses on:

- **Employee engagement:** In our rapidly changing energy industry, maintaining a high level of engagement is vital to attract and retain talented people and to optimise business results.
- **Talent:** Attracting and retaining the right people and developing their skills and experience is one of the most critical challenges and opportunities we face as we embrace transformation.
- **Diversity and inclusion:** We take pride in our diverse and inclusive workforce. We believe that diversity in the experiences, backgrounds and perspectives of our people enables us as a company to have a better understanding of our customers and a greater ability to engage more genuinely in the communities in which we work.
- **Health and safety:** We are committed to providing our people with a safe and healthy place to work. The wellbeing of our people is critically important, as our people are our greatest assets.



## **People**

# **Employee engagement**

# 

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

Our industry is transforming rapidly, and we are responding by creating an agile culture. Maintaining a high level of engagement is increasingly important for attracting and retaining talented people and, ultimately, for the delivery of business results.

To help build our culture and drive engagement, we are focusing on:

- · aligning, connecting and consistently reinforcing our strategy
- making the customer connection stronger for everyone at AGL
- refreshing our values aligning them closely to our strategy
- creating a vision of leadership for the future, and
- defining new ways of working that become our habits.

As identified in our FY16 Sustainability Report, we now measure engagement every two years. This change aims to provide sufficient time and opportunity to plan, deliver and measure outcomes of engagement action plans. We plan to undertake our next engagement survey during FY18, and we've set a target to increase our engagement levels to 75%. Visit the **data centre** to see our previous employee engagement results.

# Refreshing our values

Our company values guide the desired behaviours, attitudes and decision-making practices of our people as they go about their work each day. With our new company identity, we've taken the opportunity during FY17 to refresh our values to bring to life the behaviours that will support our new direction and purpose.

The new values were developed with a range of inputs and in consultation with AGL people (including the Executive Team and their direct reports), and customer insights gained through our brand work. They have a strong link to our previous values and emphasise the new thinking and practices that will underpin our success as we move forward.

Our people are being introduced to the new values through a range of initiatives, with the aim to build strong alignment between the company's values and employees' individual values and drivers, which is a key factor in driving employee engagement.

Our values are:

• Safety and beyond: Caring about our people, making it safe to speak up.

In our business safety comes first, because physical and mental wellbeing are fundamental to a successful workplace. We create a supportive environment, where we feel safe to challenge the norm, to speak up, to say what we mean. Safety is a shared responsibility; by taking care of each other, AGL becomes a better business for all.

• Sustainable thinking: Thinking of the future today, creating a sustainable tomorrow.

Taking care of the environment and the community we operate in, is something we consider in everything we do. We are future-focused, proactive and adaptable to change. Every decision we make today is based on always thinking ahead to find the right path forward.



Visit our Data Centre Employees by location • Inclusive of all: Inclusive of all experiences, united in our success.

We welcome all and harness our diversity through trust and respect for one another. We seek diverse views, enriching our thinking to drive greater performance. We all work together for the success of AGL.

• Focused on what matters: Focused on our customers, going further to deliver value.

All that we do leads to our customers so we consider them in everything we do, and strive to enrich their experience. We relentlessly push ourselves to go further, to not only improve what we do but to exceed expectations. We give our focus and energy to all the things that matter to AGL's success, always acting honestly and with integrity.

## Creating a great place to work

The way we work at AGL needs to keep in step with changes occurring in our society, including an ageing population, carer responsibilities, worker expectations, and technological changes (see our economic transformation report for more information). We are focusing on a range of benefits that are valued by our people and attractive to others who may see AGL as a place they'd like to work.

- All roles flex: We recognise how important it is for people to balance their work and personal commitments in a way that enhances their wellbeing and meets the needs of the business.
   We are creating a workplace where working flexibly is the norm, rather than the exception, which means that we consider flexibility (in some form) for all new and existing roles. 60% of respondents to AGL's 2016 Engagement Survey said they had worked flexibly in the previous 12 months, with flexible start and finish times the most popular form of flexible work (39% of respondents).
- **Dress for your day:** Recognising that dress is an expression of individual difference and that diversity is a driver of success, in March 2017, we introduced a new 'Dress for your Day' policy for our office-based people. Where an employee's role does not require personal protective clothing to be worn for safety purposes, 'Dress for your Day' provides our people with the opportunity to wear smart casual attire, subject to their work requirements for the day.
- **Digital transformation:** Through the digital transformation project, we are investing in our people and business through new processes that transform the way we work by unlocking value and uplifting capacity and performance. The program will focus on transforming our employees' experience, our processes and our performance with advanced tools that allow us to focus on what we do best. AGL will be able to make better decisions by having one source of truth to enable us to be agile and prepare for the changing face of the energy sector in Australia. The program will transform the way we work and bring the employee digital experience to life across many processes from procurement of goods and services, and work management at our operational sites, through to recruitment, performance management, payroll, health and safety, and financial reporting.
- Smarter working: For more than three years now, we have been transitioning our corporate offices to 'smarter working' environments, combining people, places and technology to facilitate the development of an anticipatory culture. During FY17, we moved into new, smarter working environments in Sydney and Brisbane. Our new head office at 200 George Street, Sydney, has been awarded the 6-Star Green Star Rating Interiors Certification, which represents excellence in environmentally sustainable design.

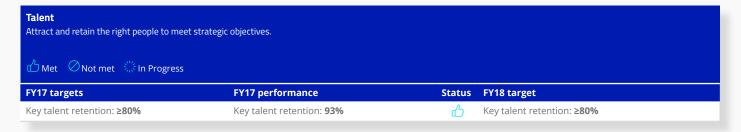


"Flexible working allows me to spend time with my children at a really important stage of their life" – Chian Kee, Head of Legal (Retail & New Energy)

In this section

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# Talent



Attracting and retaining the right people and developing their skills and experience is one of the most critical challenges and opportunities we face as we embrace transformation in a rapidly evolving industry.

## We invest in our people so we can deliver on our strategy.

We need people with the right skills and who are the right fit for our business. Our customers and other stakeholders benefit by dealing with enthusiastic and engaged people, and our business benefits through decreased attrition rates. In short, a positive stakeholder experience is reflected in our bottom line and in shareholder value.

# **Employment value proposition**

Our Employment Value Proposition (EVP) describes the unique rewards and benefits (tangible and intangible) we offer in return for the skills, capabilities and experiences that our people deliver. Communicating the EVP to our people and the external candidate market helps us to attract and retain the right people in the following ways:

- **Attraction:** Attraction of talent, particularly passive candidates or candidates from different markets where our organisation may not be well known.
- **Engagement:** Ensures that our message to the external workforce is an accurate reflection of our culture, and encourages our people to act as our advocates.
- Branding: A strong EVP creates a strong employer brand to attract talent from the external market.
- **Retention:** Retention of key talent within the business via a consistent EVP message ensures that our people's motivations are aligned to what our business offers so they are more likely to be engaged and succeed at AGL.

#### Talent management

Our Talent Management Program provides appropriate learning and development opportunities for all our people, especially leaders, and comprises four key areas:

- Identifying critical roles: Identifying critical roles continues to be a focus to ensure there is an identified pipeline of talent. These roles pose a significant business risk if vacant because they are key to our new business development, revenue generation or operational management. Critical roles are typically difficult to fill quickly with an external hire if there are no ready internal successors. Profiling of critical roles is undertaken to enable 'role success' to be defined and then used to develop and source talent.
- Succession planning: To ensure the sustainability of our 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 talent being actively developed internally and/or identified in the external market.
- Building talent pipelines: We are focused on identifying organisation-wide talent pools and building bench strength for key roles. Talent is a quarterly agenda item for the Executive Team and business unit talent sessions are held as input to those discussions. Outputs include target lists 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 enables proactive career planning for key individuals needing critical experiences or representing a retention risk.



"We attract key talent by having great career development opportunities and an excellent remuneration and benefits program" – Graeme Sennett, Manager Remuneration, Policies & Reporting

- **Talent metrics:** We report (internally) on the bench strength of our senior leaders, as well as development moves, recruitment and succession plans to the Executive Team and the People and Performance Board Committee.
- Talent management systems: An end-to-end review of the talent management process and supporting systems was undertaken in FY16. Implementation of recommendations will be delivered through the enterprise resource planning transformation which commenced this year (refer to the employee engagement section).

#### **Developing our people**

We provide a suite of learning and development opportunities for our people. Key aspects include:

- We deliver a structured induction program for all new starters that includes receiving a comprehensive information and welcome pack, completing compulsory compliance training modules and attending an AGL Welcome Day.
- Our online learning platform, Empower, provides a central portal for the delivery of compliance training and offers our people improved access to learning and development opportunities.
- We offer a 'Delivering Lean and Agile Six Sigma' training program. Participants are required to
  complete a knowledge test on the methodologies and show practical application by driving
  improvements to processes relevant to their business unit. During FY17, we celebrated the
  graduation of 51 people who achieved Green Belt qualifications and four people who achieved
  Black Belt qualifications through this training program.
- Our Assisted Education Program supports our people who are completing formal qualifications at secondary and tertiary level, by providing financial support and allowing time off work to study.

Our leadership development programs provide training and development opportunities to all levels of leadership. We regularly review our leadership development programs to ensure we have the leadership capability that we need as we transform to meet the changing energy environment. Key leadership development activities during FY17 included:

- **Propel Leadership Program:** This program supports development of frontline leaders in our corporate offices, with 50 participants during the period.
- GOLD (Group Operations Leadership Development) Program: This program supports development of frontline leaders in our operational sites. This program combines on-the-job observation and coaching with classroom education and is being progressively rolled out across operational sites. A cohort of 73 frontline leaders across AGL Torrens, Mount Beauty and AGL Macquarie operations participated in the program in FY17.
- Illuminate and Illuminate Plus: These programs form AGL's leadership development program for women. AGL's Board, Executive Team and senior leaders attended a graduation event for the 14 women who participated in the Illuminate Program and a further 5 senior female leaders who participated in the Illuminate Plus program. The program combines group work, one-on-one coaching and workshops with participants' leaders. Participants in the Illuminate Plus also have the opportunity to shadow Executive Team members. The program is achieving very positive results with 100% of participants reporting increased confidence and resilience post program and the majority taking up broader roles or promotions within 12 months post program. Development continued in FY17 with a cohort of 21 women currently involved across both programs.
- Leaders of all levels are also able to participate in one to two-day leadership programs run throughout the year.

During FY17, over 136,000 hours of training¹ (averaging 39.3 hours per FTE) was delivered to our people, including over 3,600 hours of leadership training, over 13,000 hours of compliance training, over 55,000 hours of contact centre training and more than 61,000 hours of group operations technical, safety and systems training.

# **Turnover**

Total turnover, which includes voluntary turnover (attrition) and involuntary turnover, decreased to 15% in FY17 from 19% in FY16, as organisational transformation activities consolidate.

Attrition decreased to 9% in FY17 from 10% in FY17. A breakdown of attrition rates and new hires by age and gender is available in the data centre. Attrition rates for female employees have fallen from 18% in FY16 to 12%. There has been an increase in attrition rates for employees in the age 60 and above age brackets due to a number of older, longer-serving employees leaving operational business units.



During FY17, the retention of key talent<sup>2</sup> across AGL was 93%, up from 84% recorded in FY16, based on total turnover, reflecting the reduced volume of organisational change which displaced some key talent as business focus and skills changed in FY16. This met our target to keep retention of key talent above 80%, and highlights that AGL continues to provide an employee value proposition that retains those in the senior leadership pipeline.

# **Enterprise bargaining agreements**

In negotiating new enterprise agreements, AGL is seeking to balance the long-term interests and sustainability of our people, our customers, and the community.

During FY17, we continued negotiations for new Enterprise Agreements at AGL Loy Yang, AGL Macquarie, and the Newcastle Gas Storage Facility.

AGL Loy Yang: During FY17, we continued to bargain for a new Enterprise Agreement at AGL Loy
Yang with the assistance of the Fair Work Commission who facilitated the bargaining conferences.
Bargaining is being conducted with a 'single bargaining unit' (SBU) comprising each of the on-site
unions and several individual employee representatives.

In an effort to resolve the drawn-out bargaining dispute and secure the operational flexibilities sought by AGL, AGL Loy Yang applied to the Fair Work Commission to have the 2012 Enterprise Agreement terminated. This application was approved, with termination effective 31 January 2017. As a result of the termination of the Agreement, several operational flexibilities and efficiencies have been able to be implemented with more to follow in due course.

In May 2017 one of the on-site unions notified its intention to take protected industrial action in the form of an indefinite number of consecutive one-hour stoppages on the performance of all work. AGL subsequently notified its intention to take employer response action as permitted by the Fair Work Act in the form of a lock out. The proposed industrial action would have compromised the safe operation of the plant and would ultimately have put Victoria's power generation at risk. As a result, the Victorian Government applied to the Fair Work Commission to have both types of action terminated. This application was approved and, as a result, the action did not go ahead.

AGL and the SBU then participated in a series of compulsory conferences facilitated by the Fair Work Commission prior to formal arbitration of any outstanding issues. The parties were able to resolve all outstanding issues and the new enterprise agreement was put to a ballot of all relevant employees. The agreement was approved by voting employees (74.6% in favour) and the new agreement was subsequently formally approved by the Fair Work Commission. The AGL Loy Yang Enterprise Agreement 2017 came in to effect on Monday 3 July 2017.

- **AGL Macquarie:** During FY17, we successfully negotiated a replacement Enterprise Agreement for AGL Macquarie. This agreement was approved by employees at a ballot and came into operation on 1 January 2017.
- Newcastle Gas Storage Facility: During FY17, we successfully negotiated an Enterprise
  Agreement for operations at Newcastle Gas Storage Facility. This agreement was approved by
  employees at a ballot and came in to effect on 2 June 2017.
- Categories include co-ordinated and structured in-house and outsourced vocational and leadership training but exclude other training organised by individuals or their leaders, such as attendance at training courses and conferences.
- 2. Not all employees are reviewed through the Talent process

## **Related Information**

AGL Careers
AGL Employee Benefits



#### In this section

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#### People

# **Diversity and inclusion**

Diversity and inclusion Build a diverse workforce and inclusive workplace culture.					
ப் Met ⊘Not met ंै In Progress					
FY17 progress against FY19 target	Status	FY19 target			
Women in the Senior Leadership Pipeline¹: 38%	5005	Women in the Senior Leadership Pipeline <sup>2</sup> : 40%			

We understand the value that a diverse workforce brings to our success as a company, and the importance of an inclusive workplace culture, in helping AGL people to bring all their energy and capability to their work.

## We're committed to building a diverse workforce and an inclusive culture.

Having a workforce that reflects the diversity of the customers we serve, and the community in which we operate, helps us do better business. We will benefit from the diversity of thought, experiences and ideas, have a greater opportunity to understand our customers' needs, and will be well equipped to anticipate the future and respond with better ideas and solutions.

A diverse workforce and an inclusive workplace culture are attractive to potential employees and provide us with an edge when competing for talent and in retaining talented people.

Our **Diversity and Inclusion Policy** describes our approach to diversity and inclusion and how these attributes are promoted and embedded throughout our business.

AGL's Diversity and Inclusion Council oversees a comprehensive strategy to build inclusion and foster diversity in all its forms across our workplaces. The Council is chaired by the CEO and Managing Director, Andy Vesey, and during FY17 comprised 14 other leaders from across AGL's major businesses and geographies, representing different diversity interests.

Our current priorities are:

- continuing to build AGL's culture of inclusion, embedding diversity and inclusion concepts and principles in our people processes, training and decision making
- expanding areas of focus to ensure support for other priority needs of our people including support for people impacted by domestic violence, accessibility for people with a disability, and continuing local initiatives for mature age workers and cultural inclusion
- building greater alignment and engagement of diversity and inclusion strategies to support the changing needs of the customers we serve and the communities in which we operate
- maintaining our focus on gender equity with an emphasis on removing barriers for women to increase their representation in leadership
- raising the bar on our work to support lesbian, gay, bisexual, transgender and intersex (LGBTI) inclusion, continuing with a holistic program that encompasses work with our employees, the community and our customers, and
- translating flexibility for our different businesses and workplaces, and equipping leaders to confidently manage a flexible workforce.

#### **Diversity survey**

Last year, we asked our people to voluntarily complete a confidential employee engagement survey, which included questions related to workforce demographics. The response rate to the survey was 69%, and the data shows<sup>3</sup>:

- 28.5% of survey respondents were born overseas, with our people identifying with over 40 different cultures and having fluency in more than 22 languages. Our workforce broadly reflects Australia's multicultural society, with the ABS estimating that 28% of the Australian population is born overseas<sup>4</sup>
- 2.7% of survey respondents identified as Indigenous, comparable with an estimated 3% in the general Australian population<sup>5</sup>
- lesbian, gay, bisexual, transgender and intersex (LGBTI) employees represent almost 8% of our workforce, with the full diversity within the LGBTI community represented within this population, including transgender and intersex. Australians of diverse sexual orientation, sex or gender identity may account for up to 11% of the Australian population<sup>6</sup>
- 4.2% of survey respondents reported having a disability. Approximately 18.3% of Australians have a form of disability.
- 52.3% of survey respondents reported having carer's responsibilities, compared to 38.2% of employees in Australia with unpaid caring responsibilities<sup>8</sup>.

#### **Gender diversity**

# Achieving gender equality is important, not only because it is fair and the right thing to do, but because it is linked to our overall performance.

There is a positive correlation between increased representation of women on company boards and in senior management positions and the achievement of better financial performance, higher employee retention rates, and enhanced corporate image and reputation<sup>9</sup>. We face similar challenges to other Australian organisations in retaining and realising the potential of female leaders who have the capability and aspiration to move into senior leadership positions.

We've set a target to increase the number of women in the Senior Leadership Pipeline to 40% by FY19. At the end of FY17, the Senior Leadership Pipeline comprised 38% women, up from 34% in FY16 as a result of an increased focus on gender diversity. During FY17, the external appointment rate of women to the Senior Leadership Pipeline was 51%, and the internal appointment rate of women to the Pipeline was around 10 48%.

#### Visit our data centre - Women in leadership

AGL's Board has also committed to achieving a target that, by 2018, 30% of the Directors will be female. This target has been met with the appointment of Diane Smith-Gander to the Board on 28 September 2016, who joins Jacqueline Hey and Belinda Hutchinson to bring the percentage of women on the AGL Board to 33%. We are one of 22 ASX 50 companies with more than 30% female representation on our Board<sup>11</sup>.

We review gender pay equity bi-annually at AGL, before and after the annual remuneration review. We assess pay equity by business unit, work level and hierarchical relativity (using non-EBA payroll data), with our most recent pay equity analysis being undertaken as of 31 March 2017. None of the 99 separately identified role groupings that enabled a male/female pay comparison (covering 1,368 positions), indicated a gender pay gap of more than 20% (between the average male and female pay for the group) that could not be explained by experience, location, or years of service. Leaders are required to consider gender equity relativities during the remuneration review process, with gender equity reporting used to validate outcomes.

Gender pay equity analytics and reporting are embedded in our annual remuneration review system. Supporting processes, such as training for leaders involved in remuneration decisions, ensure gender equity is at the forefront of people processes. Our diversity and inclusion strategy includes initiatives to address the drivers behind gender pay equity gap, including improvements to hiring practices, implementation of inclusive leadership training, and leading talent programs designed for women at emerging and senior level to support their development and career progression.

We have identified opportunities to improve our recruitment processes – ensuring we have women represented on the shortlist for senior roles and less-traditional occupations on hiring panels, and the representation of women in the senior leadership pipeline is included as a closely watched number in the monthly performance reporting and discussion with the Executive Team.

Gender diversity is monitored at all levels of the organisation. In May 2017, AGL submitted its Workplace Gender Equality Report to the Workplace Gender Equality Agency, complying with the *Workplace Gender Equality Act 2012.* 

Gender breakdowns of employees' employment status, contract type, location and turnover rates are available in the data centre.

During FY17, we launched AGL Equality<sup>12</sup>, an employee network of women and men, working together to ensure that women thrive and realise their full potential at AGL. As a network of people who are passionate about gender equality, the AGL Equality network aims to harness the energy and passion of many, to support our work to shift the gender balance. The network has developed a program of work in FY17 that is focused on attracting and developing women and advocating for gender equality, through initiatives including networking events and advocacy, and supporting new company programs and policies that drive gender equality. The network sponsored and delivered a series of events on International Women's Day 2017, including internal and external guest speakers, and reaching employees across all our major workplaces including regional operational sites.





"Our employee network, AGL Equality, engages women and men in the drive for gender diversity and a workplace where women can thrive and achieve their potential" – Karen Whittaker, Head of Organisational Development

#### We are an industry leader on parental leave support.

During FY17, we announced that, from 1 July 2017, we are increasing our paid parental leave entitlement from 14 weeks to 20 weeks, providing greater flexibility for our people who are primary carers to take essential time to bond with and care for their new babies.

Parental leave utilisation and return to work rates are available in our data centre.

#### Family and domestic violence

In recognition that individuals, organisations and communities must all play a role in changing the way we support people impacted by family and domestic violence, last year we introduced a Family and Domestic Violence Support Policy, providing AGL people with up to 10 days paid Domestic Violence Leave along with flexible work arrangements and access to counselling services through the Employee Assistance Program. This year, we also established a working group to help facilitate the creation of a safe and supportive workplace for our people who are affected by family and domestic violence. We have introduced further processes to embed our policy, and expect to deliver further training during FY18.

Refer to the **energy prices and affordability** section for information on how we are supporting customers impacted by domestic violence.

## Lesbian, gay, bisexual, transgender and intersex (LGBTI) inclusion

We continue to implement our LGBTI inclusion strategy, with the goal of driving a culture where our employees feel safe and able to contribute to business outcomes in a personally authentic way.

We aim to improve mental health within our LGBTI employee base, eliminate stigma and discrimination, and be recognised as an inclusive employer that incorporates LGBTI people in a leading edge diversity strategy.

# AGL is nationally recognised as a leader in LGBTI inclusion.

During FY17, we completed the Australian Workplace Equality Index (AWEI) survey for the third year. The Index is administered by **Pride in Diversity**, and sets the national benchmark for LGBTI workplace inclusion. The AWEI moved to a new evaluation process in 2017, significantly raising the bar on the quantum and quality of information and evidence required. AGL was awarded a Gold tier employer ranking, and was amongst the top 8.6% of employers of the 116 employers who participated in the Australian Workplace Equality Index this year. In FY16, under the previous evaluation system, AGL achieved Silver status, and was ranked 13th of the 87 companies who participated, and 6th highest publicly listed company.

In support of the approximately 8% of AGL people who identify as LGBTI, in early FY16 AGL pledged support for marriage equality in Australia by becoming a corporate supporter of the Australian Marriage Equality (AME) national campaign which advocates for a change to the country's marriage laws. We were also proud to announce a three-year partnership with the Midsumma Festival, supporting the 30th Midsumma Festival in early 2017. To promote the Festival, AGL employees speaking about AGL's LGBTI inclusive workplace were featured in posters on Melbourne's tram and tram shelter network. AGL also sponsored and supported the 2017 Mardi Gras Film Festival in Sydney and the Broken Heel Festival in Broken Hill, reinforcing our commitment to the LGBTI community.

An important part of our LGBTI strategy is ensuring that employees seeking help with LGBTI-related issues have appropriate support.

Employees can obtain information and support from a nominated member of the LGBTI Ally Network, AGL Shine. Nominated Shine members can provide advice and support so the employee can resolve the issue themselves; be a support person if the employee wants to raise the issue formally; and/or represent the employee to request AGL resolve the issue.

During the year we launched our Gender Identity and Transition Support Guidelines. The guidelines outline a framework for supporting AGL people who are thinking about, or in the process of, gender transition at work. They are designed to educate leaders on how they can create a safe and supportive environment and provide information on how to engage expert workplace support.



# Indigenous engagement

During FY17, we formed an Indigenous engagement employee working group, chaired by a member of the AGL Diversity and Inclusion Council. As an employee-driven initiative, the group's focus for FY17 has been learning more of the history and culture of Indigenous Australia, with the goal of being able to confidently discuss this aspect of inclusion in the workplace. Timed with broader community celebrations on 50 years since recognition of Indigenous citizenship rights, the group launched a web portal for employees to learn more on Australia's Indigenous culture and grow inclusion in this part of our community. The work of this group in FY17 has set the foundational support for AGL's next steps to developing a Reconciliation Action Plan (RAP).

- 1. The 'Senior Leadership Pipeline' is defined as roles at level 12 and above based on the AGL Position Framework
- 2. The 'Senior Leadership Pipeline' is defined as roles at level 12 and above based on the AGL Position Framework
- 3. Percentages based on the number of respondents.
- 4. Migration, Australia 2015-16 (2017), Australian Bureau of Statistics
- 5. National Aboriginal and Torres Strait Islander Social Survey, 2014-15 (2016), Australian Bureau of Statistics
- 6. National Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Ageing and Aged Care Strategy (2012), Department of Health
- 7. Disability, Ageing and Carers, Australia: Summary of Findings, 2015, Australian Bureau of Statistics. The ABS survey defines disability as any limitation, restriction or impairment which restricts everyday activities and has lasted, or is likely to last, for at least six months
- 8. Survey of Disability, Ageing and Carers, Australia (2009), Australian Bureau of Statistics
- 9. Refer to research conducted by the IMF on the link between gender diversity in senior positions and business performance, available at: https://www.imf.org/external/pubs/ft/wp/2016/wp1650.pdf
- 10. The internal appointment rate is approximate only, as there are occasional differences in the classification of appointments and transfers during organisational restuctures.
- 11. Gender Diversity Progress Report Volume VI, Australian Institute of Company Directors (AICD), Sep-Nov 2016
- 12. Our prior employee network for women was called AGL NoW

#### **Related Information**

AGL Code of Conduct
AGL Diversity and Inclusion Policy

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#### People

# Health and safety



The paradigm of health safety and environmental (HSE) management and leadership is shifting. To achieve our goal of zero harm we must challenge the norm, move to a more predictive model based on data and analytics, and seek HSE thought leadership from both within and external to AGL.

Strong and dedicated safety leadership and sound dynamic management systems are essential components of our efforts to achieve a 'zero harm', safe and sustainable work environment.

An effective safety culture requires pro-active commitment, accountability, and continuous reinforcement from all levels of management, including the AGL Board. The AGL Board and Executive Team review HSE 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.

Key aspects of our strategic approach to health and safety include the following:

- Values: Safety is one of our four core values (read more in the ethical conduct section). This means that:
  - in our business, safety comes first, because physical and mental wellbeing are fundamental to a successful workplace
  - we create a supportive environment, where we feel safe to challenge the norm, to speak up, to say what we mean
  - safety is a shared responsibility by taking care of each other, AGL becomes a better business for all, and
  - we care about our people, making it safe to speak up.
- **Policy:** Our Health and Safety Policy sets out our overarching commitments in relation to health and safety including injury management. The policy applies to all employees, contractors, products, services, and joint ventures under AGL's operational control.
- Strategic framework (Target Zero): Target Zero is a strategic framework which starts with the philosophy that all incidents are preventable. Target Zero recognises that our goal of zero harm is a journey, but we believe it is achievable. For FY17 there are eight key strategic priorities which are categorised under four key pillars. These are culture, systems, capability and risk. The strategy is risk based supported by data and evolving analytics, action plans, and both business unit and site based key performance indicators. These collectively provide the framework for driving change in HSE leadership, culture and performance, assisting us in achieving the goal of being a safe and sustainable business across all areas of our business and operations.
- HSE commitments: We are developing and implementing renewed statements reinforcing our
  commitment to zero harm and the behaviours expected in achieving this. The revised approach in
  the commitments reflects a wider focus from the previous approach which was heavily focused on
  our asset operations.
- Management system: Our Health, Safety and Environmental Management System (HSEMS) forms the framework by which we manage our HSE risks across the business. Our system is based on the requirements in Australian Standards AS/NZS 4801 (2001) Occupational Health and Safety



"Health and safety is central to everything we do. It means taking care of ourselves and each other at work, including feeling safe to speak up if things aren't OK" – Bradley Brooks, Manager Health & Injury Management Management Systems and AS/NZS ISO 14001 (2014) Environmental Management Systems. During FY17, AGL Macquarie (which represents around 44% of AGL's installed generating capacity) maintained third party certification to AS/NZS 4801 (2001) Occupational Health and Safety Management Systems.

The HSEMS provides the framework and hierarchy of standards, guidelines and procedures and tools needed to meet the objectives of the Target Zero Strategic Framework. It provides a platform for a consistent approach to managing HSE across our business but with the flexibility to be applied to different operational and corporate sites and situations. The system is also a key element of ensuring compliance with HSE legislation across the jurisdictions in which we operate.

Internal and external audits of the HSEMS facilitate a culture of continuous improvement. Audit findings are reflected in HSE Audit Action Plans and in improvements to the management system, strategic direction and safety programs. During FY17, the focus of the HSE internal audit program included contractor management, implementation of standards, Training and Licensing, Housekeeping and Inspections, Journey Management, Environmental Compliance, and Risk Management. Action plans for recommendations arising from the audit are monitored weekly and verified quarterly.

• Hazard, incident and near miss reporting: Our hazard, incident and near miss reporting systems are designed to ensure that issues are reported and investigated in a consistent and effective manner. Enhancements to the technology systems to further support this have been undertaken in this reporting period.

Over FY17, additional focus areas and priorities have included:

- establishing a forward looking three-year HSE strategy and program delivery model
- undertaking stakeholder engagement and diagnostic programs to assess the implementation and effectiveness of the Target Zero program
- enhancing the existing HSE technology platform in readiness for future platform upgrades
- · improving investigation quality, management and outcomes
- enhancing the capability of data capture, collation, analytics and reporting
- improving contractor HSE management and governance
- further developing the risk profiling across the business to support risk-based decision making and prioritisation of HSE programs
- launching a refreshed health and wellbeing program, including a specific focus on mental health, and
- establishing the HSE Walks and Technical Interactions programs to enhance the quality of the
  outcomes. Enhancing our HSE management structure and building subject matter expertise to
  drive Target Zero and our continuous improvement programs.

#### Safety performance

AGL measures and tracks safety performance using a number of lagging performance indicators based on reported safety incidents. We also track leading indicators to provide insight into trends to inform us on our current and future programs.

The total injury frequency rate (TIFR)¹ for employees decreased from 4.3 in FY16 to 2.0, exceeding our target of 3.9. A stretch target of a 50% reduction in contractor TIFR was set for FY17 (equivalent to a TIFR of <5.5). The total injury frequency rate for contractors decreased from 11.0 in FY16 to 5.4, exceeding our target of 5.5.

The combined TIFR for both employees and contractors decreased from 6.2 to 3.1. The decrease in the combined TIFR indicates that the implementation of the Target Zero Strategic Framework, targeted prevention and leadership programs, and the evolving HSEMS are all playing a part in the prevention of injury and illness in our workplaces. Half of the TIFR-related injuries were lacerations, with the remaining injuries equally fractures, crush or muscular related.

The occupational injury frequency rate (OIFR)<sup>2</sup> for employees increased from 1.5 in FY16 to 1.8, whereas the OIFR for contractors decreased from 1.1 in FY16 to 1.0. The combined OIFR for both employees and contractors increased from 1.4 to 1.5. All OIFR-related injuries related to an irritation of a previously acquired injury, eight of which were associated with the back or neck.

There were 13 TIFR-related and 12 OIFR-related employee incidents in FY17 compared to 29 and 10 respectively in FY16, showing a substantial decrease in TIFR-related injuries and a minor increase in OIFR-related injuries. Similarly, contractor TIFR-related and OIFR-related incidents changed from 29 and three to 17 and three respectively.



Total injury frequency rate (employees) down 53%



**1.8** OIFR

Occupational injury frequency rate (employees) up 20%

**Visit our Data Centre** Health and safety performance – employees In FY17, there was one employee and four contractor significant incidents (defined as incidents classified as 'high risk' or above, representing a significant decrease compared to FY16 (18 employee and 19 contractor significant incidents). The data indicates that in relation to significant incidents, a primary area of focus will be on reducing what has been classified as 'AGL Line of Fire' events (more that 40% of all TIFR incidents) and a focus on evolving issues such as physical health, wellbeing and mental health.

During FY17, there were 9,859 Health and Safety Walks, 4,254 Environment Walks and 6,142 HSE Technical Interactions. There were also 4,054 hazards (comprising 3,414 safety hazards and 640 environmental hazards) and 1,105 near misses (comprising 850 safety near misses and 255 environmental near misses) reported. These results reflect a substantial improvement in reporting behaviour compared to FY16<sup>4</sup>.

Visit the data centre to view AGL's current and historical performance across a range of safety indicators, including total injury frequency rate, lost time injury frequency rate, medical treatment injury frequency rate, occupational injury frequency rate and injury severity rate.

#### SafeWork NSW - AGL Macquarie

AGL Macquarie has been charged by SafeWork NSW with contravening section 19 of the *Work Health and Safety Act 2011* (NSW). The prosecution arises from an incident in which two AGL employees suffered burns due to an arc flash that occurred during maintenance work on a transformer in November 2015. AGL is in negotiation with SafeWork NSW to present an enforceable undertaking which, if accepted by SafeWork NSW, would bring the current prosecution to an end, subject to AGL complying with the terms of the enforceable undertaking.

#### Health and wellbeing

The health and wellbeing of every single person at AGL matters, because we want everyone to lead happy and fulfilling personal and professional lives. We get there by caring for ourselves and each other.

# The health and wellbeing of our people is critically important, as our people are our greatest assets.

We support the health and wellbeing of our people through a range of initiatives to ensure no person commences or continues work if they are not fit for work. We help our people to maintain and improve their health while working with AGL, whether working in an office, call centre or operating heavy machinery.

During FY17, we have delivered a range of initiatives aimed to prevent injuries and illnesses and to encourage our people to make informed choices that will enhance their health and wellbeing. These initiatives included:

- Physical health and wellbeing: Programs offered include an annual flu vaccination program; health checks; access to an online Health and Wellbeing hub with a range of updated information and resources, programs and wellness tracking tools for employees; corporate discount for health insurance; and site-based fitness initiatives including on-site yoga programs and boot camps at major offices.
- Mental health and wellbeing: A Mental Health Framework has been established consisting of the following aspects:
  - a leader-specific program providing practical strategies to help manage pressure, build psychological fitness and support others at work
  - a general awareness program for all employees
  - promotion of the Employee Assistance Program (EAP)
  - a clearly defined process for Critical Incident Response (CIR)
  - a Mental Health Procedure to guide people at all levels through the various stages of mental health exposure from identifying the signs to escalation protocols
  - a refresh of the existing intranet site to ensure this information is readily accessible to everyone, and
  - a review of the EAP has been also been completed by merging three contracts into one to improve visibility of data and ensure services meet the needs of business.
- **Injury Management:** During FY17 we have focused on improving our injury prevention, return to work and claims management processes through task analysis reviews, and have commenced the implementation of the Ascentor Injury Master platform.
- 1. Total injury frequency rate (TIFR): for injuries that arise from a single event/shift. TIFR involves the number of lost time and medical treatment injuries classified as TIFR-related in a 12 month period, per million hours worked in that period.
- 2. Occupational injury frequency rate (OIFR): number of Lost Time and Medical Treatment Injuries classified as OIFR related in a 12 month rolling period, per million hours worked in that 12 month period.
- 3. AGL Line of Fire events refer to situations where a person, or parts of a person's body, may be in the expected path of a moving object or substance that could cause injury if it makes contact.
- 4. This program commenced part way through FY16, and as such full year results are not available.

## **Related information**

AGL Health and Safety Policy

# In this section

Employee engagement Talent Diversity and inclusion Health and safety

# **ENVIRONMENT**

# We're taking action to responsibly reduce greenhouse gas emissions and manage our environmental footprint, while providing customers with secure and affordable energy.

A number of our operations have a material environmental footprint. The Australian community has an interest in ensuring that we are held to high standards of accountability for the impact of our operations on the environment.

We are working to reduce the risk to the environment and to reduce our environmental footprint by considering environmental outcomes in all our activities. The **AGL Environment Policy** outlines our approach to protecting the environment and minimising our environmental footprint in the areas where we operate, and includes the following commitments:

- We will adhere to high standards to protect the environment where we do business.
- · We will strengthen our business by integrating environmental considerations into all business activities.
- We will analyse and improve the way we do business to reduce environmental risks and impacts.
- We will use resources and energy efficiently, minimising emissions and waste.

We have established a culture where environmental principles are front of mind and part of everyday business, and which promotes excellent environmental performance, continuous improvement and the ongoing reduction of environmental risks. Our health, safety and environment management system is based on the requirements in Australian Standard AS/NZS ISO 14001:2016 Environmental Management Systems and AS/NZS 4801: 2001 Occupational Health & Safety Management Systems. The environmental management systems at AGL Macquarie and AGL Torrens (together representing 58% of our total installed generating capacity) are certified to AS/NZS ISO 14001:2016, with AGL Loy Yang (an additional 22% of our installed generating capacity) also maintaining an environmental management system that is externally audited in line with the Environment Protection Authority Victoria's 'Accredited Licensee System - Guidelines for Environmental Management System Certification'.

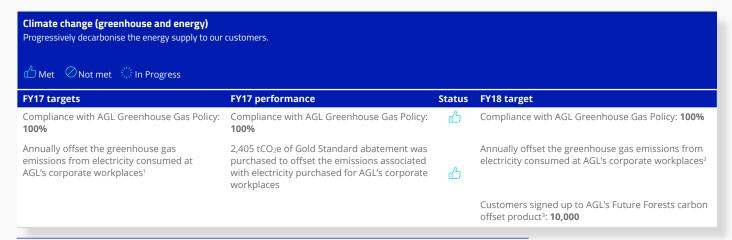
This section focuses on:

- Climate change (greenhouse and energy): The greenhouse and energy section shows how we measure and manage our greenhouse footprint, and how we are leading the transition to a carbon constrained future.
- **Renewable energy:** We are committed to the development of renewable energy in Australia, and through the Powering Australian Renewables Fund, we've commenced the construction of the Silverton Wind Farm in New South Wales.
- Water management: The management of water resources is a critical environmental issue facing Australia and one that is relevant to our business. We want to be recognised as a prudent and responsible user of water, and a user who does not adversely impact local water resources.
- **Air, waste and noise:** Emissions from our operations can potentially contribute to regional airshed environmental issues, so it is important that our operations run efficiently and within the parameters set by regulatory licences.
- **Biodiversity and cultural heritage:** We operate and develop assets on land that, in many cases, has value for reasons of biodiversity and cultural heritage, in addition to its commercial value.
- Rehabilitation: We recognise our responsibility to rehabilitate assets to an appropriate state upon the cessation of activity.

# This section focuses on: Climate change (greenhouse and energy) Renewable energy Water management Air, waste and noise Biodiversity and cultural heritage Rehabilitation

#### **Environment**

# Climate change (greenhouse and energy)



As Australia's largest scope 1 (direct<sup>4</sup>) greenhouse gas emitting business, and given that emissions from Australia's electricity generation sector comprise around one-third of Australia's total emissions inventory, we recognise that we have a key role to play in gradually reducing greenhouse gas emissions while providing secure and affordable energy for Australian households and businesses.

We are committed to structuring our activities and operating our generation portfolio in a manner broadly consistent with the Commonwealth Government's commitment to a global agreement to limit global warming to less than 2°C above pre-industrial levels. Achieving the '2 degree' outcome will require transition to a decarbonised generation sector. This is likely to take several decades given the sheer scale of replacing the existing generation fleet with low-emissions substitute technology. Furthermore, it will require an evolution of public policy as the existing framework is insufficient to deliver significant cuts in emissions by mid-century.

Our approach to greenhouse gas emissions and climate change (greenhouse and energy) is documented within the AGL Greenhouse Gas Policy. The Policy acknowledges that Australia is moving to a carbon-constrained future, and provides a framework within which we will structure our greenhouse gas reduction activities. It also presents a pathway for the gradual decarbonisation of our generation portfolio by 2050.

The Policy states that we will:

- · continue to provide the market with safe, reliable, affordable and sustainable energy options
- not build, finance or acquire new conventional coal fired power stations in Australia (i.e. without carbon capture and storage)5
- · not extend the operating life of any of our existing coal fired power stations
- close, by 2050, all existing coal fired power stations in our portfolio
- · improve the greenhouse gas efficiency of our operations, and those over which we have influence
- continue to invest in new renewable and near-zero emission technologies
- make available innovative and cost-effective solutions for our customers, such as distributed renewable generation, battery storage, and demand management solutions
- · incorporate a forecast of future carbon pricing into all generation capital expenditure decisions, and
- · continue to be an advocate for effective long-term government policy to reduce Australia's emissions in a manner that is consistent with the long-term interests of consumers and investors.



"AGL's Greenhouse Gas Policy is a demonstration of our commitment to move towards a carbon constrained future and our understanding that climate change is a significant issue to the business and the community" - Theo Comino , Manager Greenhouse &

Sustainability

We are committed to engaging with our stakeholders in relation to the issues of climate change (greenhouse and energy) and reducing greenhouse gas emissions. It is important that investors, customers, employees, communities in which we operate, the broader community, and governments are all aware of the strategic steps we are taking to reduce emissions and transition to a carbon constrained future. In September 2015, we signed up to three specific commitments under the We Mean Business Coalition, a joint initiative of the Carbon Disclosure Project, the UN Global Compact and other global organisations. These public commitments comprise using an internal carbon price, reporting comprehensive climate change (greenhouse and energy) information in mainstream reports, and ensuring responsible corporate engagement regarding climate change (greenhouse and energy) policy.

During FY16, we undertook modelling to understand the risks and opportunities associated with decarbonisation of our generation fleet. Utilising PLEXOS<sup>6</sup> modelling software, three scenarios of the National Electricity Market were analysed:

- no carbon constraint
- a carbon constraint that provides a linear pathway from emissions in 2016 to a 26-28% reduction in 2030, and
- a carbon constraint that represents a carbon budget consistent with limiting climate change (greenhouse and energy) to 2 degrees above pre-industrial levels.

The modelling shows that our power stations are likely to maintain much of their value in the shift to a carbon constrained world due to their relative low-cost and high efficiency. While the modelling is subject to significant uncertainty given the decadal timeframes involved, it is instructive for demonstrating the robustness of our assets across a range of potential outcomes.

The full analysis is presented in Carbon Constrained Future - AGL's approach to climate change (greenhouse and energy) mitigation: a scenario analysis which was published in the 2016 AGL Sustainability Report. Achieving significant cuts in emissions will require substantial new investment in renewable energy capacity and the gradual cessation of operations by existing thermal generators. You can find out more about the investments we are making in the renewable energy section, and how we are working with affected communities as we transition away from coal in the community engagement section and in our Rehabilitation Report.

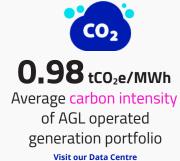
During FY17 we also launched the AGL Future Forest program, which allows customers to offset the greenhouse gas emissions association with their electricity consumption through diverse Australian forestry. We are also continuing to actively invest in other smarter and lower-emissions products and services to provide to our customers. For more information, visit the distributed energy services section.

#### Greenhouse gas emissions

We use three approaches (or 'footprints') to measure and communicate our greenhouse gas emissions. These greenhouse footprints are available in our **data centre**, and provide a complete account of the annual greenhouse gas impacts from our business:

- The operational greenhouse gas footprint covers the emissions from activities and assets that we operate.
- The equity greenhouse gas footprint sets out our share (by percentage of investment level) of the emissions from fully or partly owned assets, regardless of who operates the asset. The Equity Footprint indicates to our shareholders the greenhouse gas impacts associated with their investment.
- The energy supply greenhouse gas footprint estimates the supply chain emissions associated with the energy which we sell to our customers, covering emissions resulting from the production, transportation, distribution and consumption of electricity and gas.

We emitted 44 MtCO₂e of greenhouse gas emissions from our operated facilities in FY17



Visit our Data Centre
Carbon intensity of operated generation assets

The greenhouse intensity of our operated generation portfolio in FY17 was slightly higher than in FY16 due to a reduction in output from our renewable generation facilities. Hydro generation was below recent results primarily due to the unseasonably high rainfalls in the winter and spring months of 2016. This resulted in significantly reduced irrigation releases from the major storages of Dartmouth and Eildon, and accordingly generation from these major hydro schemes. Wind generation was also below historical averages primarily due to two planned maintenance outages at Macarthur Wind Farm during the course of the year and an unseasonably low wind resource in the months of May and June 2017.

## **Energy use and production**

Visit the data centre to view or download information about the amount of electricity generated by our operations, as well as details of the energy consumed in our operations.

- 1. Comprises offices under AGL's operational control as defined by National Greenhouse and Energy Reporting Act 2007.
- 2. Corporate workplaces comprising offices under AGL's operational control (as defined by National Greenhouse and Energy Reporting Act 2007).
- 3. This relates to the number of customers who have signed up to Future Forests during FY18.
- 4. Greenhouse gas (GHG) emission types can be explained as follows: Scope 1 all direct GHG emissions; Scope 2 Indirect GHG emissions from consumption of purchased electricity, heat or steam; and Scope 3 other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. transportation and distribution losses) not covered in Scope 2, outsourced activities, waste disposal, etc.
- 5. The term conventional is used to refer to coal fired power plants that have a higher lifecycle emissions intensity than a combined cycle gas turbine (CCGT).
- 6. See http://energyexemplar.com/software/plexos-desktop-edition/ for further information on the PLEXOS modelling software.

#### **Related Information**

AGL Greenhouse Gas Policy
Supplementary report (FY16): Carbon Constrained Future

# In this section

#### **Environment**

# Renewable energy



We are committed to playing a leading role in developing a pathway to a modern, decarbonised generation sector through investment in new renewable and near-zero emission technologies.

Australia's Renewable Energy Target requires electricity retailers (such as AGL) to progressively increase the proportion of renewable energy being supplied to customers.

In 2016, we launched an innovative new investment vehicle called the Powering Australian Renewables Fund (PARF). The fund is aimed at facilitating the construction of approximately 1,000 MW of renewable generation.

The PARF was designed to address a range of challenges faced by developers, retailers and investors. Specifically, the structure and nature of the fund enables:

- the opportunity for investors with long-term investment mandates to invest directly into renewable energy at a funding level that provides appropriate economies of scale
- diversification of risk across the supply chain (retailers, debt and equity providers and project developers) through the use of shorter term offtake arrangements and provisions for renegotiation
- efficiencies of scale with regard to financing, risk and governance arrangements leading to a reduction in cost of project delivery, and
- the ability to better manage risk through geographical diversification of renewable energy investment.

Our contribution is around \$200 million in equity to the PARF. Our equity partners' contribution is around \$800 million. In November 2016, we sold our 102 MW Nyngan and 53 MW Broken Hill solar plants into the Fund.

In January 2017 we announced financial close on the 200 MW Silverton Wind Farm project. AGL is managing the construction of this project on behalf of the PARF, and once complete, will also operate this asset until 2023 (with both AGL and the PARF having an option to extend the offtake for a further five years). The Silverton Wind Farm is expected to achieve full generation in FY18.

During FY17, we continued to progress the development of the proposed 453 MW Coopers Gap Wind Farm project, which, if built, would be the largest capacity wind farm in Australia.

By gradually increasing investment in large-scale renewable energy capacity and not extending the operating lives of existing fossil fuel based generation, we are effectively reducing the greenhouse gas emissions intensity of the Australian electricity system.

## Our portfolio of renewable energy

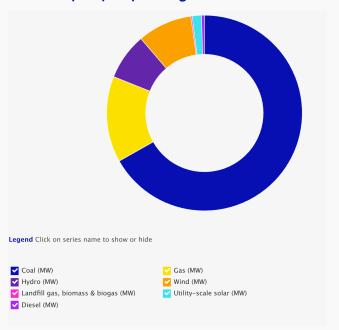
As of 30 June 2017, we operated 1,890 MW of renewable generation capacity, representing 18% of our total operated generation portfolio. We are Australia's largest non-government operator of renewable energy generation.



# Powering Australian Renewable Fund

\$2-3 billion to be invested in 1,000 MW

# Installed capacity of operated generation assets





We operate 67% of the utility-scale solar capacity in the NEM



We operate 25% of the wind capacity in the NEM

## Notes

- This breakdown includes only those generation facilities where AGL has operational control, as at 30 June.
- Installed capacity generally refers to the name plate capacity / capacity as registered with AEMO (as market operator
  of the National Electricity Market), except in circumstances where there is a network or technical constraint and where
  generators are not connected to the NEM.
- Changes in the reported installed capacity between FY16 and FY17 reflect updates to the definition of installed capacity
  to ensure consistency between sites, rather than actual changes to plant capacity. However, the increase in landfill gas
  generation capacity reflects the addition of 2.8 MW installed capacity from the new Kemps Creel Landfill generator.
- Values may not sum to total due to rounding (FY17 total: 10,246 MW).
- Historical data is available in the download file.

## View in data centre

We currently operate the largest wind farm and the largest solar plant in Australia. The 420 MW Macarthur Wind Farm in Victoria provided enough energy in FY17 to power more than 150,000 average Australian homes<sup>1</sup>, and the 102 MW Nyngan Solar Plant provided enough energy in FY17 to power more than 40,000 average Australian homes.

The combined output across all the renewable energy assets that we operate produced enough electricity to power over 620,000 average Australian homes.

Visit the data centre to view the output from our operated renewable assets, and the capacity factors for our wind farms.

We are also continuing to deliver a range of residential solar products and services to our customers. For more information, visit the **distributed energy services** section.

1. Average Australian home consumption is based on the Australian Energy Council residential electricity use and customer numbers per state for FY2015 as reported in Electricity Gas Australia 2016.

#### **Related Information**

AGL Greenhouse Gas Policy
Powering Australian Renewables Fund

# In this section

Climate change (greenhouse and energy) **Renewable energy** Water management Air, waste and noise Biodiversity and cultural heritage Rehabilitation

#### **Environment**

# Water management



The sustainable management of water resources, both quality and quantity, is a critical environmental issue in Australia and of direct relevance to our business.

Governments and the community expect the energy industry to act responsibly so that water resources are efficiently used and recycled, and not detrimentally impacted by exploration and development activities, or energy production operations.

#### Water monitoring, production and management at coal seam gas (CSG) projects

In FY16 we announced that we were exiting from CSG exploration and that CSG production at the Camden Gas Project would cease in 2023.

Understanding and protecting water resources are critical elements of the sustainable management of our CSG operations. Our water studies and monitoring networks have been developed to help the community understand what influences, if any, our former natural gas exploration and current production activities might have on water resources.

Dedicated groundwater monitoring networks were established to monitor the water level and the water quality characteristics of shallow beneficial aquifers to identify changes during CSG 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.

## **Camden Gas Project**

• **Produced water:** 'Produced water' refers to deep groundwater that is brought to the surface from coal seams as a result of CSG exploration and production activities. Due to the geology of the region, the Camden Gas Project extracts only very small volumes of produced water to produce natural gas. In addition, the coal seams in this area are separated from shallow aquifers by around 400 metres of rock, including impermeable layers, which, in combination with the small volume of produced water extracted, provides natural protection for shallow aquifers. The volume of water produced in FY17 decreased to 1.7 ML from 2.6 ML in FY16. Produced water is transported from site to a third party EPA-licensed treatment facility where most water is treated and discharged to sewer, and a small volume is treated and recycled.

In FY17, we completed a produced water management project at the Camden Gas Project's Rosalind Park Gas Plant to improve the handling and storage of produced water. Previously, produced water was temporarily stored in 15,000-litre and 65,000-litre underground concrete tanks before being processed through an onsite water treatment facility. The treated water was then stored in the lined plant flare pond prior to offsite treatment, recycling or disposal. This project involved the installation of four 70,000-litre above ground steel tanks and one 4,500-litre above ground steel tank. These tanks are double walled with leak detection and high-level alarm systems. The existing 65,000L underground tank was taken out of service. The remaining 15,000-litre underground tank has had a new cement floor poured and sprayed with an epoxy liner to reduce the risk of leakage and is now used to store only surface water run-off from bunded areas.

Visit the data centre to view or download information about the produced water quality and disposal methods at the Camden Gas Project.

• **Groundwater monitoring:** As at 30 June FY17, the Camden Gas Project groundwater monitoring program included 13 dedicated monitoring locations, which reduced from 17 in FY16. Four landholder bores were decommissioned from the monitoring network in consultation with the landholder. In addition, surface water monitoring networks across the Camden Gas Project comprised of eight perched water monitoring bores and one surface water monitoring location.

The Camden Gas Project Groundwater Management Plan provides a framework for early assessment of changes in the groundwater systems beneath the Camden Gas Project area, particularly to shallow aquifers. Monitoring and early identification enables us to prevent and/or mitigate adverse impacts. This plan outlines the monitoring program and reporting requirements to regulators.

A hydrogeological summary of groundwater systems in the region of the Camden Gas Project, which focuses on the geology, hydrogeology and groundwater use across the area, is available on our **website**. The report also outlines the potential (but unlikely) risks to shallow aquifers from the extraction of produced water, and the management and mitigation measures that we have adopted. Monitoring of produced water volumes, water levels and water quality has shown that CSG activities have not impacted shallow aquifers. Regular water monitoring reports are produced for the Camden Gas Project, and are available on our **website**. More detailed annual status reports are also published in September/October each year.

Monitoring results to date confirm our conceptual understanding of the groundwater systems within the area and indicate that CSG activities can sustainably coexist alongside other land uses with negligible impact on the shallow aquifers and surface water resources. Observed water level and water quality trends are mostly consistent with natural variations.

#### **Gloucester Gas Project**

Following our announcement in February 2016 that the Gloucester Gas Project would not proceed to final investment stage, we have commenced a process to relinquish Petroleum Exploration Licence (PEL) 285 to the New South Wales Government, and commenced a comprehensive decommissioning and rehabilitation program for well sites and other infrastructure in the Gloucester region.

- Water monitoring: As part of the operation of the Gloucester Gas Project, we conducted Waukivory pilot testing and irrigation activities in accordance with government-approved water management plans. Intensive monitoring programs provided important baseline data. Monitoring of water levels and water quality has shown that CSG exploration activities have not impacted local water resources. Monitoring results are available on our website. During FY17 we completed decommissioning of the Gloucester groundwater monitoring network.
- **Produced water:** During FY17 we received approval from the New South Wales Environment Protection Authority (EPA) to irrigate the remaining water stored in dams at our Tiedmans property, after monitoring results showed that the water quality was suitable for beneficial reuse for irrigation and livestock. This water is derived from a mix of produced water from historical exploration programs (i.e. before the Waukivory Pilot) which was blended with freshwater and treated in preparation for beneficial reuse, through irrigation, paddock runoff from the irrigation area, and direct rainfall. This approval will enable a local landholder to beneficially reuse the water for irrigation and livestock watering purposes. We will continue to monitor surface and groundwater quality of irrigation activities until we relinquish the water storage infrastructure to a local landholder.

# Water improvement projects

During FY17, we completed works to upgrade and modify the water management systems associated with the Antiene Coal Unloader. The Antiene Coal Unloader receives the majority of the coal delivered to AGL Macquarie and transfers it to Bayswater and Liddell power stations. The works involved diversion and treatment of clean stormwater runoff and upgrades to sediment basins to increase capacity and improve their treatment capability.

AGL Loy Yang has a bulk entitlement to draw water from the Latrobe River for its cooling water needs. To reduce its draw on the Latrobe catchment, AGL Loy Yang utilises the groundwater pumped from the aquifers underlying the Loy Yang mine. The groundwater is pumped from the aquifers to manage pressure in the mine batters and floor to maintain the stability of the mine. This water is of good quality and is collected separately, wherever practicable, and pumped into the power station's cooling water system, reducing the use of Latrobe River water. In addition, the AGL Loy Yang Mine fire service system is a closed loop where the run-off water from within the mine is pumped to the Fire Services Reservoir before returning for use in the mine forming a closed system. This maximises the water usage within the fire system and minimises the requirement for make-up water.

## Water recycling

Coal fired power generation consumes substantial quantities of water. Water for AGL Macquarie's Bayswater and Liddell power stations is sourced from the Hunter River (via Lake Liddell). To limit the amount of water that needs to be extracted, we recycle the process water that is used to transfer ash to the ash dams. The ash dams are designed to settle out solids to enable the return of decant water back to the station for reuse in the ash transfer process and for wash down. By doing this we recycle onsite approximately 2 GL of water that would otherwise be withdrawn from the Hunter River.

AGL Macquarie also operates water treatment plants including reverse osmosis and brine concentrators to enable the treatment and recycling of saline cooling water. By treating this cooling water, the volume of water withdrawn from the Hunter River is significantly reduced by around 10.5 GL per annum. The water treatment plant removes approximately 28,000 tonnes of salt per annum. The water treatment plants also provide security during times of drought by enabling the reuse of cooling water onsite benefiting both AGL Macquarie and other water users who withdraw water from the Hunter River.

#### Water consumption and water management

We operate hydroelectric power stations in Victoria and New South Wales, with three major schemes located on different rivers in the Kiewa, Dartmouth and Eildon catchments, and seven minor schemes. The schemes divert and harness river water (run-of-river) or draw on water from reservoirs for the purpose of electricity generation to meet intermediate and peak customer demand. The water is channelled through the water turbines, through a series of penstock controls (including gates and sluices), to generate electricity. The channelled water is then directed to a reservoir for reuse or returned to the river as flow.

The hydroelectric schemes supply, on a long-term average, approximately 1,280 MWh per annum, or about 2% of the electrical energy consumed in Victoria. Despite 2% representing only a small proportion of total customer demand, the schemes' capacity to respond to rapid changes in demand and support the electricity system in the event of other generator plant failures, is extremely valuable. Each scheme is located on different river catchments, enabling AGL to maintain operational flexibility in order to maintain its customer commitments at any given time.

For information on how we consult with our communities at hydro sites, visit the **community engagement** section.

#### Visit our data centre for:

- the amount of water consumed at our energy generation, upstream gas and corporate facilities, broken down by facility type and by water source, and
- the amount of water passed through our hydroelectric power stations as well as seawater and surface water used for cooling the AGL Torrens and Liddell power stations (respectively) that is returned to the source (referred to as 'managed water').
- ERRFR involves the number of Environment Regulatory Reported Incidents in a 12 month rolling period, per million hours worked in that 12 month period. The ERRFR target applies to the performance areas of: legislative compliance; water management; air, waste and noise; and biodiversity and cultural heritage.

#### **Related Information**

Water monitoring data



The volume of water passed through our hydroelectric generation facilities is equivalent to around 6.5 times the volume of water in Sydney Harbour.

Visit our Data Centre Managed water

#### **Environment**

# Air, waste and noise



#### Air emissions

We operate a portfolio of power generation plants, many of which involve the combustion of fuels, resulting in the emission of combustion products to the atmosphere. Our gas production and storage assets also produce emissions to air.

Emissions to air from our operations can potentially contribute to regional airshed environmental issues, so it is important that our operations run efficiently and within the parameters set by regulatory licences. Undertaking regular maintenance helps keep equipment running efficiently and we monitor emissions to verify compliance with regulatory requirements.

Air emissions are reported to the Federal Government's National Pollutant Inventory (NPI) each year. The NPI is a publicly available database of emissions from Australian industrial facilities.

FY16 saw some increases in NPI emissions data at AGL Macquarie, which were the direct result of improved emissions reporting since we acquired Bayswater and Liddell power stations. Since FY16, we have identified and implemented operating and maintenance efficiencies that have resulted in a reduction in emissions, as demonstrated in the data centre, which will be reflected in our FY17 NPI reports.

Emissions are also reported to state government regulators as required. As part of the Environment Protection Licences issued to Bayswater Power Station, Liddell Power Station, Rosalind Park Gas Plant (Camden Gas Project) and the Newcastle Gas Storage Facility by the New South Wales Environment Protection Authority (EPA), we are also required to publish air monitoring data on our website.

Visit the data centre to view or download data relating to emissions of the following pollutant types:

- Carbon monoxide (CO)
- Particulates (PM<sub>10</sub>)
- Particulates (PM<sub>2.5</sub>)
- Sulphur dioxide (SO<sub>2</sub>)
- Oxides of nitrogen (NO<sub>x</sub>)
- Volatile organic compounds (VOC)

Greenhouse gas emission data (including information about fugitive methane emissions from coal seam gas projects) is also available in the data centre, and discussed in the climate change (greenhouse and energy) section of this report.

## Fugitive emission studies at upstream gas facilities

Fugitive emissions relate to the irregular gas emissions that occur, but are not captured or controlled through an emission point, and include emissions from livestock and natural / environmental processes such as wetlands, as well as emissions from gas operations infrastructure under typical operational conditions. We conduct leak detection and repair programs on our gas operations equipment and infrastructure as part of operations and maintenance performance monitoring activities to ensure that we are consistently operating in accordance with good industry practice.



"Our Target Zero strategy is helping to maintain our focus on improving our environmental performance" – Jo Stone, Head of Environment, Health, Audit & Training • Camden Gas Project: The Leak Detection and Repair (LDAR) program implemented at Camden is a requirement of our Environmental Protection Licence and represents good industry practice. The LDAR Program is a critical operational control, which enables the operational site to closely monitor the performance and condition of plant and equipment. By identifying plant and equipment components that require repairs and maintenance, we are able to proactively manage risks relating to potential gas leaks from plant and equipment components.

As part of our LDAR program conducted during FY17, 10 leaks were identified across 13,760 gas well components and 15 leaks were identified at the Rosalind Park Gas Plant across more than 6,000 components. All repairs were recorded, completed and reported in consultation with the EPA and in accordance with the requirements of the LDAR program. The report is available on our website.

In FY17, we published the Annual Leak Detection and Repair Summary Report covering the period 22 December 2015 to 11 December 2016 for the Camden Gas Project. The report, required under our Environment Protection Licence, follows comprehensive, independent testing with highly sensitive gas detectors. The testing program uses the US Environment Protection Agency's 'Method 21' for leak detection, where the detector probe is placed at or on the component being tested. This can find leaks that are otherwise undetectable if the probe is moved just a few centimetres away.

During FY17, we installed two air compressors at the Rosalind Park Gas Plant (Camden Gas Project) to supply compressed air instead of coal seam gas to operate control instrumentation. This project has removed the need to use methane to operate instrumentation and has contributed to reducing fugitive methane emissions from the gas plant.

- **Gloucester Gas Project:** In FY16 we announced the decision to close the Gloucester Gas Project. As a result, during FY17 our activities at the Gloucester Gas Project focused on the intensive decommissioning and rehabilitation program committed to as part of closure of the project. As part of decommissioning and rehabilitation of the project we carried out standard operational leak detection activities at Gloucester Gas Project and no major leaks were identified.
- Silver Springs Oil and Gas Project: We conduct annual leak detection surveys of our processing facilities and associated infrastructure across our conventional oil and gas operations at Silver Springs, located in southern Queensland. These surveys were conducted at both aboveground and underground flowlines connecting the conventional gas wells to the processing facilities. During the monitoring period the assets surveyed included 104 wells, processing facilities at the Wallumbilla LPG plant and each of the satellite plants located at Silver Springs. Leak detection surveys were also conducted for more than 200 km of pipelines and gathering lines. The leak detection programs implemented at our conventional oil and gas operations in south Queensland represent good industry practice for maintenance monitoring and is one of the critical operational controls, which enables operational sites to closely monitor the performance and condition of plant and equipment. These programs are particularly critical for monitoring condition of oil and gas infrastructure in remote areas, where the absence of such a program could potentially lead to gas leaks remaining undetected until a significant loss of pressure indicates that repairs are required. These programs also enable operational performance and efficiency to be maintained, and the operational site to proactively manage risks relating to potential gas leaks from plant and equipment components.

#### Improvements to air emissions management and monitoring

- AGL Macquarie: The Environment Protection Licence that applies to our Bayswater Power Station currently requires continuous monitoring of nitrogen oxides (NO<sub>x</sub>) and sulphur dioxide (SO<sub>2</sub>) for one of its units, known as Unit 1. During FY17, we completed the voluntary installation and commissioning of Continuous Emissions Monitoring Systems (CEMS) for NO<sub>x</sub> and SO<sub>2</sub> on the remaining three generating units at Bayswater Power Station. The monitors are set to alarm at set levels of NO<sub>x</sub> and SO<sub>2</sub> to allow operators to act and respond to changes in emissions. The new CEMS will operate 24 hours a day, every day of the year. The units will continue to be subject to annual stack emissions testing to verify and validate the accuracy of the CEMS equipment.
  - During FY17 we also implemented a real-time PM10 monitoring network at AGL Macquarie to act as an early warning system to detect potential dust generation from ash disposal sites at Liddell Ash Dam and Ravensworth. The monitors send out alarms to site personnel indicating potential dust generation from the ash disposal sites. This system is linked to a dust Trigger Action Response Plan where the received alarms trigger management responses to stop/mitigate any potential dust generation.
- AGL Loy Yang: During FY17, we continued work on the AGL Loy Yang precipitator upgrade project. This refurbishment project involves the progressive replacement of electrodes in the plant's electrostatic precipitator flows which are used to manage particulate (dust) emissions to further enhance our controls. Each refurbishment takes approximately 20 weeks to complete.

#### Waste

Our operations produce a variety of different waste streams, which are either reused, recycled or disposed to landfill.

At our industrial sites, we seek opportunities to reuse waste, 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.

Visit the data centre to view or download the amount of hazardous and non-hazardous waste disposed and recycled from AGL's facilities. Refer to the water management section for information about the disposal of produced water.

#### Noise

The generation of noise is an unavoidable characteristic of some of our business activities. Many of our projects involve the development of rural land that is already occupied and used for other purposes by third parties. The management of noise is vitally important in such settings, where background noise levels are low and amenity expectations are high.

Some community stakeholders continue to be concerned about infrasound and low frequency sound arising from the operation of wind farms. Sound at or below these levels is considered to be inaudible to the human ear. We are supporting new scientific research into wind turbines and infrasound health impacts. For example, we are cooperating with researchers from Flinders University in a study measuring the effects of noise from our Hallett Hill Wind Farm on sleep at neighbouring residences. We continue to work closely with the National Wind Farm Commissioner and landholders neighbouring our Macarthur, Hallett and Wattle Point wind farms.

Noise monitoring conducted in FY17 at AGL's Oaklands Hill Wind Farm has confirmed that the wind farm is operating within the permitted noise levels. The Macarthur Wind Farm was determined by the Moyne Shire Council to be operating in compliance with the New Zealand Standard Acoustics - The Assessment and Measurement of Sound from Wind Turbine Generators (NZS 6808:1998) and confirmed that AGL satisfactorily met its compliance condition.

Quarterly noise monitoring conducted for the Camden Gas Project during FY17 has confirmed that noise emissions recorded at sensitive receiver locations are compliant with environmental licence conditions.

1. ERRFR involves the number of Environment Regulatory Reported Incidents in a 12 month rolling period, per million hours worked in that 12 month period. The ERRFR target applies to the performance areas of: legislative compliance; water management; air, waste and noise; and biodiversity and cultural heritage.

#### Related information

Continuous air monitoring data National Pollutant Inventory

#### In this section

#### **Environment**

# **Biodiversity and cultural heritage**



## We operate and develop assets on land that, in many cases, has value for reasons of biodiversity and cultural heritage in addition to its commercial value.

Our health, safety and environmental management system outlines the way in which potential impacts on biodiversity and cultural heritage resulting from our activities should be identified, assessed and as far as is reasonably practicable, managed and minimised prior to activities being undertaken. Our large assets and projects maintain risk registers that detail site-specific risks and risk management measures related to biodiversity and cultural heritage.

Specific information about how we manage biodiversity and cultural heritage is available on a project-by-project basis on our **website**, documented in project environmental assessments, project environmental management plans and/or other specific strategies. Of particular note during FY17:

- Newcastle Gas Storage Facility (NGSF) nest box monitoring: In August 2012, 100 nest boxes were installed on land that we own adjacent to NGSF as a requirement of the project approval. Four different box types were installed to suit a variety of arboreal mammals including sugar/squirrel gliders, brushtail/ringtail possums, pygmy possums and microbats. Monitoring of the boxes is undertaken annually. August 2016 monitoring has shown that the boxes continue to provide hollow-dependent fauna with a den resource, with 54% of boxes exhibiting signs of use (compared to 62% in 2015 and 41% in 2014). The continued observation of threatened squirrel gliders is a positive sign for this species in the area. Further information can be found on our website.
- NGSF offsets property: In May 2016, the New South Wales Minister for the Environment signed Conservation Agreements with AGL over two parcels of our land, located north of Newcastle. The Conservation Agreements satisfy a project approval commitment made to secure a biodiversity offset relating to the development of the NGSF project. The properties, together representing an area of 117.6 hectares, contain a range of biodiversity and landscape conservation values including habitat suitable for koalas and a range of other fauna species listed as vulnerable under New South Wales and Commonwealth threatened species legislation. We manage these properties in accordance with requirements of the Conservation Agreements. In FY17, property management works have included weed control, track maintenance, property inspections, waste removal and fencing improvements.
- Silver Springs oil and gas operations: Some of our site operational employees are trained and qualified fauna spotter-catchers who support fauna management across our remote oil and gas asset locations in Queensland. A number of our people are also trained as weed and seed hygiene specialists, who perform weed and seed hygiene inspections for vehicles and machinery used at our sites, including drilling and workover rigs and earthmoving equipment. Ongoing surveillance and the implementation of weed hygiene and inspection programs are critical to protecting the productive condition and agricultural land use values of the land on which we operate. Weed hygiene is also critical for the protection of native vegetation and protected flora species.



"We're committed to looking after the biodiversity and cultural heritage of the areas that our projects are located in, and minimising our environmental footprint" – Simon Garnett, Environment Business Partner, Qld.

- Macarthur Wind Farm: Breeding pairs of brolgas, which are a listed threatened species in Victoria, use the wetlands within the Macarthur Wind Farm during the breeding season each year. The 2016 breeding season brought breeding success, with a brolga chick successfully born and raised on the wind farm till fledging stage before leaving the wind farm site in late November when the family migrated back to a flocking site. This is an important result for the conservation of the local brolga community, as brolgas are listed as vulnerable under Victorian legislation. Brolga monitoring conducted throughout the Macarthur Wind Farm and surrounding area has determined that the wind farm provides breeding habitat for brolgas in the region.
- AGL Macquarie Compensatory Habitat: A Compensatory Habitat of approximately 15 hectares was established in 2006 adjacent to the Antiene Rail Coal Unloader. On 27 April 2016, a grassfire occurred as a result of rail grinding works being carried out on the Drayton Rail Loop by a third party. The fire extended into and spread throughout most of the Compensatory Habitat area. The area was assessed by suitably-qualified consultant who found that the majority of the 15 hectares had been damaged. Plans are in place to restore the area, including replacing affected trees.
- AGL Macquarie fish and platypus monitoring: We are required to conduct fish and platypus monitoring as part of the development consent for the Bayswater Power Station Water Pumping Station Upgrade to Increase Water Extraction Capacity project. During FY17, fish monitoring involved tagging 30 Australian Bass with electronic tags and installing associated receiving stations to track the bass movements up and down the weir pool adjacent to the AGL Macquarie river pumps in the Hunter River. The platypus monitoring involved visual observations and taking E-DNA samples from the river water to determine platypus activity in the vicinity of the pump station. The results of the fish monitoring has shown the bass are travelling up and down the weir. The E-DNA sampling has shown that platypus inhabit the section of the river adjacent to the river pumps. The results from the fish monitoring and platypus monitoring demonstrate that the operation of the river pumps has had no detrimental impacts on fish and platypus.
- AGL Macquarie vegetation community mapping and bio-banking assessment: In FY17 we commenced a project to map vegetation communities across our land holdings at AGL Macquarie. This project has involved the preparation of a Vegetation Management Plan which enables better management of native vegetation, including asset protection and native seed harvesting. The project has also assessed our land holdings at AGL Macquarie for bio-banking potential through the New South Wales Biodiversity Banking and Offsets Scheme, which aims to address the loss of biodiversity values caused by habitat degradation.
- **AGL Macquarie rehabilitation:** During FY17 a total of 10 hectares of the Ravensworth mine site was rehabilitated using native woodland species typical of the Central Hunter Grey Box-Ironbark Woodland Vegetation Community.

#### **AGL Biomass Policy**

In recognition of the effect that electricity generation can have on biodiversity, we have established 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.

ERRFR involves the number of Environment Regulatory Reported Incidents in a 12 month rolling period, per million hours worked
in that 12 month period. The ERRFR target applies to the performance areas of: legislative compliance; water management; air,
waste and noise; and biodiversity and cultural heritage.

#### **Related Information**

AGL Biomass Policy

#### **Environment**

# Rehabilitation

# Rehabilitation Rehabilitate sites to an appropriate state, with appropriate community consultation, upon cessation of activity. Met Not met In Progress FY17 performance Compliance with AGL Rehabilitation Principles: 100% Rehabilitation Report Status FY18 target Compliance with AGL Rehabilitation Principles: 100% (delivered through the Rehabilitation Report)

Our fleet of assets has undergone, and will continue to undergo, changes in composition. As discussed in the **sustainable business strategy** section, AGL is committed to helping deliver a sustainable energy future for Australia. An intrinsic part of this commitment, first articulated in our **Greenhouse Gas Policy**, is our plan to close all existing coal fired power stations by 2050. To provide certainty to our employees, the communities in which we operate and our broader stakeholders (policy makers and investors) we have provided dates for the closure of our major generation assets. By providing a clear pathway for the operation and retirement of our coal fired assets, beginning in 2022, we are providing our stakeholders with a transparent and clear basis upon which to engage.

In addition to our ongoing legislative and regulatory requirements, we recognise our responsibility to rehabilitate these assets and sites to an appropriate state upon the cessation of activity.

We have embarked upon a journey towards decarbonisation with a long term and strategic intent – understanding that this is a transition that must be inclusive of the views of our stakeholders.

Our approach to the rehabilitation of assets is guided by the following underlying principles:

- **Transparency:** We will provide stakeholders with information to enable better understanding of the issues related to rehabilitation of our sites.
- **Engagement:** We will undertake ongoing engagement with stakeholders to ensure a diverse range of views are considered in rehabilitation plans and processes.
- Accountability: We will publish relevant information at least annually to enable external
  assessment of rehabilitation activities.

In FY16, we undertook to conduct a detailed review of the technical characteristics and costs of rehabilitation at our major generation sites and report back. During FY17, we completed this review, which considered the rehabilitation costs of returning our Liddell, Bayswater and Torrens Island power stations to a state as near to pre-development condition as practicable. The review also assessed the costs of rehabilitating the AGL Loy Yang mine and power station to a state as identified in the final closure plan agreed with the Victorian Government. Our Rehabilitation Report provides a detailed account of our approach to rehabilitation, the outcomes associated with our major generation sites, and the future challenges in managing a just transition.

We acknowledge the expectations of surrounding communities that appropriate site rehabilitation should support agreed future land uses. We believe the longer the planning timeframes and the more comprehensive the engagement with surrounding communities, the better the opportunities for positive outcomes for all parties.

Following the review, AGL has recorded and recognised provisions of \$307 million for the estimated costs of rehabilitation, based upon returning sites to as near to pre-development condition as practicable. From this basis, we can commence an informed consultation process with impacted communities and stakeholders that considers alternative uses, potential repurposing and/or repowering. Undertaking these discussions in an environment of transparency and cooperation, we can work with communities and other stakeholders to arrive at mutually beneficial outcomes.



"In approaching the eventual closure and rehabilitation of our assets, we are committed to working long term with our people and broader impacted communities with a view to developing new industries and opportunities"

 Cameron Reid, Program Manager, Transition & Rehabilitation

# FY17 rehabilitation works Coal seam gas projects

- Camden Gas Project: In November 2016, we announced the schedule for Stage One of the rehabilitation of coal seam gas wells in the Camden Gas Project. At the conclusion of the Stage One rehabilitation program, 41 of the original 144 gas wells will have been rehabilitated. Rehabilitation of wells is undertaken with a high level of regulatory oversight by the New South Wales Government's Division of Resources and Energy and the New South Wales EPA as lead regulator, and conducted in accordance with standards set in the New South Wales Government's Code of Practice for Coal Seam Gas. We continue to engage with the local Macarthur community on the full scope of our activities (operations, closure planning, decommissioning and rehabilitation) as we work towards full closure of the project in 2023.
- Gloucester Gas Project: Following our announcement in February 2016 that the Gloucester Gas Project would not proceed to final investment stage, we commenced a process to relinquish Petroleum Exploration Licence (PEL) 285 to the New South Wales Government, and commenced a comprehensive decommissioning and rehabilitation program for well sites and other infrastructure in the Gloucester region. To-date all gas exploration wells have been decommissioned and the surface infrastructure removed from the well leases. The disturbed areas of the well leases have been reshaped and seeded for revegetation. The well leases are located in an agricultural setting and have therefore been returned to pasture for agricultural use. During FY17 we also completed decommissioning of the Gloucester groundwater monitoring network.

#### Thermal electricity generating facilities

As outlined in the electricity generation section, we operate a diverse portfolio of electricity generation assets. However, in line with our Greenhouse Gas Policy commitment not to extend the life of any of our coal fired power stations, we have commenced discussions with communities in the Latrobe Valley (where AGL Loy Yang is located), and in the Hunter area (where AGL Macquarie is located), about how transitional arrangements may be structured over the medium to long term. Liddell and Bayswater power stations in the Hunter Valley are scheduled for closure by 2022 and 2035 respectively, and Loy Yang A Power Station and Mine in the Latrobe Valley are planned to close by 2048. Further discussion is provided in our Rehabilitation Report.

- AGL Loy Yang: Under the *Mineral Resources (Sustainable Development) Act 1990*, AGL Loy Yang has in place a work plan that incorporates a rehabilitation plan. Over FY17, we refined our community engagement process at AGL Loy Yang in line with planning for ongoing operations and site rehabilitation. We submitted a work plan variation to the Victorian Government, which outlines our approach to rehabilitation of the site. In 2017, AGL Loy Yang completed a major project centred on progressive rehabilitation with the movement of the Travelling Stacker 4 (TS4) (a large piece of equipment used to distribute excess soil and earth into the mine) to the base of the mine.
- AGL Macquarie: AGL has undertaken a comprehensive study of rehabilitation options for Liddell and Bayswater power stations, along with associated infrastructure such as water supply and ash depositories. This study has assessed potential re-use of the sites and the infrastructure and forms the basis of forward planning for site rehabilitation. Mining activities on the Ravensworth No. 2 site were completed at the end of 1993. In accordance with commitments made in the Bayswater Power Station Flyash Disposal in Ravensworth No. 2 Mine Void and Mine Rehabilitation Environmental Impact Statement (EIS) dated August 1993, site management at the time (i.e. Pacific Power) proposed to complete site rehabilitation by filling the final void with fly ash from Bayswater Power Station.

Approval to extend the ash delivery and return water systems to Ravensworth Mine Void 5 and the approval of the Ravensworth South Mine Final Void Rehabilitation Management Plan was granted in late 2012. Completion of filling Void 3 occurred in May 2014, with capping completed in August 2014. Ash deposition into Void 5 started in March 2014 and it is expected to continue until 2032.

During FY17 we conducted rehabilitation of a total of 10 hectares of the Ravensworth Mine Site using native woodland species typical of the Central Hunter Grey Box-Ironbark Woodland Vegetation Community.

In addition to the rehabilitation, care and maintenance activities were carried out on site. The main activities undertaken included but were not limited to the following:

- · commencement of construction of a composting facility on Void 3 to generate compost for use in rehabilitation of the site
- continuation of ash disposal into Void 5
- use of Void 4 as an effective Water Management Storage System, and
- vegetation maintenance on Void 1 and Void 2.

#### **Related Information**

Supplementary Report (FY17): AGL's approach to rehabilitation of power generation infrastructure

#### In this section

Climate change (greenhouse and energy) Renewable energy Water management Air, waste and noise Biodiversity and cultural heritage **Rehabilitation** 

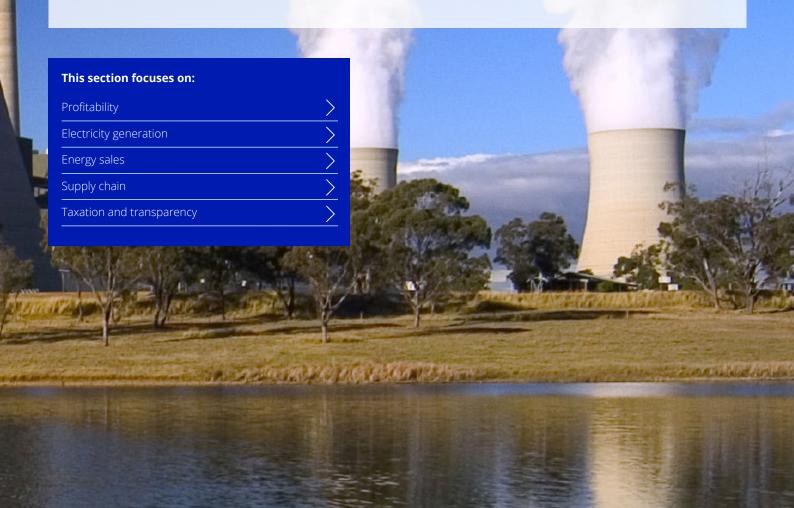
#### **ECONOMIC PERFORMANCE**

In an evolving energy market, we are guided by two key strategic imperatives: prospering in a carbon-constrained future, and building customer advocacy. Our strategic framework, with its three pillars of embracing transformation, driving productivity and unlocking growth, is about addressing these key imperatives and enabling the delivery of our main objectives in a structured way.

Refer to our strategy for further information.

This section focuses on:

- **Profitability:** We announced a record Underlying Profit after tax and improved returns to our shareholders. Our strong cash flow has enabled us to increase dividend payments and undertake an on-market share buy-back.
- **Electricity generation:** We are the largest generator in the National Electricity Market, and we also operate the largest portfolio of renewable generation assets in Australia.
- Energy sales: A core part of our strategic framework is to unlock growth, and an important way that we are doing this is by building our digital capability and enhancing our customers' experience, as we move from being a mass retailer to a personalised retailer.
- **Supply chain:** With more than 5,000 suppliers, we recognise that our suppliers can have a strong influence on our sustainability performance. We have been working to improve our procurement framework, and on adopting a consistent approach to procurement across our business.
- **Taxation and transparency:** We are committed to meeting all tax compliance obligations, and to providing transparent information about the taxes we pay and the taxation policies we employ.

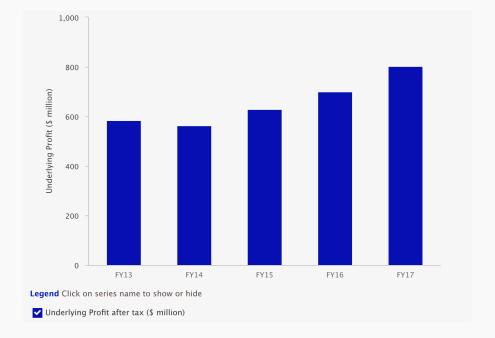


# Profitability



We delivered an Underlying Profit after tax of \$802 million in FY17, up 14% compared with \$701 million in FY16, and slightly above the guidance range of \$720 million to \$800 million provided on 28 September 2016. The principal drivers of the increase were higher wholesale electricity prices, disciplined customer price management and cost reduction initiatives. Offsetting this increase was a decline in wholesale and consumer gas margins reflecting the curtailment of gas supply, higher commodity costs and lower customer accounts.

#### **Underlying Profit after tax**



#### Notes

- 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.
- AGL has restated the result for FY13 to reflect the adoption of the revised accounting standard, AASB 119
  Employee Benefits.

View in data centre

In September 2016, the Board announced the decision to increase AGL's target payout ratio to 75% of Underlying Profit after tax in such cases that a minimum franking level of 80% can be maintained. This is a change from the previous 'progressive' dividend policy, which targeted an increase in annual dividend consistent with profit growth, and had resulted in a payout ratio of between 60% and 65% in each of the five financial years to FY16.

The Board of Directors declared dividends totalling 91 cents per share for the full FY17, reflecting a payout ratio of 75% consistent with the new dividend policy, and up 34% compared with FY16 dividends declared of 68 cents. The FY17 dividends were 80% franked.

Our total shareholder return of 42.4% was considerably higher than the 14.6% return for the broader Australian share-market (S&P/ASX100 Accumulation Index). Over five years, our total shareholder return was 117% compared with 77% for the Index.

AGL provided earnings guidance for FY18 with its full-year results on 10 August 2017 for Underlying Profit after tax of \$940 million to \$1.04 billion, subject to normal trading conditions and to any adverse impacts arising from policy and regulatory uncertainty.

On 14 February 2017, Moody's reaffirmed our credit rating, stating that the "Baa2 issuer rating reflects AGL Energy Ltd's (AGL) strong retail market position, and the low cost, scale and operating track record of its generation fleet. These credit strengths put the company in a good position to navigate the challenges presented by the evolving energy marking in Australia".

Our credit rating and disciplined management of financial risk enhances our ability to fund our operations and growth, providing AGL access to a wide range of funding sources. Our strong cash flow has enabled us to increase dividend payments and undertake an on-market share buy-back of 18.9 million shares (as of 30 June 2017) for a total consideration of \$473 million and still maintain our credit rating.

Visit the data centre for our financial performance summary, as well as key economic performance indicators, including return on equity and ratio of consumer net operating expenditure to gross margin. Detailed financial information is also available in our FY17 Annual Report.



Annual Report Financial Results



#### In this section

# **Electricity generation**

We are the largest generator in the National Electricity Market (NEM), and we have the largest privately operated portfolio of renewable generation assets in Australia.

We operate 10,246 MW of electricity generation assets across Australia, 1,890 MW of which is renewable<sup>1</sup>. More than 80% of our generating capacity is situated in New South Wales and Victoria, where our two largest customer bases are located.

The current and future earning potential of our generation portfolio is influenced by many factors, including the wholesale market price, the operational efficiency of the assets and their availability and ability to start reliably.

Visit the data centre to view or download the following information about our generation portfolio:

- installed capacity of operated generation assets
- electricity output
- equivalent availability factor, which measures the percentage of rated energy that is available
  when required
- wind farm generation, which shows the capacity factor for each wind farm.

Our assets have some of the lowest short-run marginal costs in both the New South Wales and Victorian markets, and the portfolio is flexible enough to rapidly respond to market signals. This is expected to provide near to short term opportunities. In the longer term, these assets may be impacted by climate change and other energy market related policies. The AGL Greenhouse Gas Policy provides a pathway to managing these risks.

Over the last few years, the wholesale electricity price has risen. This has been driven by a number of factors, including:

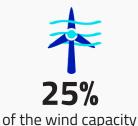
- retirement of old, coal fired generation from the market, such as the recent high-profile closure
  of Hazlewood, a 53 year old brown coal plant in Victoria, and the Northern Power station in
  South Australia
- the increasing cost of gas resulting in higher costs for gas-fired generation
- the cost of new capital to replace ageing generation fleet within the NEM, within which about 75% of thermal plants now exceed their original design life<sup>2</sup>.

As Australia progressively decarbonises its electricity system, some energy market analysts **predict** that a higher proportion of renewable energy output is likely to increase volatility within the NEM energy-only gross pool market. Government policy support to close old generation assets is also required to facilitate new investment in renewables. We have taken a leadership position on these issues, as discussed in the **public policy engagement** section. We developed the Powering Australian Renewables Fund (PARF) last year as a potential solution to encourage investment in **renewable energy**. Further information is available in the renewable energy section.

We operate<sup>4</sup>



**22%** of the total capacity in the NEM





**67%** of the utility-scale solar capacity

AGL sees opportunities for further investment in two main categories:

- Renewables: AGL has continued to make disciplined investments to grow our renewable generation portfolio. During FY17, we started construction of the Silverton Wind Farm in New South Wales on behalf of the PARF. We also progressed the development of the Coopers Gap Wind Farm project in Queensland.
- Complementary firm capacity: In an environment where the cost of renewables is falling and the gas price is high, it is unlikely that a long-term investment case can be made for baseload gas as a replacement for baseload coal. However, there may be a case for the development of gas fired peaking plants to provide a firm output from intermittent renewable plant.

Using our scenario planning processes, we are undertaking a detailed state-by-state assessment of Australia's potential energy generation requirements over the coming decades. This assessment will assist in determining the low-emissions generation and storage technologies in which we may invest as we begin to withdraw aging coal-fired generation from the National Electricity Market.

We are also continuing to review the operation of our existing portfolio to ensure it is running at its optimal efficiency and assess against market conditions. In June 2017, we announced an investment of \$295 million to develop a 210 MW reciprocating engine, gas-fired power station to be built alongside our Torrens Island Power Station in South Australia. Construction is expected to commence in the first quarter of FY18, and the power station is expected to be operational during FY19. In March 2017, we applied for a two-year extension to the Project Approval for the proposed Dalton Power Station in southern New South Wales. We are examining whether to pursue the project in order to meet peak energy security needs.

In March 2016, we announced a \$63 million project to install a Distributed Control System (DCS)<sup>3</sup> at the Bayswater Power Station. Installation of the new DCS is expected to commence in September 2017, to enhance safety, improve power station reliability and enable the plant to operate more efficiently.

- 1. Operated capacity as of 30 June 2017.
- 2. See http://www.sciencedirect.com/science/article/pii/S0313592615000156.
- 3. A DCS is a semi-automated system that monitors, controls and instructs the various parts of a power station, to help manage efficient performance and operation.
- 4. Capacity based on AEMO nameplate capacity except where registered capacity is greater than the nameplate capacity, the registered capacity is used. NEM data from AEMO NEM Registration and Exemption List as at 07/06/2017 (Excluding the Playford B and Hazelwood power stations).

#### **Related Information**

AGL Greenhouse Gas Policy Annual Report Financial Results Powering Australian Renewables Fund

#### In this section

## **Energy sales**

A core part of our strategic framework is to unlock growth. An important way that we are doing this is by building our digital capability and enhancing our customers' experience.

We're moving from being a mass retailer to a personalised retailer – using smarter solutions, technology and services to empower our customers. We're transitioning from being an owner and operator of large generation assets to an orchestrator of large and small assets, allowing energy to be generated, stored and shared by individuals.

The decline in residential electricity demand per customer that has been occurring since 2009-10 continues to show signs of flattening<sup>1</sup>. Despite an expected population growth of 30%, the Australian Energy Market Operator (AEMO) has forecast that consumption of grid-supplied electricity is likely to remain relatively flat for the next 20 years<sup>2</sup>.

The retail market is increasingly competitive. Total customer electricity sales volumes increased by 4.8% to 39,650 GWh. Consumer customer electricity sales volumes decreased by 5.1% driven by lower average customer numbers and lower average consumption driven by unfavourable customer mix changes across the residential and small business portfolios. Business customer sales volumes also decreased as a result of strategic retention activities within a competitive price driven market. Wholesale customer sales volumes increased by 33.2%, driven by increased commercial load from new and existing Wholesale Customers. Total customer gas sales volume decreased by 1.9% to 229.8 PJ due to the loss of some large business customers, partially offset by increased generation at AGL Torrens.

Our customer churn was 16.4%, and was once again lower than the 20.2% churn experienced in the rest of the market, evidence of the strong focus that has been placed on retaining high value customers.

#### Visit our Data Centre - Customer churn

In July 2017, we moved into the Western Australian gas retail market. Our current business plan is to achieve 100,000 customers in 24 months and we have earmarked a total operating and capital expenditure of around \$50 million for the project.

We continued to prioritise product innovation during FY17. For further information, refer to the customer experience and distributed energy services sections of the report.

#### **Key performance metrics**

We use a number of measures to monitor the efficiency of our consumer energy business.

Total customer accounts decreased by 0.7% across the portfolio. Electricity customer accounts declined 0.4%, largely due to the loss of some multisite accounts. Gas customer accounts declined 1.1% largely as a result of the disconnection of unidentified energy consumers.

Consumer gross margin per customer account increased \$1 or 0.5% to \$217 reflecting disciplined and effective price and discount management within a highly competitive market and a continued focus on high value customers through strategic marketing and disconnection of unidentified customers. Consumer EBIT per customer account decreased \$4 or 3.7% to \$104, due largely to an increase in consumer bad debts expense driven by increased customer pricing, as well as higher advertising spend as a result of our rebranding activities and our entry into the Western Australian gas retail market. The introduction of charges for customer paper bills and over the counter payments had a favourable impact on consumer net operating costs, as did continued growth in digital billing customers. The consumer net operating costs to gross margin ratio increased by 2.2 percentage points to 52.1%.



"The future of energy is about pushing the boundaries and creating new solutions" – Amer Hussein, Manager Government and Community Relations



Over **3.6 million** customer accounts

The cost of serving each customer account has increased by \$1 to \$70/account as a decrease in labour costs was more than offset by higher bad debts expense and increased depreciation costs reflecting further investment in growth initiatives to better serve our customers.

#### **New Energy**

New Energy, AGL's 'innovation accelerator', is well positioned for success, focused on investing in strategic partnerships and bringing new products and technologies to the market, leading transformation within the energy sector.

In FY17, as part of New Energy's broader innovation strategy, we committed to a ten-year partnership with the Energy Impact Partners global coalition.

Through Energy Impact Partners we have access to leading-edge technologies and strategic international partnerships with other energy companies, where we can collaborate to increase revenues, reduce costs and provide customers with smarter energy solutions through innovation.

Energy Impact Partners is a private equity firm that invests in emerging technologies, products, services and business models throughout the electricity supply chain, from generation to consumption. The strategic partnership with Energy Impact Partners provides greater reach for our technology scanning and incubation, and a ready process to bring new solutions to scale. It is also a channel to international markets, strategic partnerships and finance for our innovative Australian technology partners.

In FY17 our South Australian Virtual Power Plant went live. When fully developed, the 5 MW peaking capacity of the plant will make it the world's largest residential virtual power plant. Batteries installed in homes throughout Adelaide are being orchestrated to simultaneously aggregate the battery discharge via smart software in a cloud-based platform, giving critical mass to the VPP generation capabilities. We estimate that our customers in the VPP trial will save around \$500 per year on their energy bill, in addition to receiving a heavily discounted battery. The demonstration is also proving the value of batteries in the energy transition – offering an alternative capacity to thermal plants as they close, enabling high penetration of renewables in the South Australian grid by allowing intermittent renewable energy to be used when it's needed, rather than when it's produced. It is anticipated installation of all 1,000 batteries will be completed by the second half of 2018.

New Energy has also converted the meters of 17,000 AGL solar customers in New South Wales to digital meters following changes to the feed in-tariff structure. These changes have enabled our customers to derive greater value from their solar systems by enabling them to self-consume the energy they have generated, in addition to exporting energy to the grid.

#### Wholesale gas portfolio

We have continued to pursue multiple options to strengthen supply in gas and to develop our portfolio in response to a dynamic and volatile market. We have secured flexible transportation arrangements with both Epic Energy and APA, which have enabled bi-directional movement of gas. This helps us to meet both household and generation demand responsibly. We also executed a binding heads of agreement with Cooper Energy. This doubles the proposed supply to AGL from Cooper Energy's project in the Gippsland Basin to 12 PJ for eight years from 2019. Meanwhile, we continued to engage with other domestic suppliers to source further competitive supply and to leverage the flexibility provided by our strong storage position.

In November 2016, we announced an investment of \$17 million into a feasibility study for a potential LNG Import Facility in Eastern Australia as part of our approach to maintaining future security and stability of gas supply. On 10 August 2017 we announced Crib Point in Victoria as the preferred location, with a final investment decision on the project targeted for 2018.

Our gas storage facilities at Newcastle and Silver Springs continue to provide a strategic reserve of natural gas, helping to secure continuity of supply during periods of peak demand or supply disruptions.

- 1. See Australia's National Electricity Market: Optimising Policy to Facilitate Demand-Side Response.
- 2. 2016 National Electricity Forecasting Report, AEMO.

#### **Related Information**

Annual Report Financial Results

#### In this section



# Supply chain

#### Supply chain Work with our suppliers to ensure their commitment to our sustainable practices (outlined in the AGL Supplier Code of Conduct) to meet the expectations of AGL and the community. ⚠ Met ONot met in Progress Status **FY17 targets** FY17 performance FY18 target AGL Supplier Agreements signed in FY17 to AGL Supplier Agreements signed in FY17 to AGL Supplier Agreements signed in FY18 to include the AGL Supplier Code of Conduct: 100% include the AGL Supplier Code of Conduct: include the AGL Supplier Code of Conduct: Proportion of material suppliers<sup>1</sup> evaluated for compliance with the AGL Supplier Code of Conduct:

80%

With more than 4,500 suppliers, we recognise that our suppliers can have a strong influence on our sustainability performance. We have been working on improving our procurement framework and adopting a consistent approach across our business.

In FY17, we implemented a new company-wide 'Procure to Pay' Policy, which sets out principles to guide our procurement activities. One of our guiding principles is to 'maximise sustainable procurement activities' to reduce the social and environmental impacts of activities along our supply chain. Specifically, this requires all our people to seek opportunities to meet our sustainability targets by:

- implementing our sustainability principles and values
- selecting suppliers with similar sustainability values and commitments
- influencing suppliers to reduce the social and environmental impact of the products and services provided to us
- contributing to the development of local communities affected by our operations, through the creation of employment opportunities and the development of skills at a local level, and
- investing in long-term collaborations with suppliers to support the implementation of initiatives aimed at reducing the social and environmental impacts of their products/services.

Supporting the Procure to Pay Policy is our Supplier Code of Conduct, which outlines a minimum set of requirements that suppliers must adhere to when engaging in business with us. The Supplier Code of Conduct covers corporate governance, ethics, risk management, labour policies, human rights and discrimination, occupational health and safety, environmental management, community and supply chain.

All new suppliers who are engaged using AGL's supplier agreements are required to comply with obligations outlined in our Supplier Code of Conduct. This requirement is embedded in our standard contract templates to ensure that it applies to all new contracts. In addition, they may be asked to complete a Supplier Code of Conduct Questionnaire. New suppliers identified as being of high value and/ or risk may also be requested to complete a detailed Sustainable Procurement Questionnaire as part of their application to work with us. Where areas of non-compliance are identified, we require those suppliers to work with us in developing a Corrective Action Plan.

One hundred percent of AGL Supplier Agreements signed during FY17 included the requirement for the supplier to comply with our Supplier Code of Conduct. During FY17, over 93% of suppliers were engaged under our AGL Supplier Agreements. In instances where it is not feasible to engage suppliers under our standard supplier agreements, we undertake prequalification checks as part of our due diligence screening process. The checks may require the supplier (where relevant) to provide health and safety and environmental credentials, and provide referees. We may also use third parties to conduct checks on the commercial profiles of prospective suppliers.

In support of the small businesses who make up our supplier base, in FY17 we signed up to the Australian Supplier Payment Code. The Code is a business-led initiative launched by the Business Council of Australia that aims to ensure that small business suppliers are paid within 30 days of issuing a correct invoice. AGL joins 32 of Australia's largest companies (including ANZ, Qantas, Telstra, BHP, Coles and Woolworths) in supporting the initiative. By signing up to the Code, AGL commits to:

- pay eligible Australian small business suppliers within 30 days of receipt of a correct invoice or receipt of a correct product from the supplier (whichever is the later), or on mutually agreed terms, or on terms that are consistent with a standard industry practice
- pay correct invoices from suppliers on time
- provide clear guidance to suppliers about the company's payment procedures, and
- work with supplier businesses, where practicable, to apply technologies and practices that will speed up invoice reconciliation, approval and payment processes (e.g. online portals, electronic invoicing, Electronic Funds Transfer, payment cards, etc.).
- 1. A 'material supplier' is defined as a supplier whose spend with AGL is \$15 million or greater per annum, and/or who supplies goods or services that are assessed as very high or extreme risk according to AGL's Fully Integrated Risk Management (FIRM) matrix.

#### **Related Information**

AGL Supplier Code of Conduct
Australian Supplier Payment Code

#### In this section

# Taxation and transparency

We are committed to meeting all tax compliance obligations, and to providing our stakeholders with information about the taxes we pay and the taxation policies we employ.

We have adopted the Board of Taxation's voluntary Tax Transparency Code (TTC), and the tax-related disclosures in this report and our Financial Report meet the requirements of this Code.

Our Tax Risk Management Policy sets out clear objectives and accountabilities for managing tax risk. The policy is endorsed by the Board and reviewed every two years.

The key focus of this policy is to:

- · ensure all tax obligations are satisfied
- ensure tax risks are identified, managed and communicated to relevant stakeholders, including senior management and Audit and Risk Management Committee
- maintain a co-operative and transparent relationship with taxing authorities, and
- ensure the management of tax risks is appropriately resourced.

Group Tax manages AGL's tax strategy in accordance with the AGL Compliance Management Policy and the AGL Code of Conduct. Material tax risks and compliance issues are reported to the Chief Financial Officer and ultimately to the Board Audit and Risk Management Committee as part of our Governance Framework.

We manage our Australian tax obligations in line with the expectations of the Australian Tax Office (ATO). Due to our market capitalisation and gross revenue, AGL is defined as a 'key taxpayer' under the ATO's Risk Differentiation Framework. We are therefore subject to increased levels of review by the ATO.

In the interests of good corporate citizenship and transparency, we engage regularly with the ATO in a cooperative manner. This open dialogue includes an annual pre-lodgement compliance review with the ATO.

We do not have any material operations outside Australia<sup>1</sup>, and we have no tax obligations in any jurisdictions other than Australia. We have no international related party dealings. We do not engage in activities which artificially shift profits to low- or no-tax jurisdictions.

We have a strong history of paying fully franked dividends to our shareholders. The franking credits attached to the dividends paid by listed companies are a direct function of the income taxes paid each year. However, as announced at our FY16 Annual General Meeting, our dividend policy has been updated to target a payout ratio of approximately 75% of Underlying Profit after tax, franked to a minimum of 80%. The FY17 interim and final dividends were 80% franked. The reduction in franking is due to an increase in the payout ratio.

Under Australian taxation law, AGL has formed two tax consolidated groups (TCG) whereas for accounting purposes, they are consolidated and reported as one. AGL and its wholly owned subsidiaries form one TCG, and a non-wholly owned group, AGL Generation Holdco Pty Ltd (AGL Generation) form a second TCG. The latter TCG has prior year tax losses.

#### **Performance**

During FY17, we paid various taxes in Australia totalling \$750.3 million, including income tax of \$292 million. Visit the **data centre** to view our FY17 tax contribution summary.

Our effective tax rate on Underlying Profit after tax was 29.6% for FY17, which is in line with the Australian corporate tax rate of around 30%. Visit the **data centre** to view our effective tax rates in prior years.

Effective tax rate	FY17 \$m
Gross revenue	12,584
Underlying Profit before tax	1,140
Underlying income tax	(338)
Non-controlling interest	0
Underlying net profit after tax	802
Effective tax rate	29.6%

We use Underlying Profit rather than statutory profit<sup>2</sup> to determine the effective tax rate, as Underlying Profit provides a better reflection of the performance of our underlying and ongoing operations, and is the metric used to determine our dividend distribution.

Broadly, differences between AGL's effective tax rate and the corporate tax rate of 30% are related to:

- non-deductible expenses that are expensed for accounting
- · benefits arising from research and development
- · recognition of unbooked tax losses, and
- adjustments arising from accounting/tax differences on disposals.

#### **Reconciliation of Statutory Profit to taxable income**

Under the Australian Accounting Standards, income tax expense is calculated on Statutory Profit. There are differences between a company's income tax expense and the actual cash tax paid by the company, primarily because income tax expense includes amounts that were not paid/received during the financial year. These are referred to as deferred tax items.

There are a number of income and deduction items that are recognised at different points in time for accounting and tax purposes. Some examples of these items are: depreciation; capitalised interest expense; accrued expenses and provisions; unrealised gains and losses on derivatives; amortisation of intangibles; impairment of assets; and recoupment of prior year tax losses. Statutory Profit is adjusted for such differences to arrive at taxable income, which is taxed at 30%. The tax liability is then reduced for any tax offsets such as research and development expenditure.

In the final quarter of calendar year 2017, the ATO will publish details of gross revenue, taxable income and income tax for certain entities based upon tax returns for the year ended 30 June 2016.

Being in a capital intensive industry, our taxable income is generally lower than our Statutory Profit since tax depreciation is generally greater than accounting depreciation.

- 1. In February 2016 AGL announced that it made a US\$20m investment (22% ownership) in a US company, Sunverge Energy Inc. AGL also has non-controlling interests in a US fund investing in companies focused on energy impact technologies and a US company developing smart home access products and services.
- 2. Statutory Profit is prepared in accordance with the *Corporations Act 2001* and the Australian Accounting Standards, which comply with the International Financial Reporting Standards. Underlying Profit is the statutory profit adjusted for significant items (usually associated with the acquisition/disposal of investments, impairment of assets and major restructure costs) and changes in the fair value of financial instruments.

#### **Related Information**

AGL Compliance Management Policy AGL Code of Conduct AGL Dividend Policy

#### In this section