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ASX & Media Release

AGL – Results for Announcement to the Market

8 August 2019

Attached are the following documents relating to AGL Energy Limited's results for the year ended 30 June 2019:

- Appendix 4E
- AGL Energy Limited 2019 Annual Report

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Company Secretary

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Appendix 4E

AGL Energy Limited

ABN 74 115 061 375

Preliminary Final Report

Results for announcement to the market
for the year ended 30 June 2019

				30 June 2019 $A million	Restated* 30 June 2018 $A million
Revenue	**Up**	**3.4%**	to	**13,246**	12,816
Statutory Profit after tax attributable to shareholders	**Down**	**42.8%**	to	**905**	1,582
Underlying Profit after tax attributable to shareholders	**Up**	**2.2%**	to	**1,040**	1,018
				30 June 2019 cents	**Restated* 30 June 2018 cents**
Statutory Earnings per share	**Down**	**42.8%**	to	**138.0**	241.2
Underlying Earnings per share	**Up**	**2.2%**	to	**158.6**	155.2
				30 June 2019 $A	**Restated* 30 June 2018 $A**
Net tangible asset backing per share	**Down**	**6.6%**	to	**7.16**	7.67
				Amount cents	**Franked amount cents**
Final dividend per ordinary share				64.0	51.2
Interim dividend per ordinary share				55.0	44.0

**Figures restated on adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to the annual report for further information.*

Record date for determining entitlements to the final dividend:
22 August 2019 and payable 20 September 2019.

Dividend reinvestment plan:
The AGL Dividend Reinvestment Plan (DRP) will operate in respect of the 2019 final dividend. AGL will acquire shares on market and allot them to DRP participants at no discount to the simple average of the daily weighted average price at which AGL's ordinary shares trade during each 10 trading days commencing 26 August 2019. The last date for shareholders to elect to participate in the DRP for the 2019 final dividend is 23 August 2019.

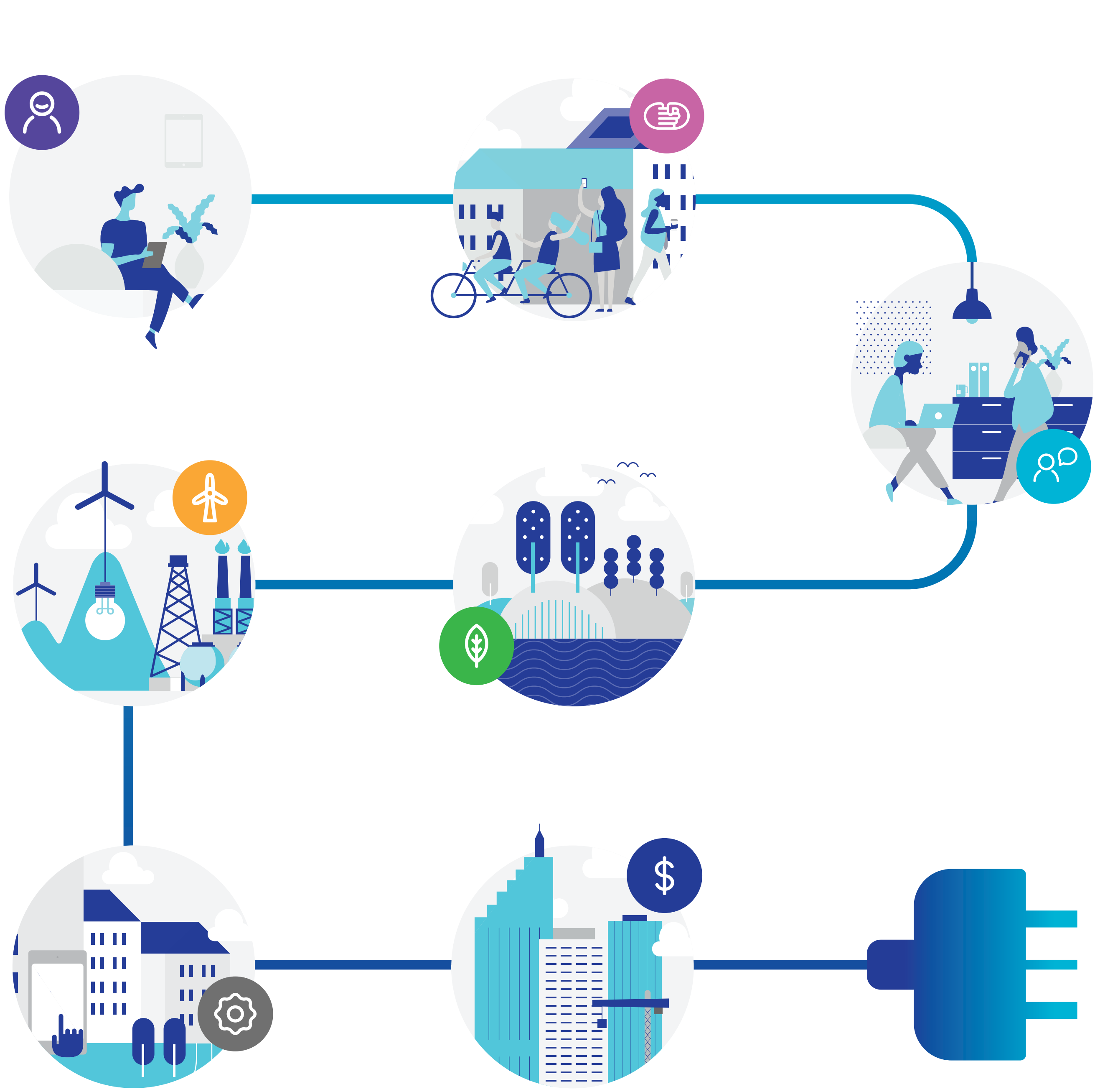
Brief explanation of Underlying Profit after tax and Underlying Earnings per share:
Statutory Profit after tax and Statutory Earnings per share are prepared in accordance with the Corporations Act 2001 and Australian Accounting Standards, which comply with International Financial Reporting Standards.

Statutory Profit after tax of $905 million included a gain of $4 million after tax treated as significant items and a loss of $139 million after tax from the changes in the fair value of financial instruments. Excluding these items, the Underlying Profit after tax was $1,040 million, 2.2% up on the prior corresponding period.

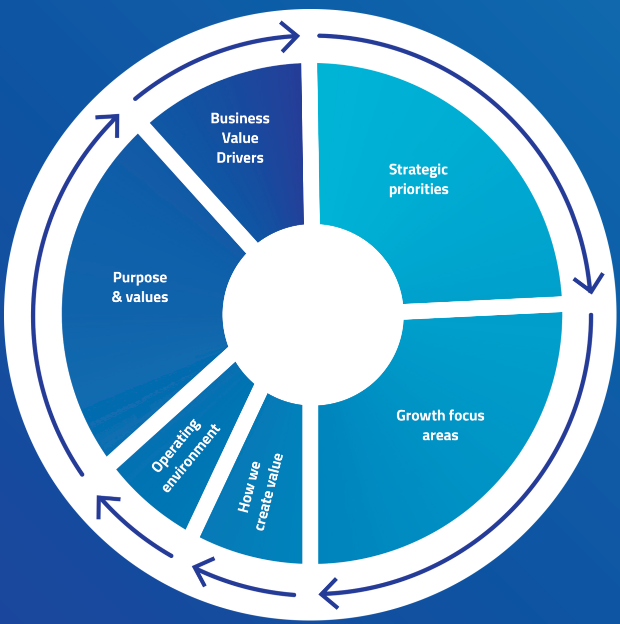
Underlying Profit after tax is reported to give information to shareholders that provides a greater understanding of the performance of AGL Energy Limited's (AGL's) operations. AGL believes Underlying Profit after tax is useful as it removes significant items and timing mismatches between the fair value of derivatives and the underlying asset being hedged thereby facilitating a more representative comparison of financial performance between financial periods.

This report should be read in conjunction with the AGL Directors' Report incorporating the Operating and Financial Review and the 2019 Annual Report released to the market on 8 August 2019.

2019 Annual Report



Contents



About this Report

AGL recognises that transparent reporting about our strategy, our performance and our challenges is an essential part of our responsibility to our shareholders and other stakeholders, and to maintaining our licence to operate.

Integrated reporting

For the first time, we have prepared our Annual Report with reference to the International Integrated Reporting Council's (IIRC) International Integrated Reporting Framework, as we believe it provides a useful basis for disclosing how we create sustainable value for our shareholders and other stakeholders over time.

We have used the framework to demonstrate how consideration of risks and opportunities (both those arising from our business and those that exist in a broader operational context), our purpose and our values drive our strategy. We have also considered how the execution of our strategy creates value, applying a lens that is broader than financial performance alone.

We recognise that the transition to Integrated Reporting is a journey. Information provided in this report should be considered as a baseline from which we expect to introduce additional and alternative key performance indicators as well as targets to drive our performance from FY20.

Report structure

This report is designed to be read in its entirety. The required elements of the Directors' Report, including the Operating and Financial Review (OFR) as required by ASIC Regulatory Guide 247, are covered on pages 6 to 81. Commentary on AGL's financial performance specifically is contained on pages 37 to 57, and references information reported in the Financial Report (page 82 to 168).

The Remuneration Report (page 58 to 81) and the Financial Report (page 82 to 161) have been audited by Deloitte. The non-financial metrics included in the Directors' Report (page 12 to 23) are subject to internal verification processes.

Further information

This report is available on our website at **agl.com.au/2019annualreport**. A printed copy of the report is available free of charge upon request.

AGL's 2019 Corporate Governance Statement is available at **agl.com.au/corporategovernance**.

As a result of the transition to Integrated Reporting, we will no longer publish a stand-alone Sustainability Report. However, a comprehensive data centre in which additional performance data is available to view and download can be found at **2019datacentre.agl.com.au**. This includes AGL's performance against the sustainability targets set for FY19.

Business Value Drivers

AGL creates value for shareholders and other stakeholders through the utilisation of various forms of 'capital'. The International Integrated Reporting Framework describes six forms of capital (financial, manufactured, intellectual, human, social and relationship and natural) but encourages organisations to adopt a categorisation and terminology appropriate to their business.

In this report, AGL has grouped and defined these capitals into the seven distinct Business Value Drivers outlined below. Icons are used throughout this report to demonstrate how each Business Value Driver links to strategy, risk management and remuneration, and to demonstrate key relationships and trade-offs between Business Value Drivers.

CUSTOMERS
Social and relationship capital
Effective and trusted relationships with residential, business and wholesale customers.

COMMUNITIES & RELATIONSHIPS
Social and relationship capital
The strength of working relationships and trust with key stakeholders; brand and reputation.

PEOPLE
Human capital
The competencies, experience, behaviours, engagement and wellbeing of AGL's employees and contractors.

ENVIRONMENT
Natural capital
Access to and stewardship and use of scarce natural resources, and AGL's impact on the natural environment, both directly and as a result of the products and services provided.

INFRASTRUCTURE
Manufactured capital
Effective and efficient use of assets throughout the value chain that AGL uses, owns or has control of, to enable delivery of energy to the market and to customers.

SYSTEMS & PROCESSES
Intellectual capital
Availability and development of processes, knowledge, insights, systems and data, including energy portfolio management and customer analytics, to support and enhance business activities.

FINANCE
Financial capital
Access to and management of financial capital to support execution of strategy and investment in growth opportunities through retaining financial market support.

Information about performance and outlook in respect of each Business Value Driver is included on pages 12 to 25 of this report.

Forward-looking statements

This report includes information about AGL's performance for the period 1 July 2018 to 30 June 2019. Any forward-looking statements are based on AGL's current expectations, best estimates and assumptions as at the date of preparation, many of which are beyond AGL's control. These forward-looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, which may cause actual results to differ materially from those expressed in the report.

Sustainable Development Goals

The United Nations Sustainable Development Goals (SDGs) are a set of 17 interconnected goals that form a global benchmark for achieving a sustainable future for all.

While many of the SDGs intersect with AGL's operations, the three SDGs we assess as most material to our strategy and operations comprise SDG 13 – Climate Action; SDG 7 – Affordable and Clean Energy; and SDG 9 – Industry, Innovation and Infrastructure.

SDG	Business Value Driver			
13 CLIMATE ACTION	Page 18			
7 AFFORDABLE AND CLEAN ENERGY	Page 20	Page 18	Page 12	Page 14
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Page 20	Page 22	Page 24	

Letter from the Chairman

"I am pleased to present AGL's Annual Report for the financial year ended 30 June 2019 (FY19). It's the first time that AGL has produced an Annual Report with reference to the principles of Integrated Reporting."

Graeme Hunt
Chairman

I am pleased to present AGL's Annual Report for the financial year ended 30 June 2019 (FY19). It's the first time that AGL has produced an Annual Report with reference to the principles of Integrated Reporting.

In our approach to Integrated Reporting, we have sought to present in one report a discussion of the company's financial drivers, which we historically disclosed in our Annual Report, and the non-financial drivers of value that we previously presented an annual Sustainability Report. The Board believes this approach enables a more complete discussion of the factors that affect value creation for AGL over the short, medium and long term. We are confident it will give you a more complete view of our strategy, governance, performance and prospects at a dynamic time for the energy sector.

Energy policy

Over the course of FY19, energy policy remained a key matter for AGL, the customers and communities we serve and for the Australian economy at large. We are still in the early stages of a multi-decade transition from an energy landscape dominated by base-load thermal power to a future of cleaner, more distributed energy generation and storage. This transition should ultimately deliver affordable, reliable and cleaner energy for our country whilst empowering our customers and all users of energy.

As with any major transition, there remains uncertainty, price volatility and some debate as to the best path forward. AGL is proud of its 180 year history as an Australian company that cares about the responsible operation of its assets and making investments that are sustainable over the long-term. It remains our priority to work constructively with all levels of government, regulators, industry and the community at large. This incorporates managing the responsible closure of power stations that are at the end of their lives – such as the Liddell Power Station in New South Wales – as well as ensuring we have the right environment for innovative new services such as our "bring your own battery" extension of our Virtual Power Plant initiative. In all cases, we want to help drive progress towards stable energy and climate policy nationally that enables private operators like AGL to make long-term investment decisions and for our customers and shareholders to feel confident about the future.

We recognise that, in the short term, progress means building trust with all stakeholders, and that the most immediate priority is making energy more affordable and its costs and usage more transparent for our customers.

AGL took steps during FY19 to provide automatic discounts to loyal customers and forgive the debts of certain hardship customers who couldn't afford to pay their bills. In 2019, we lowered standing offer rates for electricity customers. Following the introduction of new default pricing mechanisms, AGL conducted a review to ensure that all standing offer customers were not paying more than if they were on the regulated rate. As a result, prices have fallen further for many standing offer customers. Challenging supply conditions have resulted in increases in residential gas prices for FY20 of between 1% and 5%. We will continue to take steps to make it easier for customers to understand and compare prices and get access to the best deals.

We recognise that, in the short term, progress means building trust with all stakeholders, and that the most immediate priority is making energy more affordable and its costs and usage more transparent for our customers.

Leadership

In December 2018, the Board made the decision to appoint Brett Redman as Managing Director & CEO. After conducting an extensive domestic and international search, the Board was unanimous in its view that Brett was the right person to lead AGL in the years ahead. Brett has been with AGL for 12 years and was Chief Financial Officer from 2012 until becoming interim CEO following Andy Vesey's departure in August 2018. He has more than 25 years' experience in senior roles in blue-chip industrial companies in Australia and North America. The Board is very encouraged by the energy, rigour and commitment to culture and performance that Brett has brought to the role to date and with the strength of the team he has built.

As a result of Brett's appointment, in May 2019 we were pleased to appoint Damien Nicks to the role of CFO. Damien had been interim CFO since August 2018 and, before that, held several senior finance executive roles since joining AGL in March 2013, most recently as General Manager, Group Commercial Finance.

Both Brett and Damien have started their roles at lower levels of remuneration than their predecessors, reflecting the Board's view that it is appropriate to set starting salaries lower and provide scope for them to increase over time in line with experience and performance. We have also taken the opportunity to simplify AGL's Executive Remuneration Framework for FY20 onwards in line with community expectations, allowing for a lower total short-term incentive (STI) payout and higher levels of deferral on both the STI and the long-term incentive (LTI).

The Board remains focused on its own skills mix and succession practices. Belinda Hutchinson retired from the Board in December 2018 after making an enormous contribution over eight years of service. In May 2019, Patricia McKenzie joined the Board, bringing 40 years' of experience in the Australian energy sector, with particular focus on matters of market design, industry governance and regulatory reform. This experience will serve the Board well pending the retirement of Les Hosking, who has now served 11 years on the AGL Board and will not seek re-election when his current term expires in 2020. The Board continues to progress succession planning processes to ensure that the Board has the skills and experience that may be required in the future.

Corporate governance

Your Board understands the need for large corporations providing essential services to build the trust of their customers, shareholders and the Australian community and to retain this trust. Against this backdrop, the Board maintains a strong focus on all aspects of corporate governance, not only ensuring its policies, practices and frameworks are of a high standard, but also that they evolve to meet increasing community expectations. The Board also seeks to monitor that the company's values are upheld, that an appropriate culture can thrive and that its strategy is suitable relevant to its operating environment.

AGL's strategy

Following Brett's appointment as Managing Director & CEO, the Board oversaw a substantial refresh of AGL's growth strategy over the course of FY19. This recognises that the parts of the business that have underpinned AGL's strong financial performance over recent years – in electricity generation, wholesale trading and retailing – will be exposed to more challenging operating conditions in years ahead. Our strategy refresh identified three major areas of potential investment focus: optimising our existing portfolio for performance and value; evolving and expanding our core energy market offerings; and creating new opportunities with increasingly connected customers as data and energy value streams converge.

Our proposal in May 2019 to acquire the integrated telecommunications company Vocus Group Limited, reflected the third of these growth areas. Building a multi-product AGL brand across other services essential to modern life is analogous to our expansion into electricity from gas in the 1990s. We saw in Vocus – and in the provision of data and communications services in general – an opportunity to meet the needs of customers who increasingly see the provision of broadband as just as important to their way of life as they do energy. We also saw an opportunity to reinvigorate our offering to business customers and leverage the growth of Vocus' broadband fibre network throughout Australia as we delivered this multi-product strategy.

Ultimately, we did not proceed with a binding proposal for Vocus for reasons of value – reflecting the strong financial discipline under which we will only commit to new investments that can clearly exceed our hurdle rates. While it is important for AGL to invest in growth to secure future value creation, just as we have done successfully in the past, maintenance of financial discipline and appropriate capital allocation is especially pertinent with interest rates at such lows.

Capital management

While we view our low debt levels relative to our investment grade credit rating as prudent amid considerable uncertainty, the Board has announced as part of the FY19 results an on-market buy-back of up to 5% of the company's issued capital. The Board considers an on-market share buy-back to be an appropriate mechanism to return excess cash to shareholders where liquidity materially exceeds buffer levels.

Dividends

We declared dividends for FY19 of 119 cents per share, including the final dividend of 64 cents per share declared with the full-year result, which will be paid on 20 September 2019 to shareholders registered as at 22 August 2019. The dividend reinvestment plan will continue to be available. We recognise this is a valuable mechanism for shareholders who wish to use their dividends to increase their holding without incurring brokerage fees. Dividends for FY19 were up 2 cents per share on FY18, reflecting modest year-on-year profit growth. The company's total dividends have risen more than 50 cents since FY16 as a result of our strong cash flows and introduction of the policy to target a payout ratio of 75% of Underlying Profit after tax.

Annual General Meeting

Our AGM will be held in Sydney on Thursday, 19 September 2019. At the AGM, in addition to the usual items of business, shareholders will be asked to consider three resolutions requisitioned by two small groups of shareholders. The Board respects the right of shareholders to put forward resolutions. However, the Board does not consider the requisitioned resolutions to be in the best interests of the company as a whole for the reasons detailed in the Notice of Meeting.

Conclusion

Amid ongoing uncertainty in the energy sector, it has been another year of strong performance for AGL. However, FY20 is expected to be more challenging with a lower earnings outlook. Notwithstanding these challenges, your Board is confident that the appropriate strategy is in place, supported by a strong company culture, to drive the right outcomes for customers and the community and continued value creation for our shareholders over the long-term.

On behalf of my fellow Directors, I thank you for your continued support for our company and look forward to seeing many of you at the AGM.

Managing Director & CEO's Report

"I was really honoured to be appointed to lead AGL in December. I have worked here for 12 years – and I am immensely proud of our history and the important role we play in the Australian economy."

Brett Redman
Managing Director & CEO

I was really honoured to be appointed to lead AGL in December. I have worked here for 12 years – and I am immensely proud of our history and the important role AGL plays in the Australian economy.

To maintain that role, one of the first things I did was to establish three priorities: **Growth, Transformation and Social Licence.** To deliver on these priorities, we undertook a review of AGL's purpose, values and growth opportunities over the course of FY19. I feel confident that this work – which is now complete – sets us up strongly for the next era in AGL's history, and allows us to focus on delivery in FY20 and beyond.

AGL employs 3,750 people in Australia, almost half of them in regional communities, and the concept of Progress for Life is what they believe encapsulates what we stand for as a company. After all, a company cannot last for 180 years as we have without having innovation, adaptability and a focus on the future in its make-up. It also can't achieve the kind of heritage and brand that AGL has without a deep commitment to understanding what its customers want – and delivering to those needs. We don't always get it right – and certainly in recent years as energy prices have risen and the policy environment has been so uncertain, there are things we can say with hindsight we could have done differently.

AGL employs 3,750 people in Australia, almost half of them in regional communities, and the concept of Progress for Life is what they believe encapsulates what we stand for as a company.

But I do believe AGL is now on a path that our stakeholders will be able to recognise that we are making progress and see our commitment to ensuring our customers, people, shareholders and all of our stakeholders get the best from the changes occurring in our industry. I set targets early on for the year in relation to driving improvement in our safety performance, as well as increased customer satisfaction and employee engagement. AGL has a strong safety culture but, while injury severity continues to decrease, we experienced an increase in the rate of injuries overall in FY19, which we do not consider acceptable. Our customer satisfaction – as measured by Net Promoter Score – did improve materially in the period, while employee engagement improved too.

I am also delighted to have a rejuvenated Executive Team in place following the recent appointments of Jo Fox, Damien Nicks, Christine Corbett and João Segorbe (see page 26).

Growth strategy

Our three focus areas for investment reflect the strength of the business we have, as well as the evolution that is occurring in the energy sector and the opportunities the future will present.

The first focus area is optimising our existing portfolio for performance and value. We operate Australia's largest electricity generation fleet, comprising some of the country's most important brown and black coal power stations and its largest non-government owned hydroelectric power scheme. We also continue to build on our track record of driving major renewables development. These assets – combined with the intellectual property we possess in trading and our 3.7 million customer accounts – comprise a valuable base from which to build.

That's why making these assets as strong as they can be will always be the bedrock of growth – as reflected in the investment we have committed to upgrading the Bayswater and Loy Yang A power stations (without increasing carbon emissions) and the $420 million we have invested in the past three years in customer experience and other digital transformation programs.

Evolving markets

Our second area of focus for investment is evolving and expanding our core energy market offerings.

Energy Networks Australia and the CSIRO reported in April 2017 that some $419 billion of expenditure was required in grid scale generation throughout the National Electricity Market to 2050. It's for this reason that we are developing a pipeline of energy supply and storage projects.

During FY19, wind farms at Silverton, New South Wales, and Coopers Gap, Queensland, owned by Powering Australian Renewables Fund, and developed and underwritten by AGL, began generating. Early in FY20, we will complete the Barker Inlet Power Station near Adelaide. We have secured options over two of the most compelling pumped hydro power projects in Australia, at Bell's Mountain, New South Wales and Kanmantoo, South Australia.

We are progressing plans to convert an existing jetty at Crib Point, Victoria, to import liquified natural gas (LNG) to ease supply constraints for gas as traditional gas fields become depleted. We also have several sites at various stages of development for further gas-fired generation technology throughout the National Electricity Market.

As we develop our integrated plans for energy generation and storage, we see AGL, with the diversity and scale of its generation portfolio, customer base and trading expertise, as a lead enabler of the transition to clean, affordable and reliable energy. There is approximately 5 GW of utility-scale wind and solar projects committed throughout Australia via a range of different investors. We want to deploy our resources to the large-scale firming assets – gas, hydro and batteries – that will enable this transition to deliver energy that is not just cleaner, but more affordable and reliable too.

> Our three focus areas for investment reflect the strength of the business we have, as well as the evolution that is occurring in the energy sector and the opportunities the future will present.

A modern utility

Our third area of focus for investment is creating new opportunities with increasingly connected customers.

In the modern world we rely on internet connectivity almost as much as we do energy, and increasingly energy and data services are converging in smart appliances, residential battery orchestration and electric vehicles. AGL's Virtual Power Plant in Adelaide – bringing together almost 1,000 batteries in our customer's homes to act like a 5 MW peaking plant – is one of the largest operating Virtual Power Plant of its kind in the world. So, I was proud in July that we were able to extend the program via our new "bring your own" battery scheme, enabling our electricity customers to join this virtual scheme and get paid $100 upfront and a further $180 a year to do so.

I am also encouraged by our research that tells us people would trust AGL to provide their broadband and other data services and that, like us, they see a modern utility as a provider of a range of services. Critical to success will be innovation. In FY20 we are establishing a Future Business team with explicit responsibility for understanding and developing the offerings our customers will need in years to come.

FY19 results

AGL's performance in FY19 set a high watermark for our profitability as we face into an exciting future.

Strong operation of our energy supply portfolio meant Underlying Profit after tax, our primary measure of earnings, was a record $1,040 million, while operating cash flow was $1,599 million.

It was also a year of record levels of investment by AGL. Our capital expenditure was $939 million, reflecting the increasing year-on-year investments we are making to keep our ageing thermal plant operating, and our investment in new projects. Even with Silverton, Coopers Gap and Barker Inlet near completion, we have a further $2 billion of projects under development.

> ...our operating cash performance and financial position remains robust and we have entered FY20 in a great position to execute against our refreshed purposes, values and growth strategy.

As we prepare to begin in 2022, the closure of our Liddell Power Station in New South Wales, we are focusing on the development of new assets. The realities of an ageing thermal generation fleet meant that in June 2019, we were forced to remove from service until December one of the four generation units at AGL Loy Yang in Victoria as a result of damage to its stator and rotor components. We are working closely with the South Australian government to enable the deferral of the mothballing of two units at the 50-year old AGL Torrens to try to mitigate the impact of this outage. Over time these ageing thermal assets must close and be replaced by cleaner, more reliable sources.

The requirements of the Federal Government's Retailer Reliability Obligation (RRO) have been standard practice at AGL for many years, including providing contract liquidity to the National Electricity Market, and we are committed to continuing to meet these requirements, whether or not the RRO is technically triggered.

We will keep investing in the flexibility and reliability of our existing fleet and seeking out the best opportunities to invest in the new sources of energy supply Australia needs. This is why a stable policy environment that enables private operators such as AGL to invest is so important.

FY20 outlook

As we look into FY20 and beyond, there are encouraging signs. Following a period of volatility, AGL's customer numbers are rising again. Lower prices, increased transparency and digitisation of services have all contributed to improved customer satisfaction and lower churn levels.

Nonetheless, our financial results in FY20 will be affected by operating challenges including lower wholesale prices for electricity and for renewable energy generation certificates, increasing costs for coal and gas as legacy contracts roll off, and the re-regulation of retail electricity standing offer pricing.

We expect these factors as well as the impact of the Loy Yang A Unit 2 outage – which we estimate will be between $80 million and $100 million – and materially higher depreciation expense arising from the increase in capital investment in recent years, to result in a drop in Underlying Profit after tax in FY20 to between $780 million and $860 million.

However, our operating cash performance and financial position remains robust and we have entered FY20 in a great position to execute against our refreshed purpose, values and growth strategy – and to make the investment decisions that will generate value in years to come.

Thank you for reading this report.

Purpose, Values & Strategy

AGL is a leading integrated energy business that has been operating for more than 180 years and has a proud heritage of innovation. We operate Australia's largest private electricity generation portfolio, with a total capacity of 10,413 MW, which accounts for approximately 20% of the total generation capacity within Australia's National Electricity Market. We are an active participant in gas and electricity wholesale markets with more than 3.7 million customer accounts, including residential, small and large business and wholesale customers.

Business Value Drivers

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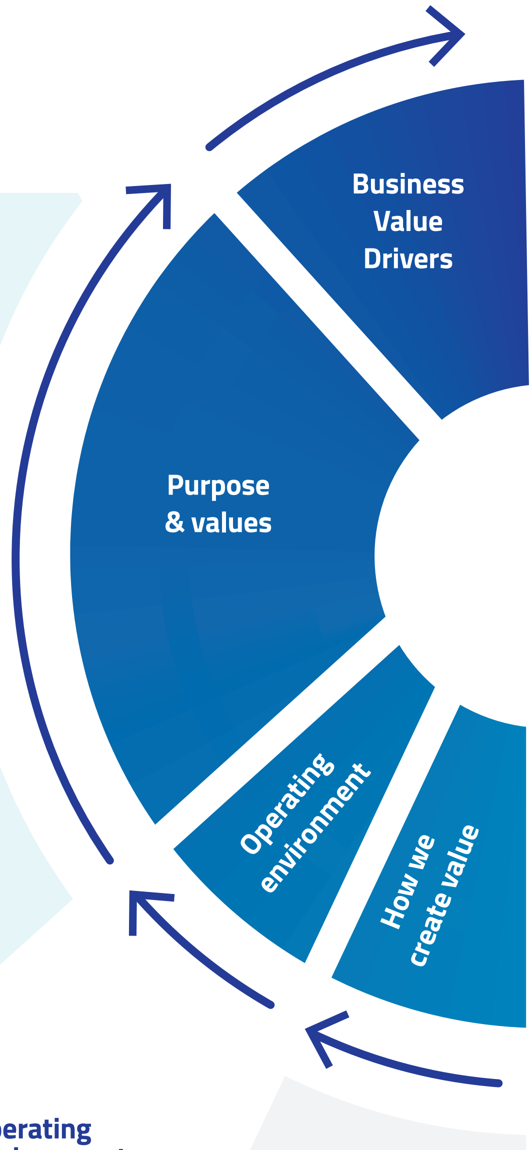


Purpose and values

The energy sector is experiencing a period of significant change, characterised by shifting customer expectations, adoption of new technologies, greater government and regulatory intervention, and an uncertain investment environment.

Against this backdrop, AGL undertook a comprehensive review of our purpose and values during FY19 to ensure we had the right framework to evolve our organisational culture, guide our decision-making and support our communication.

The outcomes were a refreshed purpose statement with the concept of Progress for Life as its central theme, and a refreshed set of values that build on this theme, while recognising the power of our 180-year heritage.

Our refreshed company values are:

- **Care in every action**
- **Integrity always**
- **Better together**
- **Deliver your best**, and
- **Shape tomorrow**.

At AGL we recognise that we have an important role to play in supporting progress – both technological and human – for our customers, our communities, the Australian economy and our planet.

The theme of progress recognises our proud history of delivering innovative outcomes for customers, as well as how we are continuing to evolve how Australians produce, share and consume energy.

To us, progress means helping customers achieve better ways of living day-to-day by enabling them to take greater control over their energy and other essential services. It also means investing in new ideas, partnerships and infrastructure – renewing and expanding our portfolio of energy sources and other products to make them more sustainable, reliable, affordable and useful.

Operating environment
See page 8

How we create value
See page 10

Strategic priorities

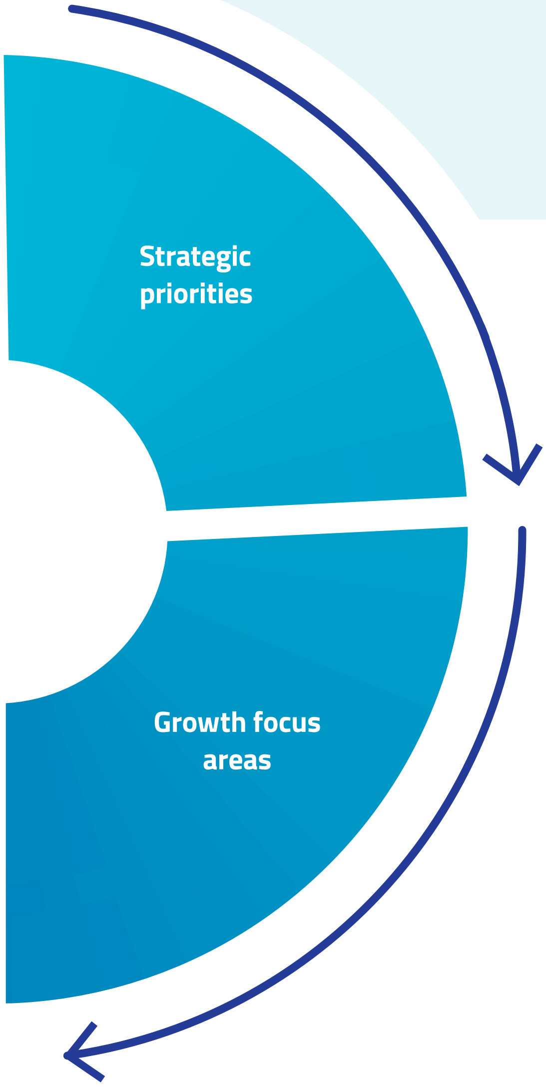
AGL is currently focused on three strategic priorities: Growth, Transformation and Social Licence.

Growth reflects the need for AGL to invest in new opportunities to meet evolving customer needs. This is especially important as traditional sources of value such as thermal electricity generation decline and may ultimately need to be replaced altogether.

The 'Growth focus areas' section outlines key areas that arose for AGL out of a material review of opportunities available to our business.

Transformation reflects AGL's need to reposition, refresh and reinvigorate the business in a changing world, especially as digital technology continues to alter customers' expectations.

Social Licence reflects the need to meet and exceed rising community expectations at a time when we need to rebuild fallen levels of trust in large institutions.



Growth focus areas

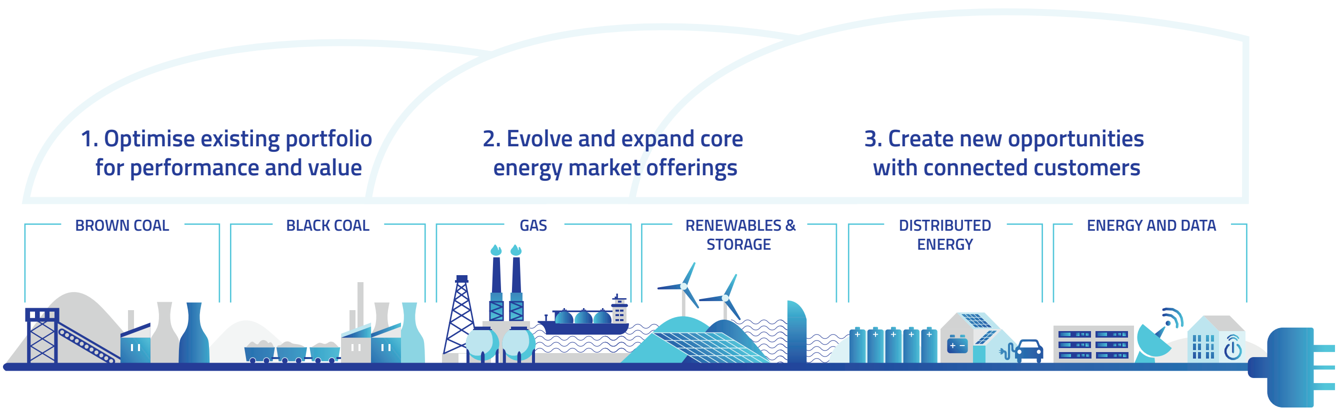
AGL's ability to undertake major investment in capital projects and acquisitions has historically provided the foundation for considerable value creation for AGL's shareholders.

Following a fundamental review of opportunities available, during FY19 we have defined three focus areas for our next phase of growth investment. These are: optimise existing portfolio for performance and value; evolve and expand core energy market offerings; and create new opportunities with connected customers.

While our electricity generation portfolio will transition away from coal over time, the first focus area reflects that these assets will remain important to Australia's energy system for many years. We need to invest to ensure they are secure, reliable and flexible – not least to provide back-up from dispatchable power as the system transitions to more renewables. This is why we are investing in upgrades at our Bayswater and Loy Yang A power stations that will improve reliability and flexibility but not bring any increase in carbon emissions.

The second focus area reflects the market's need for new sources of energy generation, supply and storage. This is why we are building projects such as the Barker Inlet Power Station in South Australia, which can respond quickly to reduced supply from other sources or spikes in demand, and pursuing the Crib Point liquified natural gas (LNG) import jetty in Victoria to provide a new supply of gas. It's also why we are developing a pipeline of future projects including pumped hydro, as outlined on page 20, and why we continue to look for grid-scale battery opportunities.

The third focus area includes opportunities in distributed energy such as home storage and electric vehicles, including the residential battery offering AGL is bringing to market in FY20. Central to these new technologies and solutions is the convergence of energy and data value streams, bringing together the provision of data services such as broadband with energy services, and enabling development of new and innovative products and services.



Operating Environment

Our value creation model exists in an environment influenced by internal and external factors both in and out of AGL's control. We use several processes and techniques to ensure we understand these factors and how they affect our business to ensure we are best placed to mitigate negative impacts while capitalising on opportunities to deliver value to our customers, shareholders and other stakeholders.

Strategic risks

AGL's comprehensive, enterprise-wide risk management program, which is aligned with the principles and requirements of the international standard for risk management (ISO 31000), is detailed in the 2019 Corporate Governance Statement at agl.com.au/corporategovernance. Through this framework, we identify factors that are critical to the successful delivery of our strategy and our ability to create value into the future.

We undertake a comprehensive annual process to assess the key risks to achieving our strategic priorities. We define these as Tier 1 Strategic Risks. To determine the Tier 1 Strategic Risks for FY20, an extensive consultation process across each division of AGL was undertaken during FY19, involving key senior management representatives and operational managers to gain an understanding of strategic risks relevant to their area. Risks were assessed through the lens of AGL's strategic priorities of Growth, Transformation and Social Licence. This process is designed and facilitated to allow common concepts to arise and their implications in relation to each Business Value Driver to be considered.

For FY20, 11 Tier 1 Strategic Risks have been defined that could inhibit our ability to deliver on our strategic priorities over the next three to five years. We have categorised these into Risk Themes and defined the causes and potential consequences of each to enable us to determine which mitigation activities are most necessary. Tier 1 Strategic Risks are monitored and reviewed through the Audit & Risk Management Committee.

Tier 1 Strategic Risks

Tier 1 Strategic Risks for FY20 are outlined across, with reference to the Business Value Drivers that would be impacted by the risk eventuating.

Market disruption
AGL does not (or cannot) adequately or appropriately respond to changing customer expectations and preferences regarding energy sources, prices and related products and services.

Government intervention
AGL is not able to effectively anticipate, plan or respond to an increasingly restrictive regulatory environment and uncertainty regarding government policy.

Climate change
AGL is unable to meet expectations and/or deliver on its commitments to transition to a low carbon future within an acceptable timeframe.

Investment decisions
AGL's major investment decisions do not deliver on their intended benefits or outcomes for shareholders, customers and the community.

Stakeholder trust
AGL's strategy to deliver on its social licence to all stakeholders is unclear, inconsistent, and/or poorly executed.

Material themes

To provide a focus for external reporting, AGL has summarised its Tier 1 Strategic Risks into material themes that align closely with each Business Value Driver. Scorecards (pages 12-25) outline our approach and performance against each Business Value Driver, focusing on these material themes.

Transition to a low carbon future
Progressively decarbonise the energy supplied to our customers, developing a pathway to a modern, decarbonised generation sector through investment in new renewable and near-zero emission technologies, and ensuring a sustainable transition.

Reliability
Manage our power generation assets and gas supply efficiently to ensure security of supply for customers, both day-to-day, and over the long-term.

Insights
Employ our systems, data capabilities and insights (including energy portfolio management and customer analytics) to manage risk, deliver stronger customer products, manage costs and build our business for the future.

Business Value Drivers

ENVIRONMENT

INFRASTRUCTURE

SYSTEMS & PROCESSES

Stakeholder issues

We engage in constructive dialogue with our stakeholders throughout the year to understand and respond to issues that are important to them, and to ensure our strategy and plans take into account the legitimate concerns of stakeholders as well as the impact of emerging trends.

We undertake a regular and independently-facilitated review of material stakeholder issues. The last review was undertaken in FY18, and identified 20 potential material issues through a consideration of AGL's business risks, scenario planning drivers, strategy, key policies, consumer sentiment, stakeholder views (expressed through a survey which was a preliminary component of the materiality review), industry analysis and global 'megatrends'. 15 external stakeholders and 15 internal stakeholders completed a detailed survey to rank the issues in order of importance from the perspectives of value creation, impact and performance across different time horizons, and participated in detailed one-on-one interviews with the independent facilitator, which enabled discussion of the issues ranked as most significant by each stakeholder. The detailed results of this review are available at in AGL's FY18 Sustainability Report.

During FY19, we regrouped the issues identified through this review into seven material themes to provide for focused reporting, matched to each Business Value Driver. These material themes were subsequently validated by the Audit & Risk Management Committee. The material themes are cross referenced to the Tier 1 Strategic Risks, and demonstrate the alignment between the issues of importance to our stakeholders and the risks to our business in terms of value creation.

Customer privacy
AGL does not obtain, handle, process and store customer data in an appropriate, compliant, transparent or secure manner.

Organisational culture
AGL is unable to foster a resilient and agile organisational culture that is built on strong and ethical behaviours, talented people, a focus on safety, and a customer-centric mindset.

Resilience of supply
AGL is unable to generate and maintain a resilient energy supply.

Wholesale market volatility
AGL is unable to effectively mitigate the volatility of the wholesale market.

Access to gas
AGL is unable to source sufficient quantities of gas to meet its future demand.

Cybersecurity
AGL's critical systems, platforms and technology infrastructure are compromised by a cyber event.

Licence to operate
Work transparently and collaboratively with communities, governments and other external stakeholders, in partnership for mutual benefits.

Affordability, fairness and simplicity
Provide affordable, fair and simple energy solutions for all our customers, focusing on delivering a consistently superior customer experience to generate long-term value.

Workplace, talent and culture
Attract, develop and retain the right talent to build a safe, anticipatory, engaged and inclusive culture.

Financial management and value creation
Utilise our existing business and robust financial position as a strong platform from which to invest in Australia's energy future and pursue new growth opportunities.

COMMUNITIES & RELATIONSHIPS

CUSTOMERS

PEOPLE

FINANCE

How We Create Value

We are focused on creating long-term value for our shareholders and other stakeholders through the delivery of our strategic objectives and growth agenda, in a manner that is consistent with our business purpose of Progress for Life.

Inputs

We use a range of resources and relationships (or 'capitals') to create value and deliver on our strategy and business purpose. These are grouped under seven Business Value Drivers, and the inputs are summarised as follows:

CUSTOMERS

- Customer accounts
- Customer relationship quality

COMMUNITIES & RELATIONSHIPS

- Brand and reputation
- Relationships with government, regulators, local communities, non-government organisations (NGOs), unions, supply chain and partners

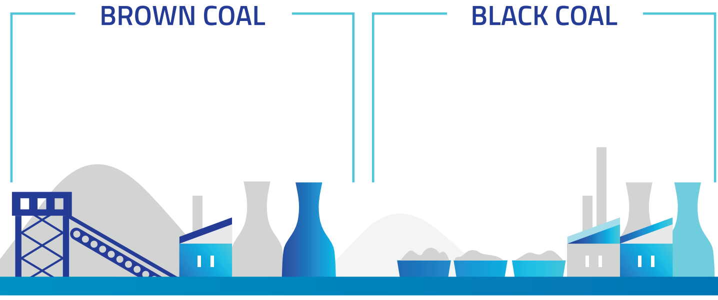
PEOPLE

- Employees
- Safety culture
- Organisational culture and values
- Diversity and inclusion
- Capabilities and skills

Activities

We operate across the energy value chain, delivering energy to the market and our customers. Our operated electricity generation portfolio spans thermal generation (black and brown coal and gas) as well as renewables and storage, comprising approximately 20% of the total generation capacity within the National Electricity Market. We also operate gas storage infrastructure and gas production facilities. We provide customer service and billing capabilities through contact centres and billing platforms. We also manage energy procurement risks on behalf of our customers through market trading and hedging. We facilitate the delivery of distributed energy solutions and services to our customers, and as energy and data streams continue to converge, we are increasingly considering growth opportunities in this area.

While we do not own or operate electricity or gas transmission or distribution infrastructure, we rely on this infrastructure to deliver energy to the market and to our customers.



CUSTOMERS

- Customer relationships
- Products and services
- Energy affordability

Refer to page 12 for performance measures

COMMUNITIES & RELATIONSHIPS

- Licence to operate
- Local economic investment, growth and opportunities
- Contribution to community through taxes
- Transparent policy positions
- Ethical performance of supply chain

Refer to page 14 for performance measures

PEOPLE

- Injury rates and wellbeing
- Engaged workforce and inclusive culture
- Investment in talent and leadership

Refer to page 16 for performance measures

ENVIRONMENT

- Greenhouse gas emissions
- Management of physical and transitional climate change risks
- Scenario planning for carbon constrained future
- Other environmental risks

Refer to page 18 for performance measures

Our value creation model depicts how we create value through seven Business Value Drivers, by identifying our key inputs, the activities we perform, and the resulting outputs and outcomes in terms of value creation.

Operating environment

The market, political and social context in which we operate provides challenges as well as opportunities for creating value (refer to pages 8–9).

ENVIRONMENT

- Black and brown coal
- Gas
- Water
- Land

INFRASTRUCTURE

- Operated electricity generation assets
- Gas storage assets and other gas infrastructure

SYSTEMS & PROCESSES

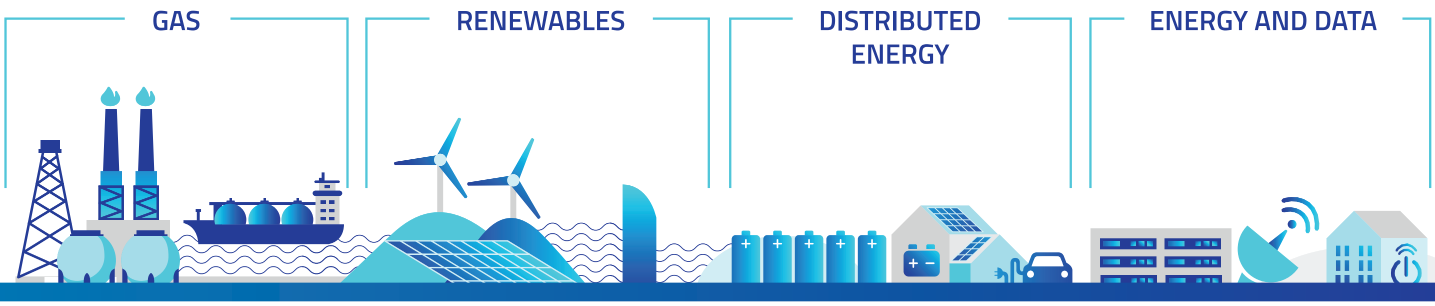
- Processes, innovation, knowledge, insights and systems
- Energy supply contracts

FINANCE

- Liquid assets (cash, investments)
- Debt facilities and credit rating
- Shareholders and the ability to raise equity

Outputs

We generate 43.7 TWh of energy annually, and in turn supply around 39.2 TWh of electricity and around 167.1 PJ of natural gas as well as energy-related products and services to over 3.7 million residential, small and large business and wholesale customer accounts.



INFRASTRUCTURE

- Efficient and reliable operation of existing asset base
- Market development and continuity
- Sustainable end of asset life planning

Refer to page 20 for performance measures

SYSTEMS & PROCESSES

- Effective wholesale energy portfolio management
- Data security and process governance
- Development and delivery of products, services and systems better suited to customer needs
- Effective risk management and improved process safety

Refer to page 22 for performance measures

FINANCE

- Investor returns
- Agility to respond to growth opportunities
- Maintenance of credit rating

Refer to page 24 for performance measures

Value creation outcomes

We maximise the value created for shareholders and other stakeholders by operating our business and assets efficiently and effectively; managing risks; investing in people, systems and processes; securing efficient financing; minimising our environmental footprint; developing and delivering the right products and services; engaging with stakeholders and ensuring we maintain our licence to operate.

Business Value Driver

Customers

Effective and trusted relationships with residential, small and large business, and wholesale customers.

Affordability, fairness and simplicity

AGL operates in a highly competitive retail environment. We are focused on delivering a consistently superior customer experience that meets the changing needs of our customers and generates long-term value.

Strategic context

As one of Australia's largest energy retailers, we put our customers at the centre of our decision-making. In this period of high energy prices, policy uncertainty and technology transition, we recognise that building and maintaining the trust of our customers is essential.

We are focusing on developing products and services that minimise customers' energy costs and improve the transparency and clarity of their energy bills. We understand that energy costs can comprise a significant component of individuals' and businesses' expenses and proactively assist our customers to be on the most appropriate energy plans to meet their needs (see trade-offs on page 13). In an effort to help relieve cost of living pressures for as many customers as possible, over FY19 AGL delivered lower standing offer electricity prices for residential and small business customers in all markets, led the market with our expanded scheme to reward our loyal standing offer customers with automatic discounts, and expanded the debt relief available to customers on our Staying Connected hardship program through a $50 million debt relief package.

AGL is committed to building customer advocacy. Our participation in the Energy Charter represents a commitment from energy businesses across the supply chain to progress the culture and solutions required to improve outcomes for all customers – residential, small and large businesses alike.

We are also responding to changing energy customer preferences through the digitisation of our business in order to drive productivity and deliver greater flexibility in how we take our products and services to market. We have made significant capital investment over the past three years through our Customer Experience Transformation program, delivering an enhanced digital experience for our customers.

Our focus on technology to enable increased customer engagement is reflected in our refreshed strategy, under which a range of emerging growth opportunities in distributed energy have been identified, including bringing to market residential battery offerings, expanding our view to consider e-mobility more broadly, and utilising smart home and energy efficiency technologies that aim to leverage the convergence of data and energy.

Customer accounts:

2.3 m Electricity

1.4 m Gas

3.7 m Total

Creating value

Building trusted customer relationships	KPI		FY19	FY18	FY17	FY16	FY15
Our key customer metric is Net Promoter Score (NPS). AGL's NPS has improved significantly over FY19 to the highest level we have obtained since using this measure, with customers reporting more positive perceptions of the AGL brand as being one they can trust, and rating AGL's services and prices more favourably than in previous years. It also reflects positive consumer sentiment towards the energy industry more generally relative to past years, when negative media coverage was more prevalent.	Customer Net Promoter Score (NPS)	●	-11.1	-22.5	-18.1	-18.2	-25.4
Our Ombudsman complaints have reduced by around 2% in the past year. This is largely due to a reduction in complaints related to connections and credit issues, following improvements to meter installation timeframes and to our processes for communicating with customers about credit and collections issues.	Ombudsman complaints	●	11,138	11,413	12,277	14,176	18,892

Energy affordability	KPI	FY19	FY18	FY17	FY16	FY15
Staying Connected customer numbers have increased this year through both proactive engagement with and early identification of hardship customers. AGL has increased support mechanisms for potential hardship customers and has noticed a greater awareness of AGL's Staying Connected program.	Number of customers on Staying Connected	30,083	26,657	31,463	39,366	22,016
	Average level of debt of customers on Staying Connected	$2,301	$2,502	$2,171	$2,255	$2,109
Both total average debt across AGL's mass market portfolio and AGL's Staying Connected customer debt have decreased, mainly due to AGL's delivery of debt relief and payment matching initiatives, and the introduction of proactive communications to customers who may be in financial hardship.	Total average debt across mass market customer portfolio	$331[1]	$501	$438	$422	$396

1. During FY19 AGL updated the methodology used to calculate total average debt across mass market customer portfolio to incorporate all AGL customers rather than just those with debt.

Growth in customer numbers through innovative products and services	KPI	FY19	FY18	FY17	FY16	FY15
AGL continues to face intense competition in the retail market, with consistently high levels of customer churn.	Customer accounts	3.708 m	3.641 m	3.653 m	3.681 m	3.735 m
However, our customer account numbers have increased by 1.8% over the year. Consumer electricity accounts have increased as a result of customer growth in New South Wales and Victoria, while increases in consumer gas accounts have largely been driven by customer growth in Western Australia and Victoria. We also saw a 7% increase in large business customer accounts in FY19 to around 16,000 accounts.	Customer churn	17.6%	18.9%	16.4%	15.7%	14.9%

Legend

- Improving trend and/or satisfactory outcome
- Neutral trend
- Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Key relationships and trade-offs with other Business Value Drivers

There is a direct relationship between the Customers and Systems & Processes Business Value Drivers reflected in AGL's significant investment in digitising its customer service and analytical capabilities via the Customer Experience Transformation program during FY17-FY19 to deliver stronger customer products and relationships. For example, this investment has enabled AGL to deliver real-time analytical data to customers through Energy Insights, a product that gives customers greater control to manage their energy by providing them with an estimated breakdown of their energy use by appliance category.

AGL is balancing the Customer, Finance and Communities & Relationships Business Value Drivers to help customers select the most appropriate energy plan to suit their needs, even when doing so may reduce revenue. For example, we are making progress transitioning our electricity customers to market offers from standing offers, which at 30 June 2019 accounted for just 3% of all electricity customer accounts. AGL also helps customers in financial hardship gain access to guaranteed discounts, payment plans and other support services via the Staying Connected program.

There is a direct relationship between the Customer and Communities & Relationships Business Value Drivers, as evidenced by the way in which we are collaborating across the energy supply chain for the benefit of customers in progressing the Energy Charter. The Energy Charter is of benefit to our customers and in turn, the collaborative approach we are taking with other participants across the energy supply chain leads to a broad recognition of the need for the energy industry as a whole to adopt a more customer-centric approach.

Beyond FY19

AGL is committed to driving the cultural change that is needed to build the increased trust of our customers. We recognise that customer needs and expectations are increasing and evolving. There has been a convergence of a number of technology disruptors across transportation, power generation and traditional utilities, which applies to both residential and business customers. The convergence of energy and data creates an opportunity for AGL to position itself as a trusted and preferred partner of the connected customer.

More information

Historical data on various customer indicators from FY15-FY19 (including energy volumes sold, and consumer and business markets by state and fuel type) is available at **2019datacentre.agl.com.au**.

The Energy Charter, to which AGL is a signatory, is available at **theenergycharter.com.au**.

Business Value Driver

Communities & Relationships

The strength of working relationships with key stakeholders; our brand and reputation.

Licence to operate

AGL recognises that community trust in institutions, including energy companies, is low. By making it a strategic priority to build and maintain our social licence we are demonstrating our commitment to driving the cultural change necessary to gain the increased trust of our customers and the community, which, in turn, is needed to deliver long-term sustainable value for our shareholders. Managing our licence to operate enables us to pursue our growth agenda and requires a commitment to transparency and investment in the community.

Strategic context

AGL strives to make a net positive social, economic and environmental contribution to the communities in which we operate. A wide variety of people and groups are interested in, or affected by, the decisions that AGL makes. We proactively engage with our stakeholders on relevant issues in ways that are most appropriate to each group. We understand that the current state of energy market transition and policy uncertainty can lead to challenges, and we consider it important to understand the different views and perspectives held by our stakeholders.

We undertake ongoing assessments of our business culture, practices and policies, and how well they currently support our public commitments to the community, our people and our customers. This is important to enable us to prioritise areas requiring improvement.

Engagement with local communities in the context of projects such as our power generation assets, energy storage assets and development projects, is particularly important as it ensures that community members receive timely and transparent information and have an avenue through which to raise concerns. We conduct regular sentiment surveys in the Latrobe Valley, our largest power generation asset community, and are expanding this work to the communities of our other large power generation assets to understand the issues of importance to them, including their attitudes towards the local power industry and their views on energy transition.

As a supplier of an essential service we have a responsibility to engage openly 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.

Engagement with our supply chain is also becoming increasingly important, particularly in light of recent federal and New South Wales government modern slavery legislation. We are focusing on improving our procurement framework and supplier assessment processes to ensure that we have an ethical supply chain. This not only protects vulnerable parties that may otherwise be prone to be taken advantage of, but in addition protects AGL's brand and reputation.

Creating value

Measuring our reputation	KPI		FY19	FY18	FY17	FY16	FY15
AGL's Reptrak score declined since FY18. The drop in AGL's reputation over the past year has been driven by declining scores on three important dimensions of reputation – leadership, workplace and citizenship. This decline in reputation was consistent with scores across the energy industry as a whole.	Reptrak score	●	61.7	64.0	58.4	60.8	59.1

Transparent policy positions

It is important to our stakeholders that our involvement in public policy development is undertaken transparently and consistently. Our submissions to government processes are published on AGL's online channel, **The Hub**.

Further, the community 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 perceived to result in, preferential treatment. We adopted a Political Donations Policy in August 2015, which prohibits AGL from making political donations.

No political donations (monetary or in-kind) were made during FY19, nor were any political donations made through third parties. AGL will continue to monitor the positions of industry associations to which it is a member. This monitoring will include policy positions and public advocacy statements. AGL will continue to disclose differences between our position and that of industry associations.

Community contributions and investment

We invest in the communities in which we operate through local procurement, local employment opportunities, a structured program of community investment, and opportunities for AGL employees to volunteer with charitable or community-based organisations.

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. AGL's contribution to the community increased in FY19.

We are committed to meeting all tax compliance obligations, and to providing our stakeholders with information about the taxes we pay. In this regard we have adopted the Board of Taxation's voluntary Tax Transparency Code. During FY19, we contributed and collected a total of $759 million in taxes (including corporate income tax instalments of $263 million). Our underlying effective tax rate on Underlying Profit has been in line with the Australian corporate tax rate of 30%.

KPI		FY19	FY18	FY17	FY16	FY15
Community contribution	●	$4.5 m	$4.3 m	$3.5 m	$3.2 m	$2.7 m
Underlying effective tax rate	NA	29.1%	29.5%	29.6%	29.0%	29.4%

Legend

- ● Improving trend and/or satisfactory outcome
- ● Neutral trend
- ● Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Key relationships and trade-offs with other Business Value Drivers

Our existing and potential investments in energy infrastructure (refer to page 20) create both social and economic opportunities and potential impacts in the communities in which they are located. We expect our investments in energy supply to contribute to the long-term affordability and reliability of energy. While such investments will benefit our customers and the community and economy more broadly, we recognise the need to balance these benefits with the specific needs of the communities and environment in which our projects are located.

As we undertake end of life planning for our thermal assets, we are addressing safety concerns from ageing infrastructure as well as issues of local community economic sustainability, and the broader community's desire for carbon-intensive assets to be closed, balancing People, Environment and Infrastructure Business Value Drivers. When planning for asset closures we are mindful of the impact these will have on our people who work on these assets and on the communities where they are located. AGL has committed to no forced redundancies when we close the Liddell Power Station and we expect to provide retraining opportunities as we repurpose the site and progress plans to provide new sources of energy supply.

Beyond FY19

Our Social Licence program will be delivered to drive cultural change across AGL's business to ensure we can better understand and meet rising customer and community expectations at a critical time in the energy sector, and develop robust metrics by which we will be able to measure our performance in key areas.

Having a better understanding of the social return on our investment in local communities will help us focus on and invest in programs that will deliver the most value to our stakeholders and our business and continuously improve disclosure in this area.

More information

Visit **2019datacentre.agl.com.au** for various measures of community investment. Information about the ways in which we engage with local communities is available on our website at **agl.com.au/about-agl/how-we-source-energy**.

Information about the taxes that we pay and the taxation policies that we employ (meeting the requirements of the ATOs' Tax Transparency Code) is available at **agl.com.au/about-agl/who-we-are/our-commitments**.

Business Value Driver

People

The competencies, experiences, behaviours, engagement and wellbeing of AGL's employees and contractors.

Workplace talent and culture

We are focused on attracting, developing and retaining the right talent to build a safe, engaged and performance-driven culture that can deliver the best outcomes for our customers and other stakeholders. We recognise the significance of this Business Value Driver to AGL's ability to deliver on strategic priorities and manage Tier 1 Strategic Risks (page 8).

Following a comprehensive review of our values in FY19, AGL's refreshed values are: **Care in every action**, **Integrity always**, **Better together**, **Deliver your best**, and **Shape tomorrow**. These values provide a guide as to how we will deliver on our strategic priorities (page 6).

Strategic context

The safety of our people is always our first priority. Our Target Zero strategy, which starts with the belief that all incidents are preventable, focuses on three pillars: visible leadership, fundamental risk management and simplified systems. During FY19 we focused on implementing the AGL Lifesaving Rules across the business to establish clear expectations of our people. This includes rolling out Critical Control Checks as part of the visible leadership program, and developing an AGL-wide Safe System of Work framework that provides guidance on permitted and non-permitted work on-site and the minimum risk controls required.

To deliver on our strategy, we need an engaged and diverse workforce with the right skills to ensure that we continue to optimise the value of our existing business, and the capabilities to meet the requirements and opportunities of the evolving energy landscape.

Recognising the broad-ranging benefits of an engaged workforce, during FY19 we focused on a range of initiatives under the two focus areas borne out of an engagement survey undertaken in late 2018 – keeping our employee promise and making it safe to speak up. These initiatives have included launching additional employee benefits, developing a 'Families at AGL' portal to help our people navigate work-life balance, launching a new connected leadership development program, and undertaking broad workplace consultation as part of the refresh of our values.

We continue to prioritise an inclusive workforce culture, recognising that increased diversity of thought, experiences and backgrounds in our workforce enhances our ability to innovate, problem solve and deliver sustainable outcomes for our customers and communities. An inclusive workplace culture also enhances our ability to compete for talent and retain talented people. Our FY19-20 Diversity and Inclusion Strategy channels our activities into four focus areas to drive success: inclusive practices, diversity in leadership, flexible working, and engaging externally.

During FY19, we critically reviewed our organisation to ensure we have the right structure and capabilities to deliver on our strategy. This involved AGL undertaking a significant review of our organisational design to put in place a structure, including new Executive Team appointments, to position AGL for our next phase of development, while also recognising the importance of having a stable environment for our people to perform their roles.

We are committed to ensuring our corporate governance framework, policies and practices reflect a high standard of ethical behaviour. For AGL, ethical governance means more than just complying with legislative requirements – it means setting clear principles and values of expected behaviour and holding our people to account. Ensuring our people feel safe to speak up is an important pillar in maintaining a strong ethical culture.

Creating opportunities for our people to develop and grow reduces the risk of skills and knowledge loss and enhances performance and business continuity. We support the targeted development of AGL people through a range of solutions including internal and external learning programs, and critical experiences gathered on the job in the form of key projects, secondments and other internal and external placements. We also have a talent strategy designed to deliver end- to-end talent solutions that focus on diversity and inclusion, capability development and a strong talent pipeline.

3,750

Number of employees (headcount)

3,586

Number of employees (FTE)

47.9%

Proportion of workforce employed under enterprise bargaining agreements

Creating value

Safety	KPI	FY19	FY18	FY17	FY16	FY15
Our key safety and wellbeing risks over FY19 included permit to work/ isolation, working at heights, confined space and mobile equipment operation. While the number of reportable incidents increased (driving the Total Injury Frequency Rate (TIFR) upwards), the severity of incidents is reducing year on year. The majority of FY19 TIFR injuries were low to moderate in severity. As we continue to develop our Target Zero strategy and framework, we are incorporating two additional key focus areas: an enhanced safety leadership program and building an increased focus on serious injury prevention.	TIFR employees	2.1	1.2	2.0	4.3	4.1
	TIFR (employees + contractors)	3.6	2.4	3.1	6.2	3.8
	Fatalities (employees + contractors)	0	0	0	0	0
	High potential near miss: recordable incident ratio NA	0.9:1	Not reported	Not reported	Not reported	Not reported

Culture and values	KPI	FY19	FY18	FY17	FY16	FY15
AGL achieved a six percentage point improvement in employee engagement scores over FY19, driven by a focus on delivering on employee promises and creating an environment in which people feel safe to speak up. The number of appointments of males to senior leadership roles has increased resulting in an overall reduction of female representation in the Senior Leadership Pipeline (SLP). This is primarily driven by appointments to Group Operations leadership roles. AGL experienced an increase in the number of complaints relating to unacceptable behaviour in the workplace in FY19. After investigations were undertaken there were no substantiated material breaches of AGL's Code of Conduct. AGL considers the increased reporting of incidents as a reflection of our focus on creating an environment in which it is safe to speak up.	Employee engagement	68%	62%[1]	Not measured	70%	76%
	Gender mix in SLP (% female)	38%	42%	38%	34%	33%
	Code of Conduct breaches	0	Not reported in the same way	Not reported	Not reported	Not reported

1. This engagement pulse survey was conducted in early FY19 and was considered a reflection of FY18 employee sentiment.

Talent and leadership	KPI	FY19	FY18	FY17	FY16	FY15
Structural changes have resulted in minimal change to our key talent retention rate as compared with the year before.	Attrition (total workforce)	12%	11%	9%	10%	9%
	Key talent retention	80%	81%	93%	84%	Not reported

Legend

- Improving trend and/or satisfactory outcome
- Neutral trend
- Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Key relationships and trade-offs with other Business Value Drivers

There is a direct relationship between the People and Customers Business Value Drivers. AGL recognises that investments we make in continuously improving our organisational culture promotes a sense of trust in our people, which in turn encourages them to advocate for AGL in the broader community and helps to foster a sense of community trust in AGL. We also recognise that an inclusive and diverse workforce delivers a greater opportunity for our people to understand and respond to our customers' needs.

Beyond FY19

The launch of AGL's new purpose and values on 1 July 2019 will drive work in FY20 to continually embed the purpose and values into employee experiences, before launching them to our customers and the community. Equality, particularly gender equality, will also be a focus in FY20. This includes recognising that operational sites have specific needs and priorities and has driven the establishment of separate work streams to focus on gender equality at AGL's sites.

More information

Historical data from FY15-FY19 as well as information on other people indicators (including diversity statistics, turnover and additional safety metrics) is available at **2019datacentre.agl.com.au**.

Business Value Driver

Environment

Access to and stewardship and use of scarce natural resources, and AGL's impact on the natural environment, both directly and as a result of the products and services provided.

Transition to a low carbon economy

AGL acknowledges and accepts the scientific consensus on climate change. We recognise that to stay within concentrations consistent with two degrees Celsius or less of global warming, a gradual decarbonisation of the electricity generation sector is required by 2050. Our approach to transitioning to a low-carbon future is set out within the AGL Greenhouse Gas Policy, which provides the framework within which we are structuring our greenhouse gas reduction activities.

Strategic context

As one of Australia's leading integrated energy companies, and as Australia's largest greenhouse gas emitter, we have a responsibility to be transparent about the risks and opportunities that climate change poses to our business, the community and the economy more broadly.

For this reason, AGL follows the guidance provided by the Financial Stability Board's Task Force on Climate-Related Financial Disclosure's voluntary disclosure framework (TCFD Framework) in both this report and in our associated FY19 Carbon Scenario Analysis report. Elements of the TCFD Framework are summarised in the diagram below.

We consider both physical and transitional risks associated with climate change and have incorporated these risks into the development of our strategy (refer to page 6).

TCFD Framework

Governance

Climate change risks and opportunities are considered by the Board and its committees (refer to page 29).

Strategy

Our overall approach is set out within the AGL Greenhouse Gas Policy. The scenario analysis that informs our strategy is outlined opposite.

Risk management

Risks and opportunities are summarised opposite. These are managed in accordance with AGL's Risk Management Framework (refer to page 8).

Metrics + Targets

The carbon intensity of AGL's generation portfolio is a key metric for measuring performance over time. Other metrics are also outlined opposite.

Transitional risks

Transitional risks include risks in end-of-life asset planning, rehabilitation of assets, misalignment of these plans with future scenarios leading to possible stranded assets and revenue loss and continued policy uncertainty.

Customer response to climate change is a driver of the increasing adoption of distributed energy services. To mitigate risks posed by changes to the nature of energy demand, we have developed a range of new products and services designed to focus on customers' changing expectations, including developing capabilities to deliver residential battery solutions.

Physical risks

Physical risks include increased frequency and severity of extreme weather events resulting in operational disruption, higher average temperatures (causing increases to frequency and magnitude of peak electricity demand and de-rating thermal plant), and precipitation changes impacting upon the efficacy of hydroelectric generation assets.

Change to peak electricity demand presents risks and opportunities. Our hydroelectric and gas peaking assets allow us to rapidly respond to market signals at times of high peak demand. Conversely, as an electricity retailer, we could be exposed to high costs if hedge contracts for supply do not match peakier customer demand.

Operational disruption from severe weather resulting in plant damage or unavailability and associated revenue losses is a risk for which AGL has devised a range of deductive, preventative and corrective management measures.

More information

Historical data on AGL's total emissions, emissions breakdowns by source and emissions intensities from FY15-FY19 is available at **2019datacentre.agl.com.au**.

Detailed information about AGL's FY19 Carbon Scenario Analysis methodology and results can be found at **agl.com.au/specialreports**.

Performance data in relation to other environmental aspects, including air emissions, water consumption and management, waste management, land use and biodiversity is available at **2019datacentre.agl.com.au**.

Information on environmental non-compliances resulting in penalty infringement notices being issued is included on page 35.

Creating value

Greenhouse gas emissions

AGL's greenhouse gas emissions reduced in FY19 due to an increase in renewable electricity generation, particularly in the first half of the period, and a corresponding decrease in required coal-fired generation. Additionally, unplanned outages at the Loy Yang A Power Station has led to a further reduction in emissions.

There has been a corresponding decrease in our operated and controlled intensities. The emissions intensity of total revenue also decreased due to a decrease in emissions and an increase in revenue.

KPI	FY19	FY18	FY17	FY16	FY15
Operated scope 1 & 2 emissions ($MtCO_2e$)	43.2	43.6	43.9	43.8	38.8
Operated generation intensity (tCO_2e/MWh)	0.95	0.97	0.98	0.96	0.97
Controlled generation intensity (tCO_2e/MWh)	0.95	0.96	0.97	0.95	0.96
Proportion of operated renewable generation output (%)	10%	9%	8%	9%	9%
Emissions intensity of total revenue ($ktCO_2e$/$ million)	3.3	3.4	3.5	3.9	3.7

Modelling the transition: scenario analysis

Australia's transition to a low carbon economy is subject to uncertainty including in relation to government policy and consumer uptake of new technologies.

Accordingly, we have undertaken scenario analysis of our operations to better understand the long-term impact to our generation fleet under a range of potential policy scenarios.

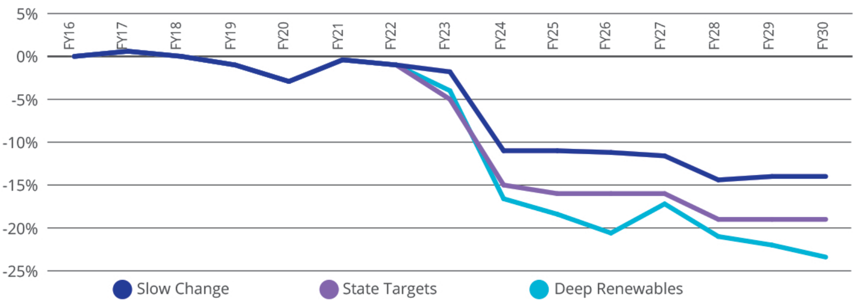
Utilising external modelling software by PLEXOS, three scenarios of the National Electricity Market were analysed:

- **Slow Change** – Australia's current renewable energy target of 33 TWh by 2020.
- **State Targets** – Additional state-based renewable energy policies in Queensland and Victoria (50% renewables by 2030)
- **Deep Renewables** – National policy requiring 50% renewables by 2030 and 45% emissions reduction from 2005 levels.

The results of the analysis show that the shift in AGL's electricity generation fleet from coal to renewables will need to continue under all three scenarios, but that our Bayswater and Loy Yang A coal-fired power stations will be required by the market until at least 2030.

The analysis also indicates that AGL's current timeline for closure of our coal-fired assets is not inconsistent with reducing emissions to a level consistent with limiting warming to below two degrees Celsius above pre-industrial levels.

AGL percentage emissions change from FY16 baseline



Other environmental risks

During FY19 AGL Macquarie suspended coal ash sales as a precautionary measure after test results identified elevated levels of metals which could exceed limits set by the NSW Environment Protection Authority (EPA). External advice confirmed that the use of coal ash does not pose a risk to human health or the environment. In June 2019 AGL resumed supply of fly ash and AGL continues to cooperate fully with the EPA.

KPI	FY19	FY18	FY17	FY16	FY15
Environmental Regulatory Reportable incidents	12	14	10	16	Not reported

Legend

- Improving trend and/or satisfactory outcome
- Neutral trend
- Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Key relationships and trade-offs with other Business Value Drivers

Recognising that our thermal assets are significant emitters of greenhouse gases, AGL has set closure dates for our coal- fired power stations. We acknowledge the trade-off between the Environment Business Value Driver with the People and Communities & Relationships Business Value Drivers, as these closures will affect AGL's people and the local communities in which these assets are located. Asset closure may also represent a trade-off between the Environment and Finance Business Value Drivers, as AGL may forgo short-term financial returns that may arise from extending the operating life of those assets. However, AGL's analysis to date suggests that such extensions would not be financially viable in the long-term.

Beyond FY19

AGL's Greenhouse Gas Policy, transition plans and robust approach to carbon risk management demonstrate our resilience against risks posed by the transition to a low-carbon economy. In FY20, we plan to broaden our scenario analysis to consider alternative transition pathways involving a larger paradigm shift, such as considering limiting warming to 1.5 degrees above pre-industrial levels. This will be considered in our strategic planning cycle for FY20 and reflected in our 2020 report. Recent and planned investments in renewables, storage and gas-firming capacity (page 20) are expected to contribute to lowering the carbon intensity of our portfolio.

Business Value Driver

Infrastructure

Effective and efficient use of assets throughout the value chain that AGL uses, owns or has control of, to enable delivery of energy to the market and to customers.

Reliable energy supply

Australia's energy sector is transitioning from a system dependent on ageing thermal generation assets to one characterised by renewable energy, lower emission technologies, firming technologies and energy storage. As the largest electricity generator in the National Electricity Market (NEM), we have a key role to play in ensuring that we manage our generation assets and gas supply efficiently to ensure security and reliability of supply for customers.

Strategic context

The framework for delivering reliability in the NEM is primarily market-based. AGL is one of a number of players in the market (including other generators, operators of transmission and distribution networks, and the Australian Energy Market Operator) that together contribute to the security and reliability of the grid.

AGL considers reliability at both asset and fleet level, as well as in terms of investing in the new assets that will be required to replace supply from ageing thermal assets and to meet federal and state government renewable energy and climate policies.

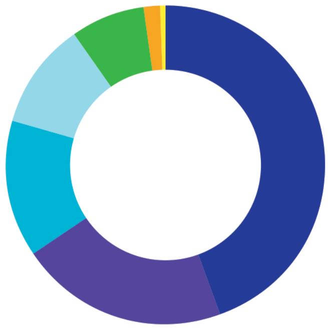
We remain committed to the orderly transition of our portfolio away from coal to new sources of generation and storage, which will ultimately be cleaner, affordable and reliable (refer to page 18). AGL is committed to open and constructive engagement with our communities, governments and other affected stakeholders. However, we recognise that our thermal assets are essential to Australia's energy security. As such, we are investing in efficiency upgrades at the Bayswater and Loy Yang A power stations to ensure these assets are secure, reliable and flexible to support more intermittent renewable energy in the NEM.

Gas has a substantial role to play in the transition to a low-carbon economy. We continue to work towards securing reliable and cost-effective sources of gas for our customers and for generation, and recognise the value that comes from our gas storage infrastructure. We are progressing plans for the Crib Point LNG jetty in Victoria.

Should we receive environmental approval and choose to proceed, this project has the potential to provide a new source of gas to the east coast and to support our gas storage and shaping strategy and our development of flexible gas-fired generation capacity. From FY21, AGL will augment its operated gas storage assets with contracted storage services from the Iona Gas Storage Facility. This strategically located reservoir will provide AGL with additional flexibility to manage its gas demand requirements.

Operated generation assets

10,413 MW



29.5 PJ
Operated gas storage assets

4 PJ/pa
Operated gas production

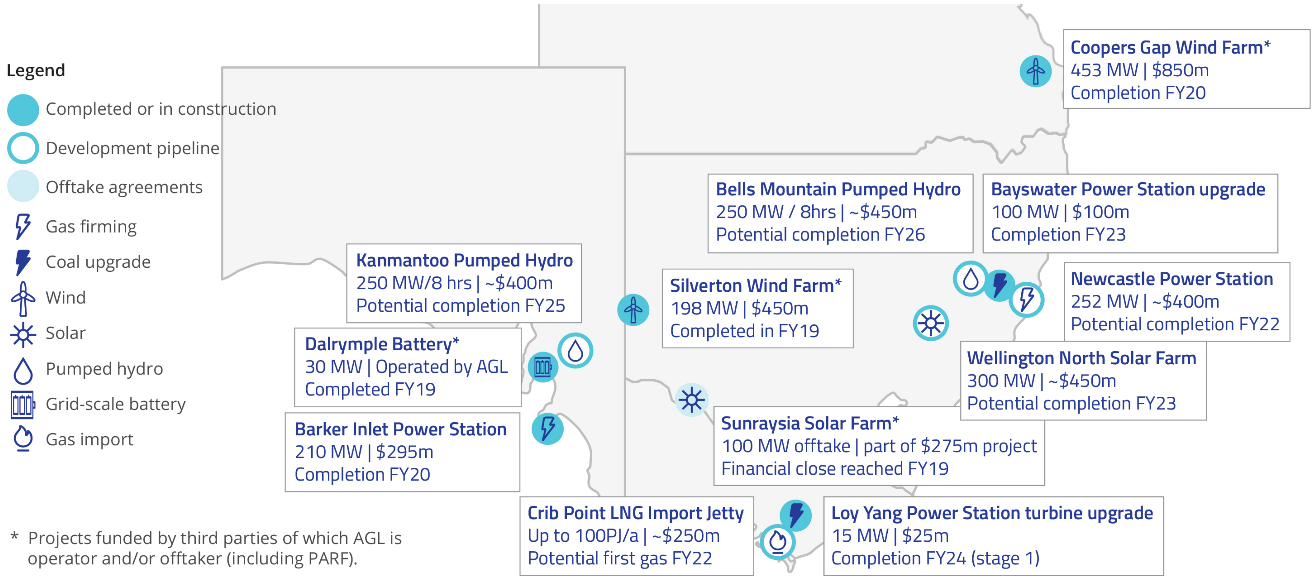
Creating value

Generation efficiency and availability	KPI		FY19	FY18	FY17	FY16	FY15
Generation sold to the pool increased 2% since FY18 and is now at its highest level since FY16. AGL was unable to meet our budgeted Equivalent Availability Factor during FY19 primarily due to a planned outage extension at Bayswater Power Station Unit 1, Liddell's Unit 3 turbine failure, and Loy Yang A's Unit 2 generator failure.	Pool generation volume (GWh)	●	43,723	43,065	43,099	43,774	38,249
The higher number of unplanned outages and corresponding decreased availability experienced at our thermal plants highlight the need for continued investment to ensure the resilience and availability of our assets.	Equivalent Availability Factor (EAF)[1]	●	78.4%	79.6%	84.9%	80.1%	82.5%

1. Equivalent availability factor is strongly linked to commercial availability, which is currently a targeted remuneration outcome for some Key Management Personnel.

Market development and continuity

AGL's development pipeline is supporting the NEM as it transitions towards higher renewable penetration, through investment and development of options spanning renewables, flexible gas-fired generation, pumped hydro and grid-scale batteries. As at 30 June 2019, there were approximately $1.9 billion of new wind, solar and gas firming projects under construction as a result of AGL's investment in enhancing energy supply, and we have another approximately $2 billion of projects subject to feasibility including pumped hydro projects at Bells Mountain and Kanmantoo.



Legend

- Improving trend and/or satisfactory outcome
- Neutral trend
- Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Key relationships and trade-offs with other Business Value Drivers

Balancing community expectations in relation to decarbonisation of Australia's energy sector with the role that we play in contributing to the continued availability and reliability of energy represents a trade-off between the Customer, Communities & Relationships and Environment Business Value Drivers. We have set orderly timelines for the retirement of our thermal assets, which enables us, and the market, to respond with appropriate investments to provide continuity of supply for the community.

Investing in our thermal assets represents a trade-off between the Infrastructure, Environment and Finance Business Value Drivers. While our thermal assets remain significant emitters of greenhouse gases, upgrades to them are designed to improve the reliability and flexibility of their output without increasing their emissions intensity.

The eventual retirement of large-scale assets carries with it a responsibility to consider a range of impacts in the lead up to, during and following decommissioning, representing trade-offs with the Communities & Relationships Business Value Driver. These assets provide significant economic opportunities for the communities and regions within which they operate, therefore their planned and eventual closure can be a time of concern and uncertainty for our employees, their families and their communities, which also represents a trade-off with the People Business Value Driver.

Beyond FY19

Efficiency upgrades are in place to maximize the performance and reliability of our existing asset base. We have a pipeline of development opportunities to pursue given the right policy settings, and expect to be a significant contributor to Australia's evolving energy landscape – generating reliable, sustainable energy at the lowest cost.

More information

Historical data on AGL's generation capacity is available at **2019datacentre.agl.com.au**.

Additional information about pool generation volumes is available on page 51 in the Operating and Financial Review.

Detailed information about each of AGL's assets (including community engagement and environmental monitoring data, where relevant) is available at **agl.com.au/about-agl/how-we-source-energy.**

Business Value Driver

Systems & Processes

Availability and development of processes, knowledge, insights, systems and data, including energy portfolio management and customer analytics, to support and enhance business activities.

Insights

AGL operates in a highly competitive environment. We differentiate ourselves by employing our systems, data capabilities and insights (including energy portfolio management and customer analytics) to manage risk, deliver strong customer products, manage costs and build our business for the future.

Strategic context

Together with our people, our systems and processes create the foundation for the work we do every day. They underpin how we safely maintain our assets, how we analyse data to serve our customers better, and how we safeguard our own and our customers' sensitive information in the light of cybersecurity risks.

As we position ourselves for the future, we continue to invest in our systems and processes. In FY19 we invested $141 million of capital expenditure on digital transformation such as our enterprise resource planning system upgrade and on improving our customer experience. This includes investment in technology to improve our customers' digital experience, as well as tools to standardise and streamline internal processes and improve our employee experience.

As a vertically integrated energy business, we manage wholesale market risk through considered hedging strategies coupled with careful analysis and forecasting of generation and customer demand volumes. Sophisticated wholesale energy portfolio management tools are key to this process. AGL's approach to managing energy price risks, both through physical ownership of energy generation and through hedging, reflects the need to provide pricing certainty to customers and limit our customers' exposure to adverse market outcomes. AGL manages risk exposure by determining the appropriate timing and degree of contracting activities and by ensuring that AGL's overall risk appetite is not exceeded.

Our investment in technology is also enabling the greater personalisation of service, and we are prioritising the digitisation of our business in order to increase flexibility and the speed-to-market for new products and services. Our ability to successfully harness insights from multiple data sets will be central to our ability to continue to evolve our customer experience.

We operate within a sophisticated data security framework and have implemented processes and protections to ensure data breach prevention. In particular, AGL's Cybersecurity Framework follows a risk-based approach for managing cybersecurity risks for critical infrastructure, which allows us to consider cybersecurity risk as a priority similar to financial, safety and operational risk, while factoring in larger systemic risks inherent in the context of critical infrastructure.

$420 m

Digital transformation programs undertaken between FY17-FY19

$141 m

Capital expenditure on digital transformation programs during FY19

Creating value

Wholesale energy portfolio management

An important way in which AGL manages energy price risk, and protects our customers' exposure to energy price volatility, is through financial hedging. AGL's governance framework establishes the wholesale risk management policy guidelines under which energy hedging activities are conducted. The policy allows for the commercial optimisation of AGL's portfolio provided that all activities adhere to overall risk limits that reflect AGL's risk appetite.

AGL is exploring opportunities to utilise metrics from our existing disclosures to demonstrate the effectiveness of our hedging strategies and wholesale energy portfolio management tools, which operate within AGL's overarching wholesale risk management framework.

Customer insights and analytics

We recognise that our customers' needs and preferences are changing, and that the market is being disrupted by factors such as technology and the evolving regulatory involvement. As part of a dedicated program of work, AGL is seeking to leverage leading practice data, analytics and insights to allow us to get to know our customers better, and deliver truly personalised experiences for our customers that meet their specific needs, while always maintaining the security, privacy and integrity of their data. Over the course of the work being undertaken, we wish to capture better data in a 'single view of customer' available across all touchpoints.

Our data foundations are being strengthened in parallel with a top-down evaluation of metrics, with a strategic reporting platform enabling sustained self-service reporting, leading to better, faster decision-making and improved commercial and customer outcomes.

Ultimately AGL wishes to be a data-powered and insights driven organisation, with customer interactions and decision-making based upon trusted data.

Data security and process governance

As access to customer data, and data security more generally, take on increasing importance in our community, these issues have become the subject of particular focus at AGL.

AGL prioritises the appropriate treatment of customer data and information within the terms of the Privacy Act. To date, we have had no notifiable breaches under the Privacy Act 1988 Mandatory Data Breach Reporting regime.

KPI		FY19	FY18	FY17	FY16	FY15
Reportable privacy incidents	●	0	0	Not reported	Not reported	Not reported
Notifiable data breaches arising from a material risk relating to cybersecurity, data governance, or failure of internal controls	●	0	Not reported	Not reported	Not reported	Not reported

Legend

- ● Improving trend and/or satisfactory outcome
- ● Neutral trend
- ● Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Key relationships and trade-offs with other Business Value Drivers

There is a direct relationship between the Systems & Processes and Customer Business Value Drivers. Investment in systems and processes develops customer insights and analytical capabilities, which enables us to develop products and services that deliver a superior customer experience and meet the changing needs of our customers. This direct relationship becomes all the more important as AGL maximises its analytical capabilities and makes use of more sophisticated customer data. In these circumstances, it becomes increasingly important for AGL to be able to protect its customer data, particularly given the greater convergence of energy and data value streams.

The ongoing need to invest in systems and processes comes with short-term financial impact, but drives long-term value for customers over time.

Beyond FY19

We are seeking to maximise our data and analytical capabilities across a range of areas of our business. This is particularly the case as we seek to engage more effectively with our customers. Data plays an integral part in our day-to-day lives, and the convergence of energy and data creates an opportunity for AGL to position itself as a trusted and preferred partner of connected customers. The data strategy that we are embarking upon aims to deliver personalised experiences for our customers, improve AGL's resilience to external disruptors, and provide the analytical tools to maximise the efficiency and effectiveness of our systems capabilities.

More information

Performance data on Systems & Processes is available at **2019datacentre.agl.com.au**.

Business Value Driver

Finance

Access to and management of financial capital to support execution of strategy and investment in growth opportunities through retaining financial market support.

Financial management and value creation

We recognise that prudent financial management is an essential component of preserving and growing value for all our stakeholders. The trust placed in us by financial markets is integral to our ability to fund our operations and invest in new products and services to support our customers and the communities in which we operate.

Strategic context

As Australia's second oldest publicly listed company, AGL has a long and proud historical relationship with Australian investors. At 30 June 2019, we had 114,217 individual shareholders, representing primarily everyday Australians either directly or via their super funds, as well as many of Australia's and the world's largest pension funds.

We also have longstanding relationships with our lending banks, including major Australian institutions as well as banks throughout Asia. We have established a successful bond issuance program in both the US Private Placement and Australian Medium Term Note markets, enabling us to diversify our funding from long-term, competitively-priced sources. We have a Baa2 credit rating with Moody's Investors Service.

AGL recognises that capital allocation during a time of a transitioning energy market must be disciplined. We have to ensure that we are both creating value for the long-term, while protecting ongoing returns. Our five capital allocation principles govern our approach to new investment and capital management (these are described in detail in the Allocating capital for growth table), and when combined, continue to drive strong outcomes for shareholders.

The principal metrics we use for remuneration, as reflected in the Remuneration Report, are Underlying Profit after tax, return on equity and relative total shareholder return. These metrics form a core component of our remuneration framework – Underlying Profit for short-term incentive (STI), and return on equity and relative total shareholder return for long-term incentive (LTI). In this way, we seek to ensure short and long-term executive pay outcomes correspond with shareholder returns. STI scorecards have been re-designed to focus on meaningful objectives that reward for beyond 'business as usual' in our financial performance as well as improving customer experience, engagement of our people and the safety of our workforce and contractors. We are also tailoring objectives to the individual accountabilities of our executives.

Creating value

Delivering shareholder value	KPI			FY19	FY18[1]	FY17	FY16	FY15
Underlying Profit after tax was $1,040 million, up 2%. This result reflects the strong operation of our energy supply portfolio.	Underlying Profit after tax	KPI linked to remuneration	Improving trend	$1,040m	$1,018m	$802m	$701m	$630m
Return on equity was 12.5%, down 0.6 percentage points reflecting an increase in AGL's equity base.	Return on equity (%)	KPI linked to remuneration	Neutral trend	12.5	13.1	10.2	8.3	7.2
AGL's total shareholder return in FY19 was -1.8%, compared with +12.6% for the S&P/ASX100 Index. While the FY19 outcome was better than FY18, we recognise that this was not a positive outcome for shareholders.	Total shareholder return (%)	KPI linked to remuneration	Neutral trend	-1.8	-12.3	42.4	22.3	14.8

1. Restated for adoption of AASB 9 Financial Instruments and AASB 16 Leases.

Legend

- Improving trend and/or satisfactory outcome
- Neutral trend
- Deteriorating trend
- KPI linked to remuneration outcomes for CEO and Key Management Personnel (page 58)

Allocating capital for growth

To assist stakeholders with monitoring and understanding the principles by which we make decisions about financial capital, since December 2017 we have communicated our performance relative to five capital allocation principles.

Capital allocation principles		FY19 outcome
1. Maintain balance sheet strength consistent with Baa2 credit rating to enable optimal response to opportunities as they emerge	✓	AGL continued to maintain a strong balance sheet consistent with a Moody's Baa2 credit rating, with gearing of 23.5% at 30 June 2019 and ample headroom coming into FY20.
2. Maintain target dividend payout ratio of 75% of Underlying Profit after tax, franked to 80%	✓	Dividends increased by 2 cents per share on the prior year and were consistent with policy.
3. Maintain optionality on our balance sheet to drive improved return on equity over time	✓	During the year AGL divested non-core assets with the completion of the sale of a portfolio of small generation and compressed natural gas refuelling assets, known as AGL's National Assets portfolio.
4. Application of threshold hurdle rate supported by ongoing analysis of cost of capital and appropriate risk adjustment for competing investment classes	✓	AGL continued to ensure all of the projects we are undertaking as part of our capital investment plans are incrementally positive to shareholder value. This included $388 million of growth and transformation capital expenditure. This included investment in the Barker Inlet Power Station, upgrades to Loy Yang A and Bayswater power stations, the completion of our Customer Experience Transformation program and the upgrade to our enterprise resource planning systems (PT3).
5. Return excess cash to shareholders if more accretive opportunities are not identified within a reasonable time-frame	✓	AGL redeemed $650 million worth of subordinated notes on 11 June 2019 using cash reserves and existing bank debt facilities. An on-market share buy-back has been announced for FY20.

Key relationships and trade-offs with other Business Value Drivers

As identified on pages 12 to 23, we are investing significant financial capital (both operating expenditure and capital expenditure) in projects and systems aimed at enhancing other Business Value Drivers, as well as investing for sustainable financial returns.

In making investment decisions, AGL is constantly balancing the need to create value for all stakeholders with the financial impact of the investment on AGL's overall position. This includes weighing up the need to maintain short-term financial performance while also creating long-term value.

Beyond FY19

As the energy market continues to transition and present short-term challenges to our financial performance, focus on effective capital allocation and business optimisation will be a priority.

More information

The Operating and Financial Review (page 37) outlines AGL's financial performance for FY19.

Full financial accounts are available from page 82.

Executive Team

Brett Redman
Managing Director & CEO

See page 31 for Brett's bio.

Christine Corbett
Chief Customer Officer

Christine joined AGL in July 2019. Prior to joining AGL, Christine built a career at Australia Post spanning almost three decades, where she held several leadership roles, including two years as Chief Customer Officer, responsible for group channel operations, marketing, digital and customer experience. She also held the role of Interim Chief Executive Officer at Australia Post prior to joining PwC in 2018 as a Special Advisor consulting for a range of clients in the customer and integrated solution space.

Christine holds a Bachelor of Law and a Bachelor of Business (Comm) from the Queensland University of Technology, and is a graduate of the Australian Institute of Company Directors and Stanford Graduate School of Business' Executive Program.

John Fitzgerald
General Counsel & Company Secretary

John was appointed Company Secretary in October 2015. In December 2007, John was appointed General Counsel and continues to hold that position in addition to his role as Company Secretary.

Previous to joining AGL, John worked in both government and private legal practice.

John's holds a Bachelor of Arts and a Bachelor of Law from the University of New South Wales and a Masters in Arts from the National University of Ireland (University College Dublin). John is admitted as a Solicitor of the Supreme Court of New South Wales and has been practising in projects, mining and energy law for over 20 years.

Joanne Fox
Executive General Manager, People & Culture

Joanne joined AGL in June 2019, following a long career at Santos.

With more than 25 years' experience, Joanne has a strong and diverse background leading the Human Resources function in large ASX100 companies in the oil and gas, FMCG and pharmaceutical industries. Joanne brings extensive experience in capability and culture development, succession management, talent development and organisational design.

Joanne holds a Graduate Certificate in Energy & Resources from University College of London plus an Masters of Business Administration from University of South Australia.

Lisa Harrington
Executive General Manager, Stakeholder Relations

Lisa joined AGL in December 2013 and led the Government Affairs function prior to being appointed Chief of Staff to the Managing Director and CEO in 2015. In November 2016, Lisa became the Executive General Manager of Stakeholder Relations.

Lisa has 20 years' experience in stakeholder relations and communications across corporate, government and not-for profit sectors. Lisa holds a Bachelor of Communications from the University of Technology Sydney, attended the Melbourne Business School as part of AGL's Academy for Senior Leaders and undertook the Advanced Management Program at Harvard Business School.

Doug Jackson
Executive General Manager, Group Operations

Doug joined AGL in March 2013, as Chief Operating Office, Merchant Operations and was appointed to Executive General Manager, Group Operations in May 2015.

With over 35 years' experience in the energy and mining industry, prior to joining AGL, Doug worked in both the United States and Canada, leading the operations and construction of electricity generation and mining assets.

Doug holds an Masters of Business Administration in Global Energy from The University of Calgary – Haskayne School of Business.

Simon Moorfield
Executive General Manager, Future Business & Technology

Simon joined AGL in January 2016 as Chief Information Officer, before being appointed to Executive General Manager, Future Business & Technology in July 2019.

Simon has over 20 years' experience in technology and program management, having held several executive roles both locally and internationally with enterprises such as NAB, GE Captial and CBA. His significant leadership experience in large retail businesses such as CBA Retail and GE Capital Asia Pacific includes leading numerous innovative change and transformation programs.

Simon holds a Bachelor of Computer Science from RMIT.

Damien Nicks
Chief Financial Officer

Damien joined AGL in March 2013 and held several senior executive finance roles across Retail Energy, Energy Markets and Group Commercial Finance before being appointed Interim CFO in August 2018 then formally CFO in May 2019.

Damien has more than 24 years' experience across large multinational businesses including Linfox Logistics, Smorgon Steel and Deloitte.

Damien is a Board member of ActewAGL, a joint venture that governs the electricity and gas retailer and distribution businesses in the ACT. Damien holds a Bachelor of Commerce (Honours) from La Trobe University, is a fellow of the Chartered Accountants Australia and New Zealand and a graduate member of the Australian Institute of Company Directors.

João Segorbe
Executive General Manager, Strategy & Corporate Development

João joined AGL in August 2019.

With more then 18 years' experience, João brings a wealth of international energy sector expertise, most recently from the global team leading McKinsey & Company's thinking on energy transition. João headed up the company's Electrical Power and Natural Gas Professional Practice in Australia and New Zealand since 2016.

João holds a Masters of Science in Mechanical Engineering at the Instituto Superior Técnico, Portugal, and completed his Masters of Business Administration at Northwestern University in the USA.

Richard Wrightson
Executive General Manager, Wholesale Markets

Richard joined AGL in March 2010 as Head of Wholdsale Electricity. He was appointed Executive General Manager, Wholesale Markets in July 2017.

Richard has 27 year's local and international experience and prior to arriving in Australia in 1996 Richard was involved in the contract and trading areas of PowerGen and British Energy. his significant Australian energy sector experience includes consulting on the National Electricity Market commencement, as well as working at the Electricity Trust of South Australia, the State Electricity Commission of Victoria and Loy Yang Power.

Richard holds a Bachelor of Economics from Nottingham Trent University (UK).

Directors' Report

Governance Summary

AGL is committed to ensuring that its corporate governance framework, policies and practices are of a high standard. Delivering on this commitment requires AGL to have a sound understanding of current governance requirements and practices, as well as being attuned to emerging governance trends and shifting stakeholder expectations. Set out below is a summary of selected aspects of AGL's corporate governance framework and a highlight of the key governance issues affecting AGL during FY19.

Throughout FY19, AGL's corporate governance arrangements were consistent with the Corporate Governance Principles and Recommendations (3rd edition) published by the ASX Corporate Governance Council (ASX Principles). AGL has considered the recently released 4th edition of the ASX Principles and expects that its governance arrangements will be consistent with the 4th edition of the ASX Principles throughout FY20. AGL's 2019 Corporate Governance Statement is available at **agl.com.au/CorporateGovernance**.

AGL's 2019 Corporate Governance Statement outlines AGL's arrangements in relation to its Board, Board Committees, Executive Team, risk management framework and financial reporting, diversity and inclusion, key corporate governance policies and shareholder engagement.

AGL's governance framework is summarised in the diagram below.

Changes to Board composition during FY19

During FY19, the following changes were made to AGL's Board:

- Andy Vesey ceased to be a Director on 23 August 2018;
- Belinda Hutchinson retired from the Board on 12 December 2018;
- Brett Redman was appointed as the Managing Director & CEO on 1 January 2019; and
- Patricia McKenzie was appointed as a Non-Executive Director on 1 May 2019.

The following changes were made to AGL's Board Committees during FY19:

- Belinda Hutchinson retired from the People & Performance Committee (P&PC) and Audit & Risk Management Committee (ARMC) following her retirement from the Board on 12 December 2018;
- Peter Botten was appointed to the P&PC on 12 December 2018; and
- Patricia McKenzie was appointed to the Nominations Committee, ARMC and P&PC on 21 May 2019.

Board skills

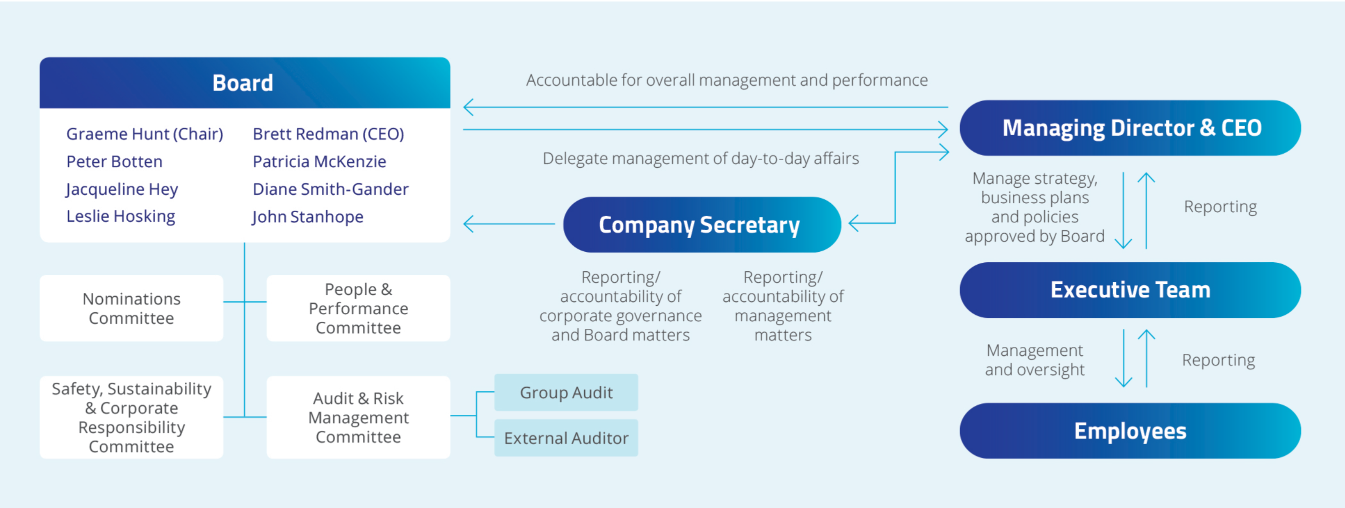
The Board Skills Matrix (Table 1) summarises the mix of skills and experience that the current AGL Directors possess. During FY19, the Board utilised this Matrix in relation to the appointment of Patricia McKenzie, who provides additional experience in gas, electricity, operations/asset management, risk management and compliance, and large public company/governance.

The Board considers that its current members have an appropriate mix of skills that enable the Board to discharge its responsibilities and deliver AGL's strategic objectives. As part of the FY19 update of the Board Skills Matrix, the Board has identified additional skills and experience that may be required in the future and is taking steps to address those competency requirements.

Key areas of focus during FY19

The key areas of focus for the Board during FY19, in addition to standing agenda items, are set out in Table 2.

The key areas of focus for the Board Committees, in addition to standing agenda items, are set out in Table 3.



Governance Summary

Table 1 – Board Skills Matrix

Skills required	Description	Board	SSCR	AMRC	P&PC
Gas experience	Knowledge of the supply, storage and transportation aspects of Australia's gas markets, including trading, contracting and wholesale pricing.	6/8	2/4	3/4	3/4
Operations/asset management	Having led or overseen the management of complex operating assets which require the leadership of a large, skilled workforce.	8/8	4/4	4/4	4/4
Risk management and compliance	A working knowledge of contemporary risk and compliance management practices. Experience managing business risks and controls and the activities necessary to effectively manage and mitigate risk.	8/8	4/4	4/4	4/4
Technology/ industry transformation	Experience and insights from industries that have been through significant technology/ digital disruption or transformation. Experience with new and emerging technologies.	6/8	3/4	3/4	2/4
Strategy and growth	Experience developing strategic objectives and driving growth opportunities in large, complex organisations.	8/8	4/4	4/4	4/4
Electricity experience	Knowledge of the essential elements of the National Electricity Market (NEM), including trading, contracting and wholesale and retail pricing. A knowledge of the generation market (renewables, coal and gas) as well as downstream retail and commercial and industrial market dynamics.	5/8	1/4	3/4	2/4
Corporate finance	Experience leading or overseeing the corporate finance function within a large business or investment banking environment. Experience dealing with a range of funding sources and capital structuring models and financial accounting and reporting.	8/8	4/4	4/4	4/4
Customer and retail	Knowledge of customer segmentation models and how to influence customer behaviour in an increasingly digital world. This experience would ideally come from a retail environment, however business-to-business sales in the commercial or industrial environment is also highly relevant.	6/8	3/4	2/4	3/4
Large public company / governance	Experience as a Director of public company Board(s) within the ASX100. Particularly relevant are businesses with an exposure to complex political, regulatory and business environments with a strong track record of environmental and social governance and significant people and performance structures.	8/8	4/4	4/4	4/4

Table 2 – Board Focus Areas

Committee	Key Focus Areas in FY19	Business Value Drivers
Board	• CEO succession processes, including overseeing an extensive domestic and international search process that culminated in the appointment of Brett Redman as Managing Director and CEO in January 2019. • Overseeing the processes to appoint new members to the Executive Team, including the Chief Financial Officer, Chief Customer Officer, EGM People & Culture and EGM Strategy & Corporate Development. • Group performance (including financial performance, asset performance, customer metrics and HSE performance) . • Growth options available to AGL, including by optimising existing assets, evolving AGL's core energy market offerings and new growth opportunities. • The non-binding, indicative proposal that AGL made to acquire Vocus Group Limited. • Customer pricing and affordability initiatives, including consideration of proposed regulatory changes to energy pricing and assisting customers to take up government-led residential battery schemes. • Implementation of AGL's transformation programs, including the Customer Experience Transformation project and the enterprise resource planning upgrade. • AGL's governance and risk management systems and identifying ways to further strengthen governance, accountability and culture within AGL. • Action AGL is taking to deliver on its strategic priority to build Social Licence, including approving a new set of purpose and values for AGL. • The ongoing feasibility of the LNG import jetty project at Crib Point.	$

Governance Summary

Table 3 – Board Committee Focus Areas

Committee	Key Focus Areas in FY19	Business Value Drivers
Safety, Sustainability & Corporate Responsibility	• Site visits to AGL's power stations at Loy Yang and Macquarie to oversee key health, safety and environmental issues affecting the sites. • Visit to Crib Point, the site of AGL's proposed LNG import jetty, including meeting with various stakeholders and community members to allow Directors to understand key concerns. • AGL's safety, culture, systems, capability and risk, including overseeing initiatives to improve health, safety and environmental performance. • Monitoring safety and environmental incidents, including the suspension of coal ash sales from the Bayswater and Liddell Power Stations following reporting of elevated levels of metals in the ash, including overseeing reports which confirmed that the use of the ash did not pose a risk to human health. • Key themes in relation to AGL's customers including complaint handling processes, brand health, initiatives to drive improved customer advocacy and the effectiveness of customer campaigns. • Action AGL is taking to deliver on its strategic priority to build Social Licence and to promote stakeholder advocacy. • AGL's performance against sustainability framework targets set out in the 2018 Sustainability Report.	
Audit & Risk Management	• Overseeing the issues, incidents and risks identified by management in the quarterly Group Audit, compliance and risk reports and ensuring there is clear accountability for, and effective closure of, relevant issues. • Overseeing AGL's financial reporting processes, including consideration of AGL's half-year and full year reports. • AGL's transition to reporting that meets the principles of the International Integrated Reporting Framework. • Reviewing the effectiveness of AGL's governance and risk management systems and identifying ways to further strengthen governance, accountability and culture within AGL, including the consideration of improvement opportunities across AGL's business in the areas of culture, governance, remuneration and customers, following the release of the Final Report of the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry. • AGL's preparedness for peak period operations and reviewing performance of assets during peak periods, including risk controls and lessons learned. • Reviewing reports from management on emerging sources of risks and the mitigation measures in place to deal with those risks, including in relation to IT security and climate change.	$
People & Performance	• Overseeing the preparation of AGL's Remuneration Report. • Changes to AGL's Executive Remuneration Framework, as set out in the Remuneration Report on page 60-61. • CEO and Executive Team FY19 objectives, as set out in the Remuneration Report on page 65. • Consideration of AGL's Diversity Targets. • Executive succession planning and talent development. • Action AGL is taking to foster employee engagement and monitoring of workplace culture.	
Nominations	• FY19 Board Review process. • Updating of the Board Skills Matrix. • Succession planning to address AGL's future opportunities and challenges, including the identification and appointment of Patricia McKenzie as a new Non-Executive Director and the CEO succession process.	

Board of Directors

The Directors present their report together with the financial statements of AGL Energy Limited and its controlled entities for the year ended 30 June 2019. The following sections form part of this Directors' Report – Purpose, Values & Strategy (pages 6-7); Operating Environment (pages 8-9); How We Create Value (pages 10-11); Business Value Drivers (pages 12-25); Corporate Governance Summary (pages 28-33); Other Required Disclosures (pages 34-36); Operating and Financial Review (pages 37-57); and Remuneration Report (pages 58-81).

The names of the persons who have been Directors, or appointed as Directors, during the period since 1 July 2018 and up to the date of this Report are Brett Redman (Managing Director & CEO) (appointed on 1 January 2019), Graeme Hunt, Les Hosking, Jacqueline Hey, John Stanhope, Peter Botten, Diane Smith-Gander, Patricia McKenzie (appointed on 1 May 2019), Belinda Hutchinson (retired on 12 December 2018) and Andy Vesey (retired on 23 August 2018).

Details of the skills, qualifications, experience and responsibilities of AGL's Directors as at the date of this Report are set out below.

Graeme Hunt

Non-Executive Director since September 2012 and Chairman since 27 September 2017. Age 62.
MBA, BMET, FAus IMM

Current Directorships: Chairman of BIS Industries Limited and Member of CSIRO Energy Advisory Council.

Former Directorships of listed companies over the past 3 years: Graeme was a Director of Broadspectrum Limited from 7 May 2010 until 31 December 2016, and held the position of Managing Director and Chief Executive Officer from 1 November 2012 until 31 December 2016.

Experience: Graeme has extensive experience in establishing and operating large capital projects including in energy intensive industries. He was previously Managing Director of Broadspectrum Limited and Managing Director of Lihir Gold Limited. He has also held a number of senior executive positions in a 30 year career with the BHP Group.

Brett Redman

Managing Director & CEO since January 2019. Age 49.
BCom, FCA, GAICD

Current Directorships: Nil.

Former Directorships of listed companies over the past 3 years: Nil

Experience: Brett has over 25 years of experience in senior finance roles in large blue-chip industrial companies, with expertise in leading group strategy and finance in the Energy and Utilities sector. Before joining AGL in 2007, Brett held numerous finance roles at BOC in the South Pacific and North America, Email and CSR, which was complemented by his background in chartered accounting at Deloitte. Prior to Brett's appointment as AGL's Managing Director and CEO, Brett was AGL's CFO since 2012, where he was responsible for leading growth initiatives including the acquisitions of the Loy Yang A and Macquarie power stations, as well as the creation of the Powering Australian Renewables Fund.

Peter Botten AC, CBE

Non-Executive Director since October 2016. Age 64.
BSc, ARSM

Current Directorships: Council Member of the Australia PNG Business Council, Chairman of the Oil Search Foundation, Business for Development Australia, Hela Provincial Health Authority, the National Football Stadium Trust in Papua New Guinea and Managing Director of Oil Search Limited (appointed on 28 October 1994).

Former Directorships of listed companies over the past 3 years: Nil.

Experience: Peter has been Managing Director of Oil Search Limited since 1994, overseeing its development into a major Australian Securities Exchange-listed company. Peter has extensive worldwide experience in the oil and gas industry, holding various senior technical, managerial and board positions in a number of listed and government-owned bodies.

Jacqueline Hey

Non-Executive Director since March 2016. Age 53.
BCom, Grad Cert (Mgmt), GAICD

Current Directorships: Director of Qantas Airways Limited (commenced 29 August 2013), Bendigo and Adelaide Bank Limited (commenced 5 July 2011), Cricket Australia and Member of Brighton Grammar School Council.

Former Directorships of listed companies over the past 3 years: Jacqueline was a director of Australian Foundation Investment Company Ltd from 31 July 2013 until 18 January 2019.

Experience: Jacqueline enjoyed a successful executive career prior to becoming a full-time company director in 2011. Jacqueline has extensive experience in the areas of information technology, telecommunications and marketing. Jacqueline worked with Ericsson for more than 20 years in finance, marketing and sales and in leadership roles in Australia, Sweden, the UK and the Middle East.

Board of Directors

Composition of Board Committees
as at 30 June 2019

Director	Status	Audit & Risk Management Committee	People & Performance Committee	Safety, Sustainability & Corporate Responsibility Committee	Nominations Committee
Graeme Hunt	Independent				Chair
Brett Redman	Managing Director & CEO				
Jacqueline Hey	Independent	✔		Chair	✔
Les Hosking	Independent	✔		✔	✔
Patricia McKenzie	Independent	✔	✔		✔
Peter Botten	Independent		✔	✔	✔
John Stanhope	Independent	Chair	✔		✔
Diane Smith-Gander	Independent		Chair	✔	✔

Leslie Hosking

Non-Executive Director since November 2008. Age 74.

Current Directorships:

Director of Magnis Energy Technologies Limited and Adjunct Professor of the University of Sydney John Grill Centre for Project Leadership.

Former Directorships of listed companies over the past 3 years: Les was a Non-Executive Director of Adelaide Brighton Limited from 10 June 2003 until 16 May 2018 and held the position of Chairman from 17 May 2012 until 16 May 2018.

Experience: Les has over 30 years of experience in trading, broking and management in metals, soft commodities, energy and financial instrument derivatives in the global futures industry. He was also previously a Director of The Carbon Market Institute Limited, Innovation Australia Pty Limited, Australian Energy Market Operator Limited (AEMO), and Managing Director and Chief Executive Officer of NEMMCo.

Patricia McKenzie

Non-Executive Director since May 2019. Age 63.
LLB FAICD

Current Directorships:
Director of The Housing Connection.

Former Directorships of listed companies over the past 3 years: Patricia was a director of APA Group from January 2011 until March 2019.

Experience: Patricia has 40 years' experience in the Australian energy sector with particular focus on matters of market design, industry governance and regulatory reform. Patricia was previously the Chair of Essential Energy and a director of Macquarie Generation and Transgrid. She was CEO of the Gas Market Company from 2001 to 2008 and a member of the Gas Market Leaders Group representing gas market operators from 2005 to 2010. In these roles, she was a key participant in the Council of Australian Government's National Energy Reform, a major outcome of which was the establishment of the Australian Energy Market Operator (AEMO), of which she was a Director from 2009 to 2011.

Diane Smith-Gander AO

Non-Executive Director since September 2016. Age 61.
BEc, MBA, FAICD, FGIA, Hon. DEc, FAIM, GAICD

Current Directorships: Chair of Safe Work Australia and the Asbestos Safety and Eradication Council, Director of Wesfarmers Limited (commenced 27 August 2009), Committee for Economic Development of Australia (CEDA), North Queensland Airports Group and Keystart Loans Group, Deputy Chair of The UWA Business School Advisory Board and Member of the Norton Rose Fulbright Australia Partnership Council.

Former Directorships of listed companies over the past 3 years: Diane was a Director of Broadspectrum Limited from 22 October 2010 until 16 September 2016, and held the position of Chair from 25 October 2013 until 16 September 2016.

Experience: Diane has extensive Australian and international experience in banking and finance, technology, and strategic and management consulting. This includes as a former partner at McKinsey, and Group Executive IT and Operations, Westpac Banking Corporation.

John Stanhope AM

Non-Executive Director since March 2009. Age 68.
BCom (Economics and Accounting), FCPA, FCA, FAICD, FAIM, FAHRI

Current Directorships:
Chairman of Australia Post, Port of Melbourne, The Bionics Institute of Australia and Melbourne Jazz Limited, Chancellor of Deakin University and Vice Chair of the International Integrated Reporting Council.

Former Directorships of listed companies over the past 3 years: Nil.

Experience: John has many years of experience in senior positions in financial, communications and other commercial roles. He was previously a member of the Financial Reporting Council and a Director of RACV Ltd and of Telstra Corporation Limited.

Board of Directors

Directors' Interests

The relevant interest of each Director in the share capital of AGL or any of its related bodies corporate, as notified by the Directors to the ASX in accordance with Section 205G of the Corporations Act, at the date of this Report is as follows:

AGL Energy Limited Ordinary Shares	
Brett Redman	74,770
Les Hosking	8,701
Graeme Hunt	12,500
John Stanhope	8,251
Jacqueline Hey	8,228
Peter Botten	7,390
Diane Smith-Gander	5,670
Patricia McKenzie	0

No options have been granted over any securities or interests of AGL or the consolidated entity. Brett Redman also holds performance rights allocated as LTI awards under AGL's Long-Term Incentive Plan, which are detailed on page 75 of the Remuneration Report.

Company Secretaries

John Fitzgerald was appointed Company Secretary on 1 October 2015. In December 2007, John was appointed General Counsel and continues to hold that position in addition to his role as Company Secretary. John's qualifications are a Bachelor of Arts and a Bachelor of Laws from the University of New South Wales and a Masters in Arts from the National University of Ireland (University College Dublin). John is admitted as a Solicitor of the Supreme Court of New South Wales and has been practising in projects, mining and energy law for over 20 years.

Melinda Hunter was appointed as an additional Company Secretary on 23 May 2017. Melinda's qualifications are a Bachelor of Commerce and a Bachelor of Laws from Macquarie University. Melinda is admitted as a Solicitor of the Supreme Court of New South Wales and has been practising corporate law for over 15 years.

Dividends

The annual dividend for the year ended 30 June 2019 was 119.0 cents per share (80% franked) compared with 117.0 cents per share (80% franked) for the prior year. The FY19 dividend includes an interim dividend of 55.0 cents per share paid on 22 March 2019 and a final dividend of 64.0 cents per share payable on 20 September 2019.

For more information on dividends, refer to the Other Required Disclosures on page 34.

Directors' Meetings

The number of Directors' Meetings (including meetings of Committees of Directors) and number of meetings attended by each of the Directors of AGL during the financial year ended 30 June 2019 were:

	Regular Board Meetings		Special Board Meetings		Audit & Risk Management Committee		People and Performance Committee		Safety, Sustainability and Corporate Responsibility Committee		Nominations Committee	
Directors' Name	A	B	A	B	A	B	A	B	A	B	A	B
Graeme Hunt	11	11	9	9							6	6
Brett Redman	6	6	6	6								
Jacqueline Hey	11	11	9	9	5	5			6	6	6	6
Les Hosking	11	11	9	9	5	5			6	6	6	6
Peter Botten	10	11	8	9			3	3	5	6	5	6
Diane Smith-Gander	11	11	8	9			6	6	6	6	6	6
John Stanhope	11	11	8	9	5	5	6	6			6	6
Patricia McKenzie	2	2	3	3	1	1	2	2				
Belinda Hutchinson	5	5	1	2	1	2	2	3			4	4
Andy Vesey	1	1										

A – number of meetings attended as a member
B – number of meetings held during the time the Director held office during the year

During the year, in aggregate, there were 25 occasions when Non-Executive Directors also attended some of the meetings of committees, of which they were not members.

Directors also participated in informal meetings and telephone conferences. AGL makes extensive use of email between meetings to keep Directors informed of current developments; to provide relevant background and industry information; to settle routine matters and allow formal Board meetings to concentrate on more important matters. Periodically, Directors meet informally outside AGL to discuss matters of interest and travel to visit assets, operations or locations of particular relevance to AGL.

Other Required Disclosures

These Other Required Disclosures (pages 34 to 36) are attached to and form part of the Directors' Report.

1. Changes in state of affairs

In the opinion of the Directors there were no significant changes in the state of affairs of the AGL consolidated entity that occurred during the financial year other than those included in this Directors' Report.

2. Proceedings on behalf of the company

No person has applied under Section 237 of the Corporations Act for leave of the Court to bring proceedings on behalf of AGL or intervene in any proceedings to which AGL is a party for the purpose of taking responsibility on behalf of AGL for all or any part of those proceedings. AGL was not a party to any such proceedings during the year.

3. Commercial in confidence information

Further information about likely developments in the operations of AGL and its consolidated entity and the expected results of those operations in the future has been included in this Directors' Report except to the extent disclosure of the information would be likely to result in unreasonable prejudice to the consolidated entity.

The type of information not disclosed includes commercial in confidence information such as detailed operational plans and strategies that would provide third parties with a commercial advantage.

4. Non-audit services

Non-audit services have been provided during the year by the external auditor, Deloitte Touche Tohmatsu Australia. Disclosure of the details of these services can be found in Note 26 of the Financial Report 2019.

The Board has a formal policy on the provision of auditing and related services. Specifically, the external auditor is precluded from providing any services that might threaten its independence or conflict with its assurance and compliance role. Semi-annual reports on the provision of auditing and related services are provided to the Board through the Audit & Risk Management Committee. The Directors are satisfied that the provision of $25,000 of other accounting advice and services by the external auditor is compatible with the general standard of independence for auditors.

The policy and procedures in place, and the review by the Audit & Risk Management Committee, enable Directors to conclude that non-audit services provided did not compromise the external auditor's independence requirements of the Corporations Act. There is also in place an agreed rotation policy for the senior auditor of Deloitte Touche Tohmatsu Australia. The external auditor annually provides a letter to the Company Secretary on its independence within the meaning of relevant legislation and professional standards. No officers of AGL were partners or directors of Deloitte Touche Tohmatsu Australia during this or prior periods.

5. Rounding

AGL is an entity to which ASIC Corporations Instrument 2016/191 applies and, in accordance with that Instrument, amounts in the Financial Report and this Directors' Report have been rounded to the nearest million dollars, unless otherwise stated.

6. Auditor's Independence Declaration

A copy of the external auditor's declaration under Section 307C of the Corporations Act in relation to the audit for the financial year is attached to the AGL Financial Report 2019.

7. Indemnification and insurance of officers

AGL's constitution indemnifies, to the extent permitted by law, officers of the consolidated entity when acting in their capacity in respect of:

- liability to third parties (other than related entities) when acting in good faith; and
- costs and expenses of successfully defending legal proceedings and ancillary matters.

The Directors named earlier in this Report and the Company Secretaries, have the benefit of the indemnity, together with any other person concerned in or who takes part in the management of the consolidated entity.

During the year, AGL paid premiums in respect of contracts insuring all Directors of AGL as listed earlier, all Directors of related bodies corporate of AGL, secretaries and other officers of the consolidated entity against liabilities incurred in their capacity as Director or Officer, as the case may be, of the consolidated entity.

The contract prohibits disclosure of the nature of the liabilities covered and the amount of premium.

8. Dividends

The Directors have declared a final dividend of 64.0 cents per share, compared with 63.0 cents per share for the prior final dividend. The annual dividend for the year ended 30 June 2019 was 119.0 cents per share compared with 117.0 cents per share for the prior year. The dividend will be 80% franked and will be paid on 20 September 2019. The record date to determine shareholders' entitlements to the final dividend is 22 August 2019. Shares will commence trading ex-dividend on 21 August 2019.

The following dividends have been paid or declared by the Directors since 30 June 2018:

Final dividend of 63.0 cents per share (80% franked) paid on 21 September 2018	$413 million
Interim dividend of 55.0 cents per share (80% franked) paid on 22 March 2019	$361 million
Final dividend of 64.0 cents per share (80% franked) payable on 20 September 2019	$420 million

Other Required Disclosures

Before declaring each dividend the Directors satisfied themselves that:

- AGL's assets exceeded its liabilities immediately before declaring the dividend and the excess was sufficient for the payment of the dividend;
- the payment of the dividend was fair and reasonable to AGL's shareholders as a whole; and
- the payment of the dividend would not materially prejudice AGL's ability to pay its creditors.

AGL targets a payout ratio of approximately 75% of Underlying Profit after tax and a minimum franking level of 80%.

Pursuant to the AGL 80% franking policy, in recent years AGL has paid the unfranked component of dividends out of certain foreign source income (known as Conduit Foreign Income, or CFI). This is relevant only for non-resident shareholders. The effect is that the unfranked portion of the dividend is not subject to Australian dividend withholding tax. The CFI balance will be fully utilised for the 2019 final dividend, with only a portion of the unfranked component paid out of CFI.

Unfranked dividends sourced from CFI have no tax implications for Australian resident shareholders.

The AGL Dividend Reinvestment Plan (DRP) will operate in respect of the 2019 final dividend. AGL will acquire shares on market and allot them to DRP participants at no discount to the simple average of the daily weighted average price at which AGL's ordinary shares trade during each of the 10 trading days commencing 26 August 2019. The last date for shareholders to elect to participate in the DRP for the 2019 final dividend is 23 August 2019.

9. Subsequent events

Share buy-back

On 8 August 2019, AGL announced its intention to undertake an on-market buy-back of up to 32,791,252 shares (being approximately 5% of AGL's issued ordinary shares). AGL reserves the right to vary, suspend or terminate the buy-back at any time.

Acquisition of Perth Energy Holdings Pty Ltd

On 8 August 2019, AGL announced it had agreed to purchase 100% of the outstanding share capital of Perth Energy Holdings Pty Ltd for consideration of up to $93 million, based on enterprise value. The transaction is on a cash and debt free basis and is subject to a number of conditions precedent, including regulatory approval, which were not satisfied at the date of this report.

Apart from the matters identified above and elsewhere in this Directors' Report and the AGL Financial Report, the Directors are not aware of any other matter or circumstance that has arisen since 30 June 2019 that has significantly affected or may significantly affect the operations of AGL, the results of those operations, or the state of affairs of AGL in the future.

10. Non-IFRS Financial Information

The Operating & Financial Review attached to and forming part of this Directors' Report includes a number of non-International Financial Reporting Standards (IFRS) financial measures. AGL management uses these non-IFRS financial measures to assess the performance of the business and make decisions on the allocation of resources.

Principal among these non-IFRS financial measures is Underlying Profit. This measure is Statutory Profit/(Loss) adjusted for:

- significant items (which are material items of revenue or expense that are unrelated to the underlying performance of the business); and
- changes in the fair value of financial instruments recognised in the statement of profit or loss (to remove the volatility caused by mismatches in valuing financial instruments and the underlying asset differently).

AGL believes that Underlying Profit provides a better understanding of its financial performance than Statutory Profit/(Loss) and allows for a more relevant comparison of financial performance between financial periods.

Underlying Profit is presented with reference to the Australian Securities & Investment Commission (ASIC) Regulatory Guide 230 "Disclosing non-IFRS financial information", issued in December 2011. AGL's policy for reporting Underlying Profit is consistent with this guidance. The Directors have had the consistency of the application of the policy reviewed by the external auditor of AGL.

11. Corporate governance

A copy of AGL's Corporate Governance Statement can be found on the AGL website at **agl.com.au/CorporateGovernance**.

12. Environmental regulation

AGL's businesses are subject to a range of environmental laws and regulations as well as project and site-specific environmental permits and approvals issued at both the Federal and State Government levels.

During the financial year ended 30 June 2019, there were four alleged non-compliances in relation to an event that occurred in late May 2018 at Bayswater Power station when diesel overflowed from an onsite storage tank, with a small amount of diesel making its way into a nearby creek. Two of these alleged non-compliances became the subject of regulatory action by the NSW Environment Protection Authority (EPA) under relevant environmental legislation, with two penalty infringement notices being issued to AGL Macquarie Pty Limited. There were also two official cautions that were issued to AGL Macquarie Pty Limited in relation to this event.

There were other alleged non-compliances, which have not resulted in any regulatory action. These were notified to the relevant regulator, and reported under the AGL site licence conditions in accordance with the respective legal requirements.

Other Required Disclosures

The two penalty infringement notices were issued on 24 January 2019 for an alleged failure to comply with two conditions of environmental protection licence (EPL) 779. These notices included fines of $15,000 each.

The two official cautions were also issued on 24 January 2019 for an alleged:

- failure to comply with a condition of EPL 779; and
- pollution of waters offence.

In June 2017 the NSW EPA commenced proceedings against AGL Upstream Investments Pty Limited, alleging that AGL had contravened a condition of its EPL 12003. 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 the proceedings are ongoing. There is no allegation that environmental harm occurred.

On 16 January 2019, AGL suspended coal ash sales from Bayswater and Liddell power stations as a precautionary measure. This step was taken after a number of test results identified elevated levels of metals including chromium and copper, which could exceed limits set by the EPA in the Coal Ash Order 2014. AGL notified the EPA, SafeWork and NSW Health and the four companies in the Upper Hunter that buy and use the coal ash, predominantly in engineering applications for concrete based products.

At the time, AGL sought advice from an external expert who confirmed through a comprehensive human health risk assessment that, based on AGL's current coal ash sample test results, the use of the coal ash for all known uses does not pose a risk to human health and is not considered to be of concern to the environment. In June 2019 AGL resumed supply of fly ash supply from site, with the resumption of cenosphere supply commencing in July 2019. AGL continues to cooperate fully with the EPA in relation to this matter.

Approval of Directors' Report

This Directors' Report is made in accordance with a resolution of the Board of Directors and is signed for and on behalf of the Board this 8th day of August 2019.

Graeme Hunt
Chairman

13. Financial performance

Principal activities

AGL's principal activities consisted of the operation of energy businesses and investments, including electricity generation, gas storage and the sale of electricity and gas to residential, business and wholesale customers. There were no significant changes in the principal activities of AGL during the year.

13.1 Group results summary

Adoption of new standards

AGL has adopted AASB 9 Financial Instruments and AASB 16 Leases and restated 2018 comparative figures to reflect the adoption of these new standards. The tables in section 13.8 summarise the adjustments recognised against each individual line item within the Group Financial Performance statement and the Summary Statement of Financial Position for all standards. AGL also adopted AASB 15 Revenue from Contracts with Customers, which did not have a material impact.

13.1.1 Reconciliation of Statutory Profit to Underlying Profit

13.1.1.1 Profit after tax

	2019 $m	Restated 2018 $m
Statutory Profit after tax	**905**	1,582
Adjust for:		
Significant items after tax		
National Assets gain on divestment	**(37)**	-
Residential Solar operations impairment	**38**	-
Proceeds from Yandin wind farm development rights	**(5)**	-
Sunverge impairment	**-**	27
Active Stream gain on divestment	**-**	(29)
Loss/(gain) on fair value of financial instruments after tax	**139**	(562)
Underlying Profit after tax	**1,040**	1,018

Statutory Profit after tax was $905 million, down $677 million compared with the prior year. This included two items excluded from Underlying Profit:

- The loss on fair value of financial instruments of $(139) million compared with a $562 million gain in the prior year. This net loss reflected a negative fair value movement in AGL's net sold electricity derivatives as a result of higher forward electricity prices, and a negative fair value movement in AGL's purchased oil and coal derivative contracts as a result of lower forward oil and coal prices. See section 13.1.5 for more detail.
- Significant items of net $4 million from divestments and impairments.

Underlying Profit after tax was $1,040 million, up 2.2% from the prior year. A description of the factors driving Underlying Profit is included in section 13.1.2.5.

	2019	Restated 2018
Earnings per share on Statutory Profit[1]	**138.0 cents**	241.2 cents
Earnings per share on Underlying Profit[1]	**158.6 cents**	155.2 cents

1. Earnings per share calculations have been based upon a weighted average number of ordinary shares of 655,825,043 (30 June 2018: 655,825,043).

13.1.1.2 Earnings Before Interest and Tax (EBIT)

	2019 $m	Restated 2018 $m
Statutory EBIT	**1,472**	2,464
Significant items	**(10)**	3
Loss/(gain) on fair value of financial instruments	**198**	(803)
Finance income included in Underlying EBIT	**-**	4
Underlying EBIT	**1,660**	1,668

13.1.1.3 Summary of Underlying EBIT by business unit

	2019 $m	Restated 2018 $m
Wholesale Markets	**2,757**	2,665
Customer Markets	**194**	202
Group Operations	**(1,036)**	(919)
Investments	**33**	33
Centrally Managed Expenses	**(288)**	(313)
Underlying EBIT	**1,660**	1,668

Refer to section 13.4 for detailed Business Unit analysis.

13.1.2 Group financial performance

	2019 $m	Restated 2018 $m
Revenue	**13,246**	12,816
Cost of sales	**(9,440)**	(9,070)
Other income	**27**	49
Gross margin	**3,833**	3,795
Operating costs (excluding depreciation and amortisation)	**(1,548)**	(1,559)
Underlying EBITDA	**2,285**	2,236
Depreciation and amortisation	**(625)**	(568)
Underlying EBIT	**1,660**	1,668
Net finance costs	**(193)**	(224)
Underlying Profit before tax	**1,467**	1,444
Income tax expense	**(427)**	(426)
Underlying Profit after tax	**1,040**	1,018

13.1.2.1 Year-on-year movement in revenue ($m)

Total revenue was $13,246 million, up 3.4%, driven by higher pool generation sales in Wholesale Markets, decreased sales volumes and the impact of customers switching to lower priced products in Customer Markets, and the non-recurrence of revenue associated with divested assets in Group Operations. Higher pool generation revenue was driven by higher electricity volumes generated and sold to the pool and a higher average pool price compared with the prior year. Customer revenue was impacted by Consumer Electricity and Gas customers switching to lower priced products and lower Large Business gas volumes. The non-recurrence of divested assets revenue related to the Active Stream business (sold in the prior year) and National Assets portfolio (sold during the year). Further analysis on the movement in gross margin is provided below.

Other income of $27 million in the year included equity accounted investments income of $33 million and a net loss from asset disposals. The prior year included equity accounted investments income of $39 million and a net gain from asset disposals.

13.1.2.2 Year-on-year movement in gross margin ($m)

Total gross margin was $3,833 million, up 1.0%. The increase was largely attributable to Wholesale Markets benefitting from higher wholesale electricity prices, higher customer gas prices and lower compliance costs. The reduction in compliance costs was driven by AGL self-generating more certificates through increased hydro and wind generation. This increase in gross margin was partly offset by lower Large Business gas volumes in Customer Markets and the non-recurrence of margin associated with divested assets in Group Operations. Refer to section 13.4 for further analysis on the movement in gross margin for each operating segment.

13.1.2.3 Operating costs

	2019 $m	Restated 2018 $m
Wholesale Markets	**(26)**	(22)
Customer Markets	**(532)**	(556)
Group Operations	**(726)**	(701)
Investments	**-**	(3)
Centrally Managed Expenses	**(264)**	(277)
Operating costs (excluding depreciation and amortisation)	**(1,548)**	(1,559)

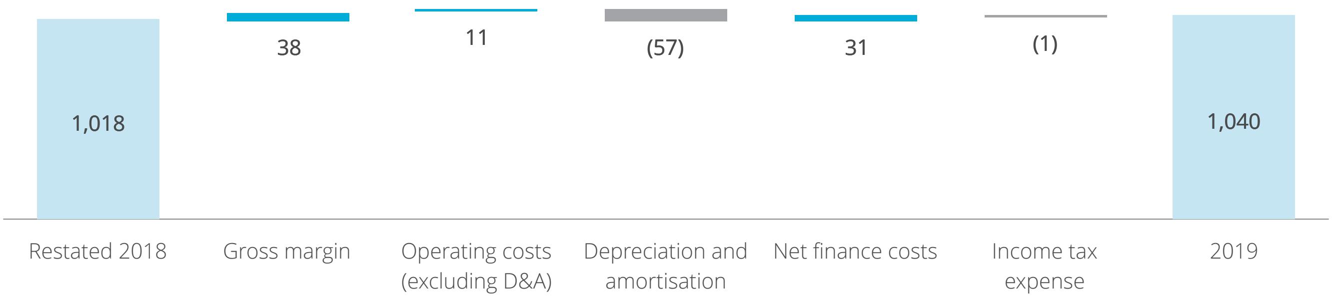
Total operating costs (excluding depreciation and amortisation) were $1,548 million, down 0.7%. This was driven by a reduction in labour costs in Customer Markets and Group Operations. The reductions were mainly due to transition and re-organisation activities undertaken in the prior year together with operating efficiencies achieved through the Customer Experience Transformation program. This was partly offset by increased costs in Group Operations to maintain plant availability and increased field development costs relating to the Moranbah Gas Project joint venture, and costs in Customer Markets associated with customer affordability measures. Refer to section 13.4 for further analysis on the movement in operating costs for each operating segment.

13.1.2.4 Depreciation and amortisation (D&A)

	2019 $m	Restated 2018 $m
Wholesale Markets	**(21)**	(10)
Customer Markets	**(101)**	(102)
Group Operations	**(480)**	(424)
Centrally Managed Expenses	**(23)**	(32)
Depreciation and amortisation	**(625)**	(568)

Depreciation and amortisation of $625 million was up $57 million and reflected AGL's increased level of capital investment in recent years. This was principally in Group Operations, predominantly due to a higher asset base at AGL Macquarie and AGL Loy Yang due to the committed closure of Liddell Power Station and a revision to the depreciation methodology of the licence and other assets relating to AGL Hydro.

13.1.2.5 Year-on-year movement in Underlying Profit after tax ($m)



Underlying Profit after tax was $1,040 million, up 2.2%. The principal driver of the increase was margin growth in Wholesale Markets from higher wholesale electricity prices and lower compliance costs in Eco Markets. This was offset by lower Large Business gas volumes in Customer Markets and higher depreciation and amortisation in Group Operations.

Net finance costs were $193 million, down 13.8%, largely due to a reduction in average borrowings from $2,846 million in the prior year (restated) to $2,616 million. Underlying tax expense was $427 million, up 0.2% and reflected the increase in profit. The underlying effective tax rate was 29.1%, broadly in line with the prior year.

13.1.3 Significant items

13.1.3.1 Asset and business disposals

2019

On 11 September 2018, AGL completed the sale of a portfolio of small generation and compressed natural gas refuelling assets, known as AGL's National Assets portfolio, to Sustainable Energy Infrastructure, a consortium led by Whitehelm Capital. A post tax profit of $37 million was recognised in the year.

In December 2018, AGL disposed of the option to purchase the Yandin wind farm development rights in Western Australia. A post tax profit of $5 million was recognised as a significant item in the year.

2018

On 30 November 2017, AGL completed the disposal of its Active Stream metering business. A post tax profit of $29 million was recognised in the prior year.

13.1.3.2 Asset impairments

2019

On 11 September 2018, AGL announced the decision to exit the residential solar installation operations, rendering many of the residential solar assets obsolete. A post tax loss of $38 million was recognised as a significant item in the year to account for the write down of goodwill, systems related assets, inventory and other business closure costs.

2018

AGL impaired the carrying value of its investment interest in Sunverge Energy Inc and related assets. A total post tax impairment loss of $27 million was recognised in the prior year.

13.1.4 Hedging

AGL's approach to managing energy price risks, both through physical ownership of energy generation and through financial hedging, reflects the need to provide pricing certainty to customers, and limit exposure to adverse market outcomes. AGL generates electricity in excess of its customers' demand in some states. In other states, AGL generates less than its customers' demand. As such, AGL manages risk exposure by determining the appropriate timing and degree of contracting activities, provided the overall AGL risk appetite is not exceeded.

AGL has in place a governance framework that establishes the policy guidelines under which energy hedging activities are conducted. Key components of that policy include segregation of duties, independent risk oversight, earnings-at-risk limits, compliance management and regular reporting to the Board. The risk policy represents the Board's and Senior Management's commitment to an effective risk management function to ensure appropriate management and oversight of AGL's risks related to wholesale markets energy risk.

The policy allows for commercial optimisation of the portfolio provided that AGL adheres to overall earnings-at-risk limits that reflects its risk appetite.

13.1.5 Changes in fair value of financial instruments

AGL uses certain financial instruments (derivatives) to manage energy price risks and to manage its exposure to interest and foreign exchange rates arising in the normal course of business. The majority of these financial instruments exchange a fixed price for a floating market based price of a given commodity, interest rate, currency or a quoted asset, with the net differential being settled with the counterparty.

Energy price risk

AGL is exposed to price volatility on the sale and purchase of energy related commodities in the normal course of business, and therefore enters into contracts that minimise the price risk to AGL on both sold and purchased forecast exposures. Certain purchased contracts traded prior to 1 July 2019 are designated as hedge relationships when they can be matched to forecast transactions with sufficient probability of the forecast transaction occurring.

Derivative instruments assigned to an effective hedge relationship have movements in fair value deferred to an equity hedge reserve until the transactions to which those instruments are matched, occur. Derivative instruments not assigned to an effective hedge relationship have movements in fair value recognised in profit or loss.

AGL's energy-related derivatives assigned to hedge relationships are purchased derivative contracts, where AGL pays a fixed price in exchange for a floating price received from the counterparty. The energy-related derivatives recognised in profit or loss are net-sold positions, where AGL receives a fixed price from a counterparty in exchange for a floating price paid to the counterparty.

AGL is required to make margin payments in respect of futures contracts traded through the Australian Securities Exchange (ASX). Initial margin call payments are made at the time contracts are entered in order to manage intra-day credit exposure. The quantum of initial margin depends on the volume traded, the expected market volatility as well as forward electricity prices at the time. The initial margin call can move subsequently as forward prices move. AGL also receives or makes payments known as variation margin calls, which cover mark to market movements of AGL's open futures position. These typically reverse through future earnings as contract positions roll off.

Treasury related risk

AGL's treasury related risk primarily relates to interest and foreign currency rate fluctuations. Contracts to minimise the exposure to market-based fluctuations are executed pursuant to AGL's treasury risk management policy. These contracts primarily result in fixed interest and foreign currency rates. These contracts are designated in hedge relationships when they can be matched to forecast transactions with sufficient probability of the forecast transaction occurring.

In addition to the above, AGL is counterparty to cross-currency interest rate swap arrangements to convert its fixed interest rate US dollar private placement borrowing instruments to floating interest rate Australian dollar equivalent borrowing instruments. The cross-currency interest rate swap arrangements are designated as fair value and cash flow hedge relationships.

Movement in fair value

The initial fair value of a derivative is the consideration paid or received (the premium). Fair value movements in any given year are a function of changes to underlying indices, market prices or currencies and the roll-off of realised contractual volumes or amounts.

A reconciliation of the movements in financial instruments carried at fair value, for the year ended 30 June 2019 is presented in the following table:

Net assets/(Liabilities)	2019 $m	2018 $m	Change $m
Energy derivative contracts	**(31)**	54	(85)
Cross currency and interest rate swap derivative contracts	**80**	(29)	109
Total net assets for financial instruments	**49**	25	24
Change in net assets	**24**		
Premiums paid	**(68)**		
Premium roll off	**86**		
Equity accounted fair value	**(16)**		
Total change in fair value	**26**		
Recognised in equity hedge and other reserve	**101**		
Recognised in borrowings	**123**		
Recognised in profit or loss – pre tax	**(198)**		
Total change in fair value	**26**		

The movement in net derivate assets in the year was up $24 million to $49 million. This movement is summarised in the table below:

	2018 $m	Unrealised fair value recognised in: Profit or loss	Hedge reserve	Borrowings	Currency basis	Premiums and roll offs paid/ (received)	2019 $m
Cross currency and interest rate swap contracts	**(29)**	3	(21)	123	4	-	**80**
Energy derivative contracts	**54**	(185)	118	-	-	(18)	**(31)**
Net asset/(liability)	**25**	**(182)**	**97**	**123**	**4**	**(18)**	**49**
Fair value recognised within equity accounted investments	**-**	(16)					
Profit or loss	**25**	**(198)**					

The fair value movement driving the change in the net derivative assets position reflected in unrealised fair value movements is as follows:

- A decrease in the fair value of energy-related derivatives of $(185) million was recognised in profit or loss (excluded from Underlying Profit). This net loss reflected a negative fair value movement in AGL's net sold electricity derivatives as a result of higher forward electricity prices, and a negative fair value movement in AGL's purchased oil and coal derivative contracts as a result of lower forward oil and coal prices.
- An increase in the fair value of purchased energy-related derivatives designated as a hedge relationship of $118 million, which was recognised in the equity hedge reserve. This increase primarily reflected higher electricity market prices relative to contracted purchase prices.
- Currency related fair value gain of $123 million recognised in borrowings. This related primarily to AGL's USD denominated debt and reflected the large depreciation of the AUD relative to the USD during the year.

13.2 Cash flow

13.2.1 Reconciliation of Underlying EBITDA to cash flow

		2019 $m		Restated 2018 $m
Underlying EBITDA		**2,285**		2,236
Equity accounted income (net of dividends received)		**(5)**		-
Accounting for onerous contracts		**(34)**		(33)
Movement in other assets/liabilities and non-cash items		**15**		21
Working capital movements				
Decrease in receivables	**103**		72	
(Decrease)/increase in creditors	**(21)**		26	
Increase in inventories	**(74)**		(32)	
Net derivative premiums paid/roll-offs	**18**		49	
(Increase)/decrease in other financial assets (margin calls)	**(187)**		162	
Net movement in green assets/liabilities	**(67)**		(2)	
Other	**(20)**		(25)	
Total working capital movements		**(248)**		250
Underlying operating cash flow before interest and tax		**2,013**		2,474
Net finance costs paid		**(151)**		(172)
Income taxes paid		**(263)**		(159)
Net cash provided by operating activities		**1,599**		2,143
Net cash used in investing activities		**(904)**		(629)
Net cash used in financing activities		**(1,043)**		(1,205)
Net (decrease)/increase in cash and cash equivalents		**(348)**		309

Underlying operating cash flow before interest and tax was $2,013 million, down $461 million. As a result, the cash rate of conversion of EBITDA to cash flow was 88%, down from 111% in the prior year. The key driver of cash conversion in both years was margin calls reflecting changes in the price of electricity. Adjusting for margin calls, the cash conversion rate was 96% in the year, down from 103% in the prior year.

Total working capital movements were $(248) million, a year-on-year change of $(498) million from a movement of $250 million in the prior year:

- The movement in receivables cash flow of $31 million reflected a decrease in days sales outstanding as more Consumer customers paid on time, combined with lower volumes in the year.
- The change in trade creditors cash flow of $(47) million was due to higher AGL Loy Yang mine coal royalty payments and lower consumer gas and electricity volumes in the year reducing network creditors. This was partly offset by an increase in coal payables driven by improved delivery volumes, and the impact of certain wholesale swap contracts on creditors compared to the prior year.
- Lower cash flow from inventory reflected an increase in the coal stockpile at AGL Macquarie.
- Net derivative premiums paid/roll-offs cash flow movement of $(31) million was due to a difference in premium cash flow profiles of the derivatives contracts in place across the 2019 and 2018 years.
- Margin calls cash flow movement of $(349) million was due to higher net cash outflows associated with initial and variation margin calls. Initial margin call cash outflows increased due to higher forward electricity prices as well as updates to the ASX's methodology on calculating volatility. Variation margin call cash outflows increased because in the prior year there were significant cash inflows associated with the roll-off of existing contracts with large negative mark to market valuations, whereas in 2019 there were cash outflows associated with the negative mark to market valuations of open positions as a result of higher forward electricity prices. Refer to section 13.1.5 for more information.
- Lower cash flow from AGL's inventory of certificates to comply with renewable schemes (green assets) was driven by increased Victorian Energy Efficiency Target (VEET) and Small-scale Renewable Energy Certificate (SREC) purchases at current market prices to meet future market surrender obligations.
- Higher cash tax paid in the year was due to AGL Loy Yang commencing paying income tax as of 2018, and 2019 tax instalments (note: there are two tax groups in AGL and, due to certain tax loss recoupment rules, AGL Loy Yang is required to pay tax while recouping tax losses).

Higher investing cash flow reflected increased capital expenditure and lower proceeds from asset sales compared with the prior year.

Financing cash flow included dividends of $(774) million, and a repayment in net borrowings of $(264) million including the redemption of $650 million of Subordinated Notes. The prior year included dividends of $(682) million and a repayment in net borrowings of $(513) million, which included the cancellation of $150 million of term debt in September 2017 and the purchase of $68 million of AGL Loy Yang CPI bonds in December 2017.

13.2.2 Capital expenditure

	2019 $m	2018 $m
Wholesale Markets	**25**	18
Customer Markets	**134**	162
Group Operations	**676**	500
Centrally Managed Expenses	**104**	98
Total capital expenditure	**939**	778

13.2.2.1 Summary of capital expenditure split between growth and sustaining

Sustaining	**551**	483
Growth and transformation	**388**	295
Total capital expenditure	**939**	778

Total capital expenditure was $939 million, an increase of $161 million compared with the prior year:

- Sustaining capital expenditure was $551 million, an increase of $68 million. This comprised $265 million of expenditure on five major outages across AGL Loy Yang, AGL Macquarie and AGL Torrens. It also included higher outage spend to improve reliability and availability at AGL Loy Yang and AGL Macquarie. Other sustaining capex was $286 million.
- Growth capital expenditure was $388 million, an increase of $93 million. This comprised spend on the Barker Inlet Power Station ($177 million), Customer Experience Transformation program ($71 million), AGL's program to upgrade its enterprise resource planning systems ($70 million), and other development projects including Crib Point and Bayswater mid-life refit ($70 million).

13.3 Review of financial position

AGL's financial position is consistent with the strong profitability of its operations, the strong conversion of income to cash flow and the essential nature of the services AGL provides to its customers.

AGL maintained its credit rating of Baa2 as provided by Moody's Investors Service throughout the year.

AGL's dividend policy is to target a payout ratio of 75% of annual Underlying Profit after tax and a minimum franking level of 80%. Total dividends declared for the year of $781 million were 1.8% higher than the prior year, consistent with AGL's profit growth.

The Dividend Reinvestment Plan (DRP) continued to operate during the year, at nil discount. During the year AGL acquired shares for allotment to DRP participants on market, thereby preventing any dilutive impact that would have occurred if new shares were issued.

13.3.1 Summary Statement of Financial Position

	2019 $m	Restated 2018 $m
Assets		
Cash and cash equivalents	**115**	463
Other current assets	**3,281**	3,227
Property, plant and equipment	**6,588**	6,757
Intangible assets	**3,740**	3,271
Other non-current assets	**1,097**	915
Total assets	**14,821**	14,633
Liabilities		
Borrowings	**2,850**	2,963
Other liabilities	**3,533**	3,369
Total liabilities	**6,383**	6,332
Net assets / total equity	**8,438**	8,301

At 30 June 2019 AGL's total assets were $14,821 million, an increase from $14,633 million at 30 June 2018, primarily due to the increase in the fair value of energy derivative contract assets and margin calls compared with the prior year (refer to section 13.2), which is reflected in other current assets. In addition, the combined increase in property, plant and equipment and intangible assets was reflective of higher capital expenditure during the year.

Total liabilities at 30 June 2019 were $6,383 million, up from $6,332 million at 30 June 2018. The primary change reflected the increase in other liabilities due to revaluation of energy derivative contracts (refer to section 13.1.5) . The reduction in borrowings was largely driven by cash generation from operating activities. Redemption of $650 million Subordinated Notes took place in June 2019, funded through a combination of existing debt facilities and available cash.

Total equity at 30 June 2019 was $8,438 million, up from $8,301 million, reflecting higher retained earnings. AGL's return on equity, calculated on a rolling 12-month basis was 12.5%, a reduction of 0.6% from 30 June 2018 (restated) driven by the increase in equity.

13.3.2 Net debt reconciliation

	2019 $m	Restated 2018 $m
Net debt reconciliation		
Borrowings	**2,850**	2,963
Less: Adjustment for cross currency swap hedges and deferred borrowing costs	**(135)**	(9)
Cash and cash equivalents	**(115)**	(463)
Net debt	**2,600**	2,491

Net debt at 30 June 2019 was $2,600 million, up from $2,491 million at 30 June 2018 reflecting lower cash on hand.

AGL's gearing (measured as the ratio of net debt to net debt plus equity) at 30 June 2019 was 23.5% compared with 22.9% at 30 June 2018 (restated).

AGL maintained its credit rating of Baa2 throughout the year as provided by Moody's Investors Service. Key metrics consistent with this credit rating at 30 June 2019:

- Interest cover: 8.7 times
- Funds from operations to net debt: 45.0%

AGL's funds from operations has been calculated with a similar methodology to Moody's whereby the movement in all current and non-current tax assets and liabilities is treated as working capital.

13.4 Review of operations

AGL manages its business in four key operating segments: Wholesale Markets, Customer Markets, Group Operations and Investments. Further detail on the activities of each operating segment is provided below.

In accordance with Australian Accounting Standard AASB 8 *Operating Segments*, AGL reports segment information on the same basis as its internal management structure. As a result, the Wholesale Markets and Customer Markets operating segments report the majority of the revenue and margin from AGL's activities, while the Group Operations operating segment reports the majority of the expenses.

13.4.1 Wholesale Markets

Wholesale Markets comprises Wholesale Electricity, Wholesale Gas and Eco Markets and is responsible for managing the price risk associated with procuring electricity and gas for AGL's customers and for managing AGL's obligations in relation to renewable energy schemes. Wholesale Markets also controls the dispatch of AGL's owned and contracted generation assets and associated portfolio of energy hedging products.

- Wholesale Electricity is responsible for managing the procurement of key fuel inputs and hedging of AGL's wholesale electricity requirements, for commercial management of the generation portfolio and for wholesale pricing to support AGL's consumer and business customer bases.
- Wholesale Gas is responsible for sourcing and managing AGL's gas supply and transportation portfolio. Wholesale Gas supplies other retailers, internal and third-party gas-fired generators, and other gas customers. Wholesale Gas is also responsible for the management of the price exposures related to AGL's oil-linked wholesale gas contracts.
- Eco Markets is responsible for managing AGL's liabilities relating to both voluntary and mandatory renewable and energy efficiency schemes, the largest being the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES).

13.4.1.1 Wholesale Markets Underlying EBIT

	2019 $m	Restated 2018 $m
Wholesale Electricity gross margin	**2,240**	2,218
Wholesale Gas gross margin	**458**	432
Eco Markets gross margin	**106**	47
Gross margin	**2,804**	2,697
Operating costs (excluding depreciation and amortisation)	**(26)**	(22)
Underlying EBITDA	**2,778**	2,675
Depreciation and amortisation	**(21)**	(10)
Underlying EBIT	**2,757**	2,665

Wholesale Markets Underlying EBIT was $2,757 million, up 3.5% due to higher wholesale electricity contract prices and decreased compliance costs in Eco Markets, which more than offset higher coal and gas supply costs.

- Wholesale Electricity gross margin was $2,240 million, up 1.0% due to higher wholesale electricity contracted prices, partly offset by higher fuel costs. The higher wholesale electricity forward curve in the National Electricity Market over the past two years has resulted in higher contracted prices for Large Business customers, Wholesale customers and financial energy derivative contracts. The increase in fuel costs from $21.8/MWh on average in the prior year to $24.3/MWh, reflected higher coal and wholesale gas prices (refer to section 13.5.1). The increase in coal costs reflected the rate escalation of existing contracts and the replacement of legacy low-cost coal contracts with contracts linked to Newcastle coal export prices. Wholesale Electricity gross margin was impacted by lower generation volume at AGL Loy Yang due to unplanned outages. This was mitigated by an increase in generation at AGL Macquarie driven by increased utilisation at Liddell, as well as higher generation from AGL hydro assets in Victoria and commencement of generation at Silverton wind farm in New South Wales.
- Wholesale Gas gross margin was $458 million, up 6.0%. The increase was driven by higher customer gas prices partly offset by higher gas purchase costs. Gas purchase costs increased from $5.3/GJ on average in the prior year to $6.3/GJ, driven by legacy low-cost gas contracts replaced with contracts priced at current market levels. The total gas volumes purchased was 13.9 PJ lower than the prior year, due to a decrease in volumes sold to Large Business customers (refer to section 13.5.2).

- Eco Markets gross margin was $106 million, up 125.5%. This reflected AGL self-generating a larger portion of large-scale generation certificates (LGCs) through increased hydro and wind generation, combined with lower prices for on-market purchases. The reduction in transfer price as a result of lower LGC market prices was more than offset by the related impact to the allocation of wind generation costs between the Wholesale Electricity and Eco Markets portfolios. The results were also impacted by changes to final compliance percentages as compared to the estimates utilised in setting transfer prices.

13.4.2 Customer Markets

Customer Markets comprises the Consumer and Large Business customer portfolios and is responsible for the retailing of electricity, gas, solar and energy efficiency products and services to residential, small and large business customers. Customer Markets sources its energy from Wholesale Markets at a transfer price based on methodologies that reflect the prevailing wholesale market conditions and other energy costs in each state. Customer Markets also includes product innovation, sales, marketing, brand, and operations.

13.4.2.1 Customer Markets Underlying EBIT

From 1 July 2018 certain fees, charges and recoveries that are directly attributable to Consumer gross margin were reallocated from operating costs and fees, charges and other margin to Consumer gross margin to improve consistency of revenue and cost allocation across states and fuels. The reallocation results in variances when comparing between the 2019 and 2018 years.

If the changes were applied to the prior year, the impact would be a net $15 million increase in prior year Consumer gross margin, a $38 million decrease in Fees, charges and other margin, and a corresponding $23 million decrease in Operating costs (refer to section 13.4.2.2). There would be no impact to prior year EBIT.

	2019 $m	Restated 2018 $m
Consumer Electricity gross margin	**505**	452
Consumer Gas gross margin	**246**	249
Large Business Electricity gross margin	**34**	36
Large Business Gas gross margin	**15**	46
Fees, charges and other margin	**27**	77
Gross margin	**827**	860
Operating costs (excluding depreciation and amortisation)	**(532)**	(556)
Underlying EBITDA	**295**	304
Depreciation and amortisation	**(101)**	(102)
Underlying EBIT	**194**	202

Customer Markets Underlying EBIT was $194 million, down 4.0%, driven by lower gas volumes in the Consumer and Large Business portfolios and lower late payment fees. Consumer electricity margin increased in the year driven by a transfer price realignment from Wholesale Markets. The reduction in operating costs reflected realised benefits from re-organisation and the Customer Experience Transformation program, as well as reduced costs associated with entry into the Western Australian gas market. This was offset by increased costs associated with the customer affordability measures.

- Consumer Electricity gross margin was $505 million, up 11.7%, as a result of a transfer price realignment from Wholesale Markets. Consumer electricity volumes declined by 1.4% driven by lower average consumption as a result of a change in customer mix. In particular, AGL had an increase in customer numbers in Victoria where average consumption is typically lower than other states. The reallocation of certain fees, charges and recoveries noted above contributed $15 million to the year-on-year increase.
- Consumer Gas gross margin was $246 million, down 1.2%, as a result of increased discounts due to customers switching to lower priced products. Gas volumes decreased 4.3% due to lower average consumption as a result of milder weather.
- Large Business Electricity gross margin was $34 million, down 5.6%, as a result of lower energy margin rates due to change in customer mix across the portfolio.
- Large Business Gas gross margin was $15 million, down 67.4%, as volumes declined 49.2% due to tight market conditions.
- Fees, charges and other margin was $27 million, down 64.9%, due to a decrease in late payment fees reflecting a positive trend of customers paying on time. In addition, $(38) million of the year-on-year decrease resulted from the reallocation of certain fees, charges and recoveries noted above.

13.4.2.2 Customer Markets operating costs

	2019 $m	Restated 2018 $m
Labour and contractor services	**(178)**	(211)
Bad and doubtful debts	**(120)**	(99)
Campaigns and advertising	**(136)**	(151)
Other expenditure	**(98)**	(95)
Operating costs (excluding depreciation and amortisation)	**(532)**	(556)
Add: depreciation and amortisation	**(101)**	(102)
Operating costs (including depreciation and amortisation)	**(633)**	(658)

Customer Markets operating costs (excluding depreciation and amortisation) were $532 million, down $24 million reflecting the benefits from re-organisation in the prior year, the Customer Experience Transformation program as well as reduced costs associated with entry into the Western Australian gas market. This was offset by increased costs associated with the customer affordability measures. In addition, $23 million of the year-on-year decrease in operating costs was due to the reallocation of costs to Consumer gross margin as noted above.

- Labour and contractor services costs were $178 million, down 15.6%, as a result of realised benefits of re-organisation undertaken during the prior year, operating efficiencies, lower transactional volumes driven by the Customer Experience Transformation program and the reallocation of costs to Consumer gross margin.
- Bad and doubtful debts were $120 million, up 21.2%. The customer affordability measures announced in August 2018 resulted in a $33 million increase in bad and doubtful debts expense. This was partially offset by an underlying improvement in net bad debt expense driven by initiatives to improve customer collections and debt recoveries whilst enhancing support to those customers experiencing hardship.
- Campaigns and advertising costs were $136 million, down 9.9%, primarily due to savings achieved through the Customer Experience Transformation program, lower acquisition and retention volumes in the year, as well as reduced costs associated with entry into the Western Australian gas market.
- Other expenditure was $98 million, broadly in line with the prior year.

Depreciation and amortisation was $101 million, broadly flat, largely relating to continued investment in digital capability and core systems improvements.

13.4.2.3 Consumer customer profitability and operating efficiency

	2019	Restated 2018
Gross margin	**$751m**	$701m
Net operating costs (including fees, charges, recoveries and depreciation and amortisation)	**$(560)m**	$(532)m
EBIT	**$191m**	$169m
Average customer accounts ('000)	**3,654**	3,648
Gross margin per customer account	**$206**	$192
Net operating costs per customer account	**$(153)**	$(146)
EBIT per customer account	**$52**	$46
Net operating costs as percentage of gross margin	**74.6%**	75.9%
Cost to serve	**$(353)m**	$(306)m
Cost to serve per account	**$(97)**	$(84)
Acquisitions and retentions ('000)	**1,830**	2,230
Cost to grow	**$(207)m**	$(226)m
Cost to grow per account (acquired and retained)	**$(113)**	$(101)

Average customer accounts increased year-on-year with lower churn, strong internal acquisition and retention activities and growth of customers in Western Australia.

AGL churn decreased 1.3 percentage points (ppts) to 17.6% from 18.9% reported at 30 June 2018. Rest of Market churn decreased 0.1 ppts to 23.9% from 24.0% reported at 30 June 2018, increasing the favourable gap between AGL and the rest of the market from 5.1 ppts as at 30 June 2018 to 6.3 ppts as at 30 June 2019. Acquisitions and retentions decreased to 1.8 million, down 17.9%, driven by lower internal retention volumes as more customers switched to lower priced products in the prior year.

Consumer EBIT per customer account was $52, up 13.0%, resulting from improved Consumer gross margin and operating efficiencies realised through investment in transformation projects.

Cost to serve per account includes the consumer operating costs related to serving existing customers divided by the average number of customers during the reporting year. Cost to serve per customer account was $97, up 15.5%, largely reflecting the impact of the customer affordability meausures on bad debts expense and lower late payment fees as more customers paid their bills on time.

Cost to grow per account includes the consumer operating costs related to acquiring and retaining customers divided by the number of customers acquired and retained during the reporting year. Total Cost to grow was $207 million, down 8.4% due to savings achieved through the Customer Experience Transformation program and reduced costs associated with entry into the Western Australian gas market. Cost to grow per account was $113, up 11.9% largely due to 400,000 lower acquisition and retentions in the year. This reflects a large proportion of lower-cost internal retentions in the prior year resulting from intense market activity as customers switched to lower priced products.

13.4.2.4 Customer numbers and churn

The following table provides a breakdown of customer numbers by state.

	2019 (´000)	2018 (´000)
Consumer Electricity	**2,261**	2,220
New South Wales	**843**	823
Victoria	**680**	658
South Australia	**365**	367
Queensland	**373**	372
Consumer Gas	**1,431**	1,406
New South Wales	**630**	643
Victoria	**544**	528
South Australia	**130**	131
Queensland	**84**	83
Western Australia	**43**	21
Total Consumer accounts	**3,692**	3,626
Total Large Business Customer accounts	**16**	15
Total Customer accounts	**3,708**	3,641

Total customer account numbers increased 1.8% to 3.708 million, from 3.641 million reported at 30 June 2018. Consumer electricity customer account numbers have increased as a result of growth in New South Wales and Victoria. Consumer gas customer account numbers have increased due to growth in Western Australia and Victoria.

13.4.3 Group Operations

Group Operations comprises AGL's power generation portfolio and other key sites and operating facilities across the Thermal, Renewables, Natural Gas, and Other business units.

- Thermal primarily comprises: AGL Macquarie (4,640 MW), consisting of the Bayswater and Liddell black coal power stations in New South Wales; AGL Loy Yang (2,210 MW), a brown coal mine and power station in Victoria; and AGL Torrens (1,280 MW), a gas power station in South Australia. The Barker Inlet Power Station (210 MW) is currently under construction, due for completion in late calendar 2019.
- Renewables primarily comprises: 786 MW of hydroelectric power stations in Victoria and New South Wales; 924 MW of wind power generation in South Australia and Victoria (as the operator), 155 MW of solar power in New South Wales (as the operator) and 30 MW of battery energy storage system at Dalrymple in South Australia. Construction for Silverton Wind Farm has been completed and AEMO has approved commissioning to 198 MW (full output) at night, however, it remains constrained to 45MW during the day.
- Natural Gas includes the Newcastle Gas Storage Facility in New South Wales, the Silver Springs underground gas storage facility in Queensland, the natural gas production assets at Camden in New South Wales and the North Queensland gas assets, including the Moranbah Gas Project. On 31 January 2019, AGL announced it had terminated its agreement to sell its North Queensland gas assets to Order (Moranbah) Holdings Pty Ltd, originally announced on 24 August 2017.
- Other operations primarily consist of National Assets, which AGL sold in September 2018 (refer to section 13.1.3), Power Development and Construction, Property and Facilities, Health Safety & Environment and technical and business support functions.

13.4.3.1 Group Operations Underlying EBIT

	2019 $m	Restated 2018 $m
Gross margin	**170**	206
Operating costs (excluding depreciation and amortisation)	**(726)**	(701)
Underlying EBITDA	**(556)**	(495)
Depreciation and amortisation	**(480)**	(424)
Underlying EBIT	**(1,036)**	(919)

The following tables provide a breakdown of the contributors to Underlying EBITDA and Underlying EBIT:

	2019 $m	Restated 2018 $m
Thermal	**(424)**	(425)
Renewables	**(50)**	(51)
Natural Gas	**(29)**	(7)
Other operations	**(53)**	(12)
Underlying EBITDA	**(556)**	(495)
Thermal	**(799)**	(772)
Renewables	**(97)**	(74)
Natural Gas	**(58)**	(40)
Other operations	**(82)**	(33)
Underlying EBIT	**(1,036)**	(919)

Group Operations Underlying EBIT was $(1,036) million, down 12.7%, driven by the non-recurrence of margin from divested assets, increased costs to maintain plant availability, increased costs relating to the Moranbah Gas Project joint venture and higher depreciation and amortisation at AGL Macquarie and AGL's hydro assets. This was partly offset by lower labour costs at AGL Loy Yang as a result of the transition and re-organisation program initiated in the prior year.

- Thermal Underlying EBIT was $(799) million, down 3.5%, driven by additional labour, contractor and maintenance costs to maintain plant availability, predominantly at AGL Macquarie. In addition, AGL Macquarie and AGL Loy Yang depreciation increased reflecting a higher asset base as a result of increased capital expenditure to ensure future reliability. This was partly offset by insurance receipts and the reduction in labour costs as a result of the AGL Loy Yang transition and re-organisation program initiated in the prior year.
- Renewables Underlying EBIT was $(97) million, down 31.1%, largely reflecting the increase in depreciation and amortisation driven by a revision to the depreciation methodology of the licence and other assets relating to AGL Hydro.
- Natural Gas Underlying EBIT was $(58) million, down 45.0%, primarily due to the increase in field development costs relating to the Moranbah Gas Project joint venture and reduction in margin received from land sale proceeds in the prior year.
- Other operations Underlying EBIT was $(82) million, down $49 million, reflecting the reduction in margin received from the Active Stream business (divested in November 2017) and National Assets business (divested in September 2018), and the transfer of the Procurement and Health, Safety and Environment functions from Centrally Managed Expenses in the year.

13.4.3.2 Group Operations operating costs

	2019 $m	Restated 2018 $m
Labour	**(330)**	(333)
Contracts and materials	**(265)**	(254)
Other	**(131)**	(114)
Operating costs (excluding depreciation and amortisation)	**(726)**	(701)

Group Operations operating costs (excluding depreciation and amortisation) of $726 million increased $25 million, primarily due to initiatives to maintain plant availability at AGL Macquarie, higher field development costs relating to the Moranbah Gas Project joint venture and the transfer of support functions from Centrally Managed Expenses in the year. This was partly offset by the reduction in labour costs at AGL Loy Yang as a result of the transition and re-organisation program undertaken in the prior year.

13.4.3.3 Group Operations depreciation and amortisation

	2019 $m	Restated 2018 $m
Thermal	**(376)**	(348)
Renewables	**(47)**	(23)
Natural Gas	**(30)**	(32)
Other operations	**(27)**	(21)
Depreciation and amortisation	**(480)**	(424)

Group Operations depreciation and amortisation increased by $56 million, or 13.2%. This was primarily driven by a higher asset base at AGL Macquarie and AGL Loy Yang from increased reliability focused capital expenditure relative to a short depreciation schedule given the planned closure of Liddell Power Station.

- Thermal depreciation and amortisation was $(376) million, up 8.0%, reflecting a higher asset base predominately at AGL Macquarie and AGL Loy Yang both due to increased reliability focused capital expenditure.
- Renewables depreciation and amortisation was $(47) million, up 104.3% driven by a revision to the depreciation methodology of the licence and other assets relating to AGL Hydro.
- Other operations depreciation and amortisation was ($27) million, up 28.6% primarily due to the addition of 664 Collins Street corporate office lease and assets associated with the office fit out.

13.4.4 Centrally Managed Expenses

AGL manages and reports a number of expense items including information technology under Centrally Managed Expenses. These costs are not formally attributable to operating segments, and as such the management of these functions are the responsibility of various corporate leaders.

Underlying EBIT of $(40) million included within Centrally Managed Expenses in the prior year was subsequently incorporated into Customer Markets, Wholesale Markets and Group Operations in the year, driven by the transfer of the New Energy, Procurement and Health, Safety and Environment functions.

	2019 $m	2018 $m
Gross margin	**(1)**	(4)
Operating costs (excluding depreciation and amortisation)	**(264)**	(277)
Underlying EBITDA	**(265)**	(281)
Depreciation and amortisation	**(23)**	(32)
Underlying EBIT	**(288)**	(313)

The following table provides a more detailed breakdown of Centrally Managed Expenses operating costs excluding depreciation and amortisation.

Labour	**(109)**	(136)
Hardware and software costs	**(78)**	(70)
Consultants and contractor services	**(31)**	(23)
Insurance premiums	**(23)**	(19)
Other	**(23)**	(29)
Operating costs (excluding depreciation and amortisation)	**(264)**	(277)

Centrally Managed Expenses Underlying EBIT was $(288) million, an increase of $25 million. Excluding the impact of the transferred functions mentioned above, Underlying EBIT decreased by $15 million. Several factors contributed to the decrease, principally IT transformation activities and investment in strategic growth opportunities, together with higher insurance costs for coal fired generation, costs associated with responding to intense regulatory activity and executive transitions and redundancies. This was partly offset by non-recurring employee related savings. Business as usual costs were broadly flat, with labour inflation partly offset by efficiency savings.

13.4.5 Investments

Investments comprises AGL's interests in the ActewAGL Retail Partnership, Powering Australian Renewables Fund (PARF), Advanced Microgrid Solutions Inc, Energy Impact Partners' Fund, Activate Capital Partners, Solar Analytics Pty Limited, Sunverge Energy Inc and Ecobee Inc.

	2019 $m	2018 $m
ActewAGL	**31**	38
PARF	**1**	-
Other	**1**	(5)
Underlying EBIT	**33**	33

ActewAGL Retail partnership contributed an equity share of profits of $31 million for the year compared with $38 million in the prior year. The decrease was due to increased competition and market activity.

During the year AGL revalued its investments in Ecobee and Advanced Microgrid Solutions to zero. This fair value movement was recorded within other comprehensive income and there was no impact to profit or loss.

13.5 Portfolio review

The portfolio review reporting for both the Electricity (refer to section 13.5.1) and Gas (refer to section 13.5.2) businesses provides a consolidated margin for each fuel across operating segments. This is as an effective tool to present how value is generated in the business for each type of fuel. The portfolio review combines the revenue from external customers and associated network and other costs, the costs of the procurement and hedging of AGL's gas and electricity requirements, and the costs of managing and maintaining AGL's owned and contracted generation assets to calculate the consolidated margin. A per unit rate ($/MWh for electricity and $/GJ for gas) is derived from each category of revenue and cost using the relevant associated volumes.

The tables in section 13.5.1 and 13.5.2 should be read in conjunction with section 13.7 to reconcile the segmental revenue and costs allocated to each portfolio with Group Underlying EBIT.

13.5.1 Electricity portfolio

Electricity portfolio review reporting combines the Wholesale Markets, Customer Markets (Consumer and Business) and Group Operations businesses to reflect the procurement and hedging of AGL's electricity requirements, the costs of managing and maintaining AGL's owned and contracted generation assets, and the margin from external customers.

All volume generated is sold into the National Electricity Market ("the pool") for which AGL receives pool generation revenue. Pool generation revenue is driven by volume and pool prices, which are set by the real-time market and differ by state. The total volume demanded by AGL customers is then purchased from the pool according to the geographical profile of customer demand and is reported as pool purchase costs. Where pool generation volumes exceed volumes purchased for customers, the net generation volume surplus drives revenue from indirect customers, which is incorporated within the pool generation revenue. Costs incurred in generating volume sold into the pool are reported as costs of generation, of which Wholesale Markets manages the cost of sales and Group Operations manages generation operation costs and asset depreciation.

	2019 GWh	2018 GWh	Movement %
Consumer customers pool purchase volume	**14,480**	14,695	(1.5)%
Large Business customers and Wholesale Markets pool purchase volume	**26,044**	25,887	0.6%
Pool purchase volume	**40,524**	40,582	(0.1)%
Add: Net generation volume surplus	**3,199**	2,483	28.8%
Pool generation volume	**43,723**	43,065	1.5%
Consumer customers sales	**13,573**	13,768	(1.4)%
Large Business customers sales	**9,775**	9,752	0.2%
Wholesale customers sales	**15,804**	15,651	1.0%
Total customer sales volume	**39,152**	39,171	0.0%
Energy losses	**1,372**	1,411	(2.8)%
Pool purchase volume	**40,524**	40,582	(0.1)%

Pool generation volumes were 43,723 GWh, 1.5% up, driven by increased generation at AGL Macquarie and AGL's Victoria hydro assets, and commencement of generation at Silverton wind farm in New South Wales. This was partly offset by reduced generation at AGL Loy Yang due to lower availability from outages, and AGL Torrens Island due to AGL's lower contracted position in South Australia. Consumer customer sales volumes were 13,573 GWh, a decrease of 195 GWh driven by a 1.1% decrease in total average consumption per customer as a result of a change in customer mix . Large Business customer sales volumes of 9,775 GWh were broadly flat. Wholesale customer sales volumes were broadly flat at 15,804 GWh, up 153 GWh, with no significant change to AGL's Wholesale customer base.

	Portfolio Margin		Per Unit		Volume Denomination	
	2019 $m	Restated 2018 $m	2019 $/MWh	Restated 2018 $/MWh	2019 GWh	2018 GWh
Consumer customers[1]	**4,068**	4,145	***299.7***	*301.1*	**13,573**	13,768
Large Business customers[1]	**1,734**	1,615	***177.4***	*165.6*	**9,775**	9,752
Wholesale customers and Eco Markets[1,2]	**1,104**	1,055	***69.9***	*67.4*	**15,804**	15,651
Group Operations (Thermal and Renewables)	**104**	97				
Total revenue[1]	**7,010**	6,912	***179.0***	*176.5*	**39,152**	39,171
Consumer network costs[1]	**(1,666)**	(1,691)	***(122.7)***	*(122.8)*	**13,573**	13,768
Consumer other cost of sales[1]	**(568)**	(597)	***(41.8)***	*(43.4)*	**13,573**	13,768
Large Business customers network costs[1]	**(580)**	(583)	***(59.3)***	*(59.8)*	**9,775**	9,752
Large Business customers other cost of sales[1]	**(253)**	(292)	***(25.9)***	*(29.9)*	**9,775**	9,752
Customer network and other cost of sales[1]	**(3,067)**	(3,163)	***(131.4)***	*(134.5)*	**23,348**	23,520
Fuel[3]	**(1,063)**	(937)	***(24.3)***	*(21.8)*	**43,723**	43,065
Generation running costs[3]	**(660)**	(575)	***(15.1)***	*(13.4)*	**43,723**	43,065
Depreciation and amortisation[3]	**(422)**	(371)	***(9.7)***	*(8.6)*	**43,723**	43,065
Costs of generation (a)[3]	**(2,145)**	(1,883)	***(49.1)***	*(43.7)*	**43,723**	43,065
Pool generation revenue[2,4]	**4,508**	3,881	***103.1***	*90.1*	**43,723**	43,065
Pool purchase costs[2,5]	**(4,060)**	(3,582)	***(100.2)***	*(88.3)*	**40,524**	40,582
Net derivative (cost)/revenue[4]	**(257)**	(259)	***(5.9)***	*(6.0)*	**43,723**	43,065
Net Portfolio Management (b)[6]	**191**	40	***4.9***	*1.0*	**39,152**	39,171
Total wholesale costs (a + b)[5]	**(1,954)**	(1,843)	***(48.2)***	*(45.4)*	**40,524**	40,582
Total costs[6]	**(5,021)**	(5,006)	***(128.2)***	*(127.8)*	**39,152**	39,171
Portfolio margin[7]	**1,989**	1,906	***50.8***	*48.7*	**39,152**	39,171
Consumer customers	**505**	452				
Large Business customers	**34**	36				
Wholesale Electricity	**2,240**	2,218				
Eco Markets	**106**	46				
Group Operations (Thermal and Renewables)	**(896)**	(846)				

1. Customer sales volume - revenue and cost is driven by customer sales volume, which is utilised to calculate $/MWh for key Consumer, Business and Wholesale Customer metrics.
2. Pool generation revenue, Wholesale electricity revenue and pool purchase costs include amounts from certain wholesale contracts that are treated as derivatives for statutory reporting purposes. In the statutory accounts the amounts associated with these contracts are recognised within cost of sales.
3. Pool generation volume - this is the direct driver of all costs of generation (fuel costs, generation running costs and depreciation and amortisation) and is used to calculate the $/MWh cost.
4. Pool generation volume - pool generation revenue is directly earned on pool generation volume, which is utilised to calculate a $/MWh value. Additionally, derivative instruments are used to manage hedging requirements of the consumer and business customer loads, as well as the long energy position where generation volume is more than the internal AGL portfolio (the net generation volume surplus).
5. Pool purchase volume - as Wholesale Markets manage the purchase of pool volume to meet customer demand, pool purchase volume is utilised to calculate the $/MWh cost.
6. Customer sales volume - excluding generation volumes, which drive generation running costs, the portfolio comprises volumes sold to customers. Sold volumes is utilised to calculate the net portfolio management $/MWh.
7. Customer sales volume - whilst various drivers exist within total cost of sales metrics and overall portfolio margin, ulitmately the volume sold to customers is the key driver of calculating margin and is used to calculate the $/MWh value.

Electricity portfolio margin increased to $50.8 per MWh from $48.7 per MWh driven by an increase in wholesale prices, partly offset by an increase in fuel costs.

Total revenue was $7,010 million, an increase of $98 million. Revenue from Consumer customers was $4,068 million, a decrease of $77 million, driven by lower volumes and the impact of customers switching to lower priced products. Large Business customer revenue was $1,734 million, an increase of $119 million, due to increased wholesale electricity market prices. Wholesale Electricity and Eco Markets revenue was $1,104 million, an increase of $49 million, reflecting the increase in Wholesale customer contract prices and a slight increase in volume.

Lower network rates and customer sales volumes resulted in lower network costs and a decrease in costs of complying with green schemes mostly contributed to the decrease in Consumer other cost of sales.

Total Wholesale costs were $(1,954) million, an increase of $111 million, or $2.8 per MWh. Net portfolio management improved by $151 million or $3.9 per MWh driven by higher pool prices and increased forward contract prices. Fuel costs increased $126 million or $2.5 per MWh reflecting increased coal contract cost escalation and higher wholesale gas prices.

Generation running costs increased $85 million due to the impact of AGL Macquarie and AGL Loy Yang forced outages and additional maintenance costs. Increased depreciation of $51 million was predominantly due to a higher asset base at AGL Macquarie and AGL Loy Yang due to the committed closure of Liddell Power Station and a revision to the depreciation methodology of the licence and other assets relating to AGL Hydro.

In addition to the commentary above, Electricity portfolio margin is discussed in sections 13.4.1 and 13.4.2.

13.5.2 Gas portfolio

The gas portfolio review reporting combines the Wholesale Markets and Customer Markets (Consumer and Business) businesses to reflect the procurement and hedging of AGL's gas requirements and the margin from external customers.

	2019 PJ	2018 PJ	Movement %
Consumer customers	**57.3**	59.9	(4.3)%
Large Business customers	**16.4**	32.3	(49.2)%
Wholesale Markets and generation	**93.4**	87.8	6.4%
Total customer sales volume	**167.1**	180.0	(7.2)%
Energy losses	**1.9**	2.9	(34.5)%
Gas purchase volume	**169.0**	182.9	(7.6)%

Total customer sales volume was 167.1 PJ, a decrease of 12.9 PJ or 7.2% primarily due to the loss of Large Business customer volumes. Large Business volumes were down 15.9 PJ or 49.2% as a result of continued tight market conditions. The decrease in Consumer customer volumes of 2.6 PJ or 4.3% was due to lower average consumption of 5.4% as a result of milder weather. The increase in Wholesale Markets and generation volumes of 5.6 PJ or 6.4% was due to higher sales to existing Wholesale customers, partly offset by lower generation at Torrens Island.

	Portfolio Margin		Per Unit		Volume Denomination	
	2019 $m	Restated 2018 $m	2019 $/GJ	Restated 2018 $/GJ	2019 PJ	2018 PJ
Consumer customers	**1,530**	1,538	***26.7***	*25.7*	**57.3**	59.9
Large Business customers	**168**	339	***10.2***	*10.5*	**16.4**	32.3
Wholesale Gas and Eco Markets	**928**	755	***9.9***	*8.6*	**93.4**	87.8
Total revenue	**2,626**	2,632	***15.7***	*14.6*	**167.1**	180.1
Consumer network costs	**(512)**	(537)	***(8.9)***	*(9.0)*	**57.3**	59.9
Consumer other cost of sales	**(42)**	(38)	***(0.7)***	*(0.6)*	**57.3**	59.9
Large Business customers network costs	**(14)**	(31)	***(0.9)***	*(1.0)*	**16.4**	32.3
Large Business customers other cost of sales	**(7)**	(6)	***(0.4)***	*(0.2)*	**16.4**	32.3
Customer network and other cost of sales	**(575)**	(612)	***(7.8)***	*(6.6)*	**73.7**	92.2
Gas purchases	**(1,045)**	(959)	***(6.3)***	*(5.3)*	**167.1**	180.0
Haulage, storage and other	**(287)**	(333)	***(1.7)***	*(1.9)*	**167.1**	180.0
Total wholesale costs	**(1,332)**	(1,292)	***(8.0)***	*(7.2)*	**167.1**	180.0
Total costs	**(1,907)**	(1,904)	***(11.4)***	*(10.6)*	**167.1**	180.0
Portfolio margin	**719**	728	***4.3***	*4.0*	**167.1**	180.0
Consumer customers	**246**	249				
Large Business customers	**15**	46				
Wholesale Gas	**458**	432				
Eco Markets	**-**	1				

Gas portfolio margin increased to $4.3 per GJ from $4.0 per GJ driven by an increase in the market price.

Total revenue was $2,626 million, a decrease of $6 million largely due to a decrease in Large Business Customers revenue, partially offset by an increase in Consumer and Wholesale customers sales revenue. The increase in Wholesale customer revenue of $173 million was driven by increased contracted rates. Consumer revenue was $1,530 million, a decrease of $8 million due to lower volumes and increased discounts as a result of customers switching to lower priced products. Large Business customers revenue declined $171 million due to a decrease in volumes sold as a result of continued tight market conditions and the loss of customers.

Total costs were $(1,907) million, an increase of $3 million mainly due to the increased wholesale gas price, partially offset by a decrease in total network costs due to lower volumes and decreased network rates.

In addition to the commentary above, Gas portfolio margin is discussed in sections 13.4.1 and 13.4.2.

13.6 Consolidated financial performance by operating segment

2019 $m	Wholesale Markets	Customer Markets	Group Operations	Centrally Managed Expenses	Investments	Inter-segment	**Total Group**
Revenue	9,100	7,554	188	-	1	(3,597)	**13,246**
Cost of sales	(6,296)	(6,727)	(14)	-	-	3,597	**(9,440)**
Other income/(loss)	-	-	(4)	(1)	32	-	**27**
Gross margin	**2,804**	**827**	**170**	**(1)**	**33**	**-**	**3,833**
Operating costs (excluding depreciation and amortisation)	(26)	(532)	(726)	(264)	-	-	**(1,548)**
Underlying EBITDA	**2,778**	**295**	**(556)**	**(265)**	**33**	**-**	**2,285**
Depreciation and amortisation	(21)	(101)	(480)	(23)	-	-	**(625)**
Underlying EBIT	**2,757**	**194**	**(1,036)**	**(288)**	**33**	**-**	**1,660**
Net finance costs							**(193)**
Underlying Profit before tax							**1,467**
Income tax expense							**(427)**
Underlying Profit after tax							**1,040**

Restated 2018 $m	Wholesale Markets	Customer Markets	Group Operations	Centrally Managed Expenses	Investments	Inter-segment	Total Group
Revenue	8,624	7,746	234	1	-	(3,789)	**12,816**
Cost of sales	(5,927)	(6,886)	(41)	(5)	-	3,789	**(9,070)**
Other income	-	-	13	-	36	-	**49**
Gross margin	**2,697**	**860**	**206**	**(4)**	**36**	**-**	**3,795**
Operating costs (excluding depreciation and amortisation)	(22)	(556)	(701)	(277)	(3)	-	**(1,559)**
Underlying EBITDA	**2,675**	**304**	**(495)**	**(281)**	**33**	**-**	**2,236**
Depreciation and amortisation	(10)	(102)	(424)	(32)	-	-	**(568)**
Underlying EBIT	**2,665**	**202**	**(919)**	**(313)**	**33**	**-**	**1,668**
Net finance costs							**(224)**
Underlying Profit before tax							**1,444**
Income tax expense							**(426)**
Underlying Profit after tax							**1,018**

13.7 Portfolio review reconciliation

2019 $m	Electricity Portfolio	Gas Portfolio	Other AGL	Adjustments (a)	Total Group
Wholesale Markets	1,104	928	5	3,524	**5,561**
Customer Markets	5,802	1,698	54	(14)	**7,540**
Group Operations	104	-	88	(48)	**144**
Other	-	-	1	-	**1**
Revenue	**7,010**	**2,626**	**148**	**3,462**	**13,246**
Wholesale Markets	(954)	(1,332)	-	(3,980)	**(6,266)**
Customer Markets	(3,067)	(575)	(28)	503	**(3,167)**
Group Operations	-	-	(22)	15	**(7)**
Other	-	-	-	-	**-**
Cost of sales	**(4,021)**	**(1,907)**	**(50)**	**(3,462)**	**(9,440)**
Other income	-	-	27	-	**27**
Gross margin	**2,989**	**719**	**125**	**–**	**3,833**
Operating costs (excluding depreciation and amortisation)	(578)	-	(970)	-	**(1,548)**
Depreciation and amortisation	(422)	-	(203)	-	**(625)**
Portfolio Margin / Underlying EBIT	**1,989**	**719**	**(1,048)**	**–**	**1,660**

2019 $m	Electricity	Gas	Pool revenue	Other	Total Group
Portfolio Margin Reporting	7,010	2,626	4,508	-	**14,144**
Revenue reclass	(849)	-	(53)	-	**(902)**
Intragroup	(4)	(293)	-	(55)	**(352)**
Other	(128)	13	14	457	**356**
Note 2 - Revenue	**6,029**	**2,346**	**4,469**	**402**	**13,246**

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Restated 2018 $m	Electricity Portfolio	Gas Portfolio	Other AGL	Adjustments (a)	**Total Group**
Wholesale Markets	1,055	755	-	3,134	**4,944**
Customer Markets	5,760	1,877	109	(50)	**7,696**
Group Operations	97	-	137	(59)	**175**
Other	-	-	1	-	**1**
Revenue	**6,912**	**2,632**	**247**	**3,025**	12,816
Wholesale Markets	(901)	(1,292)	-	(3,651)	**(5,844)**
Customer Markets	(3,163)	(612)	(31)	606	**(3,200)**
Group Operations	-	-	(40)	20	**(20)**
Other	-	-	(6)	-	**(6)**
Cost of sales	**(4,064)**	**(1,904)**	**(77)**	**(3,025)**	(9,070)
Other income	-	-	49	-	**49**
Gross margin	**2,848**	**728**	**219**	**-**	3,795
Operating costs (excluding depreciation and amortisation)	(571)	-	(988)	-	**(1,559)**
Depreciation and amortisation	(371)	-	(197)	-	**(568)**
Portfolio Margin / Underlying EBIT	**1,906**	**728**	**(966)**	**-**	1,668

Restated 2018 $m	Electricity	Gas	Pool revenue	Other	**Total Group**
Portfolio Margin Reporting	6,912	2,632	3,881	-	**13,425**
Revenue reclass	(766)	(4)	(33)	-	**(803)**
Intragroup	(1)	(300)	-	(74)	**(375)**
Other	(82)	51	53	547	**569**
Note 2 - Revenue	**6,063**	**2,379**	**3,901**	**473**	12,816

Notes

(a) Key adjustments include:

- Wholesale Markets electricity pool sales in the statutory accounts has been reallocated to cost of sales (net portfolio management) in the Portfolio Review where it is combined with pool purchase costs and derivatives to reflect AGL's net position.
- Wholesale Markets other revenue in the statutory accounts has been reallocated to cost of sales (generation running costs) in the Portfolio Review including ancillary services revenue, brown coal sales and wind farm asset management fees.
- Within Wholesale Markets, derivatives from certain wholesale contracts are recognised within cost of sales in the statutory accounts. In the Portfolio Review the revenue and costs have been separately disclosed.
- Intra-segment and inter-segment eliminations include: Gas sales from Wholesale Gas to Wholesale Electricity; gas sales from Group Operations (Natural Gas) to Wholesale Markets. Elimination adjustment also includes the reallocation of green costs from Wholesale Markets (Eco-Markets) to Consumer and Business customer other cost of sales.

13.8 Impact of adopting AASB 9 and AASB 16

Table 13.8.1 Group financial performance

	30 June 2018 $m	AASB 9	AASB 16	Restated 30 June 2018 $m
Revenue	12,816	-	-	**12,816**
Cost of sales	(9,070)	(1)	1	**(9,070)**
Other income	49	-	-	**49**
Gross margin	3,795	(1)	1	**3,795**
Operating costs (excluding depreciation and amortisation)	(1,569)	(5)	15	**(1,559)**
Underlying EBITDA	2,226	(6)	16	**2,236**
Depreciation and amortisation	(558)	-	(10)	**(568)**
Underlying EBIT	1,668	(6)	6	**1,668**
Net finance costs	(217)	-	(7)	**(224)**
Underlying Profit before tax	1,451	(6)	(1)	**1,444**
Income tax expense	(428)	2	-	**(426)**
Underlying Profit after tax	1,023	(4)	(1)	**1,018**

	30 June 2018 $m	AASB 9	AASB 16	Restated 30 June 2018 $m
Assets				
Cash and cash equivalents	463	-	-	**463**
Other current assets	3,343	(116)	-	**3,227**
Property, plant and equipment	6,685	-	72	**6,757**
Intangible assets	3,271	-	-	**3,271**
Other non-current assets	877	35	3	**915**
Total assets	14,639	(81)	75	**14,633**
Liabilities				
Borrowings	2,841	-	122	**2,963**
Other liabilities	3,408	-	(39)	**3,369**
Total liabilities	6,249	-	83	**6,332**
Net assets / total equity	8,390	(81)	(8)	**8,301**

Refer to Note 38 (c) in the Financial Report for a full summary of the overall impact of adoption of new and revised Standards and Interpretations.

14. Remuneration Report

This Remuneration Report forms part of the Directors' Report.

Message from the Chair of the People & Performance Committee

Dear Shareholders,

On behalf of the Board, I am pleased to present the Remuneration Report for AGL Energy Limited (AGL) and its consolidated entities for the year ended 30 June 2019 (FY19).

A year to 'reset' senior executive remuneration

AGL's Executive Remuneration Framework is designed to be competitive so as to attract and retain the right person for the job and to reward executives for delivering financial returns and AGL's strategy, both aimed at creating greater shareholder value.

The People & Performance Committee has considered the sentiments of our shareholders, our customers and the broader community towards levels of executive remuneration. As we have had a year of change in our Executive Team, we have taken this opportunity to 'reset' senior executive remuneration, starting with our new Managing Director & CEO.

AGL's performance in FY19

FY19 was another strong year for AGL. Statutory Profit after tax for FY19 was down to $905 million however Underlying Profit after tax reached $1,040 million, up 2% from the prior year. The principal driver of the increase was margin growth in Wholesale Markets from higher wholesale electricity prices and lower compliance costs in Eco Markets. This was offset to some degree by Customer Markets margin compression reflecting a continued competitive environment. In addition, there was higher depreciation and amortisation in Group Operations due to AGL's increased capital investment in recent years.

Underlying operating cash flow before interest and tax was $2,013 million. This was down $461 million from the prior year mainly due to higher margin calls that AGL was required to provide due to higher forward electricity prices. A large portion of the margin calls will be recovered in future earnings. Excluding the impact of the margin calls, AGL's conversion of EBITDA to cash flow was 96%.

AGL declared dividends of 119 cents per share, 2 cents higher than the prior period, consistent with AGL's profit growth.

Capital expenditure was $939 million, with investments being made to keep our ageing thermal plant operating, as well as investment in new projects such as the Barker Inlet power station.

AGL's balance sheet remains strong. Gearing was 23.5% and AGL maintained its Baa2 credit rating through the year.

The average annual return on equity (ROE) continues to perform strongly at 12.5%.

A new Managing Director & CEO

After an extensive domestic and international search, AGL announced the permanent appointment of Brett Redman as Managing Director & CEO effective 1 January 2019. Given Mr Redman's extensive experience as Chief Financial Officer (CFO) and across the energy industry, the Board is confident that AGL has the right leader to deliver our transformative initiatives and our desired customer and shareholder outcomes.

This Report details Mr Redman's remuneration arrangements, along with other changes to the key management personnel (KMP) over FY19.

FY19 remuneration outcomes

Fixed reward

AGL's approach is to set remuneration levels with regard to market benchmarks and commensurate to the skills and experience of the individual. Generally, for internal promotions, remuneration levels will be set low compared to market on appointment, to allow executives 'room to grow into the role'.

The Board looked to the market and listened to stakeholder views on contemporary CEO remuneration levels to set fixed remuneration for Mr Redman. This resulted in a reduction in fixed remuneration of more than 25% from the previous Managing Director & CEO. This is not a reflection on Mr Redman or the Board's view of his suitability for this role. It is a recognition that the expectations of our stakeholders regarding executive remuneration levels has changed since the appointment of the previous Managing Director & CEO.

The Board also re-weighted the Managing Director & CEO's package away from short-term in favour of the longer-term to more closely align with our need to deliver on our long-term strategic objectives.

Damien Nicks has been promoted to the role of CFO. His fixed remuneration is lower than that of Mr Redman who held the CFO role for six years before his appointment as Managing Director & CEO. As this is Mr Nicks' first CFO role, his remuneration has been set towards the lower end of market comparators.

Remuneration Report

For the year ended 30 June 2019

Variable reward outcomes

The starting point for considering short-term incentive (STI) outcomes is Statutory Profit. The Board adjusts Statutory Profit for non-cash fair value movements in financial instruments and may adjust for other significant items on a case-by-case basis.

Statutory Profit after tax in FY19 was $905 million, down from $1,582 million in FY18. When adjusted for the impact of fair value movements in financial instruments and significant items, Profit after tax was $1,040 million, up 2%.

STIs reward executives for financial and strategic achievements throughout the year. They reflect not only what the company achieved, but how those outcomes were achieved against customer, people, operational and strategic targets. For FY19, executives achieved STI awards at or around target opportunity levels (between 67% and 103% of target) reflecting performance and demonstrated progress against AGL's strategy. The outcome was adjusted for the impact of the Loy Yang A Unit 2 outage.

The performance conditions for the FY17 long-term incentive (LTI) plan were tested as at 30 June 2019 and this grant vested at 50%. The company did not meet the relative total shareholder return (TSR) measure (being placed at the 38.20th percentile in comparison to the S&P/ASX100 peer group) however it met and exceeded the three-year average ROE measure, achieving an average annual ROE of 11.37% excluding share buybacks.

Non-Executive Director fees

Non-Executive Director fees are set reflective of the time commitment and responsibilities associated with the role and to be competitive in attracting and retaining Non-Executive Directors to the AGL Board. In this context a number of adjustments were made, effective 1 January 2019:

- the Board Chair fee was increased by 6.2%
- the Chair of the People & Performance and Safety, Sustainability & Corporate Responsibility Committees were increased by 7.8%, and
- remaining Board and Committee fees were increased by 2.1%.

Changes to the remuneration framework for FY20 and beyond

This year, we continued to review and refine our Executive Remuneration Framework. In addition to the 'reset' of fixed pay referred to above, to more strongly align the Executive Remuneration Framework with our strategic priorities, AGL's values and the expectations of stakeholders, we have made a number of changes for FY20. Details of these changes are included on the following pages.

Previous Managing Director & CEO

AGL's previous Managing Director & CEO, Andy Vesey, was paid his contractual entitlements on ceasing to be employed by AGL. He was eligible to receive a STI award in respect of the first half of FY19 as he remained employed by the company. LTI retained on foot to be tested against applicable performance conditions at the relevant performance periods. Details of these arrangements are included in this Report.

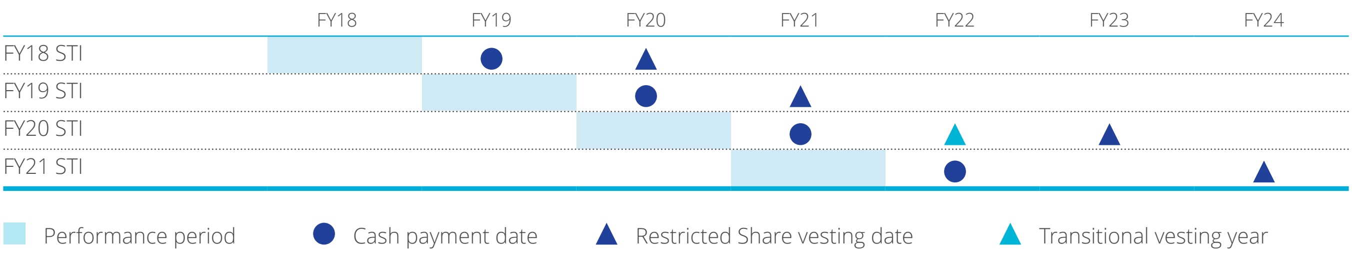
I invite you to read our Remuneration Report and trust you will find that it clearly outlines the links between our strategy, performance and executive remuneration outcomes. Your directors welcome your feedback on our remuneration practices and disclosures and look forward to your continued support at our 2019 AGM.

Yours sincerely

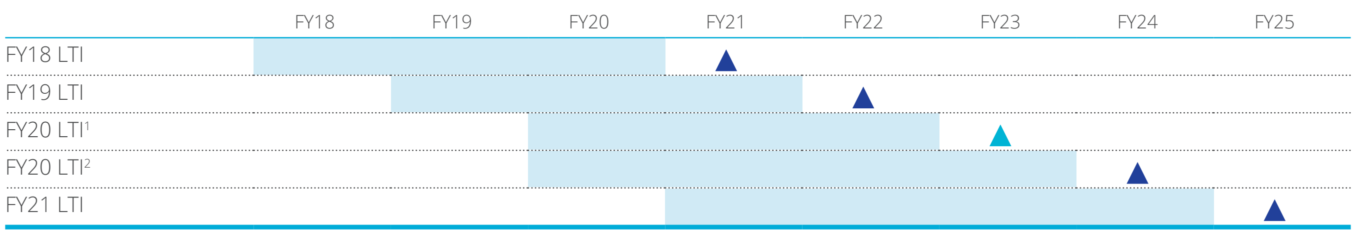
Diane Smith-Gander
Chair, People & Performance Committee

Changes to remuneration framework for FY20

Remuneration element	Current structure	Refined structure	Rationale	Transition
Short-term incentive				
STI opportunity (% fixed remuneration) – *Reduce maximum & simplify approach*	**Other executives:** • 70% target • 100.8% max	**Other executives:** • 70% target • 84% max	*Removal of individual performance moderator:* Simplification of performance scorecard, and reduction in the maximum STI award for other executives to 120% of STI target opportunity from 144%. Change does not apply to the Managing Director & CEO as this was considered when setting his remuneration package upon appointment.	Effective 1 July 2019; no transition required.
Deferral component & period – *More STI paid in shares & restricted for longer*	**Other executives:** • 90% cash • 10% Restricted Shares **All executives (incl. Managing Director & CEO):** • Restricted Shares vest one year after allocation date.	**Other executives:** • 75% cash • 25% Restricted Shares **All executives (incl. Managing Director & CEO):** • Restricted Shares vest two years after allocation date.	*Increased Restricted Share component (excluding the Managing Director & CEO):* providing improved retention, encouraging earlier achievement of AGL minimum shareholding requirements and stronger alignment with shareholder experience. The Managing Director & CEO will continue to have 50% of his STI award deferred. *Increased Restricted Share deferral period:* providing greater retention and stronger alignment with shareholder experience. Provides enhanced clawback opportunity for any material misstatement.	*For current executives:* to ensure executives a smooth transition to increased deferral, 50% of any deferred FY20 STI award will vest after one year and 50% after two years. In FY21, the full deferral component will be subject to a two-year restriction period. *For incoming new executives:* two-year deferral period with no transitional arrangement. A diagram demonstrating the rationale for the transitional arrangement is shown below.



Remuneration element	Current structure	Refined structure	Rationale	Transition
Long-term incentive				
LTI opportunity (% fixed remuneration) – *Adjust threshold/maximum*	**Other executives:** • 35% threshold • 70% max	**Other executives:** • 50% threshold • 100% max	*Increased maximum LTI opportunity:* providing a remuneration package more heavily weighted towards long-term performance and reward. Change does not apply to the Managing Director & CEO as this was considered when setting his remuneration package upon appointment.	*For current executives:* to ensure a smooth transition to the extension of the performance period, a bridging grant will be made at the same quantum as the FY20 grant to supplement the new four-year grant by providing an opportunity for LTI vesting every year. The bridging grant will be tested after three years.
Performance period – *Longer performance period*	Three-year performance period.	Four-year performance period.	*Increased performance period:* performance period extended from three years to four years to better reflect the business planning cycle.	The Board will have the discretion to lapse in full the LTI grant with the longest unserved performance period at the date of cessation of employment during the transition period. In FY21, no further bridging grants will be made. *For incoming new executives:* four-year performance period with no bridging grant. A diagram demonstrating the rationale for the bridging grant is shown below.



1. Bridging grant.
2. New four-year LTI grant.

Performance Period | Performance Right vesting date | Transitional vesting year

Remuneration Report

For the year ended 30 June 2019

Summary of FY19 performance and remuneration outcomes

How we create value

Business Value Drivers	CUSTOMERS	COMMUNITY & RELATIONSHIPS	PEOPLE	ENVIRONMENT
	INFRASTRUCTURE	FINANCE	SYSTEMS & PROCESSES	

How we think and act

AGL Values	Care in every action		Integrity always
	Better together	Deliver your best	Shape tomorrow

What we want to achieve

Strategic Priorities	Growth	Transformation	Social Licence

	Short-term incentive	Long-term incentive
FY19 performance: achievements and progress	**Profit:** Underlying Profit after tax was $1,040 million, up 2%. These results reflect the strong operation of AGL's energy supply portfolio. The outcome was adjusted for the impact of the Loy Yang A Unit 2 outage. **Customer:** Net Promoter Score (NPS) has improved significantly. Ombudsman complaints reduced by around 2% largely due to a reduction in complaints related to connections and credit issues. **Growth:** Currently approximately $1.9 billion of new wind, solar and gas firming projects under construction as a result of AGL's investment in enhancing energy supply and another approximately $2 billion of projects subject to feasibility, including two pumped hydro projects at Bells Mountain and Kanmantoo. **Transformation:** Digital transformation to improve our customer experience, as well as tools to standardise and streamline internal processes and improve employee experience.	**Relative TSR:** Three-year TSR to 30 June 2019 of 22.42%, equating to the 38.20th percentile against the S&P/ASX100 Index. **ROE:** 11.37% average ROE over the three-year performance period ended 30 June 2019 (excluding buybacks).

	Fixed remuneration	Short-term incentive	Long-term incentive
FY19 remuneration outcomes: rewards delivered	Following their permanent appointments, Mr Redman and Mr Nicks received increases in fixed remuneration. Only one executive remaining in the same role received a fixed remuneration increase during FY19, being Mr Wrightson. Further details are provided in section 14.3.2.	STI awards **Managing Director & CEO:** • 103% of target • 66% of maximum **Other executives:** • 67-102% of target • 46-71% of maximum	FY19 vesting (FY17 grant) **TSR:** • 50% of grant • 0% of Rights vesting **ROE:** • 50% of grant • 100% of Rights vesting

Remuneration Report

For the year ended 30 June 2019

14.1 Introduction

The directors present the Remuneration Report for AGL Energy Limited (AGL) and its consolidated entities for the year ended 30 June 2019 (FY19), prepared in line with the *Corporations Act 2001 (Cth)*. The Report forms part of the Directors' Report and provides shareholders with an understanding of the remuneration principles in place for key management personnel (KMP) and the resulting outcomes for FY19.

AGL KMP are the Managing Director & CEO and certain AGL executives with operational and/or financial responsibility (together referred to in this Report as 'executives'), and the Non-Executive Directors. For FY19 the executives defined as KMP are the Managing Director & CEO, the Chief Financial Officer (CFO) and the Executive General Managers (EGMs) of the three major operating segments: Customer Markets, Wholesale Markets and Group Operations.

During FY19 the following changes to the executives occurred:

- On 24 August 2018, AGL announced that Managing Director & CEO Andy Vesey would cease to be on the AGL Board effective immediately, and cease employment with AGL on 31 December 2018.
- AGL's existing CFO, Brett Redman, was appointed Interim CEO effective 24 August 2018. Following an extensive domestic and international search, Mr Redman was permanently appointed as AGL's Managing Director & CEO effective 1 January 2019.
- Damien Nicks was appointed as Interim CFO on 24 August 2018. Following the announcement of Mr Redman's permanent appointment as Managing Director & CEO, and a subsequent recruitment process to identify an ongoing CFO, Mr Nicks was permanently appointed as AGL's CFO on 31 May 2019.
- AGL's Chief Customer Officer, Melissa Reynolds, ceased employment with AGL on 30 November 2018. Mark Enzinger was appointed as Interim Chief Customer Officer effective 16 November 2018 and Ms Reynolds ceased to be KMP from this date. Christine Corbett joined AGL as its new Chief Customer Officer on 1 July 2019.

Table 14.1.1: Key management personnel

Name	Position	Dates
Non-Executive Directors		
Current		
Graeme Hunt	Chairman	Full year
Peter Botten	Non-Executive Director	Full year
Jacqueline Hey	Non-Executive Director	Full year
Les Hosking	Non-Executive Director	Full year
Patricia McKenzie	Non-Executive Director	From 1 May 2019
Diane Smith-Gander	Non-Executive Director	Full year
John Stanhope	Non-Executive Director	Full year
Former		
Belinda Hutchinson	Non-Executive Director	Until 12 December 2018
Executives		
Current		
Brett Redman	Managing Director & CEO	Full year
Mark Enzinger	Interim Chief Customer Officer	From 16 November 2018[1]
Doug Jackson	EGM, Group Operations	Full year
Damien Nicks	CFO	From 24 August 2018
Richard Wrightson	EGM, Wholesale Markets	Full year
Former		
Melissa Reynolds	Chief Customer Officer	Until 16 November 2018[2]
Andy Vesey	Managing Director & CEO	Until 23 August 2018[3]

1. With the appointment of Ms Corbett, Mr Enzinger ceased to be a KMP on 30 June 2019.
2. Ms Reynolds ceased to be a KMP on 16 November 2018 and an employee on 30 November 2018.
3. Mr Vesey ceased to be on AGL's Board and therefore a KMP on 23 August 2018 and an employee on 31 December 2018.

14.2 Remuneration strategy and framework

The remuneration strategy is underpinned by AGL's purpose of supporting progress for all of its stakeholders. Within this purpose, the objective of the remuneration strategy is to support and drive our strategic priorities of Growth, Transformation and Social Licence.

The Executive Remuneration Framework is underpinned by the AGL Business Value Drivers: Customers, Community & Relationships, People, Environment, Infrastructure, Systems & Processes, and Finance, with the aim of creating long-term value for our shareholders and other stakeholders. AGL reviews its remuneration framework regularly to ensure it continues to evolve and be fit-for-purpose and drives performance outcomes that deliver on AGL's strategy.

AGL strives to create an Executive Remuneration Framework that drives a performance culture, ensuring there is a strong link between executive pay and the achievement of company performance and returns to shareholders. This is supported by a minimum shareholding policy that applies to all executives and non-executive directors. The three main elements of AGL's remuneration framework are detailed on the following page.

AGL is committed to ensuring that its remuneration framework is equitable and supports the objective of increasing female representation at all levels of the company.

Refinements to the framework agreed during FY19 will be implemented for executives in FY20. A table outlining the changes and rationale is provided after the message from the Chair of the People & Performance Committee preceding this Report.

FY19 Executive Remuneration Framework

	Fixed remuneration	Short-term incentive (STI)	Long-term incentive (LTI)
Objective	To attract and retain executives with the right capability and experience.	To reward executives for delivering financial returns and progress relative to AGL's strategy.	To reward executives for long-term performance, encourage shareholding and deliver long-term value creation for shareholders and other stakeholders.
Inputs	• Skills and experience • Role complexity • Responsibility Benchmarked against companies ranked 11-50 on the ASX.	**Annual performance period** • Financial measures 60-70% • Strategic measures 30-40% • Performance outcome range 0-120% • Individual performance moderator (IPM) against stretching, quantifiable metrics (0-1.2 multiplier). Multiplier not applicable for Managing Director & CEO in H2. *Award (% of fixed remuneration)* **Managing Director & CEO (HY1/HY2):** • 85/60% target • 122.4[1]/100% maximum **Interim executives**: • 30-40% target • 43.2-57.6% maximum[1] **Other executives:** • 70% target • 100.8% maximum[1]	**Three-year performance period** • 50%: relative TSR measured against the S&P/ASX100 • 50%: ROE *Award (% of fixed remuneration)* **Managing Director & CEO (HY1/HY2):** • 42.5/65% threshold • 85/130% maximum **Interim executives:** • 25% threshold • 50% maximum **Other executives:** • 35% threshold • 70% maximum
AGL approach	AGL initially sets fixed remuneration at a level reflective of the inputs above. Fixed remuneration is reviewed annually by the Board, considering performance during the year, relevant market data, tenure and experience.	The starting point for considering STI outcomes is Statutory Profit. The Board may adjust Statutory Profit in consideration of any non-recurring significant items that materially affect AGL's financial results. This is to ensure that management are not unfairly advantaged or disadvantaged by items outside their control. An executive delivering against all financial and strategic objectives would normally achieve a target STI outcome.	Relative TSR provides a comparative performance benchmark against the external market. Straight line vesting from 50-100% of award for 50th to 75th percentile performance against peer group. ROE provides a measure of the effectiveness with which AGL is deploying shareholders' funds. Vesting from 50-100% of the award for performance against the approved ROE range.
Delivery	Base salary and superannuation.	Cash and Restricted Shares (restrictions lifted after twelve months) **Managing Director & CEO (HY1/HY2):** • 70/50% cash • 30/50% Restricted Shares **Interim executives:** • 100% cash **Other executives:** • 90% cash • 10% Restricted Shares	Performance Rights which vest after three years, subject to meeting the performance conditions.

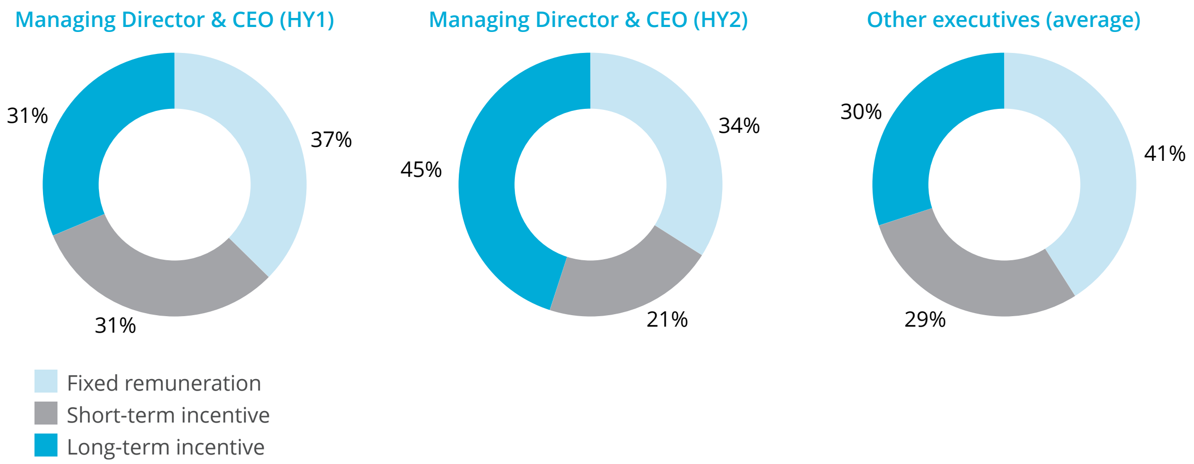
Total Remuneration

The level and mix of remuneration is designed to reward the achievement of both short and long-term objectives which, in turn, align executive and shareholder experiences through share ownership and value.

1. Includes maximum IPM.

14.2.1 Remuneration mix

The remuneration mix is structured to attract and retain appropriately. The FY19 remuneration mix for executives (excluding interim executive remuneration) is summarised below.



The variable/at-risk component of total remuneration is 66% and 59% for the Managing Director & CEO and other executives respectively (excluding interim executive remuneration). The level of variable/at-risk remuneration is broadly consistent with the average in S&P/ASX50 Index companies.

14.3 FY19 performance and executive remuneration outcomes

14.3.1 AGL five-year performance

Element	FY19	FY18[1]	FY17	FY16	FY15
Statutory Profit/(Loss) ($m)	905	1,582	539	(408)	218
Underlying Profit ($m)	1,040	1,018	802	701	630
Statutory earnings per share (EPS) (cents)	138.0	241.2	80.5	(60.5)	33.3
Underlying EPS (cents)	158.6	155.2	119.8	103.9	96.4
Dividends (cents)	119	117	91	68	64
Closing share price at 30 June ($)	20.01	22.48	25.50	19.29	15.55
Return on equity (%)[2]	12.5[3]	13.1[3]	10.2[3]	8.3	7.2

1. Restated for adoption of AASB 9 Financial Instruments and AASB 16 Leases.
2. Used to calculate a portion of executives' LTI outcomes.
3. Includes share buybacks.

14.3.2 Fixed remuneration approach and outcomes

The overall objective in establishing fixed remuneration is to attract and retain the right person for the job to lead AGL in tackling the challenges confronting the energy industry. Fixed remuneration at AGL therefore needs to be competitive to ensure the company is able to attract and retain those executives with experience in companies or industries undergoing similar transformation.

AGL's approach is to set executive's fixed remuneration initially at a level reflecting their skill and experience that allows progressive increases to apply as the executive performs and becomes more experienced in their role. Generally, for internal promotions, fixed remuneration levels will be set towards the lower end of market comparators. Fixed remuneration is reviewed annually in the context of market positioning and performance. This may or may not result in an increase for executives.

Mr Wrightson received an increase in fixed remuneration of 21.74%, effective 1 September 2018. This increase more closely aligns Mr Wrightson's fixed remuneration with external market benchmarks, performance, expertise and experience in the role.

In determining the fixed remuneration for the incoming Managing Director & CEO, the Board considered market benchmarks and listened to stakeholder views on contemporary CEO remuneration levels. The Board determined that a shift in the remuneration mix was appropriate, with a greater part of the variable reward opportunity being linked to long-term performance to more closely align with expectations on delivering the long-term objectives of AGL. This resulted in a reduction in fixed remuneration for the new Managing Director & CEO of more than 25% from the previous incumbent.

Mr Nicks was promoted to the role of CFO effective 31 May 2019 having previously acted in the role for nine months. As this is Mr Nicks' first CFO role, and in line with AGL's position on internal promotions, his fixed remuneration has been set towards the lower end of market comparators.

AGL is committed to gender pay equity across employees, including executives. With respect to the current executives in roles of equivalent size, there is no gender gap in fixed remuneration.

14.3.3 STI approach and outcomes

The objective of the STI is to reward executives for delivering financial returns and progress relative to AGL's strategy consistent with the delivery of value creation for shareholders.

Executives have a STI scorecard which establishes performance expectations across financial (70%) and strategic or performance focus (30%) measures. The STI scorecard for Mr Wrightson encompasses 60% financial and 40% strategic or performance focus measures, as the Wholesale Markets business does not have material operating expenditure. Assessment of actual performance against these measures determines the scorecard outcome for each executive in the range 0-120% percent of target. In general, the Board expects an executive delivering against all financial and strategic or performance focus objectives to achieve a target outcome of 100%. STI outcomes are then moderated in the range 0-1.2 by individual performance outcomes against measures linked to strategy.

Mr Redman was permanently appointed as Managing Director & CEO effective 1 January 2019. His FY19 STI award has been divided into two tranches, reflecting the period before and after permanent appointment. For the first half of FY19 Mr Redman's target STI opportunity was 85% of fixed remuneration, with a maximum award of 122.4% of fixed remuneration, using the methodology described above. For the second half, and in conjunction with an uplift in long-term incentive opportunity to shift more of the variable pay from cash into equity, the Board has reduced his target STI opportunity to 60% of fixed remuneration, with a maximum award of 100% of fixed remuneration. The individual performance moderator has been removed for the second half, pre-empting the refinements to the Executive Remuneration Famework to be implemented for FY20.

Net profit after tax and operating expenditure are the key financial measures to drive shareholder returns and operate as efficiently as possible in the market within which AGL operates. The strategic measures are focused on transformation and growth to drive the overall AGL objectives consistent with the delivery of value creation for shareholders.

Executive STI scorecard outcomes and individual performance moderators are detailed in Tables 14.3.3.2 and 14.3.3.3 FY19 was another strong year for AGL. The key drivers of the incentive outcomes included:

- FY19 Statutory Profit after tax was $905 million. Profit after tax adjusted for non-cash fair value movements in financial instruments and significant items (Underlying Profit) was $1,040 million, up 2% from the prior year. The outcome was adjusted for the impact of the Loy Yang A Unit 2 outage.
- The principal driver of the increase was margin growth in Wholesale Markets from higher wholesale electricity prices and lower compliance costs in Eco Markets, which was partially offset by Customer Markets margin compression.
- In addition, there was higher depreciation and amortisation in Group Operations due to AGL's increased capital investment in recent years.
- Underlying operating cash flow before interest and tax was $2,013 million. This was down $461 million from the prior year mainly due to higher margin calls that AGL was required to provide due to higher forward electricity prices. A large portion of the margin calls will be recovered in future earnings. Excluding the impact of the margin calls, AGL's conversion of EBITDA to cash flow was 96%.
- Capital expenditure was $939 million, with investments being made to keep our ageing thermal plant operating, as well as investment in new projects such as the Barker Inlet power station.
- AGL's balance sheet remains strong. Gearing was 23.5% and AGL maintained its Baa2 credit rating through the year.

Table 14.3.3.1: Actual FY19 STI outcomes

Executive[1]	Total STI award $	Cash $[2]	Restricted Shares $[3]	Total STI paid as % of target opportunity %	Total STI forfeited as a % of target opportunity %	Total STI paid as % of maximum opportunity %
B Redman	967,661	560,766	406,895	102.8	0.0	66.0
M Enzinger[4]	113,905	113,905	-	101.8	0.0	70.7
D Jackson	371,450	334,305	37,145	66.8	33.2	46.4
D Nicks[5]	237,161	237,161	-	99.6	0.4	69.1
R Wrightson	434,753	391,278	43,475	88.7	11.3	61.6

1. Includes executives who were KMP at 30 June 2019.
2. To be paid in September 2019.
3. To be allocated once the full-year financial results have been disclosed to the market, generally in August/September 2019.
4. Interim KMP during FY19. Interim KMP do not have any STI deferral component. Disclosed for KMP period only.
5. Interim KMP during FY19. As Mr Nicks was appointed as a permanent KMP on 31 May 2019, his STI deferral will commence in FY20. Disclosed for KMP period only.

Table 14.3.3.2: STI scorecard – performance measures and FY19 outcomes

				B Redman Managing Director & CEO				M Enzinger Interim Chief Customer Officer			
Strategic Priorities	Goal Type	Performance Measure	Business Value Drivers	Weighting	Min	Target	Max	Weighting	Min	Target	Max
Growth, Transformation and Social Licence	Financial	AGL profit after tax	$	60%		●		60%		●	
		AGL/business unit operating expenditure	$	10%		●		10%		●	
	Performance focus goals	**Customer:** AGL's NPS ranking against tier 1 competitors		15%		●		15%		●	
		Growth: Drive AGL's growth agenda	$	15%		●					
		Transformation: Deliver key project deliverables	$					15%			●

	D Jackson EGM, Group Operations				D Nicks CFO				R Wrightson EGM, Wholesale Markets				
	Weighting	Min	Target	Max	Weighting	Min	Target	Max	Weighting	Min	Target	Max	Outcome
	60%		●		60%		●		60%		●		Underlying Profit after tax was $1,040 million, up 2%. These results reflect strong operation of AGL's energy supply portfolio. The outcome was adjusted for the impact of the Loy Yang A Unit 2 outage.
	10%		●		10%			●					Overall operating expenditure slightly behind budget with some business units ahead of budget.
	15%		●		15%		●		15%		●		AGL's NPS improved significantly over FY19 to the highest level obtained since using this measure, with customers reporting more positive perceptions of the AGL brand as being one they can trust, and rating AGL's services and prices more favourably than in previous years. Ombudsman complaints have reduced by around 2% in the past year, largely due to a reduction in complaints related to connections and credit issues.
					15%		●						Demonstrated strong financial discipline with respect to potential investments maintained, with milestones to growth pathways met, including decision to cease due diligence work on Vocus Group acquisition. Approximately $1.9 billion of new wind, solar and gas firming projects under construction as a result of AGL's investment in enhancing energy supply and another approximately $2 billion of projects subject to feasibility.
	15%		●						25%		●		Digital transformation program to improve customer experience, as well as tools to standardise and streamline internal processes and improve employee experience. Delivered real-time analytical data to customers through Energy Insights, a product that gives customers greater control to manage their energy. Crib Point LNG import jetty project first gas delivery now expected second half of FY22.

Table 14.3.3.3: Individual performance moderators and FY19 outcomes

The individual performance moderator has the capacity to increase or decrease the scorecard outcome within the range of 0-1.2. The moderator applies to the overall financial and strategic outcomes in the scorecard, not the weighting.

				B Redman Managing Director & CEO						M Enzinger Interim Chief Customer Officer					
Strategic Priorities	Goal Type	Performance Measure	Business Value Drivers	Weighting	Min		Target		Max	Weighting	Min		Target		Max
Growth, Transformation and Social Licence	Safety	Health, safety and environment leadership, near misses, Total Injury Frequency Rate (TIFR)		15%		●				15%		●			
	People / Culture	Employee engagement		15%				●		15%				●	
	Customer	Digital adoption								20%					●
		Develop and implement energy innovation for customers								20%				●	
	Financial	Financial performance measures													
		Commercial availability and lost capacity factors of fleet													
	Social licence	Regulatory, customer and business processes and reporting		35%				●		30%					●
		Reduction in reportable environmental incidents													
	Strategic	Improve organisational effectiveness – new ways of working		35%				●							

D Jackson EGM, Group Operations				D Nicks CFO				R Wrightson EGM, Wholesale Markets				
Weighting	Min	Target	Max	Weighting	Min	Target	Max	Weighting	Min	Target	Max	Outcome
15%	●			15%	●			15%		●		While the number of reportable incidents has increased (driving TIFR upwards), the severity of incidents is reducing year on year, with the majority of FY19 TIFR injuries being low to moderate in severity.
15%		●		15%		●		15%		●		AGL achieved a 6% improvement in the employee engagement score over FY19, driven by a focus on delivering on employee promises and creating an environment where people feel safe to speak up.
												Material increase in digitisation of customer interactions with a strong reduction in call volumes and enhanced digital experience for customers.
												Opportunities in distributed energy identified including bringing to market residential battery offerings, expanding view to consider e-mobility and utilising smart home and energy efficiency technologies that aim to leverage the convergence of data and energy. Growth in customer numbers through innovative products and services. Customer account numbers have increased by 1.8% over the year despite intense competition in the market, with consistently high customer churn. There was a 7% increase in large business customer accounts in FY19.
				20%		●		30%			●	Optimisation program well underway. Strong outcomes delivered by Wholesale Markets financial measure.
45%	●											Outcome adjusted for the impact of the Loy Yang A Unit 2 generator failure.
				20%			●	20%		●		First phase of enhanced trading capabilities and technological advancements, including machine trading and artificial intelligence. Improved data security and process governance with no reportable privacy incidents and no notifiable data breaches realised by a material risk relating to cyber security, data governance or failure of internal controls.
25%		●										Proactive management of environmental risks, specifically by taking precautionary measures with respect to Macquarie suspending coal ash sales after test results identified elevated levels of metals which could exceed limits set by the NSW Environment Protection Authority (EPA). External advice confirmed no risk to human health or the environment therefore resumed supply of fly ash in June 2019.
				30%		●		20%		●		Digitisation enabling greater personalisation of service to customers delivered with increased flexibility and speed-to-market for new products and offerings through new ways of working. Similarly, the implementation of AGL's enterprise resource planning (ERP) platforms has improved the employee experience with technology and improved efficiencies through new ways of working.

Following the previous Managing Director & CEO's cessation of employment, Mr Vesey was eligible to a pro-rated FY19 STI award in respect of the half year he was employed by the Company. The award was assessed at the financial half-year end and outcomes were achieved at target against financials and below target against strategic measures. A STI award equal to 82% of the pro-rated target amount and 49% of the pro-rated maximum amount was paid in February 2019.

14.3.4 Prior year STI awards – Restricted Shares

Table 14.3.4.1: FY18 STI Restricted Share awards outstanding (FY18 STI deferral)

Executive[1]	Allocation date	Number of awards allocated	Value at allocation date $[2]	Vesting date
B Redman	21 August 2018	3,476	74,699	21 August 2019
D Jackson	21 August 2018	2,839	61,010	21 August 2019
R Wrightson	21 August 2018	1,471	31,612	21 August 2019

1. Includes executives who were KMP at 30 June 2019.
2. Calculated based on allocation price of $21.49 (actual weighted average price paid for shares for all participants receiving STI deferral), rounded to the nearest dollar. Due to the residual amount being less than the value of a share, value at allocation date is slightly lower than values reported in Table 14.4.1.1.

Table 14.3.4.2: FY17 STI Restricted Share awards vested during FY19 (FY17 STI deferral)

Executive[1]	Allocation date	Number of awards vested	Value vested $[2]	Vesting date
A Vesey	23 August 2017	56,415	1,150,302	23 August 2018
D Jackson	23 August 2017	2,813	57,357	23 August 2018
B Redman	23 August 2017	3,571	72,813	23 August 2018

1. Includes executives who were KMP at the vesting date.
2. Calculated based on closing share price on the vesting date, being $20.39.

14.3.5 LTI approach and outcomes

The objective of the LTI is to reward executives for delivering long-term performance, to encourage shareholding and deliver long-term value creation for shareholders.

The LTI is a Performance Rights plan which assesses AGL's performance against two key metrics, relative TSR and ROE, over a three-year period. Relative TSR provides a comparative, external market performance benchmark against a peer group of companies. ROE provides a measure of the effectiveness with which AGL is deploying shareholders' funds by dividing profit after tax for a given period by the monthly average of shareholders' equity for the same period. To ensure sustained performance, average ROE over the three years is calculated at the end of the performance period. Both LTI measures are key to AGL's long-term success as they clearly link to the creation of absolute and comparative shareholder value.

Pre-FY16 LTI plan – LTI transitional grants

To ensure executives were not unfairly disadvantaged by the closure of the pre-FY16 annual banking plan, the Board introduced a transitional arrangement for FY16 and FY17 under which impacted executives were provided a grant of Restricted Shares. This was to provide continuity in the annual vesting opportunities (in FY16 and FY17) under the old plan. The transitional share grants were subject to a twelve-month restriction period from grant, being September 2016 and September 2017.

- The first transitional share grant (relating to FY16) was granted in September 2016 and vested in September 2017.
- The second and final transitional share grant (relating to FY17) was granted in September 2017 and vested in September 2018.

Further details of the transitional grants and how they are calculated were provided in section 3.5 of the FY17 Remuneration Report.

Table 14.3.5.1: FY17 LTI transitional Restricted Share awards vested during FY19

Executive[1]	Allocation date	Number of awards vested	Value vested $[2]	Vesting date[3]
B Redman	29 September 2017	4,073	79,424	1 October 2018
D Jackson	29 September 2017	620	12,090	1 October 2018
R Wrightson	29 September 2017	581	11,330	1 October 2018

1. Includes executives who were KMP at the vesting date.
2. Calculated based on closing share price on the vesting date, being $19.50.
3. Vesting scheduled for 29 September 2018, therefore occurred on the next available trading day.

FY17 LTI offer – vested during FY19

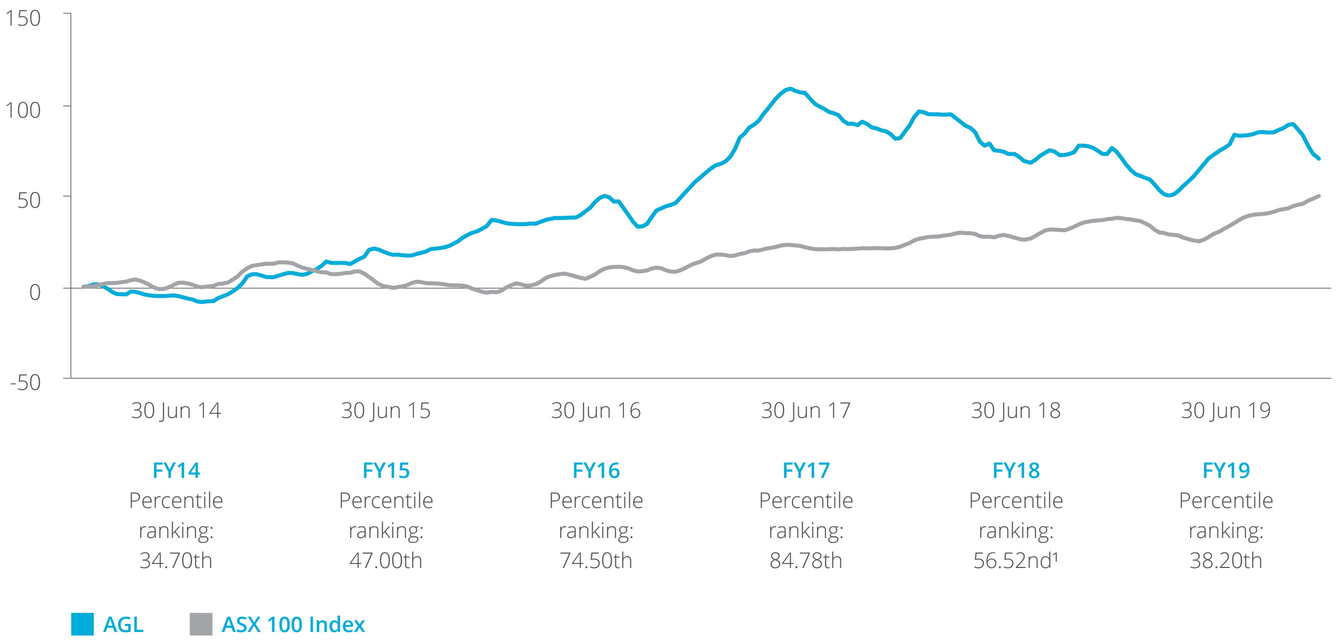
In assessing outcomes under the LTI, the Board will assess the quality of the results and the manner in which they were achieved as well as ensuring that those outcomes are aligned with the experience of AGL's shareholders.

The metrics for the FY17 plan that vested at the end of the year were relative TSR (compared to the constituent companies in the S&P/ASX100 Index) and ROE.

The vesting outcome of the FY17 LTI offer is detailed below.

Metric	Vesting schedule	Outcome	Commentary
Relative TSR	Straight-line vesting between 50-100% for 50th to 75th percentile	38.20th percentile Nil vesting	AGL's relative TSR performance over the three-year performance period ended 30 June 2019 was at the 38.20th percentile, resulting in nil vesting for this metric.
ROE	Straight-line vesting between 50-100% for 9% to 10%	11.37% average annual ROE 100% vesting	The average annual ROE for AGL over the three-year performance period was 11.37% excluding buybacks, resulting in full vesting for this metric.
Total		**50% vesting**	**The combined vesting outcome for the FY17 LTI is therefore 50%.**

Relative TSR: AGL and ASX100



1. The peer group of companies for the relative TSR component of the FY16 LTI plan was Amcor, Ansell, Aristocrat Leisure, Asciano (delisted), ASX, Aurizon Holdings, AusNet Services, Brambles, Cochlear, Computershare, CSL, DUET Group (delisted), Federation Centres (now: Vicinity Centres), Healthscope, Insurance Australia Group, Medibank Private, Orora, Primary Health Care, Qantas Airways, Ramsay Health Care, Scentre Group, Sonic Healthcare, Sydney Airport, Tatts Group (delisted), Transurban Group and Woolworths.

Table 14.3.5.2: Vesting/Lapse of FY17 LTI Performance Rights

Executive[1]	Grant date	Number of awards granted	Value at grant date $[2]	Vesting date	Number of awards vested	Value vested $[3]	Number of awards lapsed	Value lapsed $[3]
B Redman	21 October 2016	36,367	448,764	30 June 2019	18,183	363,842	18,184	363,862
M Enzinger	21 October 2016	6,811	84,043	30 June 2019	3,405	68,134	3,406	68,154
D Jackson	21 October 2016	28,907	356,708	30 June 2019	14,453	289,205	14,454	289,225
D Nicks	21 October 2016	7,257	89,547	30 June 2019	3,628	72,596	3,629	72,616
R Wrightson	21 October 2016	7,992	98,621	30 June 2019	3,996	79,960	3,996	79,960

1. Includes executives who were KMP at 30 June 2019. Mr Vesey ceased to be a KMP on 23 August 2018 and an employee on 31 December 2018. Mr Vesey retained a pro-rata number of FY17 LTI Performance Rights on cessation of employment (122,758) and half of them (61,379) vested following testing of the performance conditions.
2. Calculated based on fair values shown in Note 33 to the consolidated financial report, being $7.96 for relative TSR and $16.72 for ROE.
3. Calculated based on closing share price on 30 June 2019, being $20.01.

FY18 LTI offer – outstanding

The terms of the FY18 LTI offer were detailed in the FY18 Remuneration Report.

Table 14.3.5.3: FY18 LTI Performance Rights outstanding

Executive[1]	Grant date	Vesting date	Number of awards granted	Value at grant date $[2]	Maximum value yet to vest $[2,3]
B Redman	3 November 2017	30 June 2020	26,477	409,197	409,197
M Enzinger	3 November 2017	30 June 2020	4,959	76,636	76,636
D Jackson	3 November 2017	30 June 2020	21,572	333,395	333,395
D Nicks	3 November 2017	30 June 2020	5,586	86,332	86,332
R Wrightson	3 November 2017	30 June 2020	11,153	172,364	172,364

1. Includes executives who were KMP at 30 June 2019.
2. Calculated based on fair values shown in Note 33 to the consolidated financial report, being $10.05 for relative TSR and $20.86 for ROE.
3. The minimum value of the grant is zero.

FY19 LTI offer – grant

The metrics for FY19 are relative TSR, compared to the constituent companies in the S&P/ASX100 Index, and ROE.

Table 14.3.5.4: FY19 LTI Performance Rights

Executive[1]	Grant date	Vesting date	Number of awards granted	Value at grant date $[2]	Maximum value yet to vest $[2,3]
B Redman	24 October 2018	30 June 2021	41,337	481,572	481,572
M Enzinger[4,3]	24 October 2018	30 June 2021	11,478	143,751	143,751
D Jackson	24 October 2018	30 June 2021	25,754	300,034	300,034
D Nicks	24 October 2018	30 June 2021	16,164	188,311	188,311
M Reynolds[5]	24 October 2018	30 June 2021	27,558	321,051	-
R Wrightson	24 October 2018	30 June 2021	22,695	264,392	264,392

1. Includes executives who were KMP at the grant date, except Mr Enzinger who was KMP on 16 November 2018.
2. Calculated based on fair values shown in Note 33 to the consolidated financial report, being $7.18 for relative TSR and $16.12 for ROE.
3. The minimum value of the grant is zero.
4. Mr Enzinger received a subsequent LTI grant on 14 December 2018 recognising his appointment to the interim Chief Customer Officer role. 5,920 awards granted on original grant date and 5,558 awards granted on alternate grant date. Subsequent grant calculated based on alternate fair values shown in Note 35 to the consolidated financial report, being $9.78 for relative TSR and $17.13 for ROE.
5. Ms Reynolds ceased employment on 30 November 2018. FY19 LTI award fully forfeited on cessation of employment.

FY19 LTI offer – terms

Relative TSR vesting schedule

AGL's relative TSR ranking against comparator group	Vesting of award subject to relative TSR measure (% of maximum)
Less than 50th percentile	0%
50th percentile to 75th percentile	Straight-line vesting between 50% and 100%
At or above 75th percentile	100%

ROE vesting schedule

AGL's average annual ROE outcome	Vesting of award subject to ROE measure (% of maximum)
Less than 10%	0%
10% to 12%	Straight-line vesting between 50% and 90%
12% to 14%	Straight-line vesting between 90% and 100%
At or above 14%	100%

14.3.6 Movement in Performance Rights

Table 14.3.6.1: FY19 movement in executive Performance Right holdings under the LTI plan

Executive	Balance at start of year	Acquired during year as part of remuneration	Performance Rights vested but not yet allocated[1]	Other changes during year[2]	Balance at end of year
Current					
B Redman	62,844	41,337	(18,183)	(18,184)	67,814
M Enzinger	-	11,478	(3,405)	8,364	16,437
D Jackson	50,479	25,754	(14,453)	(14,454)	47,326
D Nicks	-	16,164	(3,628)	9,214	21,750
R Wrightson	19,145	22,695	(3,996)	(3,996)	33,848
Former					
M Reynolds[3]	23,083	27,558	-	(50,641)	-
A Vesey[4]	254,142	-	-	(254,142)	-
Grand total	**409,693**	**144,986**	**(43,665)**	**(323,839)**	**187,175**

1. Includes Performance Rights vested under the FY17 LTI plan but will not be allocated as shares to executives until August/September 2019.
2. Represents balance adjustments for executives joining or leaving KMP, and any units forfeited under the LTI. Includes Performance Rights forfeited under the FY17 LTI plan but will not lapse for executives until August/September 2019.
3. Ms Reynolds ceased to be a KMP on 16 November 2018 and an employee on 30 November 2018. As such, her closing balance has been adjusted to reflect no further holdings as a KMP (39,731 Performance Rights lapsed at cessation of employment and 10,910 Performance Rights retained for post-employment vesting). Ms Reynolds is eligible to participate in the relevant vesting event on a pro-rata basis for the FY18 grant. Ms Reynolds forfeited the full FY19 grant on cessation of employment.
4. Mr Vesey ceased to be a KMP on 23 August 2018 and an employee on 31 December 2018. As such, his closing balance has been adjusted to reflect no further holdings as a KMP (77,749 Performance Rights lapsed at cessation of employment and 176,393 Performance Rights retained for post-employment vesting). Mr Vesey is eligible to participate in the relevant vesting events on a pro-rata basis for the FY17 and FY18 grants.

14.4 Executive remuneration disclosure

14.4.1 Statutory remuneration

Table 14.4.1.1: Executive remuneration and benefits for FY19 (prepared in accordance with the statutory accounting requirements)

		Short-term benefits			
Executive	Year	Cash salary/ fees $[1]	Total cash incentive $[2]	Non-monetary benefits $[3]	Other short-term benefits $[4]
Current					
B Redman	**FY19**	**1,744,686**	**560,766**	**18,924**	**-**
	FY18	954,951	672,296	15,702	-
M Enzinger	**FY19 (from 16 Nov 2018)**	**362,170**	**113,905**	**7,776**	**-**
D Jackson	**FY19**	**773,844**	**334,305**	**19,681**	**-**
	FY18	771,097	549,101	16,103	-
D Nicks	**FY19 (from 24 Aug 2018)**	**579,720**	**237,161**	**13,455**	**-**
R Wrightson[9]	**FY19**	**658,635**	**391,278**	**15,605**	**-**
	FY18	554,951	284,625	12,676	350,000
Former					
S Mikkelsen	FY18 (until 28 Sep 2017)	234,641	-	3,072	-
M Reynolds[10]	**FY19 (until 30 Nov 2018)**	**345,612**	**-**	**6,914**	**-**
	FY18	829,951	572,985	9,067	-
A Vesey[11]	**FY19 (until 31 Dec 2018)**	**1,150,000**	**338,790**[12]	**240,746**	**-**
	FY18	2,300,000	1,201,750	296,270	-
TOTAL	**FY19**	**5,614,667**	**1,976,205**	**323,101**	**-**
	FY18	5,645,591	3,280,757	352,890	350,000

1. Represents cash salary and fees including any salary-sacrificed items (such as additional superannuation contributions and charitable donations).
2. Represents cash payments under the STI achieved in the year (payable in September following the relevant financial year-end), excluding the Restricted Share portion (to be allocated in August/September following the relevant financial year-end). The Restricted Share portion is disclosed under STI Restricted Shares.
3. Includes benefits such as, but not limited to, the provision of car parking, expatriate benefits and fringe benefits tax (FBT) on all benefits, where applicable. FBT included is in respect of the FBT year ended 31 March 2019.
4. Includes retention payments and other cash benefits.
5. Includes the value of all STI Restricted Shares expected to be granted in relation to the performance year.
6. Includes a proportion of the fair value of all outstanding LTI offers at the start of the year or offered during the year (including the LTI transitional grants). Under Australian Accounting Standards, the fair value is determined as at the offer date and is apportioned on a straight-line basis across the expected vesting period after adjusting at each reporting date for an estimation of the number of shares that will ultimately vest.
7. Includes a proportion of the fair value of all Restricted Shares held at the start of the year, or which were granted during the year, generally for retention or sign-on purposes.
8. Represents the sum of cash STIs and Performance Rights/Restricted Shares/other equity as a percentage of total remuneration, excluding termination payments.
9. Mr Wrightson received a retention payment of $350,000 in FY18 with respect to his role prior to becoming KMP. FY18 was the final payment under this arrangement.
10. Ms Reynolds ceased to be a KMP on 16 November 2018, however amounts have been disclosed until 30 November 2018 when Ms Reynolds ceased employment. All termination benefits were provided in accordance with the terms of her employment contract and includes leave entitlements paid on cessation of employment.
11. Mr Vesey ceased to be a KMP on 23 August 2018, however amounts have been disclosed until 31 December 2018 when Mr Vesey ceased employment. All termination benefits were provided in accordance with the terms of his employment contract and includes leave entitlements paid on cessation of employment.
12. On cessation of employment, Mr Vesey remained eligible for a pro-rata FY19 STI award based on performance objectives. Following the announcement of AGL's half-year financial results in February 2019, it was determined that Mr Vesey would receive a STI award of $677,580, equalling 29% of his fixed remuneration (49% of his maximum STI opportunity). The award was delivered as 50% cash and 50% AGL shares.

Post-employment benefits	Share-based payments					
Superannuation/ pension $	STI Restricted Shares $[5]	LTI equity $[6]	Other equity $[7]	Total $	Performance-related %[8]	Termination benefits $
20,531	**406,895**	**446,240**	**-**	**3,198,042**	**44.2%**	**-**
20,049	74,700	208,060	-	1,945,758	49.1%	-
12,832	**-**	**63,068**	**-**	**559,751**	**31.6%**	**-**
20,531	**37,145**	**329,853**	**-**	**1,515,359**	**46.3%**	**-**
20,049	61,011	161,397	-	1,578,758	48.9%	-
17,556	**-**	**103,365**	**-**	**951,257**	**35.8%**	**-**
20,531	**43,475**	**178,326**	**-**	**1,307,850**	**46.9%**	**-**
20,049	31,625	92,107	-	1,346,033	30.3%	-
5,012	-	(77,817)	-	164,908		938,685
10,266	**-**	**49,808**	**-**	**412,600**	**12.1%**	**883,214**
20,049	63,665	137,582	-	1,633,299	47.4%	-
-	**338,790**[12]	**601,677**	**-**	**2,670,003**	**47.9%**	**2,429,894**
-	1,201,750	759,295	-	5,759,065	54.9%	-
102,247	**826,305**	**1,772,337**	**-**	**10,614,862**		**3,313,108**
85,208	1,432,751	1,280,624	-	12,427,821		938,685

14.5 Non-Executive Directors' remuneration

14.5.1 Fee pool

The maximum aggregate fee pool for Non-Executive Directors is $2.75 million per annum. The fee pool is regularly reviewed by the Board and, if appropriate, adjusted (subject to shareholder approval), having regard to the anticipated time commitment, workload and responsibilities attached and the fees paid by comparable organisations. The current fee pool was approved by shareholders at the 2016 AGM.

14.5.2 Fee policy

Non-Executive Directors receive a base fee. Members of a Committee receive a Committee fee to recognise the associated higher workload and extra responsibilities, and chairing a Committee attracts a higher fee. The Chairman of the Board receives a higher base fee in recognition of the added responsibility and time commitment; but does not receive any extra remuneration for participating in or chairing any Committees. Fees are inclusive of superannuation. There are no additional fees in relation to the Nominations Committee.

In setting Non-Executive Directors' fees, the Board considers the following:

- time commitment
- workload
- risk and responsibility, and
- market benchmark data, sourced from companies with a similar market capitalisation.

To ensure independence, Non-Executive Directors do not receive performance-related remuneration. This allows the Board to focus on governance and both short and long-term strategy.

14.5.3 FY19 fees

During the year, adjustments were made to the fees for Non-Executive Directors, effective 1 January 2019. The Board Chair fee was increased by 6.2%, and the Chair fee for the People & Performance and Safety, Sustainability & Corporate Responsibility Committees were increased by 7.8%. The remaining Board and Committee fees were increased by 2.1% in line with Consumer Price Index (CPI) movements.

Table 14.5.3.1: Non-Executive Director fees (effective 1 January 2019)

Board/Committee	Chair fee $	Member fee $
Board base fee	591,000	197,000
Audit & Risk Management Committee	54,100	27,100
People & Performance Committee	44,000	20,800
Safety, Sustainability & Corporate Responsibility Committee	44,000	20,800

Table 14.5.3.2: Non-Executive Director remuneration for FY19

Non-Executive Director	Year	Cash fees $	Superannuation $	Total $
Current				
G Hunt	**FY19**	**553,169**	**20,531**	**573,700**
	FY18	460,508	20,049	480,557
P Botten	**FY19**	**206,432**	**19,518**	**225,950**
	FY18	192,968	18,332	211,300
J Hey	**FY19**	**243,619**	**20,531**	**264,150**
	FY18	230,959	20,049	251,008
L Hosking	**FY19**	**221,819**	**20,531**	**242,350**
	FY18	224,698	20,049	244,747
P McKenzie	**FY19 (from 1 May 2019)**	**35,011**	**3,376**	**38,387**
D Smith-Gander	**FY19**	**237,419**	**20,531**	**257,950**
	FY18	224,785	20,010	244,795
J Stanhope	**FY19**	**248,569**	**20,531**	**269,100**
	FY18	243,751	20,049	263,800
Former				
B Hutchinson	**FY19 (until 12 Dec 2018)**	**98,323**	**9,207**	**107,530**
	FY18	217,501	20,049	237,550
J Maycock	FY18 (until 27 Sep 2017)	127,154	5,012	132,166
TOTAL	**FY19**	**1,844,361**	**134,756**	**1,979,117**
	FY18	1,922,324	143,599	2,065,923

14.6 Remuneration governance

14.6.1 Role of the People & Performance Committee

The primary purpose of the People & Performance Committee is to aid the Board in fulfilling its responsibilities through the recruitment, retention and remuneration of executives with the capabilities and skills necessary to execute AGL's strategy.

The People & Performance Committee reviews and makes recommendations to the Board on the remuneration arrangements for the Managing Director & CEO, Non-Executive Directors and executives. More generally, the People & Performance Committee aids the Board in relation to matters such as monitoring remuneration and employment policies, procedures and programs. In addition to its remuneration responsibilities, the People & Performance Committee's duties include overseeing talent/leadership development, providing guidance in respect of employee relations and employee engagement, and other people matters as they may arise. The complete People & Performance Charter is reviewed at least every two years and is available on AGL's website: **agl.com.au/BoardAndCommitteeCharters**.

The People & Performance Committee includes independent members of the Board, which are reviewed periodically. To assist in performing its duties and making recommendations to the Board, the People & Performance Committee has access to management and independent external consultants to seek advice on various remuneration-related matters as required. The Board's protocols in respect of the engagement of remuneration advisers are outlined in section 14.6.2.

14.6.2 Remuneration advisers

Any recommendations made by consultants in relation to remuneration arrangements of KMP must be made directly to the Board without any influence from management. There are arrangements in place to ensure any advice is independent of management. During FY19, the People & Performance Committee engaged *KPMG 3dc* to act as independent remuneration advisers. *KPMG 3dc* did not provide any remuneration recommendations as defined in the *Corporations Act 2001 (Cth)* to the People & Performance Committee during FY19.

14.6.3 Executive contract terms

Remuneration and other terms of employment for executives are formalised in service agreements. The service agreements provide for participation in short and long-term incentives in accordance with the terms of the respective plans. All service agreements are for an unlimited duration.

Table 14.6.3.1: Information relating to service agreements of executives

Executives[1]	Notice period[2]		Termination payment[3,4]	Post employment restraint period
	By executive	By AGL		
B Redman	6 months[5]	6 months	N/A	12 months
M Enzinger	3 months	6 months	N/A	6 months
D Jackson	6 months[5]	3 months	9 months	12 months
D Nicks	6 months[5]	3 months	9 months	12 months
R Wrightson	6 months[5]	3 months	9 months	12 months

1. Includes executives who were KMP at 30 June 2019.
2. AGL can, at its election, make a payment in lieu of part or all of the notice period.
3. Maximum termination payment (exclusive of any payment in lieu of notice) payable if AGL terminates the executive's employment other than for cause.
4. Termination payments reference fixed remuneration.
5. Executives may also terminate their agreement with three months' notice in the event of a 'fundamental change', which includes circumstances where there has been a substantial diminution of role and responsibility of the executive, in which event they will be entitled to a payment equivalent to nine months' fixed remuneration.

14.6.4 Equity plan governance

Key elements of equity plan governance

Element	Details
Clawback	The Board has discretion to prescribe clawback events in which any unvested equity awards may be clawed back from executives. Clawback events include where the executive has committed any act of fraud or gross misconduct in relation to the affairs of AGL, materially breached their obligations to AGL, or has hedged the value of, or entered into a derivative arrangement in relation to, an unvested equity award or where any unvested equity award has vested as a result of a material misstatement in the financial statements of AGL.
Change of control	The Board will determine at the time a change of control event occurs how to treat unvested equity in accordance with the plan rules, and ultimately has absolute discretion in determining this treatment, taking into consideration market practice.
Hedging policy	AGL has a policy in place that prevents executives from entering into any derivative or other financial product in relation to equity plans.
Cessation of employment	*Prior to vesting date:* if an executive leaves AGL before the scheduled vesting date, they are generally not entitled to participate in the vesting event. The Board has discretion to determine the relevant treatment at termination in the event of redundancy or other involuntary termination, including bona fide retirement. *Post-vesting date:* once equity has vested, generally no further employment or other restrictions apply.
Board discretion	In relation to assessing equity awards, including treatment at vesting, the Board's overarching discretion will apply, particularly when determining whether an extraordinary event should be taken into consideration in relation to assessing the performance of AGL for the purposes of the vesting event.

14.6.5 KMP share ownership

Minimum shareholding policy

To provide for shareholder alignment, AGL has implemented a minimum shareholding policy for KMP and other executives reporting to the Managing Director & CEO. Shareholdings are reported in Table 14.6.5.1. As set out in the table, certain KMP are not yet at the recommended level of shareholding corresponding to their tenure. This is because any acquisition of AGL shares by KMP must be in compliance with AGL's Securities Dealing Policy, which prevents KMP from acquiring shares during a blackout period or when they are in possession of inside information. Those KMP not yet at the recommended level of shareholding corresponding to their tenure have indicated their intention to acquire further AGL shares once the FY19 results blackout period has ended, subject to compliance with AGL's Securities Dealing Policy.

The minimum shareholding policies stipulate that:

Non-Executive Directors	Executives
• over a four-year period, directors should accumulate and thereafter maintain AGL securities to the value of 100% of the base annual director's fee • half of the above requirement should be accumulated within two years of the date of appointment for new directors, and • each newly appointed director is encouraged to acquire AGL securities equal to at least 10% of the base annual director's fee by the financial year-end in which they are appointed.	• the Managing Director & CEO should accumulate and thereafter maintain AGL securities equal to the value of 100% of fixed remuneration • the CFO should accumulate and thereafter maintain AGL securities equal to the value of 75% of fixed remuneration • remaining executives should accumulate and thereafter maintain AGL securities equal to the value of 50% of fixed remuneration, and • the above requirement should be accumulated within five years of the end of FY16 or up to five years from the date of appointment for new executives.

Movement in AGL shares

The movement during FY19 in the number of AGL shares, including Restricted Shares, held by each KMP, including their related parties, is shown below. Restricted Shares generally relate to the STI deferral, or for attraction/retention purposes in certain circumstances.

Table 14.6.5.1: KMP shareholdings

FY19	Balance at start of year	Acquired during year[1]	Other changes during year[2]	Balance at end of year	% base fees[3]
Non-Executive Director					
Current					
G Hunt	4,000	12,500	(4,000)	12,500[4]	127%
P Botten	2,390[4]	5,000	-	7,390[4]	75%
J Hey	7,783	445	-	8,228	84%
L Hosking	6,201	2,500	-	8,701	88%
P McKenzie	-	-	-	-	0%
D Smith-Gander	5,670[4]	-	-	5,670[4]	58%
J Stanhope	7,950[5]	301	-	8,251[6]	84%
Former					
B Hutchinson[7]	9,156[4]	-	(9,156)	-	
Non-Executive Director total	**43,150**	**20,746**	**(13,156)**	**50,740**	

1. Includes purchase of ordinary shares during FY19 and Dividend Reinvestment Plan.
2. Includes sale of ordinary shares during FY19 and balance adjustments for directors joining or leaving KMP.
3. Calculated based on closing share price on 30 June 2019, being $20.01.
4. All shares held indirectly.
5. Includes 5,260 shares held directly and 2,690 shares held indirectly.
6. Includes 5,561 shares held directly and 2,690 shares held indirectly.
7. Ms Hutchinson ceased to be a KMP on 12 December 2018. As such, her closing balance has been adjusted to reflect no further holdings as a KMP.

FY19	Balance at start of year	Granted / acquired during year[1]	Received upon vesting / exercise[2]	Other changes during year[3]	Balance at end of year	Performance Rights vested but not yet allocated[4]	% FR[5,6,7]
Executive							
Current							
B Redman	62,402	3,476	8,892	-	74,770	18,183	113%
M Enzinger	-	-	-	1,101	1,101	3,405	15%[8]
D Jackson	31,266	5,183	6,916	-	43,365	14,453	146%
D Nicks	-	-	-	428	428	3,628	11%
R Wrightson	11,203	1,471	-	-	12,674	3,996	48%
Former							
M Reynolds[9]	-	2,963	-	(2,963)	-	-	
A Vesey[10]	399,506	55,931	49,799	(505,236)	-	-	
Executive total	**504,377**	**69,024**	**65,607**	**(506,670)**	**132,338**	**43,665**	
Grand total	**547,527**	**89,770**	**65,607**	**(519,826)**	**183,078**	**43,665**	

1. Includes purchase of ordinary shares during FY19, Restricted Shares allocated under FY18 STI and Dividend Reinvestment Plan.
2. Includes shares acquired upon vesting of LTI awards during FY19.
3. Includes sale of ordinary shares during FY19 and balance adjustments for executives joining or leaving KMP.
4. Includes shares vested under the LTI but will not be allocated as shares to executives until August/September 2019.
5. Calculated based on closing share price on 30 June 2019, being $20.01.
6. Including Performance Rights vested but not yet allocated.
7. Percentage of fixed remuneration (FR).
8. Calculated as a percentage of fixed remuneration including higher duties allowance.
9. Ms Reynolds ceased to be a KMP on 15 November 2018. As such, her closing balance has been adjusted to reflect no further holdings as a KMP.
10. Mr Vesey ceased to be a KMP on 23 August 2018. As such, his closing balance has been adjusted to reflect no further holdings as a KMP.

Financial Report

AGL Energy Limited and controlled entities

Consolidated Statement of Profit or Loss

For the year ended 30 June 2019

	Note	2019 $m	Restated 2018 $m[1]
Continuing operations			
Revenue	2	**13,246**	12,816
Other income	3	**54**	31
Expenses	4	**(11,236)**	(9,854)
Share of profits of associates and joint ventures	13	**33**	39
Profit before net financing costs, depreciation and amortisation		**2,097**	3,032
Depreciation and amortisation	5	**(625)**	(568)
Profit before net financing costs		**1,472**	2,464
Finance income	6	**10**	10
Finance costs	6	**(203)**	(230)
Net financing costs		**(193)**	(220)
Profit before tax		**1,279**	2,244
Income tax expense	7	**(374)**	(662)
Profit for the period attributable to the shareholders of AGL Energy Limited		**905**	1,582
Earnings per share			
Basic earnings per share	23	**138.0 cents**	241.2 cents
Diluted earnings per share	23	**137.8 cents**	240.9 cents

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

The Consolidated Statement of Profit or Loss should be read in conjunction with the notes to the financial statements.

AGL Energy Limited and controlled entities

Consolidated Statement of Comprehensive Income

For the year ended 30 June 2019

	Note	2019 $m	Restated 2018 $m[1]
Profit for the period		**905**	1,582
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss			
Remeasurement (loss)/gain on defined benefit plans	32	**(90)**	42
Fair value gain on the revaluation of equity instrument financial assets		**2**	-
Income tax relating to items that will not be reclassified subsequently	7	**23**	(13)
		(65)	29
Items that may be reclassified subsequently to profit or loss			
Cash flow hedges			
Gain/(loss) in fair value of cash flow hedges		**63**	(103)
Reclassification adjustments transferred to profit or loss		**33**	(56)
Cost of hedging subject to basis adjustment		**4**	-
Loss on revaluation of equity instrument financial assets		**-**	(3)
Income tax relating to items that may be reclassified subsequently	7	**(30)**	48
		70	(114)
Other comprehensive income/(loss) for the year, net of income tax		**5**	(85)
Total comprehensive income for the period attributable to the shareholders of AGL Energy Limited		**910**	1,497

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

The Consolidated Statement of Comprehensive Income should be read in conjunction with the notes to the financial statements.

AGL Energy Limited and controlled entities

Consolidated Statement of Financial Position

As at 30 June 2019

	Note	2019 $m	Restated 2018 $m[1]
Current assets			
Cash and cash equivalents	35	**115**	463
Trade and other receivables	9	**1,703**	1,775
Inventories	10	**388**	370
Current tax assets	7	**89**	147
Other financial assets	11	**798**	600
Other assets	12	**303**	261
		3,396	3,616
Assets classified as held for sale	16	**-**	74
Total current assets		**3,396**	3,690
Non-current assets			
Inventories	10	**57**	10
Other financial assets	11	**590**	448
Investments in associates and joint ventures	13	**150**	100
Property, plant and equipment	14	**6,588**	6,757
Intangible assets	15	**3,740**	3,271
Deferred tax assets	7	**261**	280
Other assets	12	**39**	77
Total non-current assets		**11,425**	10,943
Total assets		**14,821**	14,633
Current liabilities			
Trade and other payables	17	**1,556**	1,579
Borrowings	18	**102**	34
Provisions	19	**225**	233
Current tax liabilities	7	**27**	81
Other financial liabilities	20	**632**	394
Other liabilities	21	**4**	2
Total current liabilities		**2,546**	2,323
Non-current liabilities			
Borrowings	18	**2,748**	2,929
Provisions	19	**481**	509
Deferred tax liabilities	7	**97**	-
Other financial liabilities	20	**282**	432
Other liabilities	21	**229**	139
Total non-current liabilities		**3,837**	4,009
Total liabilities		**6,383**	6,332
Net assets		**8,438**	8,301
Equity			
Issued capital	22	**6,223**	6,223
Reserves		**(33)**	(102)
Retained earnings		**2,248**	2,180
Total equity attributable to owners of AGL Energy Limited		**8,438**	8,301

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

The Consolidated Statement of Financial Position should be read in conjunction with the notes to the financial statements.

AGL Energy Limited and controlled entities

Consolidated Statement of Changes in Equity

For the year ended 30 June 2019

	Attributable to owners of AGL Energy Limited						
	Issued capital $m	Investment revaluation reserve $m	Employee equity benefits reserve $m	Hedge reserve $m	Other reserve $m	Retained earnings $m	Total equity $m
Balance at 1 July 2018 (restated)[1]	**6,223**	**(3)**	**(3)**	**(96)**	**-**	**2,180**	**8,301**
Profit for the period	**-**	**-**	**-**	**-**	**-**	**905**	**905**
Other comprehensive (loss)/income for the period, net of income tax	**-**	**(2)**	**-**	**67**	**3**	**(63)**	**5**
Total comprehensive income for the period	**-**	**(2)**	**-**	**67**	**3**	**842**	**910**
Transactions with owners in their capacity as owners:							
Payment of dividends	**-**	**-**	**-**	**-**	**-**	**(774)**	**(774)**
Share-based payments	**-**	**-**	**1**	**-**	**-**	**-**	**1**
Balance at 30 June 2019	**6,223**	**(5)**	**(2)**	**(29)**	**3**	**2,248**	**8,438**
Balance at 1 July 2017 (previously reported)	6,223	-	1	15	-	1,335	7,574
Effects of adoption of AASB 9 & 16	-	-	-	-	-	(84)	(84)
Balance at 1 July 2017 (restated)	6,223	-	1	15	-	1,251	7,490
Profit for the period	-	-	-	-	-	1,582	1,582
Other comprehensive (loss)/income for the period, net of income tax	-	(3)	-	(111)	-	29	(85)
Total comprehensive (loss)/income for the period	-	(3)	-	(111)	-	1,611	1,497
Transactions with owners in their capacity as owners:							
Payment of dividends	-	-	-	-	-	(682)	(682)
Share-based payments	-	-	(4)	-	-	-	(4)
Balance at 30 June 2018 (restated)	6,223	(3)	(3)	(96)	-	2,180	8,301

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

The Consolidated Statement of Changes in Equity should be read in conjunction with the notes to the financial statements.

Consolidated Statement of Cash Flows

For the year ended 30 June 2019

	Note	2019 $m	Restated 2018 $m[1]
Cash flows from operating activities			
Receipts from customers		**14,426**	14,157
Payments to suppliers and employees		**(12,440)**	(11,726)
Dividends received		**27**	40
Finance income received		**11**	9
Finance costs paid		**(162)**	(178)
Income taxes paid		**(263)**	(159)
Net cash provided by operating activities	35(b)	**1,599**	2,143
Cash flows from investing activities			
Payments for property, plant and equipment and other assets		**(915)**	(720)
Payments for investments in associates and joint ventures		**(60)**	(28)
Payments for equity instrument financial assets		**(27)**	(49)
Payments of deferred consideration		**(35)**	(34)
Payments for sale of joint operations, net of cash disposed		**(2)**	-
Proceeds from the sale of property, plant and equipment		**6**	29
Proceeds from sale of equity instrument financial assets		**-**	13
Proceeds from the sale of subsidiaries and businesses, net of transaction costs	29	**129**	160
Net cash used in investing activities		**(904)**	(629)
Cash flows from financing activities			
Purchase of shares on-market for equity based remuneration		**(5)**	(10)
Proceeds from borrowings		**508**	730
Repayment of borrowings		**(772)**	(1,243)
Dividends paid	8	**(774)**	(682)
Net cash used in financing activities		**(1,043)**	(1,205)
Net (decrease)/increase in cash and cash equivalents		**(348)**	309
Cash and cash equivalents at the beginning of the financial period		**463**	154
Cash and cash equivalents at the end of the financial period	35(a)	**115**	463

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

The Consolidated Statement of Cash Flows should be read in conjunction with the notes to the financial statements.

1. Segment information

Operating Segments

AGL reports segment information on the same basis as the internal management reporting structure. The operating segments reflect the manner in which products are sold, whether retail or wholesale, and the nature of the services provided.

AGL views the business as four interrelated segments collectively servicing our customers' needs. AGL's segments are:

- **Customer Markets** comprises the Consumer and Large Business customer portfolios and is responsible for the retailing of electricity, gas, solar and energy efficiency products and services to residential, small and large business customers. Customer Markets sources its energy from Wholesale Markets at a transfer price based on methodologies that reflect the prevailing wholesale market conditions and other energy costs in each state. Customer Markets also includes product innovation, sales, marketing, brand and operations.
- **Wholesale Markets** comprises Wholesale Electricity, Wholesale Gas and Eco Markets and is responsible for managing the price risk associated with procuring electricity and gas for AGL's customers and for managing AGL's obligations in relation to renewable energy schemes. Wholesale Markets also controls the dispatch of AGL's owned and contracted generation assets and associated portfolio of energy hedging products.
- **Group Operations** comprises AGL's power generation portfolio and other key sites and operating facilities.
- **Investments** comprises AGL's interests in the ActewAGL Retail Partnership, Powering Australian Renewables Fund, Digital Energy Exchange, Advanced Microgrid Solutions Inc, Energy Impact Partners' Fund, Activate Capital Partners, Solar Analytics Pty Limited, Sunverge Energy Inc and Ecobee Inc.

In the segment financial results, the 'Other' category consists of various Corporate activities. These are not considered to be reportable segments.

Segment financial results

The measurement of segment results is in line with the basis of information presented to the Board of Directors for internal management reporting purposes. The performance of each segment is measured based on their Underlying earnings before interest and tax (Underlying EBIT) contribution to AGL. Certain items of income and expense are excluded from the segment results to show a measure of underlying performance. These items include changes in fair value of financial instruments and significant items.

AGL operates as an integrated business and uses a portfolio approach to manage the operations and assets to drive value and efficiency. AASB 8 *Operating Segments* requires AGL to report segment information on the same basis as the internal management structure. As a result, the Customer Markets and Wholesale Markets segments report the revenue and margin associated with satisfying the gas and electricity requirements of AGL's wholesale consumer and business customer portfolio. In contrast, the Group Operations segment reports the majority of expenses associated with these operations and is therefore a cost centre.

For the purposes of reviewing the carrying values of AGL's assets, the segments impute a revenue transfer between Customer Markets, Wholesale Markets and Group Operations. Revenues are derived to approximate prices similar to transactions with third parties.

1. Segment information (cont.)

2019	Customer Markets $m	Wholesale Markets $m	Group Operations $m	Investments $m	Other $m	Total $m
Revenue						
Total segment revenue	7,554	9,100	188	1	-	16,843
Inter-segment revenue	(14)	(3,539)	(44)	-	-	(3,597)
External revenue	7,540	5,561	144	1	-	13,246
Underlying earnings before interest, tax, depreciation and amortisation (Underlying EBITDA)	295	2,778	(556)	33	(265)	2,285
Depreciation and amortisation	(101)	(21)	(480)	-	(23)	(625)
Underlying EBIT	194	2,757	(1,036)	33	(288)	1,660
Net financing costs						(193)
Underlying profit before tax						1,467
Underlying income tax expense						(427)
Underlying profit after tax						1,040
Segment assets	2,576	2,951	7,560	239	266	13,592
Segment liabilities	543	884	887	-	181	2,495
Other segment information						
Share of profits of associates and joint ventures	-	-	1	32	-	33
Investments in associates and joint ventures	-	-	4	146	-	150
Additions to non-current assets	134	71	688	60	104	1,057
Other non-cash expenses	(120)	-	-	-	(6)	(126)

1. Segment information (cont.)

Restated 2018[1]	Customer Markets $m	Wholesale Markets $m	Group Operations $m	Investments $m	Other $m	Total $m
Revenue						
Total segment revenue	7,746	8,624	234	-	1	16,605
Inter-segment revenue	(50)	(3,680)	(59)	-	-	(3,789)
External revenue	7,696	4,944	175	-	1	12,816
Underlying earnings before interest, tax, depreciation and amortisation (Underlying EBITDA)	304	2,675	(495)	33	(281)	2,236
Depreciation and amortisation	(102)	(10)	(424)	-	(32)	(568)
Underlying EBIT	202	2,665	(919)	33	(313)	1,668
Net financing costs						(224)
Underlying profit before tax						1,444
Underlying income tax expense						(426)
Underlying profit after tax						1,018
Segment assets	2,690	2,599	7,444	162	208	13,103
Segment liabilities	575	862	823	-	202	2,462
Other segment information						
Share of profits of associates and joint ventures	-	-	1	38	-	39
Investments in associates and joint ventures	-	-	2	98	-	100
Additions to non-current assets	163	17	504	77	99	860
Other non-cash expenses	(94)	-	-	-	(6)	(100)

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

1. Segment information (cont.)

Segment revenue reconciliation to the Consolidated Statement of Profit or Loss

Reconciliation of segment revenue to total revenue is as follows:

	2019 $m	2018 $m
Segment revenue for reportable segments	**16,843**	16,604
Elimination of inter-segment revenue	**(3,597)**	(3,789)
Revenue for reportable segments	**13,246**	12,815
Other	**-**	1
Total revenue	**13,246**	12,816

Revenue from major products and services

The following is an analysis of AGL's revenue from its major products and services:

	2019 $m	2018 $m
Electricity	**6,029**	6,063
Generation sales to pool	**4,469**	3,901
Gas	**2,346**	2,379
Rendering of services	**206**	158
Other revenue	**196**	315
Total revenue	**13,246**	12,816

Segment Underlying EBIT reconciliation to the Consolidated Statement of Profit or Loss

Reconciliation of segment Underlying EBIT to profit before tax is as follows:

	2019 $m	Restated 2018 $m[1]
Underlying EBIT for reportable segments	**1,948**	1,981
Other	**(288)**	(313)
	1,660	1,668
Amounts excluded from underlying results:		
- (loss)/gain in fair value of financial instruments	**(198)**	803
- significant items[2]	**10**	(3)
Finance income included in Underlying EBIT	**-**	(4)
Finance income	**10**	10
Finance costs	**(203)**	(230)
Profit before tax	**1,279**	2,244

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).
2. Further details are contained in the Operating & Financial Review attached to and forming part of the Directors' Report.

1. Segment information (cont.)

Segment assets reconciliation to the Consolidated Statement of Financial Position

Reconciliation of segment assets to total assets is as follows:

	2019 $m	Restated 2018 $m[1]
Segment assets for reportable segments	**13,326**	12,895
Other	**266**	208
	13,592	13,103
Cash and cash equivalents	**115**	463
Current tax assets	**89**	147
Deferred tax assets	**261**	280
Derivative financial instruments	**764**	640
Total assets	**14,821**	14,633

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Segment liabilities reconciliation to the Consolidated Statement of Financial Position

Reconciliation of segment liabilities to total liabilities is as follows:

	2019 $m	Restated 2018 $m[1]
Segment liabilities for reportable segments	**2,314**	2,260
Other	**181**	202
	2,495	2,462
Borrowings	**2,850**	2,963
Current tax liabilities	**27**	81
Deferred tax liabilities	**97**	-
Derivative financial instruments	**715**	615
Deferred consideration	**199**	211
Total liabilities	**6,383**	6,332

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Geographical information

AGL principally operates in one geographical area being Australia. All non-current assets and total external revenue from customers is attributed to Australia.

Information about major customers

No single customer amounts to 10 percent or more of AGL's total external revenue (2018: none).

ACCOUNTING POLICY

Segment reporting

An operating segment is a component of AGL that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses relating to transactions with other components of AGL. Operating segments are identified on the basis of internal reports about components of AGL that are regularly reviewed by the chief operating decision maker in order to allocate resources to the segment and to assess its performance. The chief operating decision maker has been identified as the Board of Directors.

2. Revenue

2019	Consumer $m	Business $m	Wholesale $m	Other $m	Total $m
Electricity	4,041	1,731	255	2	6,029
Generation sales to pool	-	-	4,469	-	4,469
Gas	1,520	161	640	25	2,346
Rendering of services	37	1	79	89	206
Other revenue	-	-	113	83	196
Total revenue	5,598	1,893	5,556	199	13,246

2018	Consumer $m	Business $m	Wholesale $m	Other $m	Total $m
Electricity	4,144	1,610	296	13	6,063
Generation sales to pool	-	-	3,900	1	3,901
Gas	1,538	304	491	46	2,379
Rendering of services	-	-	30	128	158
Other revenue	-	-	228	87	315
Total revenue	5,682	1,914	4,945	275	12,816

ACCOUNTING POLICY

Revenue from contracts with customers

AGL's primary revenue streams relate to the retail sale of electricity and gas to residential (consumer) and business customers in Australia, the sale of electricity and gas to wholesale customers in Australia and the sale of generated electricity to the National Electricity Market in Australia. Revenue from contracts with customers is recognised when control of the goods or services is transferred to a customer at an amount that reflects the consideration to which AGL expects to be entitled to receive in exchange for those goods or services.

The majority of contractual energy supply arrangements with customers have no fixed duration, generally require no minimum consumption by the customer and are able to be terminated by either party at any time without incurring significant penalty. Given this, the enforceable contracts are considered short term (less than 12 months) in nature. There are some longer term contracts particularly those with business and wholesale customers.

AGL has generally concluded that it is the principal in its revenue arrangements because it controls the goods or services before transferring them to the customer.

AGL's primary performance obligations are the supply of energy (gas or electricity) over the contractual term. There are either individual contracts representing separate purchasing decisions of customers, or the units of supply of energy represent a series of distinct goods that are substantially the same and have the same pattern of transfer to the customer and hence is considered one performance obligation satisfied over time. For the shorter term contracts, the performance obligations are considered to be satisfied, and revenue is recognised, as and when the units of energy are delivered. Additionally, in relation to AGL's longer term contracts, AGL determines that the right-to-invoice approach to measure the progress towards completion of the performance obligation is most appropriate as it depicts AGL's performance. AGL uses the units of energy delivered to the customer as estimated as part of the unbilled process (and later verified by meter readings) or as indicated by the customer's energy meter (where these are known more frequently).

In most instances, the transaction price is determined by the unbilled process. For some wholesale contracts, AGL also considers the effects of variable consideration and for some business sales, there is non-cash consideration and consideration payable to the customer relating to renewable energy certificates (RECs).

Electricity and Gas revenue

Residential electricity and gas sales

Residential energy sales relate to the sale of energy (gas and electricity) to retail customers. Residential sales are classified as individual, short term, day-by-day contracts and are recognised as revenue on a day-by-day basis upon delivery of energy to customers.

Where the customers are eligible to receive additional discounts (e.g. pay on time discounts to encourage timely payment of energy invoices), AGL considers this to be variable consideration, which is estimated as part of the unbilled process.

Portfolio approach for residential electricity and gas sales

AGL recognises revenue from contracts with its residential customers at the electricity and gas portfolio levels. Furthermore, AGL has elected to apply the portfolio approach in accounting for the fair valuing of RECs, accounting for connection fees and sales commissions. Recognition at the portfolio level would not differ materially from applying the standard on a contract-by-contract basis.

2. Revenue (cont.)

ACCOUNTING POLICY

Business electricity and gas sales

Business sales represent the sale of energy to business customers. Revenue recognition is largely consistent with residential sales. These contracts are longer term in nature and represent a series of distinct goods that are substantially the same and have the same pattern of transfer to the customer and are treated as one performance obligation satisfied over time based on the output delivered to the customer. For a large majority of business sales customers, revenue is recognised when AGL has the 'right to invoice' the customer for consideration that has been determined to correspond directly with the value of units of energy delivered to that customer.

Some business sales arrangements also include the transfer of RECs to the customer, which can, in some instances, represent a separate performance obligation.

Material right applicable to residential and business sales

Where a fixed fee (e.g. connection fee, distribution fee, capacity reservation charge, etc.) received from a customer does not represent a transfer of a good or service to a customer, but the customer is charged an upfront amount, the customer contract contains a material right in that the customer is effectively able to buy additional units of energy at a lower cost per unit.

The material right is valued based on its relative standalone selling price. If standalone selling prices are not directly observable, the price is estimated by taking into consideration the discount the customer would receive in a standalone transaction and the likelihood that the customer would exercise the option.

Revenue from a material right is recognised as and when the right is exercised by the customer or the right expires, whichever is earlier.

Wholesale energy sales

Wholesale energy sales represent the sale of gas and electricity to wholesale customers. These involve a high volume of energy usually over an extended period of time. Supply of energy represents a series of distinct goods that are substantially the same and have the same pattern of transfer to the customer and is the major performance obligation. It is treated as one performance obligation which is satisfied over time. In some instances, there is an additional performance obligation in these contracts by way of a material right.

Revenue is recognised for these arrangements when AGL has the 'right to invoice' the customer for consideration that has been determined to correspond directly with the value of units of energy delivered to that customer.

Some wholesale electricity arrangements may involve the transfer of RECs to the customer, which may represent a separate performance obligation.

Renewable energy certificates (RECs) applicable to business and wholesale sales

There are two main instances where RECs pass between AGL and its customers. These include those transferred under a self-surrender arrangement as part of the consideration for energy and those that are sold to customers.

Received from customer (self-surrender)

As a retailer, AGL incurs costs in relation to its renewable energy obligations for which RECs must be surrendered to the government. For most customers, the costs associated with meeting these renewable energy obligations is factored into the cost of energy (i.e., there is a REC cost component built into the price paid). For some customers, instead of paying for the cost of the energy in cash, they have the option to elect to pay for their energy usage in the form of cash and by self-surrendering RECs.

The obligation to remit RECs to the regulator remains with AGL, but the customer is choosing to meet part of its payment by way of surrendering its own RECs rather than paying for the cost of the RECs as part of the overall cost of the energy.

The transfer of RECs as consideration in exchange for energy is a form of non-cash consideration. AGL measures non-cash consideration at its fair value at the date of surrender (i.e., the date of transfer by the customer).

Transferred to the customer

For some customer contracts, AGL sells both energy and RECs to the customer. A customer may purchase RECs to meet its own REC obligations and/or where it wants actual title to the RECs.

The RECs sold to a customer represent a separate performance obligation, i.e. a good, as the customer can benefit from the RECs on their own and the promise to transfer RECs to the customer is separately identifiable from the other promises in the contract (e.g. promise to deliver energy).

AGL determines the portion of the transaction price that it allocates to the RECs using the relative standalone selling price method.

The transaction price is allocated to each performance obligation based on the proportion of the stand-alone selling price of each performance obligation to the sum of the stand-alone selling prices of all of the performance obligations in the contract.

2. Revenue (cont.)

ACCOUNTING POLICY

Revenue is recognised as and when the control of the RECs are transferred to the customer, which occurs at a point in time. Where the customer is entitled to all the RECs generated at a specified power plant (e.g. in cases where power plants are located at the customer's site), transfer of control to the customer occurs as and when the RECs are generated. In other cases where the RECs are transferred to the customer from inventory, control of the RECs transfers upon receipt by the customer.

Pool Revenue

Pool generation sales

Pool generation sales and pool purchase costs relate to sales by AGL's generation assets to the grid and purchases of energy by AGL wholesale on behalf of AGL's retail business. AGL has assessed it is acting as the principal in relation to such sales and purchases of energy to the pool and therefore the transactions are recognised on a 'gross' basis. Revenue from these arrangements is recognised at the spot price achieved when control of the energy passes to the grid.

Variable consideration

If the consideration in a contract includes a variable amount, AGL estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

Significant financing component

AGL applies the practical expedient in that it does not adjust the promised amount of consideration for the effects of a significant financing component if it expects, at contract inception, that the period between the transfer of the promised good or service to the customer and when the customer pays for that good or service will be one year or less.

Costs to obtain a contract

Costs that are incurred regardless of whether a contract is obtained are expensed as incurred, unless those costs are explicitly chargeable to the customer. Discretionary bonuses paid to sales staff based on meeting annual sales targets, overall profitability and individual performance evaluations are expensed as incurred as they are not directly attributable to identifiable contracts and do not meet the criteria for capitalisation. The direct costs of establishing customer contracts are recognised as an asset when they relate to a specific customer acquisition campaign. The direct costs are amortised over the minimum contract term. Direct costs include customer acquisition fees paid to channel partners and upfront account purchase payments.

Costs to fulfil

The costs incurred by AGL to fulfil a contract with a customer, which may qualify for capitalisation include connection fees paid/incurred by AGL (including those charged by distribution businesses to provide such network services, or those incurred directly by AGL in connecting a customer). These costs do not fall within the scope of any other standard (i.e. the cost is not part of inventory, an intangible asset or property, plant and equipment). Therefore, these costs are capitalised as a contract cost (cost to fulfil) asset and amortised over the life of the customer contract or customer relationship, where material.

Completed contracts

AGL has applied the practical expedient in that it has not restated contracts that:

- begin and end within the same annual reporting period; or
- are completed contracts at the beginning of the earliest period presented.

Cost sharing arrangements

AGL enters into cost sharing arrangements whereby the costs to operate and maintain assets that are shared with parties outside the AGL Group are recharged to the parties in accordance with their beneficial interest. These recharged amounts are recognised as revenue when the associated costs to which they relate impact the statement of profit or loss. Revenue is measured with reference to the fair value of the consideration received.

Government grants

Government grants are recognised when there is reasonable assurance that AGL will comply with the conditions of the grant and the grant will be received.

Government grants that require AGL to construct an asset are recognised as deferred revenue in the Consolidated Statement of Financial Position and transferred to profit or loss on a systemic basis over the useful life of the related assets.

2. Revenue (cont.)

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Variable consideration and constraints

AGL includes variable consideration in the transaction price as estimated at the inception of a contract. However, if it is considered 'highly probable' that a significant reversal of revenue recognised will occur in the future, the variable consideration is constrained and not included in the transaction price.

AGL's contractual arrangements contain a number of variable pricing elements including pay-on-time discounts, payment plans, and escalations. Some of these variable elements are resolved during the reporting periods. Where they are not, management estimates the likelihood of the variable pricing element eventuating and recognises the variable pricing element to the extent it is not highly probable that it will reverse.

Revenue recognition

AGL recognises revenue from gas and electricity services once the gas and/or electricity has been consumed by the customer. Management estimates customer consumption between the last invoice date and the end of the reporting period when determining gas and electricity revenue for the financial period. Various assumptions and financial models are used to determine the estimated unbilled consumption.

3. Other income

	Note	2019 $m	2018 $m
Net gain on disposal of property, plant and equipment		**2**	6
Gain on disposal of subsidiaries and businesses	29	**52**	25
Total other income		**54**	31

4. Expenses

	2019 $m	Restated 2018 $m[1]
Cost of sales	**9,440**	9,070
Administrative expenses	**289**	262
Employee benefits expenses	**601**	651
Other expenses		
Loss/(gain) on fair value of financial instruments	**198**	(803)
Impairment loss on trade receivables (net of bad debts recovered)	**120**	99
Derecognition of assets and costs associated with exit of business	**47**	-
Impairment loss on investment in an associate and other related assets	**-**	28
Short term lease and outgoings expenses[2]	**12**	10
Net loss on disposal of joint operation	**2**	-
Other	**527**	537
Total expenses	**11,236**	9,854

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).
2. Includes short term and low value lease expenses, utilities and other outgoings.

5. Depreciation and amortisation

	2019 $m	Restated 2018 $m[1]
Property, plant and equipment	**477**	543
Intangible assets	**143**	15
Other	**5**	10
Total depreciation and amortisation	**625**	568

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).

6. Net financing costs

	2019 $m	Restated 2018 $m[1]
Finance income		
Interest income	**10**	10
	10	10
Finance costs		
Interest expense[2]	**127**	158
Lease interest expense	**10**	7
Unwinding of discounts on provisions and other liabilities	**35**	33
Unwinding of discount on deferred consideration	**23**	24
Other finance costs	**8**	8
	203	230
Net financing costs	**193**	220

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).
2. Interest expense for the year ended 30 June 2019 is presented net of capitalised interest of $21 million (2018: $11 million).

The weighted average capitalisation rate on funds borrowed for finance costs capitalised is 5.61% (2018: 5.64%).

ACCOUNTING POLICY

Net financing costs

Interest income is recognised in profit or loss as it accrues, using the effective interest method.

Finance costs directly attributable to the acquisition, construction or production of qualifying assets, are added to the cost of those assets.

All other finance costs are recognised in profit or loss in the period in which they are incurred. Finance costs comprise interest expense on borrowings calculated using the effective interest method, amortisation of borrowing costs relating to long-term financing facilities, unwinding of the discount on provisions and deferred consideration, and gains and losses on certain hedging instruments that are recognised in profit or loss.

7. Income tax

Income tax recognised in the Consolidated Statement of Profit or Loss

The major components of income tax expense are:

	2019 $m	Restated 2018 $m[1]
Current tax		
Current tax expense in respect of the current year	**265**	79
Deferred tax		
Relating to the origination and reversal of temporary differences	**109**	583
Total income tax expense	**374**	662

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

7. Income tax (cont.)

Numerical reconciliation between tax expense and pre-tax accounting profit

The prima facie income tax expense on pre-tax accounting profit reconciles to the income tax expense in the financial statements as follows:

	2019 $m	Restated 2018 $m[1]
Profit before tax	**1,279**	2,244
Income tax expense calculated at the Australian tax rate of 30% (30 June 2018: 30%)	**384**	673
Non-deductible capital losses on disposal and impairment	**5**	8
Non-deductible expenses	**1**	6
Recognition of previously derecognised capital losses	**(2)**	(17)
Adjustments in relation to current tax of prior years	**(12)**	(2)
Other	**(2)**	(6)
Total income tax expense	**374**	662

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Income tax recognised in other comprehensive income

	2019 $m	2018 $m
Deferred tax		
Cash flow hedges	**30**	(48)
Remeasurement (loss)/gain on defined benefit plans	**(27)**	13
Fair value gain on the revaluation of equity instrument financial assets	**4**	-
Total income tax recognised in other comprehensive income	**7**	(35)

Deferred income tax recognised in the Consolidated Statement of Profit or Loss

	2019 $m	Restated 2018 $m[1]
Temporary differences		
Tax losses	**149**	234
Provisions, payables and accruals	**2**	(15)
Allowance for expected credit losses	**17**	(6)
Defined benefit superannuation plans	**(6)**	(4)
Borrowings	**(3)**	(2)
Derivative financial instruments	**(59)**	324
Property, plant and equipment and intangible assets	**7**	37
Other	**2**	15
Total deferred income tax recognised in profit or loss	**109**	583

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Current tax balances

	2019 $m	2018 $m
Current tax assets		
Income tax refund receivable	**89**	147
Current tax liabilities		
Income tax payable	**27**	81

7. Income tax (cont.)

Deferred tax balances

	2019 $m	Restated 2018 $m[1]
Deferred tax assets/(liabilities) arise from the following:		
Tax losses	**395**	544
Provisions, payables and accruals	**188**	190
Allowance for expected credit losses	**53**	70
Defined benefit superannuation plans	**43**	10
Borrowings	**40**	37
Derivative financial instruments	**31**	2
Property, plant and equipment and intangible assets	**(578)**	(571)
Other	**(8)**	(2)
Net deferred tax assets	**164**	280

	2019 $m	Restated 2018 $m[1]
Recognised in the Consolidated Statement of Financial Position as follows:		
Deferred tax assets	**261**	280
Deferred tax liabilities	**(97)**	-
Net deferred tax assets	**164**	280

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Deferred tax assets of $25 million (2018: $30 million) remain unrecognised.

AGL has adopted the voluntary Tax Transparency Code as endorsed by the Board of Taxation and the Australian Taxation Office.

ACCOUNTING POLICY

Income tax

Income tax expense represents the sum of the tax currently payable and deferred tax.

Current tax

Current tax payable is based on taxable profit for the year and any adjustments in respect of prior years. AGL's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are recognised for all taxable temporary differences. Deferred tax assets are recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Deferred tax assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax reflects the tax consequences that would follow from the manner in which AGL expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset only if AGL has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:

- the same taxable entity; or
- different taxable entities that intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

7. Income tax (cont.)

ACCOUNTING POLICY

Current and deferred tax for the period

Current and deferred tax are recognised as an expense or income in profit or loss, except when they relate to items recognised outside profit or loss (whether in other comprehensive income or directly in equity) or a business combination.

Tax consolidation

AGL Energy Limited (the Parent Entity) and its wholly-owned Australian resident subsidiaries formed a tax-consolidated group pursuant to Australian taxation law with effect from 25 October 2006 and are therefore taxed as a single entity from that date. AGL Energy Limited is the head entity in the tax-consolidated group.

On 23 July 2012, AGL Generation Holdco Pty Ltd, a subsidiary 99.99% owned by AGL, and AGL Generation Pty Ltd elected to form a tax-consolidated group with Loy Yang Marketing Holdings Pty Limited and its wholly-owned subsidiary, in addition to the existing group. On 27 July 2012, Great Energy Alliance Corporation Pty Limited (GEAC) and its wholly-owned subsidiaries joined the new tax-consolidated group. AGL Generation Holdco Pty Ltd is the head entity in the new tax-consolidated group.

Tax expense/income, deferred tax liabilities and deferred tax assets arising from temporary differences of the members of the tax consolidated group are recognised in the separate financial statements of the members of the tax-consolidated group using the 'standalone taxpayer' approach by reference to the carrying amounts in the separate financial statements of each entity and the tax values applying under tax consolidation. Current tax liabilities and assets and deferred tax assets arising from unused tax losses and tax credits of the tax-consolidated group are recognised by the head entity in each tax consolidated group.

The members of the tax-consolidated group have entered into a tax sharing and tax funding agreement. The tax funding agreement requires payments to/from the head entity equal to the current tax liability/asset assumed by the head entity and any tax loss deferred tax asset assumed by the head entity. The payments are recorded as intercompany receivables/payables.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Deferred tax assets relating to tax losses

AGL recognises a deferred tax asset relating to tax losses incurred by a subsidiary. The recoverability of this deferred tax asset is dependent on the generation of sufficient taxable income, by the subsidiary, to utilise those tax losses. Management judgements and estimates are required in the assessment of this recoverability, including forecasting sufficient future taxable income.

8. Dividends

Recognised amounts

	2019 $m	2018 $m
Final dividend		
Final dividend for 2018 of 63.0 cents per share, franked to 80%, paid 21 September 2018 (2018: Final dividend for 2017 of 50.0 cents per share, franked to 80%, paid 22 September 2017)	**413**	328
Interim dividend		
Interim dividend for 2019 of 55.0 cents per share, franked to 80%, paid 22 March 2019 (2018: Interim dividend for 2018 of 54.0 cents per share, franked to 80%, paid 26 March 2018)	**361**	354
Dividends paid as per the Consolidated Statement of Cash Flows	**774**	682

Unrecognised amounts

Since the end of the financial year, the Directors have declared a final dividend for 2019 of 64.0 cents per share, franked to 80% (2018: 63.0 cents per share, franked to 80%), payable 20 September 2019.	**420**	413

8. Dividends (cont.)

Dividend reinvestment plan

The AGL Dividend Reinvestment Plan (DRP) will operate in respect of the 2019 final dividend. AGL will acquire shares on market and allot them to DRP participants at no discount to the simple average of the daily weighted average price at which AGL's ordinary shares trade during each of the 10 trading days commencing 26 August 2019. The last date for shareholders to elect to participate in the DRP for the 2019 final dividend is 23 August 2019.

Dividend franking account

	2019 $m	2018 $m
Adjusted franking account balance	**(111)**	(94)
Impact on franking account balance of dividends proposed after the reporting date but not recognised as a liability	**(144)**	(142)

ACCOUNTING POLICY

Dividends

Dividends represent a distribution of profits that holders of ordinary shares receive from time to time. Dividends are not accrued as a liability until a dividend declaration is made by the Board of Directors. The liability is reduced when the dividend is paid. The Board of Directors takes into consideration factors including AGL's relative capital strength and the existing dividend payout ratio guidelines in determining the amount of dividends to be paid.

9. Trade and other receivables

	2019 $m	Restated 2018 $m[1]
Trade receivables	**946**	1,004
Unbilled revenue	**898**	938
Allowance for expected credit loss	**(175)**	(232)
	1,669	1,710
Other receivables	**34**	65
Total trade and other receivables	**1,703**	1,775

Allowance for expected credit loss		
Balance at beginning of the financial year (AASB 139)		103
Adjustment on application of AASB 9		110
Balance as at 1 July (restated)	**232**	213
Impairment losses recognised on receivables	**149**	120
Amounts written off as uncollectible	**(206)**	(101)
Balance at end of the financial year	**175**	232

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments. Refer to Note 38(c).

9. Trade and other receivables (cont.)

The allowance for expected credit loss associated with unbilled revenue and the ageing of trade receivables at the reporting date is detailed below:

	2019		Restated 2018[1]	
	Total $m	Allowance $m	Total $m	Allowance $m
Unbilled revenue	**898**	**(55)**	938	(65)
Not past due	**628**	**(10)**	494	(6)
Past due 0 – 30 days	**71**	**(9)**	189	(14)
Past due 31 – 60 days	**45**	**(9)**	62	(11)
Past due 61 – 90 days	**30**	**(8)**	41	(10)
Past 90 days	**172**	**(84)**	218	(126)
Total	**1,844**	**(175)**	1,942	(232)

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments. Refer to Note 38(c).

At the end of the reporting period, trade receivables with a carrying amount of $208 million (2018: $349 million) were past due but not considered impaired. These trade receivables relate to customers for whom there has not been a significant change in credit quality and the amounts are considered recoverable.

Other balances within trade and other receivables are neither impaired nor past due. It is expected that these other balances will be received when due.

ACCOUNTING POLICY

Trade and other receivables

Trade and other receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Trade and other receivables are recognised at amortised cost, less an allowance for expected credit loss. AGL's policy requires customers to pay in accordance within agreed payment terms. Depending on the customer segment, trade receivables are generally due for settlement within 30 days.

AGL assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost and fair value through other comprehensive income (FVOCI). The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, unbilled revenue, contract assets and lease receivables, AGL applies the simplified approach, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

Unbilled revenue

Unbilled revenue represents estimated gas and electricity services supplied to customers but unbilled at the end of the reporting period. Unbilled gas and electricity revenue is not collectible until such time as customers' meters are read and bills rendered.

9. Trade and other receivables (cont.)

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Expected credit loss on trade receivables and unbilled revenue

AGL uses an allowance matrix to measure expected credit losses of trade receivables and unbilled revenue from its customers. Trade receivable amounts are disaggregated into customer segments.

Loss rates are estimated in each age category and are based on the probability of a receivable progressing through to write-off. Factors to estimate the loss rate are based on risk assessment performed for each customer segment and economic factors such as wholesale electricity forward curves, commodity fuel forward curves and prevailing macro-economic information.

Unbilled revenue

AGL recognises revenue from gas and electricity sales once the gas and/or electricity has been consumed by the customer.

Management estimates customer consumption between the last invoice date and the end of the reporting period when determining gas and electricity revenue for the financial period. Various assumptions and financial models are used to determine the estimated unbilled consumption.

Some of the assumptions and estimates include:

- Volume and timing of energy consumed by the customers
- Various pricing plans prevalent and allocation of the estimated volume to such pricing plans
- Loss factors
- Behavioural discounts

10. Inventories

	2019 $m	2018 $m
Current		
Raw materials and stores - at cost	**311**	242
Finished goods - at cost	**77**	128
Total current inventories	**388**	370
Non-current		
Finished goods - at cost	**57**	10
Total non-current inventories	**57**	10

ACCOUNTING POLICY

Inventories

Inventories are measured at the lower of cost and net realisable value. Costs of inventories are determined on a first-in-first-out or weighted average basis. Net realisable value represents the estimated selling price for inventories less the estimated costs necessary to sell the inventory.

11. Other financial assets

	2019 $m	2018 $m
Current		
Derivative financial instruments - at fair value		
Cross currency swap contracts - cash flow and fair value hedges	**5**	-
Forward foreign exchange contracts - cash flow hedges	**1**	-
Energy derivatives - cash flow hedges	**32**	6
Energy derivatives - economic hedges	**229**	250
	267	256
Futures deposits and margin calls	**531**	344
Total current other financial assets	**798**	600
Non-current		
Derivative financial instruments - at fair value		
Cross currency swap contracts - cash flow and fair value hedges	**131**	72
Interest rate swap contracts - cash flow hedges	**-**	1
Forward foreign exchange contracts - cash flow hedges	**-**	-
Energy derivatives - cash flow hedges	**1**	-
Energy derivatives - economic hedges	**365**	311
	497	384
Equity instrument financial assets - at fair value through other comprehensive income		
Unlisted equity securities	**-**	16
Unlisted investment funds	**93**	48
Total non-current other financial assets	**590**	448

Refer to Note 36 for AGL's financial assets accounting policy and critical accounting estimates and assumptions.

12. Other assets

	Note	2019 $m	2018 $m
Current			
Green commodities scheme certificates and instruments		**251**	200
Prepayments		**52**	61
Total current other assets		**303**	261
Non-current			
Defined benefit superannuation plan asset	32	**7**	39
Other		**32**	38
Total non-current other assets		**39**	77

ACCOUNTING POLICY

Green commodity scheme certificates

AGL participates in a number of renewable energy and energy efficiency schemes administered by the Commonwealth and State governments. AGL holds green commodity scheme certificates in order to satisfy its surrender obligations under the various schemes.

Green commodity scheme certificates are initially recorded at cost, being the fair value of the consideration paid or the cost of generation of the certificate. Subsequent to initial recognition, they are stated at the lower of cost and net realisable value.

13. Investments in associates and joint ventures

	2019 $m	2018 $m
Investments in associates - unlisted	-	-
Investments in joint ventures - unlisted	150	100
Total investments in associates and joint ventures	**150**	100

Reconciliation of movements in investments in associates and joint ventures

	2019 $m	2018 $m
Balance at beginning of financial year	100	80
Additions[1]	60	28
Impairment loss recognised in profit or loss	-	(20)
Share of profits after income tax	33	39
Dividends received	(27)	(40)
Other	(16)	13
Balance at end of financial year	150	100

1. During the year, AGL made $60 million of capital contributions to the Powering Australian Renewables Fund in accordance with the terms of the Investor Agreement and Commitment Deed.

	Principal activities	Ownership interest 2019 %	Ownership interest 2018 %	Carrying value 2019 $m	Carrying value 2018 $m
Associates					
CSM Energy Limited[1]	Coal mine methane gas extraction	-	35	-	-
Matter Technology Ltd	Energy management services	20	19.9	-	-
Solar Analytics Pty Ltd[2]	Solar PV monitoring	31.2	37.2	-	-
Sunverge Energy Inc[3]	Energy storage and management services	15.6	22	-	-
Joint ventures					
ActewAGL Retail Partnership	Gas and electricity retailer	50	50	50	45
Energy Infrastructure Management Pty Ltd	Pipeline management services	50	50	4	2
Central Queensland Pipeline Pty Ltd	Gas pipeline development	50	50	-	-
Powering Australian Renewables Fund	Development and owner of renewable energy generation projects	20	20	96	53
Total investments in associates and joint ventures				150	100

1. CSM Energy was dissolved and deregistered on 22 April 2019.
2. During the year, Solar Analytics completed a capital raise in which AGL did not partake. As a result AGL's ownership interest was diluted by 6%.
3. During the year, Sunverge Energy completed a capital raise in which AGL did not partake. As a result AGL's ownership interest was diluted by 6.4%, and no longer has significant influence.

All the above entities are incorporated and operate in Australia except for Sunverge Energy Inc, which is incorporated and predominantly operating in the USA.

13. Investments in associates and joint ventures (cont.)

Aggregate information of joint ventures that are not individually material

	2019 $m	2018 $m
Current assets	**546**	336
Non-current assets	**1,221**	831
Total assets	**1,767**	1,167
Current liabilities	**223**	210
Non-current liabilities	**1,043**	597
Total liabilities	**1,266**	807
Net assets	**501**	360
Revenue	**1,037**	852
Expenses	**(966)**	(774)
AGL's share of joint ventures' profit	**33**	39

Commitments and contingent liabilities

AGL's share of commitments and contingent liabilities of associates and joint ventures are disclosed in Notes 24(b) and 25 respectively.

ACCOUNTING POLICY

Investments in equity accounted investees

AGL's interests in equity accounted investees comprise interests in associates and joint ventures. Associates are those entities in which AGL has significant influence, but not control, over the financial and operating policies of the entity. A joint venture is an arrangement in which AGL has joint control and AGL has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Investments in associates and joint ventures are accounted for using the equity method.

Under the equity method, investments in associates and joint ventures are initially recognised in the Consolidated Statement of Financial Position at cost and adjusted thereafter to recognise AGL's share of the profit or loss and other comprehensive income of the associates and joint ventures.

An impairment loss is measured by comparing the recoverable amount of the investment with its carrying amount. An impairment loss is recognised in profit or loss and is reversed if there has been a favourable change in estimates used to determine the recoverable amount.

Unrealised gains on transactions between AGL and an associate or a joint venture are eliminated to the extent of AGL's interest in the associate or joint venture. Unrealised losses are also eliminated, but only to the extent that there is no evidence of an impairment.

14. Property, plant and equipment

2019	Plant and equipment $m	Right-of-use plant and equipment $m	Other $m	Right-of-use other $m	Total $m
Balance at 1 July 2018, net of accumulated depreciation and impairment	**6,463**	**6**	**94**	**194**	**6,757**
Reclassified to intangible assets	**(450)**	**-**	**-**	**-**	**(450)**
Additions	**756**	**-**	**-**	**17**	**773**
Disposals	**(15)**	**-**	**-**	**-**	**(15)**
Depreciation expense	**(459)**	**(1)**	**(2)**	**(15)**	**(477)**
Balance at 30 June 2019, net of accumulated depreciation and impairment	**6,295**	**5**	**92**	**196**	**6,588**
Balance at 1 July 2018					
Cost (gross carrying amount)	**8,895**	**11**	**109**	**261**	**9,276**
Accumulated depreciation and impairment	**(2,432)**	**(5)**	**(15)**	**(67)**	**(2,519)**
Net carrying amount	**6,463**	**6**	**94**	**194**	**6,757**
Balance at 30 June 2019					
Cost (gross carrying amount)	**8,672**	**11**	**109**	**278**	**9,070**
Accumulated depreciation and impairment	**(2,377)**	**(6)**	**(17)**	**(82)**	**(2,482)**
Net carrying amount	**6,295**	**5**	**92**	**196**	**6,588**
Restated 2018[1]					
Balance at 1 July 2017, net of accumulated depreciation and impairment (restated)	6,220	7	96	205	6,528
Additions	783	-	-	1	784
Disposals	(4)	-	-	-	(4)
Reclassified as held for sale	(8)	-	-	-	(8)
Depreciation expense	(528)	(1)	(2)	(12)	(543)
Balance at 30 June 2018, net of accumulated depreciation and impairment	6,463	6	94	194	6,757

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).

Balance at 1 July 2017	Plant and equipment $m	Right-of-use plant and equipment $m	Other $m	Right-of-use other $m	Total $m
Cost (gross carrying amount)	8,426	11	144	260	8,841
Accumulated depreciation and impairment	(2,206)	(4)	(48)	(55)	(2,313)
Net carrying amount	6,220	7	96	205	6,528
Balance at 30 June 2018					
Cost (gross carrying amount)	8,895	11	109	261	9,276
Accumulated depreciation and impairment	(2,432)	(5)	(15)	(67)	(2,519)
Net carrying amount	6,463	6	94	194	6,757

Other

Includes land, buildings and leasehold improvements.

Property, plant and equipment under construction

The net carrying amount of property, plant and equipment disclosed above includes expenditure recognised in relation to plant and equipment which is in the course of construction of $793 million (2018: $684 million).

Software

During the year, $450 million of software was reclassified to intangible assets.

14. Property, plant and equipment (cont.)

ACCOUNTING POLICY

Property, plant and equipment

Property, plant and equipment is measured at cost less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the acquisition or construction of the asset. Finance costs related to the acquisition or construction of qualifying assets are capitalised. Cost may also include transfers from other comprehensive income of any gain or loss on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Subsequent costs are capitalised when it is probable that future economic benefits associated with the item will flow to AGL and the cost of the item can be measured reliably. Other costs are recognised in profit or loss as incurred.

The gain or loss arising on disposal or retirement is recognised in profit or loss.

Depreciation is calculated on a straight-line basis so as to write off the cost of each asset over its expected useful life to its estimated residual value. Leasehold improvements are amortised over the period of the relevant lease or estimated useful life, whichever is the shorter. Land is not depreciated.

The estimated useful lives, residual values and depreciation method are reviewed, and adjusted if appropriate at the end of each annual reporting period.

The following estimated useful lives are used in the calculation of depreciation:

- Freehold buildings – Up to 50 years
- Leasehold improvements – lesser of lease period or up to 50 years
- Plant and equipment – Up to 50 years

Right-of-use assets (ROU assets)

A ROU asset is recognised in relation to each lease and is initially measured at cost comprising the initial measurement of the lease liability adjusted for any lease payments made before the commencement date (reduced by lease incentives received), plus initial direct costs incurred in obtaining the lease and an estimate of costs to be incurred in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

A ROU asset is subsequently measured using the cost model less any accumulated depreciation and any accumulated impairment losses; and adjusted for any remeasurement of the lease liability. AGL does not apply the revaluation model but instead carries all ROU assets at cost. The ROU asset is depreciated over its useful life. The useful life of a ROU asset for depreciation purposes is the shorter of the useful life of the asset and the lease term. Where the ROU asset is adjusted due to changes in the lease liability, the depreciation for the ROU asset is adjusted on a prospective basis.

The following estimated useful lives are used in the calculation of depreciation on ROU assets:

- Plant and equipment – ROU assets: lesser of lease period or up to 50 years
- Other – ROU assets: lesser of lease period or up to 50 years

Short-term and low value leases as lessee

AGL has elected to apply the practical expedients available for short-term leases (i.e. where the lease period is 12 months or less) and low-value asset leases. As a result of application of these practical expedients, the measurement requirements of accounting standards do not apply and the expense for these leases is recognised on a straight-line basis.

Impairment of non-financial assets excluding goodwill

At the end of each reporting period, AGL reviews the carrying amounts of its assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, AGL estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a post-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

An impairment loss is recognised in profit or loss if the carrying amount of an asset or cash-generating unit exceeds its recoverable amount.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

15. Intangible assets

2019	Goodwill $m	Software $m	Licences $m	Other $m	Total $m
Balance at 1 July 2018, net of accumulated amortisation and impairment	**2,881**	**-**	**311**	**79**	**3,271**
Reclassified from property, plant and equipment	**-**	**450**	**-**	**-**	**450**
Additions	**-**	**177**	**-**	**-**	**177**
Disposals	**(15)**	**-**	**-**	**-**	**(15)**
Amortisation expense	**-**	**(124)**	**(7)**	**(12)**	**(143)**
Balance at 30 June 2019, net of accumulated amortisation and impairment	**2,866**	**503**	**304**	**67**	**3,740**
Balance at 1 July 2018					
Cost (gross carrying amount)	**2,882**	**-**	**311**	**258**	**3,451**
Accumulated amortisation and impairment	**(1)**	**-**	**-**	**(179)**	**(180)**
Net carrying amount	**2,881**	**-**	**311**	**79**	**3,271**
Balance at 30 June 2019					
Cost (gross carrying amount)	**2,867**	**1,072**	**311**	**258**	**4,508**
Accumulated amortisation and impairment	**(1)**	**(569)**	**(7)**	**(191)**	**(768)**
Net carrying amount	**2,866**	**503**	**304**	**67**	**3,740**
2018					
Balance at 1 July 2017, net of accumulated amortisation and impairment	2,881	-	311	94	3,286
Amortisation expense	-	-	-	(15)	(15)
Balance at 30 June 2018, net of accumulated amortisation and impairment	2,881	-	311	79	3,271
Balance at 1 July 2017					
Cost (gross carrying amount)	2,882	-	311	448	3,641
Accumulated amortisation and impairment	(1)	-	-	(354)	(355)
Net carrying amount	2,881	-	311	94	3,286
Balance at 30 June 2018					
Cost (gross carrying amount)	2,882	-	311	258	3,451
Accumulated amortisation and impairment	(1)	-	-	(179)	(180)
Net carrying amount	2,881	-	311	79	3,271

15. Intangible assets (cont.)

Impairment testing for goodwill and intangibles with indefinite useful lives

Goodwill and other intangible assets deemed to have indefinite lives, that are significant in comparison to AGL's total carrying amount of intangible assets with indefinite lives, have been allocated to cash-generating units (CGUs) for the purpose of impairment testing as follows:

Year ended 30 June 2019	Goodwill $m	Licences $m	Total intangible assets with indefinite lives $m
Customer Markets	**886**	-	**886**
Wholesale Markets	**1,353**	-	**1,353**
Group Operations	**627**	-	**627**
Total goodwill and intangibles with indefinite useful lives	**2,866**	-	**2,866**

Year ended 30 June 2018	Goodwill $m	Licences $m	Total intangible assets with indefinite lives $m
Customer Markets	901	-	901
Wholesale Markets	1,353	-	1,353
Group Operations	627	311	938
Total goodwill and intangibles with indefinite useful lives	2,881	311	3,192

ACCOUNTING POLICY

Intangible assets

Intangible assets acquired separately are initially measured at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses.

The useful lives of intangible assets are assessed to be either finite or indefinite. Indefinite intangible assets are assessed at least annually for impairment. Finite intangible assets are amortised over their estimated useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired.

The estimated useful life and amortisation method are reviewed at the end of each annual reporting period.

The following estimated useful lives are used in the calculation of amortisation for intangible assets with finite lives:

- Customer relationships and contracts – 3 to 20 years
- Software – 3 to 7 years
- Licences – the lesser of licence term and asset useful life

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset are recognised in profit or loss when the asset is derecognised.

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of the acquisition of the business less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill is allocated to each of AGL's CGUs or groups of CGUs expected to benefit from the synergies of the combination, and tested for impairment at least annually.

A CGU or groups of CGUs to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the CGU or group of CGUs is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the CGU(s) and then to the other assets of the CGU(s) pro rata based on the carrying amount of each asset in the CGU(s). Any impairment loss for goodwill is recognised directly in profit or loss. An impairment loss recognised for goodwill is not reversed in subsequent periods.

Software

Software is measured at cost less accumulated amortisation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition or development of the software.

Licences

Licences are carried at cost less any accumulated amortisation and impairment losses.

15. Intangible assets (cont.)

ACCOUNTING POLICY

Customer relationships and contracts

Customer relationships and contracts acquired in a business combination are carried at cost less accumulated amortisation and any accumulated impairment losses. Amortisation is recognised as an expense on a straight-line basis over the period during which economic benefits are expected to be received.

The direct costs of establishing customer contracts are recognised as an asset when they relate to a specific customer acquisition campaign. The direct costs are amortised over the minimum contract term. Direct costs include customer acquisition fees paid to channel partners and upfront account purchase payments. All other customer acquisition costs are expensed as incurred.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Impairment testing for Customer Markets, Wholesale Markets and Group Operations

The recoverable amounts for the Customer Markets, Wholesale Markets and Group Operations CGUs have been determined using value in use models including an appropriate terminal value. The key assumptions in the calculation of value in use include:

- forward market-based transfer pricing between CGUs;
- customer numbers and churn;
- consumption volumes;
- energy procurement costs and volumes and generation volumes; and
- gross margin including assumptions around regulatory outcomes, pricing in unregulated markets and customer discounts.

Management do not believe that any reasonable possible change in these assumptions would result in an impairment.

The estimate of regulatory outcomes is based on actual regulatory decisions for the current price reset period, which are publicly available, together with AGL's expectations of regulatory decisions beyond the current reset period and market prices in unregulated markets. The assumed future gross margin in unregulated markets is determined with reference to historic achieved rates along with AGL's expectations of future price changes together with the impact of expected customer discounts. Customer numbers and consumption volumes are estimated based on historical experience in various segments, together with marketing strategies for the retention and winning of customers. Energy procurement costs are estimated based on the actual hedge portfolio, together with an estimate of future hedging prices and volumes beyond the period of the actual hedge portfolio.

Cash flow forecasts are based on Board approved budgets and the most recent three-year plan. The terminal value is based on final year free cash flow, except for capital expenditure, which is normalised in perpetuity adjusted for inflation of 2.5% (2018: 2.5%). Discount rates used are the pre-tax equivalent of a post-tax weighted average cost of capital of 8.6% (2018: 8.6%).

Impact of climate change related risk

The recoverable value estimates used in the impairment of assets analysis considers climate change risk through the adjustment of cash inflows associated with the planned closure of AGL's Liddell Power Station. This recoverable value estimate demonstrates that the carrying value of AGL's Group Operations CGU is not impaired.

Management recognises that there is an increased pace of change in the energy industry and associated political landscape and will continue to work towards incorporating quantification of the financial impact of climate change and related policies within our annual financial filings in accordance with Australian Securities and Investments Commission (ASIC), Australian Prudential Regulation Authority (APRA), and Australian Accounting Standards Board (AASB) recommendations.

Notwithstanding the above, any change to the planned closure dates of AGL's coal-fired generation plants as a result of climate change may have a material impact on the National Electricity Market and may result in a material change to AGL's estimated cash inflows.

No impairment loss has been recognised for the Customer Markets, Wholesale Markets or the Group Operations CGUs for the year ended 30 June 2019 (2018: $nil).

Impairment of goodwill and other intangibles with indefinite useful lives

AGL determines whether goodwill and other intangibles with indefinite useful lives are impaired at least on a semi-annual basis. This requires an assessment of impairment indications, and an estimation of the recoverable amount of the cash-generating units, using a value in use discounted methodology, to which the goodwill and intangibles with indefinite useful lives are allocated.

16. Assets and liabilities classified as held for sale

	2019 $m	2018 $m
Assets of disposal groups held for sale	-	74

De-designation of disposal groups previously held for sale

North Queensland gas assets

On 25 August 2017, AGL agreed to sell its North Queensland gas assets to a consortium of Shandong Order Gas Co. Limited and Orient Energy Limited. The sale remained subject to a number of conditions precedent including regulatory approval, which were not met and subsequently the sale process was ceased as announced to the market on 31 January 2019. The North Queensland gas assets have been de-designated as held for sale effective 31 January 2019, as the sale process has not identified another buyer. Despite this change in classification, the sale process for the assets is ongoing. The carrying value of non-current assets relating to the North Queensland gas assets is nil (June 2018: nil) primarily due to previous impairment losses.

Disposal groups sold

National Assets Portfolio

On 11 September 2018, AGL completed the divestment of its portfolio of small generation and compressed natural gas refuelling assets, National Assets, for consideration of $136 million. Refer to Note 29 for further information.

ACCOUNTING POLICY

Non-current assets and disposal groups held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Non-current assets and disposal groups classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

17. Trade and other payables

	2019 $m	2018 $m
Current		
Trade payables and accrued expenses	**951**	942
Accrued distribution costs	**400**	412
Green commodity scheme obligations	**189**	204
Other	**16**	21
Total trade and other payables	**1,556**	1,579

Trade payables are unsecured and are generally settled within 32 days from end of month of the date of recognition.

ACCOUNTING POLICY

Trade and other payables

Trade and other payables represent liabilities for goods and services provided to AGL prior to the end of the reporting period that are unpaid and arise when AGL becomes obliged to make future payments in respect of the purchase of these goods and services.

17. Trade and other payables (cont.)

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Accrued distribution costs

AGL recognises distribution costs once the gas and electricity has been delivered to the customer and is measured through a regular review of usage meters. Management estimates customer consumption between the last invoice date and the end of the reporting period when determining distribution costs for the financial period. Various assumptions and financial models are used to determine the estimated unbilled consumption.

18. Borrowings

	2019 $m	Restated 2018 $m[1]
Current		
Bank loans - unsecured	**60**	-
CPI bonds - unsecured	**8**	8
Other loans - unsecured	**11**	11
Lease liabilities	**23**	15
Total current borrowings	**102**	34

	2019 $m	Restated 2018 $m[1]
Non-current		
USD senior notes - unsecured	**1,054**	931
Subordinated notes - unsecured	**-**	650
Medium term notes - unsecured	**599**	598
Bank loans - unsecured	**760**	410
CPI bonds - unsecured	**73**	80
Other loans - unsecured	**122**	133
Lease liabilities	**149**	139
Deferred transaction costs	**(9)**	(12)
Total non-current borrowings	**2,748**	2,929

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).

Financing facilities

AGL has access to the following committed bank facilities:

	Total facilities		Amounts used	
	2019 $m	2018 $m	2019 $m	2018 $m
USD senior notes - unsecured (after effect of cross currency swaps)	**910**	910	**910**	910
Subordinated notes - unsecured	**-**	650	**-**	650
Medium term notes - unsecured	**599**	598	**599**	598
Bank loans - unsecured	**1,261**	1,256	**820**	410
CPI bonds - unsecured	**81**	88	**81**	88
Other loans - unsecured	**133**	144	**133**	144
Bank guarantees - unsecured	**569**	499	**408**	408
Total financing facilities	**3,553**	4,145	**2,951**	3,208

18. Borrowings (cont.)

USD senior notes

On 8 December 2016, AGL issued US$395 million of fixed rate unsecured senior notes in the US private placement market, comprising three tranches of 12 year, 13 year and 15 year maturities for US$150 million, US$70 million and US$175 million, respectively. To manage the foreign exchange risk arising from the future principal and interest payments required on the US$395 million, the notes were converted back to approximately A$522 million through cross currency interest rate swaps. On 8 December 2016, AGL further issued A$50 million of fixed rate unsecured senior notes in the US private placement market with a 10 year maturity.

On 8 September 2010, AGL issued US$300 million of fixed rate unsecured senior notes in the US private placement market, comprising two tranches of 12 year and 15 year maturities for US$165 million and US$135 million, respectively. To manage the foreign exchange risk arising from the future principal and interest payments required on the US$300 million, the notes were converted back to approximately A$338 million through cross currency interest rate swaps.

Subordinated notes

On 4 April 2012, AGL issued $650 million of unsecured AGL Energy Subordinated Notes in the Australian retail bond market. The notes had a 27 year maturity with a non-recall period of seven years. Interest on these notes was charged at Bank Bill rate plus a margin of 3.8% and is paid on a quarterly basis. The notes were redeemed on 11 June 2019 for their face value plus any outstanding interest.

Medium term notes

On 5 November 2014, AGL issued $600 million of senior unsecured, seven year fixed rate medium term notes. The notes were issued at a spread of swap plus 170 basis points, equating to a 5% coupon.

Bank loans

In June 2018, AGL extended its existing $410 million 6.5 year club term loan facility for another four years to mature in June 2025. As at 30 June 2019, this facility was fully utilised.

On 8 October 2015, AGL extended a $150 million revolving facility for a further year until December 2019. As at 30 June 2019, $60 million of the revolving facility was utilised.

In February 2017, AGL amended and extended the $400 million revolving tranche of the syndicated loan facility to mature in September 2020. As at 30 June 2019, $350 milion of the revolving tranche was utilised.

During the FY17 financial year, AGL executed $375 million of new bank bilateral debt facilities for tenors between 1.5 to 5 years. Out of the $375 million, $100 million matured in FY19, and the remaining $275 million were fully undrawn as at 30 June 2019.

CPI bonds

CPI bonds rank pari passu with other unsecured debt and will mature in May 2027.

Other loans

On 5 July 2011, AGL entered into a $200 million loan facility with EKF, the Danish export credit agency. Amortising over 18 years, the loan matures in 2031. As at 30 June 2019, this facility was fully utilised.

ACCOUNTING POLICY

Borrowings

Interest bearing liabilities

All loans and borrowings are initially recognised at fair value, being the amount received less attributable transaction costs. After initial recognition, interest bearing liabilities are stated at amortised cost with any difference between cost and redemption value being recognised in profit or loss over the period of the borrowings on an effective interest basis.

Leases

At inception of a contract, AGL assesses whether a contract is, or contains a lease. A contract is, or contains a lease, if the contract conveys to the customer a right to control the use of an identified asset for a period of time in exchange for consideration.

18. Borrowings (cont.)

ACCOUNTING POLICY

AGL assesses whether:

- The contract involves the use of an identified asset – the asset may be explicitly or implicitly specified in the contract. Capacity portions of larger assets would be considered an identified asset if the portion is physically distinct or if the portion represents substantially all of the capacity of the asset. An asset is not considered an identified asset if the supplier has the substantive right to substitute the asset throughout the period of use.
- The customer in the contract has the right to obtain substantially all of the economic benefits from the use of the asset throughout the period of use.
- The customer in the contract has the right to direct the use of the asset throughout the period of use – the customer is considered to have the right to direct the use of the asset only if either:
  - The customer has the right to direct how and for what purpose the identified asset is used throughout the period of use; or
  - The relevant decisions about how and for what purposes the asset is used are predetermined and the customer has the right to operate the asset, or the customer designed the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use.

AGL has applied the above approach in identifying leases in contracts entered into, or modified, on or after 1 July 2018. For contracts entered into before 1 July 2018, AGL has elected to apply the grandfathering practical expedient on transition as detailed in note 38(c). Consequently, the transition and measurement requirements only apply to arrangements that were identified as leases pursuant to the previous leases standards as at and subsequent to 1 July 2018.

AGL as lessee

In contracts where AGL is a lessee, AGL recognises a right-of-use asset and a lease liability at the commencement date of the lease for all leases other than short-term or low-value asset leases.

Lease liabilities

A lease liability is recognised in relation to each lease and is initially measured at the present value of future lease payments at the commencement date. To calculate the present value, the future lease payments are discounted using the interest rate implicit in the lease (IRIL), if the rate is readily determinable. If the IRIL cannot be readily determined, the incremental borrowing rate at the commencement date is used. Lease payments included in the measurement of the lease liability comprise the following:

- Fixed payments, including in-substance fixed payments;
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date (e.g. payments that vary due to changes in CPI, or commodity prices); and
- Amounts expected to be payable by the lessee under residual value guarantees, purchase options and termination penalties (where relevant).

Variable payments other than those included in the measurement of the lease liability above (i.e. those not based on an index or rate) are recognised in profit or loss in the period in which the event or condition that triggers those payments occur.

For contracts containing lease and non-lease components, AGL accounts for each lease component separately from the non-lease components of the contract, where material. The consideration in the contract is allocated to the components based on their relative stand-alone prices.

Subsequently, the lease liability is measured in a manner similar to other financial liabilities, i.e., at amortised cost using the effective interest rate method. This means the liability is:

- Increased to reflect interest on the lease liability;
- Decreased to reflect lease payments made; and
- Remeasured to reflect any reassessment of lease payments or lease modifications, or to reflect revised in-substance fixed lease payments.

After commencement date, the following amounts are recognised in profit or loss with respect to the payments pursuant to the lease:

- interest expense: recognised as finance cost; and
- variable lease payments not based on an index or a rate: recognised in profit or loss in the period in which the event or condition that triggers those payments occurs.

Short-term and low value leases

AGL has elected to apply the practical expedients available for short-term leases (i.e. where the lease term is less than 12 months) and low-value asset leases. As a result of application of these practical expedients, the measurement requirements above do not apply and the expense for these leases is recognised on a straight-line basis.

18. Borrowings (cont.)

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Leases

Lease term

Where lease arrangements contain options to extend the term or terminate the contract, AGL assesses whether it is 'reasonably certain' that the option to extend or terminate the contract will be made. Consideration is given to the prevalence of other contractual arrangements and or the economic circumstances relevant to the lease contract, that may indicate the likelihood of the option being exercised. Lease liabilities and ROU assets are measured using the reasonably certain contract term.

Lease discount rates

The discount rate applicable to a lease arrangement is determined at the inception of the contract or when certain modifications are made to the contract. The discount rate applied is the rate implicit in the arrangement, or if unknown, AGL's incremental borrowing rate. The incremental borrowing rate is determined with reference to AGL's borrowing portfolio at the inception of the arrangement or the time of the modification and the amount and nature of the lease arrangement. If the arrangement relates to a specialised asset, incremental project financing assumptions are considered.

19. Provisions

	2019 $m	2018 $m
Current		
Employee benefits	**184**	189
Environmental restoration	**12**	18
Onerous contracts	**25**	25
Restructuring	**4**	1
Total current provisions	**225**	**233**

	2019 $m	2018 $m
Non-current		
Employee benefits	**13**	38
Environmental restoration	**330**	308
Onerous contracts	**138**	163
Total non-current provisions	**481**	509

Movements in each class of provision, except employee benefits, are set out below:

	Environmental restoration $m	Restructuring $m	Onerous contracts $m	Total $m
Balance at 1 July 2018	**326**	**1**	**188**	**515**
Additional provisions recognised	**3**	**8**	**-**	**11**
Provisions utilised and derecognised	**(16)**	**(5)**	**(31)**	**(52)**
Unwinding of discount	**29**	**-**	**6**	**35**
Balance at 30 June 2019	**342**	**4**	**163**	**509**

19. Provisions (cont.)

ACCOUNTING POLICY

Provisions

Provisions are recognised when AGL has a present obligation (legal or constructive) as a result of a past event, it is probable that AGL will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows. The unwinding of the discount is recognised in profit or loss as part of finance costs.

Onerous contracts

A provision for onerous contracts is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract.

Environmental restoration

The provision for future restoration costs is the best estimate of the present value of the expenditure required to settle the restoration obligation at the end of the reporting period, based on current legal requirements and current technology. Future restoration costs are reviewed periodically and any changes are reflected in the provision at the end of each reporting period.

The initial estimate of the environmental restoration provision relating to exploration, development and production facilities is capitalised into the cost of the related asset and depreciated/amortised on the same basis as the related asset. Changes in the estimate of the provision for environmental restoration are treated in the same manner, except that the unwinding of the effect of discounting on the provision is recognised as a finance cost rather than being capitalised into the cost of the related asset.

Restructuring

A restructuring provision is recognised when AGL has developed a detailed formal plan for the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected by it. Future operating losses are not provided for.

Employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave, long service leave and sick leave when it is probable that settlement will be required and they are capable of being measured reliably.

Liabilities recognised in respect of short-term employee benefits are measured at their nominal values using the remuneration rate expected to apply at the time of settlement.

Liabilities recognised in respect of long-term employee benefits are measured as the present value of the estimated future cash outflows to be made by AGL in respect of services provided by employees up to the end of the reporting period.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Provision for environmental restoration

AGL estimates the future removal and restoration costs of electricity generation assets, oil and gas production facilities, wells, pipelines and related assets at the time of installation of the assets. In most instances, removal of these assets will occur many years into the future. The calculation of this provision requires management to make assumptions regarding the removal date, application of environmental legislation, the extent of restoration activities required and available technologies.

20. Other financial liabilities

	2019 $m	2018 $m
Current		
Derivative financial instruments - at fair value		
Cross currency swap contracts - cash flow and fair value hedges	-	4
Interest rate swap contracts - cash flow hedges	20	15
Energy derivatives - cash flow hedges	-	24
Energy derivatives - economic hedges	576	316
	596	359
Deferred consideration	36	35
Total current other financial liabilities	632	394
Non-current		
Derivative financial instruments - at fair value		
Cross currency swap contracts - cash flow and fair value hedges	-	55
Interest rate swap contracts - cash flow hedges	37	28
Energy derivatives - cash flow hedges	5	71
Energy derivatives - economic hedges	77	102
	119	256
Deferred consideration	163	176
Total non-current other financial liabilities	282	432

ACCOUNTING POLICY

Financial Instruments

Refer to Note 36.

Deferred consideration

To the extent that deferred consideration is payable after one year from the acquisition date, the deferred consideration is discounted at an appropriate interest rate and, accordingly, carried at net present value in the Consolidated Statement of Financial Position. The discount component is then unwound as an interest charge in profit or loss over the life of the obligation.

21. Other liabilities

	Note	2019 $m	Restated 2018 $m[1]
Current			
Deferred revenue		4	2
Total current other liabilities		4	2
Non-current			
Deferred revenue		17	18
Defined benefit superannuation plan liability	32	152	76
Other		60	45
Total non-current other liabilities		229	139

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).

22. Issued capital

	2019 $m	2018 $m
655,825,043 fully-paid ordinary shares (30 June 2018: 655,825,043)	**6,223**	6,223

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding-up of the Parent Entity in proportion to the number of shares held. Every ordinary Shareholder present at a general meeting of the Parent Entity, in person or by proxy is entitled to one vote per share.

ACCOUNTING POLICY

Issued capital

Ordinary shares are classified as equity. Ordinary shares issued by AGL are recorded at the proceeds received, less transaction costs directly attributable to the issue of new shares, net of any tax effects.

23. Earnings per share

	2019	Restated 2018[1]
Statutory earnings per share		
Basic earnings per share	**138.0 cents**	241.2 cents
Diluted earnings per share	**137.8 cents**	240.9 cents
Underlying earnings per share		
Basic earnings per share	**158.6 cents**	155.2 cents
Diluted earnings per share	**158.4 cents**	155.0 cents

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Earnings used in calculating basic and diluted earnings per share

	2019 $m	Restated 2018 $m[1]
Statutory earnings used to calculate basic and diluted earnings per share	**905**	1,582
Significant income items after income tax	**(4)**	(2)
Loss/(gain) in fair value of financial instruments after income tax	**139**	(562)
Underlying earnings used to calculate basic and diluted earnings per share	**1,040**	1,018

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Weighted average number of ordinary shares

	30 June 2019 Number	30 June 2018 Number
Number of ordinary shares used in the calculation of basic earnings per share	**655,825,043**	655,825,043
Effect of dilution - LTIP share performance rights	**711,067**	772,813
Number of ordinary shares used in the calculation of diluted earnings per share	**656,536,110**	656,597,856

24. Commitments

(a) Capital expenditure commitments

Property, plant and equipment and intangible assets

	2019 $m	2018 $m
Not later than one year	**147**	286
Later than one year and not later than five years	**2**	25
	149	311

There are nil (2018: nil) joint operations capital commitments and AGL's share of associates' commitments is nil (2018: nil).

(b) Joint venture commitments

AGL's share of commitments made jointly with other investors relating to its joint ventures are as follows:

Commitments to contribute funds for the acquisition of property, plant and equipment	**-**	60

25. Contingent liabilities

Certain entities in AGL are party to various legal actions and claims which have arisen in the ordinary course of business. Any liabilities arising from such legal actions and claims are not expected to have a material adverse effect on AGL.

Provisions are not required in respect of these matters, as it is either not probable that a future sacrifice of economic benefits will be required or the amount is not capable of reliable measurement.

26. Remuneration of auditors

Auditor of the Parent Entity

	2019 $000	2018 $000
Deloitte Touche Tohmatsu Australia		
Audit and review of Group financial reports	**1,674**	1,462
Other regulatory audit services	**173**	173
Other assurance services	**161**	148
Other accounting advice and services	**25**	-
	2,033	**1,783**
Deloitte Touche Tohmatsu related practices		
Audit of subsidiary financial reports	**25**	-
Total remuneration of auditors	**2,058**	**1,783**

The auditor of AGL Energy Limited is Deloitte Touche Tohmatsu Australia.

27. Subsidiaries

Name of subsidiary	Note	Country of incorporation	Ownership interest and voting power held 2019 %	2018 %
AGL Limited		New Zealand	**100**	100
AGL ACT Retail Investments Pty Limited	(a)	Australia	**100**	100
AGL Barker Inlet Pty Limited	(a)	Australia	**100**	100
AGL Community Legacy Program Pty Limited	(a)	Australia	**100**	100
AGL Corporate Services Pty Limited	(a)	Australia	**100**	100
AGL Electricity (VIC) Pty Limited	(a)	Australia	**100**	100
Victorian Energy Pty Limited	(a)	Australia	**100**	100
AGL Sales Pty Limited	(a)	Australia	**100**	100
AGL Sales (Queensland) Pty Limited	(a)	Australia	**100**	100
AGL Sales (Queensland Electricity) Pty Limited	(a)	Australia	**100**	100
AGL Torrens Island Holdings Pty Limited	(a)	Australia	**100**	100
AGL SA Generation Pty Limited	(a)	Australia	**100**	100
AGL Torrens Island Pty Limited	(a)	Australia	**100**	100
AGL South Australia Pty Limited	(a)	Australia	**100**	100
AGL APG Holdings Pty Limited	(a)	Australia	**100**	100
Australian Power and Gas Company Limited	(a)	Australia	**100**	100
Australian Power and Gas Pty Limited	(a)	Australia	**100**	100
APG Operations Pty Ltd	(a)	Australia	**100**	100
Australian Power and Gas (NSW) Pty Ltd	(a)	Australia	**100**	100
Ignition Energy Pty Ltd	(a)	Australia	**100**	100
Greentricity Pty Limited	(a)	Australia	**100**	100
IQ Energy Services Pty Ltd	(a)	Australia	**100**	100
AGL Energy Limited		New Zealand	**100**	100
AGL Energy Sales & Marketing Limited	(a)	Australia	**100**	100
AGL Energy Services Pty Limited	(a)	Australia	**100**	100
AGL Financial Energy Solutions Pty Limited	(a)	Australia	**100**	100
AGL Gas Developments (Hunter) Pty Limited	(a)	Australia	**100**	100
AGL Gas Developments (PNG) Pty Limited	(a)	Australia	**100**	100
AGL Gas Developments (Sydney) Pty Limited	(a)	Australia	**100**	100
AGL Generation Holdco Pty Ltd		Australia	**99.99**	99.99
AGL Generation Proprietary Limited	(b)	Australia	**100**	100
Great Energy Alliance Corporation Pty Limited	(b)	Australia	**100**	100
GEAC Operations Pty Limited	(b)	Australia	**100**	100
AGL LYP 1 Pty Ltd	(b)	Australia	**100**	100
AGL Loy Yang Partnership		Australia	**25**	25
AGL Loy Yang Pty Ltd		Australia	**25**	25
AGL Loy Yang Projects Pty Ltd		Australia	**25**	25
AGL LYP 2 Pty Ltd	(b)	Australia	**100**	100
AGL Loy Yang Partnership		Australia	**25**	25
AGL Loy Yang Pty Ltd		Australia	**25**	25
AGL Loy Yang Projects Pty Ltd		Australia	**25**	25
AGL LYP 3 Pty Ltd	(b)	Australia	**100**	100
AGL Loy Yang Partnership		Australia	**24.63**	24.63
AGL Loy Yang Pty Ltd		Australia	**24.63**	24.63
AGL Loy Yang Projects Pty Ltd		Australia	**24.63**	24.63
AGL LYP 4 BV		Netherlands	**100**	100
AGL Loy Yang Partnership		Australia	**25.37**	25.37
AGL Loy Yang Pty Ltd		Australia	**25.37**	25.37
AGL Loy Yang Projects Pty Ltd		Australia	**25.37**	25.37

27. Subsidiaries (cont.)

Name of subsidiary	Note	Country of incorporation	Ownership interest and voting power held 2019 %	2018 %
Loy Yang Marketing Holdings Pty Limited	(b)	Australia	**100**	100
AGL Loy Yang Marketing Pty Ltd	(b)	Australia	**100**	100
AGL Gloucester MG Pty Ltd	(a)	Australia	**100**	100
AGL HP1 Pty Limited	(a)	Australia	**100**	100
AGL Hydro Partnership		Australia	**49.5**	49.5
AGL Southern Hydro (NSW) Pty Limited	(a)	Australia	**100**	100
AGL HP2 Pty Limited	(a)	Australia	**100**	100
AGL Hydro Partnership		Australia	**20.0**	20.0
AGL HP3 Pty Limited	(a)	Australia	**100**	100
AGL Hydro Partnership		Australia	**30.5**	30.5
AGL LNG Pty Ltd	(a)(c)	Australia	**100**	-
AGL Macquarie Pty Limited	(a)	Australia	**100**	100
AGL New Energy Pty Limited	(a)	Australia	**100**	100
AGL New Energy ACP Pty Limited	(a)	Australia	**100**	100
AGL New Energy EIF Pty Limited	(a)	Australia	**100**	100
AGL New Energy Investments Pty Limited	(a)	Australia	**100**	100
AGL PARF NSW Pty Limited	(a)	Australia	**100**	100
AGL PARF QLD Pty Limited	(a)	Australia	**100**	100
AGL Power Generation Pty Limited	(a)	Australia	**100**	100
AGL Power Generation (Wind) Pty Limited	(a)	Australia	**100**	100
Australia Plains Wind Farm Pty Ltd	(a)	Australia	**100**	100
Ben Lomond Wind Farm Pty Ltd	(a)	Australia	**100**	100
Box Hill Wind Farm Pty Limited	(a)	Australia	**100**	100
Crows Nest Wind Farm Pty Ltd	(a)	Australia	**100**	100
Highfields Wind Farm Pty Limited	(a)	Australia	**100**	100
Worlds End Wind Farm Pty Ltd	(a)	Australia	**100**	100
AGL PV Solar Holdings Pty Limited	(a)	Australia	**100**	100
AGL PV Solar Developments Pty Limited	(a)	Australia	**100**	100
AGL Retail Energy Limited	(a)	Australia	**100**	100
AGL Share Plan Pty Limited	(a)	Australia	**100**	100
AGL (SG) (Camden) Operations Pty Limited	(a)	Australia	**100**	100
AGL (SG) (Hunter) Operations Pty Limited	(a)	Australia	**100**	100
AGL (SG) Operations Pty Limited	(a)	Australia	**100**	100
AGL Shipping Pty Ltd	(a)(c)	Australia	**100**	-
AGL Upstream Gas (Mos) Pty Limited	(a)	Australia	**100**	100
AGL Cooper Basin Pty Ltd	(a)	Australia	**100**	100
AGL Gas Storage Pty Ltd	(a)	Australia	**100**	100
AGL Upstream Infrastructure Investments Pty Limited	(a)	Australia	**100**	100
AGL Upstream Investments Pty Limited	(a)	Australia	**100**	100
AGL Wholesale Gas Limited	(a)	Australia	**100**	100
AGL Wholesale Gas (SA) Pty Limited	(a)	Australia	**100**	100
Barker Inlet Trust	(e)	Australia	**100**	100
Barn Hill Wind Farm Pty Ltd	(a)	Australia	**100**	100
Connect Now Pty Ltd	(a)	Australia	**100**	100
Coopers Gap Wind Farm Pty Ltd	(a)	Australia	**100**	100
Digital Energy Exchange Australia Pty Limited	(a)	Australia	**100**	100
Geogen Victoria Pty Ltd	(a)	Australia	**100**	100
GRCI Australia Pte Ltd	(c)	Singapore	**100**	-
H C Extractions Pty Limited	(a)	Australia	**100**	100
NGSF Asset Pty Limited	(a)	Australia	**100**	100

27. Subsidiaries (cont.)

Name of subsidiary	Note	Country of incorporation	Ownership interest and voting power held 2019 %	2018 %
NGSF Assets Trust		Australia	**100**	100
NGSF Finance Pty Limited	(a)	Australia	**100**	100
NGSF Operations Pty Limited	(a)	Australia	**100**	100
NGSF Operations Trust		Australia	**100**	100
Powerdirect Pty Ltd	(a)	Australia	**100**	100
Silverton Wind Farm Holdings Pty Limited	(a)	Australia	**100**	100
Silverton Wind Farm Developments Pty Limited	(a)	Australia	**100**	100
Silverton Wind Farm Transmission Pty Limited	(a)	Australia	**100**	100
The Australian Gas Light Company	(a)	Australia	**100**	100
Wellington North Solar Farm Pty Limited	(a)	Australia	**100**	100

Names inset indicate that shares are held by the company immediately above the inset.

(a) Parties to a Deed of Cross Guarantee with AGL Energy Limited as detailed in Note 31.

(b) Parties to a Deed of Cross Guarantee with AGL Generation Proprietary Limited as detailed in Note 31.

(c) Incorporated during the financial year.

28. Acquisition of subsidiaries and businesses

There were no acquisitions of subsidiaries and businesses made during the year ended 30 June 2019 and 30 June 2018.

29. Disposal of subsidiaries and businesses

2019

Disposal of National Assets

On 11 September 2018, AGL completed the divestment of its portfolio of small generation and compressed natural gas refuelling assets, National Assets, for consideration of $136 million.

2018

Disposal of Active Stream Pty Limited

On 30 November 2017, AGL completed the divestment of 100% of the shares in its digital metering subsidiary, Active Stream Pty Limited, and associated metering assets, for consideration of $165 million.

The major classes of assets and liabilities disposed were as follows:

	2019 $m	2018 $m
Assets		
Trade and other receivables	**41**	1
Prepayments	**1**	-
Inventories	**-**	18
Property, plant and equipment	**33**	115
Other assets	**2**	-
Liabilities		
Trade and other payables	-	(4)
Net assets disposed	**77**	130
Consideration		
Consideration received in cash	**136**	165
Costs directly attributable to the disposal	**(7)**	(5)
Liability assumed	**-**	(5)
	129	155
Gain on disposal of subsidiaries and businesses		
Consideration	**129**	155
Net assets disposed	**(77)**	(130)
	52	25
Net cash inflow on disposal of subsidiaries and businesses		
Consideration received in cash	**136**	165
Costs directly attributable to the disposal paid	**(7)**	(5)
	129	160

30. Joint operations

Joint operation	Principal activities	Interest 2019 %	Interest 2018 %
Bowen Basin - Queensland			
Moranbah Gas Project - PL 191, PL 196, PL 222, PL 223 & PL 224	Gas production and exploration	**50**	50
Spring Gully Project - ATP 592P, PL 195, PL 203 & PL 417	Gas production and exploration	**0.75**	0.75
Spring Gully Project - PL 204	Gas production	**0.0375**	0.0375
Surat Basin - Queensland			
ATP 1190 (Bainbilla Block)	Oil and gas exploration	**75.252**	75.252
ATP 1190 (Spring Grove #2 sole risk)	Oil and gas exploration	**52.752**	52.752
ATP 1190 (Weribone)	Oil and gas exploration	**28.71**	28.71
PL 1 (Cabawin)	Oil production	**23.08**	23.08
PL 15	Gas production	**75**	75
PL 30 (Riverslea)	Oil production	**10**	10
PL 74 (Major)	Oil production	**16**	16
Others			
North Queensland Energy Joint Venture	Sale of gas and electricity	**50**	50
Lytton Joint Venture[1]	Crude oil storage terminal	**-**	33.333

1. AGL divested its interest in the Lytton Joint Venture in April 2019. A loss of $2m was recognised on disposal of the assets and liabilities.

AGL's interest in assets employed in the above joint operations is detailed below. The amounts are included in the consolidated financial statements under their respective asset categories.

	2019 $m	2018 $m
Current assets		
Cash and cash equivalents	**2**	3
Trade and other receivables	**3**	3
Total current assets	**5**	6
Total non-current assets	**-**	-
Total assets	**5**	6

AGL's share of capital expenditure commitments and contingent liabilities of joint operations are disclosed in Notes 24 and 25 respectively.

ACCOUNTING POLICY

Joint operations

AGL has joint operations where the entity has joint control and direct rights to the assets, liabilities, revenues and expenses. This share has been recognised in accordance with the accounting standards applicable to the particular assets, liabilities, revenues and expenses.

31. Deeds of cross guarantee

The wholly-owned subsidiaries identified in Note 27 have entered into a Deed of Cross Guarantee with AGL in accordance with ASIC Corporations (Wholly-owned Companies) Instrument 2016/785 and are relieved from the Corporations Act 2001 requirement to prepare and lodge an audited financial report and directors' report. The effect of the deed is that each party guarantees the debts of the others.

The following wholly-owned subsidiaries became a party to the Deed of Cross Guarantee by way of an Assumption Deed dated 24 May 2019:

- AGL Shipping Pty Limited
- AGL LNG Pty Limited

Set out below is the statement of profit or loss, statement of comprehensive income, statement of financial position and a summary of movements in retained earnings of the entities party to a Deed of Cross Guarantee.

Statement of profit or loss

	AGL Energy Limited		AGL Generation Pty Ltd	
	2019 $m	Restated 2018 $m[1]	2019 $m	2018 $m
Revenue	**10,465**	9,724	**404**	4
Other income	**457**	31	**-**	-
Expenses	**(8,333)**	(8,728)	**(4)**	(4)
Share of profits/(losses) of associates and joint ventures	**33**	39	**(142)**	1,335
Profit before net financing costs, depreciation and amortisation	**2,622**	1,066	**258**	1,335
Depreciation and amortisation	**(437)**	(403)	**-**	-
Profit before net financing costs	**2,185**	663	**258**	1,335
Finance income	**85**	86	**-**	-
Finance costs	**(196)**	(210)	**(13)**	(14)
Net financing costs	**(111)**	(124)	**(13)**	(14)
Profit before tax	**2,074**	539	**245**	1,321
Income tax (expense)/benefit	**(442)**	(141)	**47**	(396)
Profit for the year	**1,632**	398	**292**	925

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Statement of comprehensive income

Profit for the year	**1,632**	398	**292**	925
Other comprehensive income				
Items that will not be reclassified subsequently to profit or loss				
Remeasurement (loss)/gain on defined benefit plans	**(54)**	15	**(27)**	20
Fair value gain on the revaluation of equity instrument financial assets	**2**	-	**-**	-
Income tax relating to items that will not be reclassified subsequently	**12**	(5)	**8**	(6)
	(40)	10	**(19)**	14
Items that may be reclassified subsequently to profit or loss				
Cash flow hedges	**96**	(159)	**-**	-
Cost of hedging basis adjustment	**4**	-	**-**	-
Equity instrument financial assets	**-**	(3)	**-**	-
Income tax relating to items that may be reclassified subsequently	**(30)**	48	**-**	-
	70	(114)	**-**	-
Other comprehensive income/(loss) for the year, net of income tax	**30**	(104)	**(19)**	14
Total comprehensive income for the year	**1,662**	294	**273**	939

31. Deeds of cross guarantee (cont.)

Statement of financial position

	AGL Energy Limited		AGL Generation Pty Ltd	
	2019 $m	Restated 2018 $m[1]	2019 $m	2018 $m
Current assets				
Cash and cash equivalents	**78**	452	**1**	1
Trade and other receivables	**1,526**	1,522	**-**	1
Inventories	**313**	294	**-**	-
Current tax assets	**89**	147	**-**	-
Other financial assets	**848**	922	**-**	-
Other assets	**60**	71	**-**	4
Assets classified as held for sale	**-**	74	**-**	-
Total current assets	**2,914**	3,482	**1**	6
Non-current assets				
Trade and other receivables	**-**	-	**-**	319
Inventories	**57**	10	**-**	-
Other financial assets	**3,287**	3,459	**5,032**	4,712
Investments in associates and joint ventures	**150**	100	**-**	-
Property, plant and equipment	**3,153**	3,356	**-**	-
Intangible assets	**2,816**	2,343	**-**	-
Deferred tax assets	**-**	310	**-**	-
Other assets	**39**	64	**-**	-
Total non-current assets	**9,502**	9,642	**5,032**	5,031
Total assets	**12,416**	13,124	**5,033**	5,037
Current liabilities				
Trade and other payables	**1,304**	1,348	**-**	11
Borrowings	**93**	26	**-**	-
Provisions	**192**	179	**-**	-
Current tax liabilities	**-**	-	**209**	-
Other financial liabilities	**596**	2,014	**-**	-
Other liabilities	**4**	2	**-**	-
Total current liabilities	**2,189**	3,569	**209**	11
Non-current liabilities				
Borrowings	**2,637**	2,817	**-**	-
Provisions	**405**	435	**-**	-
Deferred tax liabilities	**10**	-	**102**	358
Other financial liabilities	**204**	259	**1,432**	151
Other liabilities	**132**	94	**-**	-
Total non-current liabilities	**3,388**	3,605	**1,534**	509
Total liabilities	**5,577**	7,174	**1,743**	520
Net assets	**6,839**	5,950	**3,290**	4,517
Equity				
Issued capital	**6,223**	6,223	**2,878**	2,878
Reserves	**(33)**	(102)	**-**	-
Retained earnings/(accumulated losses)	**649**	(171)	**412**	1,639
Total equity	**6,839**	5,950	**3,290**	4,517

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

31. Deeds of cross guarantee (cont.)

Summary of movements in (accumulated losses)/retained earnings

	AGL Energy Limited		AGL Generation Pty Ltd	
	2019 $m	Restated 2018 $m[1]	2019 $m	2018 $m
(Accumulated losses)/retained earnings at beginning of financial year	**(171)**	103	**1,639**	**700**
Profit for the year	**1,632**	398	**292**	**925**
Dividends paid	**(774)**	(682)	**(1,500)**	**-**
Remeasurement (loss)/gain on defined benefit plans, net of tax	**(38)**	10	**(19)**	**14**
Retained earnings/(accumulated losses) at end of financial year	**649**	(171)	**412**	**1,639**

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

32. Defined benefit superannuation plans

AGL contributes to superannuation plans that provide defined benefit members a lump sum on retirement, death, disablement and withdrawal. Some defined benefit members are eligible for pension benefits in some cases. Lump sum benefits are calculated based on years of service and final average salary. The defined benefit plans are closed to new members.

The plans are the Equipsuper Fund (EF), Electricity Industry Superannuation Scheme (EISS), State Superannuation Scheme (SSS), State Authorities Superannuation Scheme (SASS) and the State Authorities Non-contributory Superannuation Scheme (SANCS).

The Superannuation Industry Supervision (SIS) legislation governs the superannuation industry and provides the framework within which superannuation plans operate. The SIS Regulations require an actuarial valuation to be performed for each defined benefit plan every three years, or every year if the plan pays defined benefit pensions.

The plans' trustees are responsible for the governance of the plans. The trustees have a legal obligation to act solely in the best interests of plan beneficiaries. The trustees have the following roles: administration of the plans and payment to the beneficiaries from plan assets when required in accordance with the plan rules; management and investment of the plan assets; and compliance with other applicable regulations.

There are a number of risks to which the plans expose AGL. The most significant risks are investment risk, salary growth risk, inflation risk, interest rate risk, legislative risk and changes in the life expectancy for members.

AGL also contributes to defined contribution superannuation plans for employees, which are also provided by these plans. Contributions made to these defined contribution plans are expensed as incurred.

Amounts recognised in profit or loss

	2019 $m	2018 $m
Current service cost	**17**	20
Net interest expense	**2**	2
Expense recognised in profit or loss as part of employee benefits expenses	**19**	22

Amounts recognised in other comprehensive income

	2019 $m	2018 $m
Remeasurements		
Return on plan assets (excluding amounts included in net interest expense)	**(14)**	(33)
Actuarial loss arising from changes in demographic assumptions	**-**	2
Actuarial loss/(gain) arising from changes in financial assumptions	**96**	(7)
Actuarial loss/(gain) arising from experience	**8**	(4)
Remeasurement loss/(gain) on defined benefit plans recognised in other comprehensive income	**90**	(42)

32. Defined benefit superannuation plans (cont.)

Amounts included in the Consolidated Statement of Financial Position

	Note	2019 $m	2018 $m
Present value of funded defined benefit obligations		**796**	725
Fair value of plan assets		**(651)**	(688)
Net defined benefit liability		**145**	37
Recognised in the Consolidated Statement of Financial Position as follows:			
Defined benefit superannuation plan asset	12	**(7)**	(39)
Defined benefit superannuation plan liability	21	**152**	76
Net defined benefit liability		**145**	37
Net liability at beginning of financial year		**37**	62
Transfer to defined contribution superannuation plans		**4**	-
Expense recognised in profit or loss		**19**	22
Amounts recognised in other comprehensive income		**90**	(42)
Employer contributions		**(5)**	(5)
Net liability at end of financial year		**145**	37

Movements in the present value of defined benefit obligations

	2019 $m	2018 $m
Opening defined benefit obligations	**725**	766
Current service cost	**17**	20
Interest expense	**28**	28
Contributions by plan participants	**7**	8
Actuarial loss arising from changes in demographic assumptions	**-**	2
Actuarial loss/(gain) arising from changes in financial assumptions	**96**	(7)
Actuarial loss/(gain) arising from experience	**8**	(4)
Benefits paid	**(83)**	(86)
Taxes, premiums and expenses paid	**(2)**	(2)
Closing defined benefit obligations	**796**	725

Movements in the fair value of plan assets

	2019 $m	2018 $m
Opening fair value of plan assets	**688**	704
Interest income	**26**	26
Return on plan assets (excluding amounts included in net interest expense)	**14**	33
Employer contributions	**5**	5
Contributions by plan participants	**7**	8
Benefits paid	**(83)**	(86)
Taxes, premiums and expenses paid	**(2)**	(2)
Transfer to defined contribution superannuation plans	**(4)**	-
Closing fair value of plan assets	**651**	688

32. Defined benefit superannuation plans (cont.)

Categories of plan assets

The major categories of plan assets as a percentage of the fair value of total plan assets at the end of the reporting period are as follows:

2019	EF %	EISS %	SSS, SASS, and SANCS %
Australian equities	**14**	**25**	**20**
International equities	**19**	**21**	**27**
Fixed interest securities	**19**	**13**	**10**
Property	**7**	**13**	**8**
Cash	**17**	**7**	**10**
Alternatives/other	**24**	**21**	**25**

2018			
Australian equities	15	24	22
International equities	17	22	26
Fixed interest securities	20	11	8
Property	8	13	9
Cash	17	9	11
Alternatives/other	23	21	24

All plan assets are held within investment funds which do not have a quoted market price in an active market.

The fair value of plan assets include no amounts relating to any of AGL's own financial instruments; or any property occupied by, or other assets used by AGL.

Principal actuarial assumptions

The principal actuarial assumptions at the end of the reporting period (expressed as weighted averages) were as follows:

2019	EF %	EISS %	SSS, SASS, & SANCS %
Discount rate active members	**2.6**	**3.1**	**3.1**
Discount rate pensioners	**2.6**	**3.1**	**-**
Expected salary increase rate	**2.5 – 5.0**	**2.5**	**3.2**
Expected pension increase rate	**2.5**	**2.5**	**-**

2018			
Discount rate active members	3.7	4.1	4.2
Discount rate pensioners	3.7	4.1	-
Expected salary increase rate	2.5 – 5.0	2.5 – 3.5	2.7 – 3.2
Expected pension increase rate	2.5	2.5	-

32. Defined benefit superannuation plans (cont.)

Sensitivity analysis

The sensitivity analyses below have been determined based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

	Defined benefit obligation			
	Increase 2019 $m	Decrease 2019 $m	Increase 2018 $m	Decrease 2018 $m
Discount rate (0.5 percentage point movement)	**(47)**	**54**	(40)	46
Expected salary increase rate (0.5 percentage point movement)	**32**	**(29)**	18	(17)
Expected pension increase rate (0.5 percentage point movement)	**11**	**(10)**	9	(8)

The sensitivity analyses presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

There was no change in the methods and assumptions used in preparing the sensitivity analyses from prior years.

Funding arrangements and employer contributions

Employer contributions are determined based on actuarial advice and are set to target the assets of the plans exceeding the total of members' vested benefits. Funding levels are reviewed regularly. Where assets are less than vested benefits, a management plan must be established to restore the coverage to at least 100%.

AGL expects to contribute $5 million to the defined benefit plans during the year ending 30 June 2020.

The weighted average duration of the defined benefit obligation as at 30 June 2019 was EF 8 years; EISS 12 years; and SSS, SASS and SANCS 14 years.

Defined contribution superannuation plans

AGL makes contributions to a number of defined contribution superannuation plans. The amount recognised as an expense for the year ended 30 June 2019 was $39 million (2018: $36 million).

ACCOUNTING POLICY

Defined benefit superannuation plans

For defined benefit superannuation plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each reporting period. Actuarial gains and losses are recognised directly in other comprehensive income, in the period in which they occur.

Changes in the net defined benefit liability, including all actuarial gains and losses that arise in calculating AGL's obligation in respect of the plan are recognised in other comprehensive income when they occur. All other expenses relating to the defined benefit plans are recognised as an expense in the profit or loss. Any defined benefit superannuation plan asset resulting from this calculation is limited to the present value of available refunds and reductions in future contributions to the plan.

Defined contribution superannuation plans

Contributions to defined contribution superannuation plans are recognised as an expense when employees have rendered service entitling them to the contributions.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Defined benefit superannuation plans

Various actuarial assumptions are utilised in the determination of AGL's defined benefit obligations. AGL uses external actuarial experts to determine these assumptions.

33. Share-based payment plans

AGL operates the following share-based payment plans:

- The share reward plan; and
- The long-term incentive plan.

AGL has the following other equity arrangements:

- The share purchase plan; and
- The restricted equity plan.

Share Reward Plan (SRP)

The SRP is AGL's complying broad-based employee share plan that enables eligible employees to be granted up to $1,000 of ordinary shares in AGL for no consideration each financial year. The SRP is governed by the AGL General Employee Share Plan Rules. The grant of shares is subject to the achievement of performance metrics and can therefore be scaled down in years where all objectives are not met. Shares granted pursuant to the SRP are subject to a trading restriction of the earlier of three years or the participant's cessation of employment.

Eligible participants include all AGL employees with at least 12 months service at the eligibility date (generally 1 September following the financial year end). Participants in the long-term incentive plan are excluded from any SRP grant.

Details of share movements in the SRP during the year are set out below:

Grant date	Balance at 1 July Number	Granted during the year Number	Fair Value per share $	Released during the year Number	Balance at 30 June Number
2019					
28 September 2018	-	**154,024**	**$19.20**	**(15,600)**	**138,424**
29 September 2017	**96,444**	-	-	**(14,858)**	**81,586**
30 September 2016	**111,818**	-	-	**(16,366)**	**95,452**
30 September 2015	**120,231**	-	-	**(120,231)**	-
Total share reward plan shares	**328,493**	**154,024**		**(167,055)**	**315,462**
2018					
29 September 2017	-	106,856	$23.10	(10,412)	96,444
30 September 2016	127,351	-	-	(15,533)	111,818
30 September 2015	136,213	-	-	(15,982)	120,231
30 September 2014	68,244	-	-	(68,244)	-
Total share reward plan shares	331,808	106,856		(110,171)	328,493

The expense recognised in profit or loss, as part of employee benefits expense during the year in relation to the SRP, was $3 million (2018: $2 million).

Long-Term Incentive (LTI) Plan

The LTI plan provides for a grant of performance rights to eligible participants subject to AGL's performance against pre-determined metrics over a three-year performance period. The LTI is governed by the AGL Employee Share Plan Rules. Participation is determined annually at the discretion of the Board.

Generally, performance rights are forfeited on cessation of employment. The Board has discretion with reference to the relevant facts and circumstances of the cessation to vest all or part of the balance, or to authorise a portion of the award to be retained and assessed post-employment.

Current LTI Plans

The performance rights are subject to two performance hurdles, weighted equally, based on:

- Relative Total Shareholder Return (Relative TSR); and
- Return on Equity (ROE).

Relative TSR is calculated by ranking AGL's TSR on a relative basis against the peer group, being S&P/ASX100 companies.

ROE measures the amount of Underlying Profit returned as a percentage of average monthly shareholders equity.

33. Share-based payment plans (cont.)

The performance period for the outstanding LTI plans as at 30 June 2019 are as follows:

FY19: Three years from 1 July 2018 to 30 June 2021

FY18: Three years from 1 July 2017 to 30 June 2020

FY17: Three years from 1 July 2016 to 30 June 2019

The number of shares vested are determined by the vesting schedules detailed in the tables below.

Relative TSR vesting schedule

AGL's TSR ranking against comparator group	Percentage of performance rights which vest		
LTI Plan	FY19	FY18	FY17
Below 50th percentile	Nil	Nil	Nil
50th – 75th percentile	50 – 100%	50 – 100%	50 – 100%
At or above 75th percentile	100%	100%	100%

ROE vesting schedule

Percentage of performance rights which vest	AGL's average ROE per LTI plan		
LTI plan	FY19	FY18	FY17
Nil	Below 10%	Below 11.5%	Below 9%
50 – 90%	10% –12%	N/A	N/A
50 – 100%	N/A	11.5% – 14%	9% – 10%
90 – 100%	12% –14%	N/A	N/A
100%	At or above 14%	At or above 14%	At or above 10%

Details of performance rights movements in the FY19 LTI Plan during the year are set out below:

Grant date	Performance hurdle	Balance at 1 July Number	Granted during the year Number	Fair value per SPR at grant date $	Vested during the year Number	Forfeited during the year Number	Balance at 30 June Number
2019							
FY19 LTI – 24 Oct 2018	**Relative TSR**	-	**188,694**	**$7.18**	-	**(24,464)**	**164,230**
FY19 LTI – 24 Oct 2018	**ROE**	-	**188,668**	**$16.12**	-	**(24,463)**	**164,205**
FY19 LTI – 14 December 2018	**Relative TSR**	-	**2,779**	**$9.78**	-	-	**2,779**
FY19 LTI – 14 December 2018	**ROE**	-	**2,779**	**$17.13**	-	-	**2,779**
Total share rights		-	**382,920**	**$11.68**	-	**(48,927)**	**333,993**

Details of performance rights movements in the FY18 LTI Plan during the year are set out below:

Grant date	Performance hurdle	Balance at 1 July Number	Granted during the year Number	Fair value per SPR at grant date $	Vested during the year Number	Forfeited during the year Number	Balance at 30 June Number
2019							
FY18 LTI – 28 Sep 2017	**Relative TSR**	**206,891**	-	**$10.05**	-	**(66,788)**	**140,103**
FY18 LTI – 28 Sep 2017	**ROE**	**206,871**	-	**$20.86**	-	**(66,782)**	**140,089**
Total share rights		**413,762**	-	**$15.46**	-	**(133,570)**	**280,192**
2018							
FY18 LTI – 28 Sep 2017	Relative TSR	-	213,320	$10.05	-	(6,429)	206,891
FY18 LTI – 28 Sep 2017	ROE	-	213,301	$20.86	-	(6,430)	206,871
Total share rights		-	426,621	$15.46	-	(12,859)	413,762

33. Share-based payment plans (cont.)

Details of performance rights movements in the FY17 LTI Plan during the year are set out below:

Grant date	Performance hurdle	Balance at 1 July Number	Granted during the year Number	Fair value per SPR at grant date $	Vested during the year Number	Forfeited during the year Number	Balance at 30 June Number
2019							
FY17 LTI – 1 Sep 2016	**Relative TSR**	**146,347**	**-**	**$7.96**	**-**	**(14,221)**	**132,126**
FY17 LTI – 1 Sep 2016	**ROE**	**146,323**	**-**	**$16.72**	**-**	**(14,216)**	**132,107**
FY17 LTI – 29 Sep 2016	**Relative TSR**	**83,031**	**-**	**$9.10**	**-**	**(13,883)**	**69,148**
FY17 LTI – 29 Sep 2016	**ROE**	**83,030**	**-**	**$17.11**	**-**	**(13,882)**	**69,148**
Total share rights		**458,731**	**-**	**$12.59**	**-**	**(56,202)**	**402,529**
2018							
FY17 LTI – 1 Sep 2016	Relative TSR	174,587	-	$7.96	-	(28,240)	146,347
FY17 LTI – 1 Sep 2016	ROE	174,563	-	$16.72	-	(28,240)	146,323
FY17 LTI – 29 Sep 2016	Relative TSR	84,565	-	$9.10	-	(1,534)	83,031
FY17 LTI – 29 Sep 2016	ROE	84,563	-	$17.11	-	(1,533)	83,030
Total share rights		518,278	-	$12.59	-	(59,547)	458,731

LTI Transitional Arrangements

To ensure executives were not unfairly disadvantaged by the closure of the pre-FY16 annual banking plan, the Board introduced a transitional arrangement for FY16 and FY17 where executives were provided a grant of restricted shares. This was to provide continuity in the annual vesting opportunities (in FY16 and FY17) pursuant to the old plan. The transitional share grants were subject to a 12 month restriction period from grant, being September 2016 and September 2017.

- The first transitional share grant ($1.1 million, relating to FY16) was granted in September 2016 and vested in September 2017.
- The second and final transitional share grant ($1.1 million, relating to FY17) was granted in September 2017 and vested in September 2018.

Performance rights grant

The fair value of performance rights granted are measured by reference to the fair value. The estimate of the fair value is measured based on the Monte Carlo simulation method. The contractual life of the performance rights is used as an input into this model. Expected volatility is based on the historical share price volatility over the past three years.

	2019 FY19 LTI		2018 FY18 LTI
Grant date	**24 Oct 2018**	**14 Dec 2018**	28 Sep 2017
Weighted average fair value at grant date	**$11.65**	**$13.45**	$15.46
Share price at grant date	**$18.48**	**$19.50**	$23.23
Expected volatility	**20.0%**	**20.0%**	20.0%
Expected dividend yield	**5.1%**	**5.1%**	3.9%
Risk free interest rate (based on government bonds)	**2.0%**	**2.0%**	2.1%

The expense recognised in profit or loss as part of employee benefits expense during the year in relation to performance rights granted to executives under the LTI Plan was $3 million (2018: $4 million).

Shares purchased on-market

During the financial year ended 30 June 2019, 237,116 (2018: 401,340) AGL shares were purchased on-market at an average price of $20.01 (2018: $23.43) per share, for a total consideration of $4,744,676 (2018: $9,403,396), to satisfy employee entitlements pursuant to the SRP and the LTI Plan.

33. Share-based payment plans (cont.)

Other equity arrangements

Share Purchase Plan (SPP)

The SPP is AGL's salary sacrifice plan that enables eligible employees to contribute up to $5,000 per financial year from their ongoing fixed remuneration and/or short-term incentive (STI) award into acquiring ordinary shares in AGL. The SPP is governed under the AGL General Employee Share Plan Rules. Shares granted pursuant to the SPP are subject to a trading restriction of the earlier of four years (from the start of the financial year in which they are acquired) or the participant's cessation of employment. The holding lock is in place to provide for a deferral of income tax for participants.

Eligible participants include all permanent AGL employees. Non-Executive Directors, the Managing Director and Chief Executive Officer, and members of the executive team are excluded from SPP participation.

Details of share movements in the SPP during the year are set out below:

Share movements	Balance at 1 July Number	Granted during the year Number	Fair Value per share $	Released during the year Number	Balance at 30 June Number
2019					
Employees	**141,286**	**116,253**	**$20.26**	**(37,267)**	**220,272**
Total share purchase plan shares	**141,286**	**116,253**		**(37,267)**	**220,272**
2018					
Non-Executive Directors	19,540	-	-	(19,540)	-
Employees	91,919	70,947	$23.48	(21,580)	141,286
Total share purchase plan shares	111,459	70,947		(41,120)	141,286

Restricted Equity Plan (REP)

The REP provides for a grant of restricted shares, either as the deferral component of STI awards for executives, or for other purposes (for example, sign-on or retention awards). The LTI transitional grants were provided for executives pursuant to the REP. The REP is governed pursuant to the AGL Employee Share Plan Rules.

Generally, restricted shares are forfeited on cessation of employment. The Board has discretion with reference to the relevant facts and circumstances of the cessation to vest all or part of the balance, or to authorise a portion of the award to be retained and vest post-employment.

Details of share movements in the REP during the year are set out below:

Share movements	Balance at 1 July Number	Granted during the year Number	Weighted average fair value per share $	Released during the year Number	Balance at 30 June Number
2019					
Current Managing Director and Chief Executive Officer[1]	**3,571**	**3,476**	**$21.49**	**(3,571)**	**3,476**
Former Managing Director and Chief Executive Officer[2,3]	**152,692**	**71,603**	**$21.51**	**(224,295)**	**-**
Employees	**64,395**	**22,228**	**$20.37**	**(52,678)**	**33,945**
Total restricted equity plan shares	**220,658**	**97,307**		**(280,544)**	**37,421**
2018					
Managing Director and Chief Executive Officer[4,5]	195,452	79,692	$22.55	(122,452)	152,692
Employees	101,997	49,599	$22.55	(83,630)	67,966
Total restricted equity plan shares	297,449	129,291		(206,082)	220,658

1. Mr Redman, in his former role as CFO, was granted 3,476 restricted share awards on 21 August 2018 as part of the FY18 performance year STI plan. The restricted shares vest after a period of twelve months, subject to continued service and forfeiture conditions.
2. Mr Vesey was granted 55,931 restricted share awards on 21 August 2018 as part of the FY18 performance year STI plan. The restricted shares vested upon resignation.
3. Mr Vesey was granted 15,672 restricted share awards on 15 February 2019 as part of the FY19 performance year STI plan. The restricted shares vested upon resignation.
4. Mr Vesey was granted 56,415 restricted share awards on 23 August 2017 as part of the FY17 performance year STI plan. The restricted shares vest after a period of twelve months, subject to continued service and forfeiture conditions.
5. Mr Vesey was granted 23,277 restricted share awards on 29 September 2017 as part of the transitional arrangements for closure of the pre-FY16 LTI Plan, to make up for the forgone annual vesting opportunity. The restricted shares vest after a period of twelve months, subject to continued service and forfeiture conditions.

Shares purchased on-market

During the financial year ended 30 June 2019, 213,560 (2018: 200,238) AGL shares were purchased on-market at an average price of $20.71 (2018: $22.88) per share, for a total consideration of $4,423,559 (2018: $4,581,445), to satisfy employee entitlements pursuant to the SPP and REP.

33. Share-based payment plans (cont.)

ACCOUNTING POLICY

Share-based payments

The fair value of performance rights granted to eligible employees pursuant to the AGL Long-Term Incentive Plan is recognised as an employee benefits expense, with a corresponding increase in the employee equity benefits reserve. The fair value is measured at grant date and recognised over the period during which the employees become unconditionally entitled to the performance rights. The fair value at grant date is determined by an independent valuer.

At the end of each reporting period, AGL revises its estimate of the number of performance rights expected to vest. The amount previously recognised as an expense is only adjusted when the performance rights do not vest due to non-market related conditions.

Pursuant to the AGL Share Reward Plan, shares are issued to eligible employees for no consideration and vest immediately on grant date. On this date, the market value of the shares issued is recognised as an employee benefits expense, with a corresponding increase in the employee equity benefits reserve.

34. Related party disclosures

Key management personnel remuneration

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of AGL, directly or indirectly, including the Directors of the Parent Entity.

The aggregate remuneration made to key management personnel is set out below:

	2019 $000	2018 $000
Short-term employee benefits	**9,758**	11,552
Post-employment benefits	**237**	229
Termination benefits	**3,313**	939
Share-based payments	**2,599**	2,713
Total remuneration to key management personnel	**15,907**	15,433

Further details are contained in the Remuneration Report attached to and forming part of the Directors' Report.

Amounts owing by joint ventures and joint operations

ActewAGL Retail Partnership	**53,392**	63,911
Powering Australian Renewables Fund	**151**	2,570
North Queensland Energy Joint Venture	**188**	188

The amount owing is unsecured, interest free and will be settled in cash. No expense has been recognised in the current or the prior period for bad or doubtful debts in respect of the amounts owed by joint ventures.

Amounts owing to joint ventures and joint operations

Powering Australian Renewables Fund	**7**	-

The amount owing is unsecured, interest free and will be net settled in cash.

34. Related party disclosures (cont.)

Trading transactions with joint ventures and joint operations

	2019 $000	2018 $000
ActewAGL Retail Partnership		
AGL sold gas and electricity to the ActewAGL Retail Partnership on normal commercial terms and conditions.		
Net amounts received	**369,024**	373,070
Sunverge Energy Inc		
On 4 February 2016, AGL entered into a supply agreement with Sunverge Energy Inc to supply AGL with battery storage units, energy software and support services on normal commercial terms and conditions. This agreement ceased during the year ended 30 June 2018.		
Net amounts paid	**-**	1,367
Powering Australian Renewables Fund		
AGL has purchased electricity and environmental products from Powering Australian Renewables Fund (PARF) on normal commercial terms and conditions.		
Net amounts received/(paid)	**155**	(5,593)
AGL received management fees from PARF for overseeing the operation and construction of PARF's generation assets.		
Net amounts received	**1,863**	3,651
North Queensland Energy Joint Venture		
North Queensland Energy Joint Venture (NQE) pays management fees to AGL as the operator of NQE.		
Net amounts received	**750**	750

35. Cash and cash equivalents

(a) Reconciliation to cash flow statement

Cash and cash equivalents at the end of the reporting period as shown in the Consolidated Statement of Cash Flows can be reconciled to the related items in the Consolidated Statement of Financial Position as follows:

	2019 $m	2018 $m
Cash at bank and on hand	**99**	163
Short-term deposits	**16**	300
Total cash and cash equivalents	**115**	463

35. Cash and cash equivalents (cont.)

(b) Reconciliation of profit for the year to net cash flows from operating activities

	2019 $m	Restated 2018 $m[1]
Profit for the year	905	1,582
Share of profits of associates and joint ventures	(33)	(39)
Dividends received from joint ventures	27	40
Depreciation and amortisation	625	568
Share-based payment expense	6	6
Loss/(gain) in fair value of financial instruments	198	(803)
Net gain on disposal of subsidiaries and businesses	(52)	(25)
Loss on disposal of assets on exit of business	47	-
Loss on disposal of joint operation	2	-
Net gain on disposal of property, plant and equipment	(2)	(6)
Non-cash finance costs	61	66
Capitalised finance costs	(21)	(11)
Deferred transaction costs on borrowings	-	(2)
Impairment of investments in associates	-	20
Other non-cash expenses	-	8
Changes in assets and liabilities		
Decrease in trade and other receivables	72	56
Increase in inventories	(74)	(32)
Decrease in derivative financial instruments	17	75
(Increase)/decrease in other financial assets	(187)	162
Increase in other assets	(9)	(27)
(Decrease)/increase in trade and other payables	(12)	29
Decrease in provisions	(81)	(23)
Decrease in other financial liabilities	-	(26)
(Decrease)/increase in other liabilities	(1)	20
Decrease in tax assets and liabilities	111	505
Net cash provided by operating activities	1,599	2,143

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

(c) Reconciliation of changes in liabilities arising from financing activities

Year ended 30 June 2019	Balance at beginning of financial year $m[1]	Net repayments $m	Non-cash movements $m	Balance at end of financial year $m
Liabilities arising from financing activities				
USD senior notes	931	-	123	1,054
Subordinated notes	650	(650)	-	-
Medium term notes	598	-	1	599
Bank loans	410	410	-	820
CPI bonds	88	(7)	-	81
Other loans	144	(11)	-	133
Lease liabilities	154	(5)	23	172
Deferred transaction costs	(12)	(1)	4	(9)
	2,963	(264)	151	2,850

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).

35. Cash and cash equivalents (cont.)

Year ended 30 June 2018[1]	Balance at beginning of financial year $m	Net repayments $m	Non-cash movements $m	Balance at end of financial year $m
Liabilities arising from financing activities				
USD senior notes	**938**	**-**	**(7)**	**931**
Subordinated notes	**650**	**-**	**-**	**650**
Medium term notes	**598**	**-**	**-**	**598**
Bank loans	**830**	**(420)**	**-**	**410**
CPI bonds	**160**	**(73)**	**1**	**88**
Other loans	**155**	**(11)**	**-**	**144**
Lease liabilities	**157**	**(9)**	**6**	**154**
Deferred transaction costs	**(15)**	**-**	**3**	**(12)**
	3,473	**(513)**	**3**	**2,963**

1. Comparatives have been restated for the adoption of AASB 16 Leases. Refer to Note 38(c).

ACCOUNTING POLICY

Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand and short-term deposits with an original maturity of three months or less that are readily convertible to known amounts of cash. The carrying amount represents fair value.

For the purposes of the Consolidated Statement of Cash Flows, cash and cash equivalents consist of cash and cash equivalents as defined above net of outstanding bank overdrafts.

36. Financial instruments

(a) Classes and categories of financial instruments and their fair values

The following table combines information about:

- classes of financial instruments based on their nature and characteristics;
  - Amortised cost
  - Fair value through profit or loss ('FVTPL')
  - Fair value through other comprehensive income ('FVOCI')
- the carrying amounts of financial instruments;
- fair values of financial instruments (except financial instruments when carrying amount approximates their fair value); and
- fair value hierarchy levels of financial assets and financial liabilities for which fair value was disclosed.

36. Financial instruments (cont.)

	Carrying value						
	Financial assets			Financial liabilities			
2019 $m	FVTPL	FVOCI	Amortised cost	FVTPL	FVOCI	Amortised cost	Total
Cash and cash equivalents	-	-	115	-	-	-	115
Other financial assets	-	93	-	-	-	-	93
Trade and other receivables	-	-	1,703	-	-	-	1,703
Future deposits and margin calls	-	-	531	-	-	-	531
Borrowings	-	-	-	-	-	(2,678)	(2,678)
Derivative financial instruments	627	-	-	(658)	-	-	(31)
Finance lease liabilities	-	-	-	-	-	(172)	(172)
Trade and other payables	-	-	-	-	-	(1,556)	(1,556)
Deferred consideration	-	-	-	-	-	(199)	(199)
Total	**627**	**93**	**2,349**	**(658)**	**-**	**(4,605)**	**(2,194)**

	Carrying value						
	Financial assets			Financial liabilities			
Restated 2018 $m[1]	FVTPL	FVOCI	Amortised cost	FVTPL	FVOCI	Amortised cost	Total
Cash and cash equivalents	-	-	463	-	-	-	463
Other financial assets	-	64	-	-	-	-	64
Trade and other receivables	-	-	1,775	-	-	-	1,775
Future deposits and margin calls	-	-	344	-	-	-	344
Borrowings	-	-	-	-	-	(2,809)	(2,809)
Derivative financial instruments	567	-	-	(513)	-	-	54
Finance lease liabilities	-	-	-	-	-	(154)	(154)
Trade and other payables	-	-	-	-	-	(1,579)	(1,579)
Deferred consideration	-	-	-	-	-	(211)	(211)
Total	**567**	**64**	**2,582**	**(513)**	**-**	**(4,753)**	**(2,053)**

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

(b) Fair value measurements

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable.

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices).
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

There were no material transfers between Level 1 and Level 2 during the year.

36. Financial instruments (cont.)

2019	Carrying amount $m	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
Financial assets					
Equity instrument financial assets					
Unlisted equity securities	-	-	-	-	-
Unlisted investment funds	93	-	-	93	93
Derivative financial instruments					
Cross currency swap contracts - cash flow and fair value hedges	136	-	136	-	136
Interest rate swap contracts - cash flow hedges	-	-	-	-	-
Forward foreign exchange contracts - cash flow hedges	1	-	1	-	1
Energy derivatives - cash flow hedges	33	-	33	-	33
Energy derivatives - economic hedges	594	145	78	371	594
Total financial assets	857	145	248	464	857
Financial liabilities					
Derivative financial instruments					
Cross currency swap contracts - cash flow and fair value hedges	-	-	-	-	-
Interest rate swap contracts - cash flow hedges	(57)	-	(57)	-	(57)
Energy derivatives - cash flow hedges	(5)	-	(5)	-	(5)
Energy derivatives - economic hedges	(653)	(293)	(151)	(209)	(653)
Total financial liabilities	(715)	(293)	(213)	(209)	(715)

2018	Carrying amount $m	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
Financial assets					
Equity instrument financial assets					
Unlisted equity securities	16	-	-	16	16
Unlisted investment funds	48	-	-	48	48
Derivative financial instruments					
Cross currency swap contracts - cash flow and fair value hedges	72	-	72	-	72
Interest rate swap contracts - cash flow hedges	1	-	1	-	1
Energy derivatives - cash flow hedges	6	-	6	-	6
Energy derivatives - economic hedges	561	34	187	340	561
Total financial assets	704	34	266	404	704
Financial liabilities					
Derivative financial instruments					
Cross currency swap contracts - cash flow and fair value hedges	(59)	-	(59)	-	(59)
Interest rate swap contracts - cash flow hedges	(43)	-	(43)	-	(43)
Energy derivatives - cash flow hedges	(95)	-	(95)	-	(95)
Energy derivatives - economic hedges	(418)	(159)	(70)	(189)	(418)
Total financial liabilities	(615)	(159)	(267)	(189)	(615)

Management has assessed that the carrying value of financial assets (excluding derivative financial assets) and financial liabilities (excluding derivative financial liabilities) to be comparable to fair value.

36. Financial instruments (cont.)

Estimation of fair values

The following summarises the major methods and assumptions used in estimating the fair values of financial instruments:

- Receivables/payables with a remaining life of less than six months, the notional amount is deemed to reflect the fair value. All other receivables/payables are discounted to determine the fair value if the effect of discounting is material.
- The fair value of forward foreign exchange contracts and energy derivatives is calculated as the present value of expected future cash flows estimated and discounted based on the applicable yield curves derived from quoted interest rates that reflect the credit risk of various counterparties. Interest rate and cross currency swaps are measured at the present value of future cash flows estimated and discounted based on the applicable yield curves derived from quoted interest rates that reflect the credit risk of various counterparties.
- The fair value of borrowings is determined as the present value of future contracted cash flows and credit adjustments. Cash flows are discounted using standard valuation techniques at applicable market yield having regard to timing of cash flows.
- The fair value of energy derivatives is determined as the present value of future contracted cash flows and credit adjustments. Cash flows are discounted using standard valuation techniques at applicable market yield having regard to timing of cash flows.
- The fair value of lease liabilities is estimated as the present value of future cash flows discounted where the effect of discounting is material.
- The fair value of deferred consideration is determined as the present value of future contracted cash flows and credit adjustments. Cash flows are discounted using standard valuation techniques at applicable market yield having regard to timing of cash flows.

The following table provides a reconciliation of fair value movements in Level 3 financial instruments.

	2019 $m	2018 $m
Opening balance	**215**	(97)
Total gains or losses recognised in profit or loss		
Settlements during the year	**(413)**	54
Changes in fair value	**457**	263
Premiums	**(32)**	(41)
Purchases	**28**	49
Disposals	**-**	(13)
Closing balance	**255**	215

The total gains or losses for the year included a gain of $11 million relating to energy derivative Level 3 contracts held at the end of the reporting period (2018: a gain of $280 million). Fair value gains or losses on energy derivatives are included in other expenses in the line item 'Loss/(gain) on fair value of financial instruments' in Note 4.

The sensitivity of Level 3 contracts with significant unobservable inputs, where the inputs are higher by 10 percent is $(257) million and lower by 10 percent is $263 million (profit after tax increase/(decrease)). Input changes were applied to forward prices with references to electricity market and emissions schemes, cost-based indexes, contract volumes and management's assumptions on long-term commodity curves.

(c) Capital risk management

AGL's objectives when managing capital are to safeguard its ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders and to maintain an appropriate capital structure of debt and equity.

In order to maintain or adjust the capital structure, AGL may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt. AGL's overall capital management strategy remains unchanged from 2018.

The capital structure of AGL consists of net debt (borrowings offset by cash and cash equivalents) and total equity (comprising issued capital, reserves and retained earnings).

AGL monitors capital on the basis of the gearing ratio and funds from operations (FFO) to interest expense cover.

36. Financial instruments (cont.)

The gearing ratio is calculated as net debt divided by adjusted total capital. Net debt is calculated as total borrowings, adjusted for cross currency swap hedges and deferred borrowing costs, less cash and cash equivalents. Adjusted total capital is calculated as total equity less the hedge reserve plus net debt. The gearing ratio at the end of the reporting period was as follows:

	2019 $m	Restated 2018 $m[1]
Current borrowings	**102**	34
Non-current borrowings	**2,748**	2,929
Total borrowings	**2,850**	2,963
Adjustment for cross currency swap hedges and deferred borrowing costs	**(135)**	(9)
Adjusted total borrowings	**2,715**	2,954
Cash and cash equivalents	**(115)**	(463)
Net debt	**2,600**	2,491
Total equity	**8,438**	8,301
Hedge reserve	**26**	96
Adjusted equity	**8,464**	8,397
Net debt	**2,600**	2,491
Adjusted total capital	**11,064**	10,888
Gearing ratio	**23.5%**	22.9%

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

(d) Financial risk management

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

The Board of Directors has overall responsibility for the establishment and oversight of the risk management policy and framework. The Board has established the Audit & Risk Management Committee (the Committee), which is responsible for approving AGL's risk management policy and framework for identifying, assessing and managing risk. The Committee is also responsible for reviewing and updating the risk profile, monitoring the effectiveness of the risk management framework and reviewing at least annually the implementation of the risk management policy and framework. The Committee reports regularly to the Board of Directors on its activities.

AGL has written policies covering specific areas, such as interest rate risk, foreign currency risk, energy price risk, credit risk, liquidity risk, and the use of derivative and non-derivative financial instruments. Compliance with policies and exposure limits is reviewed on a continuous basis.

(e) Interest rate risk management

AGL is exposed to interest rate risk as it borrows funds at both fixed and floating interest rates. The risk is managed by maintaining an appropriate mix between fixed and floating rate borrowings, and by the use of interest rate swap contracts or other hedging instruments.

AGL regularly analyses its interest rate exposure, by taking into consideration forecast debt positions, refinancing, renewals of existing positions, alternative financing, hedging positions and the mix of fixed and floating interest rates.

At the end of the reporting period, AGL had the following financial assets and liabilities exposed to floating interest rate risk:

Floating rate instruments	2019 $m	2018 $m
Financial assets		
Cash and cash equivalents	**115**	463
Total financial assets	**115**	463
Financial liabilities		
USD senior notes (after effect of cross currency swaps)	**860**	860
Subordinated notes	**-**	650
Bank loans	**820**	410
Other loans	**133**	144
Interest rate swap contracts	**(945)**	(1,205)
Total financial liabilities	**868**	859

36. Financial instruments (cont.)

Interest rate swap contracts - cash flow hedges

The following table details the notional principal amounts and remaining terms of interest rate swap contracts outstanding at the end of the reporting period:

Outstanding hedging instruments cash flow hedge - receive floating, pay fixed contracts	Average contracted fixed interest rate		Notional principal amount		Carrying value of outstanding hedging instruments		Change in fair value of hedging instruments	
	2019 %	2018 %	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Less than 1 year	**3.13**	2.57	**340**	510	**(5)**	(2)	**3**	10
1 to 2 years	**3.47**	3.13	**345**	340	**(13)**	(6)	**(1)**	4
2 to 3 years	**3.12**	4.29	**355**	245	**(14)**	(13)	**(7)**	4
3 to 4 years	**3.86**	3.41	**170**	305	**(15)**	(7)	**(4)**	(1)
4 to 5 years	**2.92**	3.86	**200**	170	**(10)**	(11)	**(6)**	-
5 years or more	**-**	2.92	**-**	200	**-**	(3)	**-**	(2)
Total			**1,410**	1,770	**(57)**	(42)	**(15)**	15

	Financial year	2019 $m	2018 $m
Aggregate notional principal of the outstanding interest rate swaps		**1,410**	1,770
Included in this amount:			
Forward interest rate swap contracts		**465**	565
Of which:			
Commences in	**2019**	**-**	150
Commences in	**2020**	**275**	225
Commences in	**2021**	**40**	40
Commences in	**2022**	**150**	150

Hedged items	Nominal amount of hedged items (assets/ liabilities)		Change in fair value for recognising hedge ineffectiveness		Balance in cash flow hedge reserve for continuing hedges		Balance in cash flow hedge reserve for which hedge accounting is no longer applied	
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Variable rate borrowings	**1,410**	1,770	**17**	(11)	**(56)**	(39)	**-**	-

The following table details the effectiveness of the hedging relationship and the amounts reclassified from hedging reserve to profit or loss:

Hedging instruments - hedge effectiveness	Current period hedging losses recognised in OCI		Amount of hedge ineffectiveness recognised in profit or loss[1]		Amounts classified to profit or loss due to hedged future cash flows being no longer expected to occur	
	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Variable rate borrowings	**(17)**	11	**(2)**	(6)	**-**	2

1. Included in line item 'Loss/(gain) on fair value of financial instruments' within other expenses in the Consolidated Statement of Profit or Loss.

The interest rate swaps settle on a quarterly basis. The floating rate on the interest rate swaps is the Australian Bank Bill Swap (BBSW) reference rate. AGL will settle the difference between the fixed and floating interest rate on a net basis. During the year, no hedges were de-designated and all underlying forecast transactions remain highly probable to occur as per original forecast.

36. Financial instruments (cont.)

Interest rate sensitivity

The following sensitivity analysis has been determined based on the exposure to interest rates for both derivative and non-derivative instruments at the end of the reporting period and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period.

At the end of the reporting period, if interest rates had been 50 basis points higher or lower and all other variables were held constant, AGL's profit after tax and other comprehensive income would have been affected as follows:

	Profit/(loss) after tax increase/(decrease)		Other comprehensive income increase/(decrease)	
	2019 $m	2018 $m	2019 $m	2018 $m
Interest rates +0.5 percentage points (50 basis points)	**(2)**	-	**(16)**	(12)
Interest rates -0.5 percentage points (50 basis points)	**2**	-	**17**	13

(f) Foreign currency risk management

AGL undertakes certain transactions denominated in foreign currencies; consequently, exposures to exchange rate fluctuations arise. Foreign currency risk arises primarily from overseas term borrowings and firm commitments for the purchase of plant and equipment which are denominated in foreign currencies. Exchange rate exposures are managed within approved policy parameters utilising forward foreign exchange contracts and cross currency swap contracts.

Forward foreign exchange contracts - cash flow hedges

AGL's Corporate Treasury policy requires the hedging of foreign currency risk using forward foreign exchange contracts. The Corporate Treasury's policy is to hedge currency exposures of anticipated cash flows in excess of $2 million and to not enter into forward foreign exchange contracts until a firm commitment is in place.

AGL enters into contracts to purchase plant and equipment denominated in foreign currencies. AGL enters into forward foreign exchange contracts to hedge the exchange rate risk arising from these anticipated future purchases, which are designated as cash flow hedges. During the year, no hedges were de-designated and all underlying forecast transactions remain highly probable to occur as per original forecast.

There was $31 million of forward foreign exchange contracts outstanding at the end of the reporting period (2018: $37 million). The fair value of those contracts is not material.

	Average exchange rate		Contract value (foreign currency)		Contract value (local currency)		Carrying value of outstanding hedging instruments		Change in fair value of hedging instruments	
Cash flow hedges - Outstanding contracts	2019	2018	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Buy JPY										
0 to 6 months	**78.65**	81.30	**1,061**	691	**13**	9	**1**	-	**1**	-
6 - 12 months	**77.37**	80.49	**1,305**	1,729	**17**	21	**-**	-	**-**	-
1 - 2 years	**76.02**	79.55	**100**	559	**1**	7	**-**	-	**-**	-
Sell US Dollars										
0 to 6 months	**0.701**	0.734	**14**	16	**21**	21	**-**	-	**-**	-

	Change in fair value for recognising hedge ineffectiveness		Balance in cash flow hedge reserve for continuing hedges		Balance in cash flow hedge reserve for which hedge accounting is no longer applied	
Hedged items	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Forecast purchases	**(1)**	-	**1**	-	**-**	-

36. Financial instruments (cont.)

The following table details the effectiveness of the hedging relationships and the amounts reclassified from hedging reserve to profit or loss:

Hedging instruments - hedge effectiveness	Change in fair value of hedging instruments recognised in OCI 2019 $m	2018 $m	Amount of hedge ineffectiveness recognised in profit or loss 2019 $m	2018 $m	Amounts classified to profit or loss due to hedged future cash flows being no longer expected to occur 2019 $m	2018 $m	Amount reclassified to profit or loss due to hedged items affecting profit or loss 2019 $m	2018 $m
Forecast purchases	**(1)**	-	**-**	-	**-**	-	**-**	-

Cross currency swap contracts

Under cross currency swap contracts, AGL has agreed to exchange specified foreign currency loan principal and interest amounts at agreed future dates at fixed exchange rates. Such contracts enable AGL to eliminate the risk of movements in foreign exchange rates related to foreign currency denominated borrowings.

The fair value of cross currency swaps at 30 June 2019 was an asset of $136 million (2018: asset of $13 million), of which $116 million (2018: $71 million) is in a cash flow hedge relationship, $16 million (2018: $(58) million) is in a fair value hedge relationship and $4 million relates to the currency basis of the cross currency swaps.

Cross currency swap contracts

The following tables detail the cross currency swap contracts in hedges outstanding at the end of the reporting period:

Outstanding contracts	Average interest rate 2019 %	2018 %	Average exchange rate 2019	2018	Contract value (foreign currency) 2019 $m	2018 $m	Contract value (local currency) 2019 $m	2018 $m	Fair value/carrying amount 2019 $m	2018 $m
Buy US dollars										
2 to 5 years	**4.47**	4.55	**0.888**	0.888	**165**	165	**186**	186	**59**	38
5 years or more	**4.46**	4.53	**0.787**	0.787	**530**	530	**674**	674	**77**	(25)

The following table details the effectiveness of the hedging relationship and the amounts reclassified from hedging reserve to profit or loss:

Outstanding contracts	USD CCIRS Cash flow hedges 2019 $m	2018 $m	USD CCIRS Fair value hedges 2019 $m	2018 $m
Carrying amount of hedging instruments				
- Assets	**116**	71	**16**	-
- Liabilities	**-**	-	**-**	(58)
Total carrying amount of hedging instruments	**116**	71	**16**	(58)
Change in value of hedging instruments	**45**	39	**74**	(46)
Change in value of hedged items	**(45)**	(39)	**(72)**	43
Change in value of hedging instruments recognised in reserve	**(8)**	(6)	**n/a**	n/a
Hedge ineffectiveness recognised in profit or loss[1]	**-**	-	**2**	(3)
Amount reclassified from hedge reserve to profit or loss[2]	**53**	45	**n/a**	n/a
Balance in cash flow hedge reserve for continuing hedges	**(15)**	(9)	**n/a**	n/a

1. Included in line item 'Loss/(gain) on fair value of financial instruments' within other expenses in the Consolidated Statement of Profit or Loss.
2. The profit or loss from foreign exchange movement of the hedging instrument offsets the profit or loss from the foreign exchange movement of the borrowings in an effective hedge relationship.

(g) Energy price risk management

AGL is exposed to energy price risk associated with the purchase and/or sale of electricity, gas, oil and environmental products. AGL manages energy risk through an established risk management framework consisting of policies to place appropriate risk limits on overall energy market exposures and transaction limits for approved energy commodities, requirements for delegations of authority on trading, regular reporting of exposures and segregation of duties.

It is AGL's policy to actively manage the energy price exposure arising from both forecast energy supply and customer energy load. AGL's risk management policy for energy price risk is to hedge forecast future positions for up to five years into the future.

Exposures to fluctuations in the wholesale market energy prices are managed through the use of various types of hedge contracts including derivative financial instruments.

36. Financial instruments (cont.)

The following table details the fair value of energy derivatives outstanding at the end of the reporting period:

	2019 $m	2018 $m
Energy derivative financial assets - current		
Energy derivatives - cash flow hedges	32	6
Energy derivatives - economic hedges	229	250
	261	256
Energy derivative financial assets - non-current		
Energy derivatives - cash flow hedges	1	-
Energy derivatives - economic hedges	365	311
	366	311
Energy derivative financial liabilities - current		
Energy derivatives - cash flow hedges	-	24
Energy derivatives - economic hedges	576	316
	576	340
Energy derivative financial liabilities - non-current		
Energy derivatives - cash flow hedges	5	71
Energy derivatives - economic hedges	77	102
	82	173

Energy derivatives – cash flow hedges

Derivative financial instruments are used by AGL in the normal course of business in order to hedge exposure to fluctuations in energy prices. The aggregate notional volumes of the outstanding energy derivatives at 30 June 2019 were 4 million MWh (2018: 9 million MWh). Energy derivatives are either designated in cash flow hedge relationships or remain non-designated. AGL will only apply hedge accounting to existing energy hedge relationships and will not apply hedge accounting to any new energy derivative arrangements.

	Average purchase price		Quantity		Carrying value of outstanding hedging instruments		Change in fair value of hedging instruments	
Hedging instruments - Outstanding contracts	2019 $	2018 $	2019 MWh m	2018 MWh m	2019 $m	2018 $m	2019 $m	2018 $m
Buy electricity	77.42	79.96	4	9	117	(166)	117	(166)

	Change in fair value of hedging instruments used to determined hedge ineffectiveness		Balance in cash flow hedge reserve for continuing hedges		Balance in cash flow hedge reserve for which hedge accounting is no longer applied	
Hedged items	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Forecast purchases	(117)	166	28	(90)	-	-

	Change in fair value of hedging instruments recognised in OCI		Hedge ineffectiveness recognised in profit or loss		Cost of hedging recognised in OCI		Amount from cash flow hedge reserve transferred to inventory		Amount from cost of hedging reserve transferred to inventory	
Hedging instruments - hedge effectiveness	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m	2019 $m	2018 $m
Forecast purchases	117	(166)	-	-	-	-	-	-	-	-

Energy derivatives – economic hedges

AGL has entered into certain derivative instruments for economic hedging purposes under the Board-approved risk management policies, which do not satisfy the requirements for hedge accounting under AASB 9 *Financial Instruments*. These derivatives are therefore required to be categorised as held for trading and are classified in the Consolidated Statement of Financial Position as economic hedges. Changes in the fair value of derivative instruments that do not qualify for hedge accounting are recognised immediately in profit or loss as part of (loss)/gain on fair value of financial instruments.

36. Financial instruments (cont.)

Energy price sensitivity

The following table details the sensitivity to a 10 percent increase or decrease in the energy contract market forward prices. A sensitivity of 10 percent has been used as this is considered reasonably possible, based on historical data relating to the level of volatility in market prices.

At the end of the reporting period, if the forward prices had been 10 percent higher or lower and all other variables were held constant, AGL's profit after tax and other comprehensive income would have been affected as follows:

	Profit/(loss) after tax increase/(decrease)		Other comprehensive income increase/(decrease)	
	2019 $m	2018 $m	2019 $m	2018 $m
Energy forward price +10%	**(274)**	(304)	**25**	44
Energy forward price -10%	**280**	337	**(25)**	(44)

The movement in profit after tax is mainly attributable to an increase/decrease in the fair value of certain energy derivative instruments which are not hedge accounted by AGL. The movement in other comprehensive income is due to the reclassification and/or amortisation of historical hedge accounted derivatives.

(h) Credit risk management

AGL manages its exposure to credit risk using credit risk management policies which provide credit exposure limits and contract maturity limits based on the credit worthiness of counterparties. AGL's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread among approved counterparties.

Trade and other receivables consist of approximately 3.7 million residential, small business and large commercial and industrial customers, in New South Wales, Victoria, South Australia and Queensland. Ongoing credit evaluation is performed on the financial condition of customers and, where appropriate, an allowance for expected credit loss is raised. AGL does not have any significant credit risk exposure to any single customer or any group of customers.

AGL limits its exposure to credit risk by investing surplus funds and entering into derivative financial instruments only with approved financial institutions that have a credit rating of at least A from Standard & Poor's and within credit limits assigned to each financial institution. Derivative counterparties are limited to high creditworthy financial institutions and other organisations in the energy industry. AGL also utilises International Swaps and Derivative Association (ISDA) agreements with derivative counterparties in order to limit exposure to credit risk through the netting of amounts receivable from and amounts payable to individual counterparties.

At the end of the reporting period, there was a significant concentration of credit risk with certain counterparties in relation to energy derivatives undertaken in accordance with the AGL's hedging and risk management activities. The carrying amount of the financial assets recognised in the financial statements, which is net of impairment losses, represents the maximum exposure to credit risk.

AGL does not hold any collateral or other credit enhancements to cover this credit risk.

(i) Liquidity risk management

Liquidity risk is the risk that AGL will not be able to meet its financial obligations as they fall due. Ultimate responsibility for liquidity risk management rests with the Board of Directors, who have established an appropriate liquidity risk management framework for the management of AGL's short, medium and long-term funding and liquidity management requirements.

AGL manages liquidity risk by maintaining adequate cash reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

The following table details AGL's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The amounts are based on the undiscounted cash flows of financial liabilities on the earliest date on which AGL can be required to pay. The table includes both interest and principal cash flows. To the extent that interest flows are at floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period.

36. Financial instruments (cont.)

2019	Less than 6 months $m	6 - 12 months $m	1 - 2 years $m	2 - 5 years $m	More than 5 years $m	Total $m
Non-derivative financial liabilities						
Trade and other payables	1,556	-	-	-	-	1,556
USD senior notes	23	23	46	350	944	1,386
Subordinated notes	-	-	-	-	-	-
Medium term notes	15	15	30	615	-	675
Bank loans	70	9	362	33	422	896
CPI bonds	6	6	12	38	41	103
Other loans	8	7	15	43	89	162
Lease liabilities	13	12	23	69	251	368
Deferred consideration	-	36	37	115	124	312
	1,691	108	525	1,263	1,871	5,458

Restated 2018[1]						
Non-derivative financial liabilities						
Trade and other payables	1,579	-	-	-	-	1,579
USD senior notes	22	22	43	342	955	1,384
Subordinated notes	19	19	40	136	1,699	1,913
Medium term notes	15	15	30	645	-	705
Bank loans	7	7	15	23	471	523
CPI bonds	6	6	12	38	55	117
Other loans	9	8	17	48	108	190
Lease liabilities	8	8	21	59	254	350
Deferred consideration	-	35	36	112	163	346
	1,665	120	214	1,403	3,705	7,107

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

36. Financial instruments (cont.)

The following table details AGL's liquidity analysis for its derivative financial instruments. The amounts are based on the undiscounted net cash inflows and outflows on those derivatives instruments that settle on a net basis, and the undiscounted gross inflows and outflows on those derivatives that require gross settlement. For interest rate swaps, the amount disclosed has been determined by reference to the projected interest rates as illustrated by the yield curves at the end of the reporting period.

2019	Less than 6 months $m	6 - 12 months $m	1 - 2 years $m	2 - 5 years $m	More than 5 years $m	Total $m
Derivative financial instruments						
Gross settled						
Cross currency swap contracts - pay leg - floating	**(17)**	**(16)**	**(31)**	**(273)**	**(828)**	**(1,165)**
Cross currency swap contracts - receive leg - fixed	**22**	**22**	**43**	**343**	**888**	**1,318**
Net receive/(pay)	**5**	**6**	**12**	**70**	**60**	**153**
Net settled						
Interest rate swap contracts	**(10)**	**(11)**	**(19)**	**(19)**	**-**	**(59)**
Energy derivatives	**(331)**	**(218)**	**(148)**	**(90)**	**(42)**	**(829)**
	(336)	**(223)**	**(155)**	**(39)**	**18**	**(735)**

2018	Less than 6 months $m	6 - 12 months $m	1 - 2 years $m	2 - 5 years $m	More than 5 years $m	Total $m
Derivative financial instruments						
Gross settled						
Cross currency swap contracts - pay leg	(21)	(20)	(41)	(310)	(908)	(1,300)
Cross currency swap contracts - receive leg	21	21	41	337	898	1,318
Net receive/(pay)	-	1	-	27	(10)	18
Net settled						
Interest rate swap contracts	(8)	(8)	(13)	(17)	-	(46)
Energy derivatives	(218)	(113)	(120)	(83)	(136)	(670)
	(226)	(120)	(133)	(73)	(146)	(698)

36. Financial instruments (cont.)

ACCOUNTING POLICY

Financial assets

Non-derivative financial assets

Classification

AGL classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on AGL's business model for managing financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. For investments in equity instruments that are not held for trading, this will depend on whether AGL has made an irrevocable election at the time of initial recognition to account for the equity instrument at fair value through other comprehensive income. AGL reclassifies debt investments when and only when its business model for managing those assets changes.

Measurement

At initial recognition, AGL measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Debt instruments

Subsequent measurement of debt instruments depends on AGL's business model for managing the asset and the cash flow characteristics of the asset. There are two measurement categories into which AGL classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. A gain or loss on a debt instrument that is subsequently measured at amortised cost and is not part of a hedging relationship is recognised in profit or loss when the asset is derecognised or impaired. Interest income from these financial assets is included in finance income using the effective interest rate method.
- Fair value through other comprehensive income (FVOCI): Assets that are held for collecting contractual cash flows and through sale on specified dates. A gain or loss on a debt investment that is subsequently measured at FVOCI is recognised in other comprehensive income.
- Fair value through profit or loss (FVTPL): Assets that do not meet the criteria for amortised cost or FVOCI are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognised in profit or loss and presented net in the statement of profit or loss within other gains/(losses) in the period in which it arises.

Equity instruments

On initial recognition, AGL elects to classify each equity instrument as FVTPL or FVOCI. AGL subsequently measures all equity investments at fair value. Where AGL has elected to present fair value gains or losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains or losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when AGL's right to receive payments is established. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value. Changes in the fair value of equity instrument financial assets classified as FVTPL are recognised in expenses in the statement of profit or loss as applicable.

Derivative financial instruments

Derivative financial instruments are stated at fair value, with changes in fair value recognised in the statement of profit or loss. Where derivative financial instruments qualify for hedge accounting, recognition of changes in fair value depends on the nature of the item being hedged. Hedge accounting is discontinued when the hedging relationship is revoked, the hedging instrument expires, is sold, terminated, exercised, or no longer qualifies for hedge accounting.

AGL documents at the inception of the hedging transaction the economic relationship between hedging instruments and hedged items including whether the instrument is expected to offset changes in cash flows of hedged items. AGL documents its risk management objective and strategy for undertaking various hedge transactions at the inception of each hedge relationship.

AGL's risk management policy is to establish a hedge ratio of 1:1.

Fair value hedge

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

36. Financial instruments (cont.)

ACCOUNTING POLICY

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in the cash flow hedge reserve within equity, limited to the cumulative change in fair value of the hedged item on a present value basis from the inception of the hedge. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, within other expenses.

When option contracts are used to hedge forecast transactions, AGL may elect to designate only the intrinsic value of the option contract as the hedging instrument. Gains or losses relating to the effective portion of the change in intrinsic value of the option contracts are recognised in the cash flow hedge reserve in equity. Gains or losses related to the time value element of the option are recognised in a cost of hedging reserve.

When cross-currency contracts are used to hedge forecast transactions, AGL may elect to designate only the change in fair value of the cross-currency contract related to the spot component as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot component of the cross-currency contracts are recognised in the cash flow hedge reserve in equity. The change in the currency basis spread element of the contract that relates to the hedged item is recognised within other comprehensive income in the costs of hedging reserve within equity. In some cases, AGL may designate the full change in fair value of the cross-currency contract (including currency basis spread) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire cross-currency contract are recognised in the cash flow hedge reserve within equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss, as follows:

- The gain or loss relating to the effective portion of hedge contracts are ultimately recognised in profit or loss as the hedged item affects profit or loss within expenses.
- The gain or loss relating to the effective portion of the interest rate swaps hedging variable rate borrowings is recognised in profit or loss within 'finance costs'.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss. Hedge ineffectiveness is recognised in profit or loss within other expenses.

CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

Fair value of financial instruments

Management uses their judgement in selecting an appropriate valuation technique for financial instruments not quoted in an active market. For derivative financial instruments, assumptions are made based on quoted market rates adjusted for specific features of the instrument. Other financial instruments are valued using a discounted cash flow analysis based on assumptions supported, where possible, by observable market prices and rates.

37. Parent Entity information

The accounting policies of the Parent Entity, which have been applied in determining the financial information shown below, are the same as those applied in the consolidated financial statements.

Financial position

	2019 $m	Restated 2018 $m[1]
Assets		
Current assets	**259**	676
Non-current assets	**12,361**	13,090
Total assets	**12,620**	13,766
Liabilities		
Current liabilities	**400**	521
Non-current liabilities	**5,559**	6,814
Total liabilities	**5,959**	7,335
Equity		
Issued capital	**6,223**	6,223
Reserves		
Employee equity benefits reserve	**(2)**	(3)
Hedge reserve	**(46)**	(34)
Retained earnings	**486**	245
Total equity	**6,661**	6,431

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases. Refer to Note 38(c).

Financial performance

Profit for the year	**1,016**	791
Other comprehensive loss	**(13)**	(8)
Total comprehensive income for the year	**1,003**	783

Guarantees entered into by the parent entity in relation to the debts of its subsidiaries

The Parent Entity has entered into a Deed of Cross Guarantee with the effect that it guarantees the debts in respect of its wholly owned Australian subsidiaries. Further details of the Deed of Cross Guarantee and the subsidiaries subject to the deed, are disclosed in Notes 27 and 31 respectively.

Contingent liabilities

The Parent Entity is a party to various legal actions and claims which have arisen in the ordinary course of business. The Parent Entity has provided warranties and indemnities to certain third parties in relation to the performance of contracts by various wholly owned subsidiaries.

The Directors are of the opinion that provisions are not required in respect of these matters, as it is either not probable that a future sacrifice of economic benefits will be required or the amount is not capable of reliable measurement.

Capital expenditure commitments

As at 30 June 2019, the Parent Entity had commitments for the acquisition of property, plant and equipment of $2 million (2018: $13 million) and its share of joint operations capital commitments was nil (2018: nil).

38. Summary of other significant accounting policies

AGL Energy Limited (the Parent Entity) is a company limited by shares incorporated in Australia whose shares are publicly traded on the Australian Securities Exchange (ASX). The address of its registered office is Level 24, 200 George Street, Sydney NSW 2000 Australia.

The consolidated financial statements comprise the Parent Entity and its controlled entities (together referred to as AGL). For the purposes of preparing the consolidated financial statements, the Parent Entity is a for-profit entity.

The principal activities of AGL are described in Note 1.

(a) Statement of compliance

These consolidated financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards and Interpretations as issued by the Australian Accounting Standards Board (AASB) and the Corporations Act 2001.

The consolidated financial statements also comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

The consolidated financial statements were authorised for issue by the Directors on 8 August 2019.

(b) Basis of preparation

The consolidated financial statements have been prepared on the basis of historical cost, except for derivative financial instruments and equity instruments financial assets, which are measured at fair value. Historical cost is generally based on the fair values of the consideration given in exchange for assets. All amounts are presented in Australian dollars, which is the functional and presentation currency of AGL, unless otherwise noted.

The Parent Entity is a company of the kind referred to in ASIC Corporations Instrument 2016/191, dated 24 March 2016, and in accordance with that Instrument, amounts in the financial statements are rounded off to the nearest million dollars, unless otherwise indicated.

The significant accounting policies that have been adopted in the preparation and presentation of the consolidated financial statements are set out below.

(c) Adoption of new and revised accounting standards and Interpretations

AGL has applied the required amendments to Standards and Interpretations that are relevant to its operations and effective for the current reporting period for the first time for the financial year commencing 1 July 2018.

- AASB 9 *Financial Instruments*
- AASB 15 *Revenue from Contracts with Customers*.

The following standards were early adopted:

- AASB 16 *Leases* (AGL has voluntarily elected to early adopt AASB 16 from 1 July 2018).

Disclosures with respect to the application of these new Standards and Interpretations are provided in this note. There were a range of other new or amended Standards and Interpretations applicable from 1 July 2018, however these did not have any material impact on the disclosures or on the amounts recognised in AGL's consolidated financial statements. With the exception of AASB 16 *Leases*, AGL has not early adopted any other accounting standards, interpretations or amendments that have been issued, but are not yet effective.

AASB 9 Financial Instruments (AASB 9)

AASB 9 *Financial Instruments* replaces AASB 139 *Financial Instruments: Recognition and Measurement* (AASB 139) bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting. With the exception of hedge accounting, which AGL applied prospectively, AGL has applied AASB 9 retrospectively, with the initial application date of 1 July 2018 and adjusting the comparative information for the period beginning 1 July 2017.

Classification and measurement of financial assets and liabilities

Financial assets and liabilities are classified and measured in accordance with one of the following categories pursuant to AASB 9:

- Amortised cost (AC);
- Fair value through other comprehensive income (that will not be reclassified subsequently to profit or loss) (FVOCI-NR);
- Fair value through other comprehensive income (FVOCI);
- Fair value through profit or loss (FVTPL).

The classification of financial assets is based on two criteria: AGL's business model for managing the assets and whether the instruments' contractual cash flows represent 'solely payments of principal and interest' (SPPI) on the principal amount outstanding. On 1 July 2018, the date of initial application of AASB 9, AGL assessed which business models apply to the financial assets and liabilities held and classified its financial instruments into the appropriate AASB 9 categories. There was no change in the carrying value of AGL's financial instruments as a result of the adoption of this element of AASB 9.

38. Summary of other significant accounting policies (cont.)

	Measurement category	
	Original (AASB 139)	New (AASB 9)
Current financial assets		
Trade and other receivables	Amortised cost	Amortised cost
Derivatives	FVTPL	FVTPL
Unlisted equity securities and investment funds	Available-for-sale	FVOCI-NR
Non-current financial assets		
Derivatives	FVTPL	FVTPL
Current financial liabilities		
Trade and other payables	Amortised cost	Amortised cost
Borrowings	Amortised cost	Amortised cost
Derivatives	FVTPL	FVTPL
Deferred consideration	Amortised cost	Amortised cost
Non-current financial liabilities		
Borrowings	Amortised cost	Amortised cost
Derivatives	FVTPL	FVTPL
Deferred consideration	Amortised cost	Amortised cost

Equity investments previously classified as available-for-sale

AGL elected to present in other comprehensive income changes in the fair value of all its equity investments previously classified as available-for-sale, because these investments are held as long-term strategic investments that are not expected to be sold in the short to medium term.

Hedge accounting

AGL applied hedge accounting prospectively. At the date of the initial application, all of AGL's existing hedging relationships were eligible to be treated as continuing hedging relationships. The currency basis adjustment relating to the hedge instrument applied to AGL's US dollar denominated borrowings has been recognised in other comprehensive income and an associated cost of hedging reserve. The adoption of the hedge accounting requirements of AASB 9 had no significant impact on AGL's financial statements.

Impairment for financial assets

The adoption of AASB 9 has changed AGL's accounting for impairment losses by replacing AASB 139's incurred loss approach with a forward-looking expected credit loss approach. AASB 9 requires AGL to record an allowance for expected credit losses for all loans and other debt financial assets not held at fair value through profit or loss. Expected credit losses are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the AGL expects to receive. AGL has applied AASB 9's simplified approach to trade receivables and unbilled revenue and has calculated expected credit losses based on lifetime expected credit losses. AGL has refined the existing segmentation of debt and identified forwardlooking factors to apply to those profiles. Some of the key factors considered in the forward-looking information include wholesale electricity forward prices, commodity fuel forward prices, national GDP growth outlook and interest rate forward curves. The impact of applying an expected credit loss model was a restated cumulative retained earnings decrease of $77 million, a restated decrease in profit for the year ended 30 June 2018 of $4 million, a restated decrease in trade and other receivables of $116 million, and a restated increase in deferred tax assets of $35 million at 30 June 2018.

AASB 15 Revenue from Contracts with Customers (AASB 15)

AASB 15 and its associated amendments supersede AASB 111 *Construction Contracts*, AASB 118 *Revenue* and related Interpretations and it applies, with limited exceptions, to all revenue arising from contracts with customers. AASB 15 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. AASB 15 requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires new disclosures. AGL adopted AASB 15 using the full retrospective method of adoption with the date of initial application of 1 July 2018. In accordance with this method, to the extent the impact is material, AGL is required to restate comparative information for the 2018 financial period. The effect of the transition on the current period has not been disclosed as the standard provides an optional practical expedient which AGL has applied. AGL did apply other available optional practical expedients as set out below. While the retrospective adoption of AASB 15 resulted in changes in accounting policies which are discussed below, it did not result in material adjustments to the current or preceding financial reporting years which is why there are no adjustments shown in the tables below relating to the impact of AASB 15 on comparative financial information.

Impact on adoption

AGL undertook a comprehensive analysis of the impact of the new revenue standard with the primary focus being to understand whether the timing, amount and nature of revenue recognised could differ pursuant to AASB 15. Based on this assessment, the application of AASB 15 did not have a material impact on the recognition, timing or measurement of AGL's revenue.

38. Summary of other significant accounting policies (cont.)

AASB 16 Leases (AASB 16)

AASB 16 *Leases* is effective for annual reporting periods commencing on or after 1 January 2019, with early application permitted for entities that also apply AASB 15. AGL elected to early adopt AASB 16 for the reporting period beginning 1 July 2018 using the full retrospective method of transition. Consequently, the impact of the new standard has been calculated as if the standard had always applied, subject to the practical expedients permitted on transition (outlined below). The cumulative retrospective impact has been recognised as at 1 July 2017, being the beginning of the earliest comparative period presented. The comparative information has been restated for the effects of the new accounting policy. Previously, AGL accounted for leases in accordance with AASB 117 *Leases* and AASB Interpretation 4 *Determining whether an arrangement contains a lease*. The new accounting policy for leases in accordance with AASB 16 is provided at note 18. Detailed disclosures of the impact of transition are provided below. AGL has elected to apply the grandfathering practical expedient on transition to AASB 16. This means that for arrangements entered into before 1 July 2018, AGL has not reassessed whether it is, or contains, a lease in accordance with the new AASB 16 lease definition. Consequently, existing contracts as at 1 July 2018 continued to be assessed per the previous accounting policy described below in accordance with AASB 117 and AASB Interpretation 4. Given this, the transition and new requirements of AASB 16 per the new accounting leases policy described at note 18, have only been applied to arrangements entered into, or modified after, 1 July 2018.

AGL as lessee

In accordance with previous lease standards, assets held pursuant to finance leases were initially recognised as assets of AGL at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor was included in the Consolidated Statement of Financial Position as a finance lease liability. Lease payments were apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges were recognised immediately in profit or loss. Assets held pursuant to finance leases were depreciated over their expected useful lives on the same basis as owned assets or, where shorter, the term of the relevant lease. Operating leases were not recognised on the Consolidated Statement of Financial Position. Instead, operating lease payments were recognised as an expense on a straight-line basis over the lease term. Contingent rentals arising pursuant to operating leases were recognised as an expense in the period in which they were incurred. Lease incentives received to enter into operating leases were recognised as a liability.
The aggregate benefit of incentives was recognised as a reduction of rental expense on a straight-line basis. In accordance with AASB 16, there is no distinction between operating and finance leases. Instead, practically all leases are accounted for using a single on-balance sheet model similar to finance leases pursuant to AASB 117. At the inception date of a lease, a liability is recognised representing an obligation to make future lease payments (i.e. the lease liability) and an asset is recognised representing the right to use the underlying asset for the lease term (i.e. right-of-use (ROU) asset). Interest expense on the lease liability and depreciation expense on the ROU asset is recognised in the statement of profit or loss. The lease expense recognition pattern is generally accelerated as compared to the pattern under previous accounting standards. AASB 16 includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of 12 months or less). Lease liabilities are remeasured upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The amount of the remeasurement of the lease liability is generally recognised as an adjustment to the ROU asset.

AGL as lessor

Lessor accounting in accordance with AASB 16 is substantially unchanged from the requirements pursuant the previous standard. Lessors continue to classify all leases using the same classification principles pursuant to the previous standards and distinguish between two types of leases: operating and finance leases.

In contracts where AGL is a lessor, AGL determines whether the lease is an operating lease or finance lease at the inception of the lease. The lease is a finance lease if it transfers substantially all of the risks and rewards incidental to ownership of the underlying asset to the lessee in the contract. If not, the lease is classified as an operating lease. AGL assesses the classification of a lease considering the following indications of finance leases:

- the lease transfers ownership of the underlying asset to the lessee by the end of the lease term;
- the lessee has the option to purchase the underlying asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception date, that the option will be exercised;
- the lease term is for the major part of the economic life of the underlying asset even if title is not transferred;
- at the inception date, the present value of the lease payments amounts to at least substantially all of the fair value of the underlying asset; and
- the underlying asset is of such a specialised nature that only the lessee can use it without major modifications.

The limited changes in accounting for lessors do not impact AGL.

Finance leases

Amounts due from lessees pursuant to finance leases are recognised as receivables at the amount of AGL's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on AGL's net investment outstanding in respect of the leases.

Operating leases

Amounts due from lessees pursuant to operating lease are recognised as lease income on a straight-line basis over the lease term.

38. Summary of other significant accounting policies (cont.)

Overall impact of adopting AASB 9, AASB 15 and AASB 16

The following tables summarise the adjustments recognised against each individual line item within the relevant primary statements for all standards. Line items that were not affected by the changes have not been included in the table below. As a result, the sub-totals and totals disclosed cannot be recalculated from the numbers provided. The specifics of the adjustments for each standard are explained in more detail below. AASB 15 did not have a material impact on adoption.

	30 Jun 2018 $m	AASB 9	AASB 16	**Restated 30 Jun 2018 $m**
Continuing operations				
Revenue	12,816	-	-	**12,816**
Other income	31	-	-	**31**
Expenses	(9,864)	(6)[1]	16[2]	**(9,854)**
Share of profits of associates and joint ventures	39	-	-	**39**
Profit before net financing costs, depreciation and amortisation	3,022	(6)	16	**3,032**
Depreciation and amortisation	(558)	-	(10)[3]	**(568)**
Profit before net financing costs	2,464	(6)	6	**2,464**
Finance income	10	-	-	**10**
Finance costs	(223)	-	(7)[4]	**(230)**
Net financing costs	(213)	-	(7)	**(220)**
Profit before tax	2,251	(6)	(1)	**2,244**
Income tax expense	(664)	2[5]	-	**(662)**
Profit for the period attributable to the shareholders of AGL Energy Limited	1,587	(4)	(1)	**1,582**

Earnings per share				
Basic earnings per share	242.0 cents	(0.6 cents)	(0.2 cents)	**241.2 cents**
Diluted earnings per share	241.7 cents	(0.6 cents)	(0.2 cents)	**240.9 cents**

1. The additional credit loss on trade receivables recognised pursuant the simplified expected credit loss model.
2. The reduction in rental expenses on the adoption of AASB 16 Leases.
3. The depreciation expense on the right-of-use asset recognised on the adoption of AASB 16 Leases.
4. The interest expense on the lease liability recognised on the adoption of AASB 16 Leases.
5. The tax effect of accounting standard adjustments.

38. Summary of other significant accounting policies (cont.)

	30 Jun 2018 $m	AASB 9	AASB 16	Restated 30 Jun 2018 $m
Profit for the period	1,587	(4)	(1)	**1,582**
Other comprehensive income				
Items that will not be reclassified subsequently to profit or loss				
Remeasurement gain on defined benefit plans	42	-	-	**42**
Income tax relating to items that will not be reclassified subsequently	(13)	-	-	**(13)**
	29	-	-	**29**
Items that may be reclassified subsequently to profit or loss				
Cash flow hedges				
Loss in fair value of cash flow hedges	(103)	-	-	**(103)**
Reclassification adjustments transferred to profit or loss	(56)	-	-	**(56)**
Reclassification adjustments transferred to the initial carrying amounts of hedged items				**-**
Available-for-sale financial assets				**-**
Loss on revaluation of available-for-sale financial assets	(3)			**(3)**
Income tax relating to items that may be reclassified subsequently	48	-	-	**48**
	(114)	-	-	**(114)**
Other comprehensive loss for the period, net of income tax	(85)	-	-	**(85)**
Total comprehensive income for the period attributable to the shareholders of AGL Energy Limited	1,502	(4)	(1)	**1,497**

38. Summary of other significant accounting policies (cont.)

	30 June 2018 $m	AASB 9	AASB 16	Restated 30 June 2018 $m
Current assets				
Cash and cash equivalents	463	-	-	**463**
Trade and other receivables	1,891	(116)[1]	-	**1,775**
Inventories	370	-	-	**370**
Current tax assets	147	-	-	**147**
Other financial assets	600	-	-	**600**
Other assets	261	-	-	**261**
	3,732	(116)	-	**3,616**
Assets classified as held for sale	74	-	-	**74**
Total current assets	3,806	(116)	-	**3,690**
Non-current assets				
Inventories	10	-	-	**10**
Other financial assets	448	-	-	**448**
Investments in associates and joint ventures	100	-	-	**100**
Property, plant and equipment	6,685	-	72[2]	**6,757**
Intangible assets	3,271	-	-	**3,271**
Deferred tax assets	242	35[3]	3[3]	**280**
Other assets	77	-	-	**77**
Total non-current assets	10,833	35	75	**10,943**
Total assets	14,639	(81)	75	**14,633**
Current liabilities				
Trade and other payables	1,579	-	-	**1,579**
Borrowings	19	-	15[4]	**34**
Provisions	233	-	-	**233**
Current tax liabilities	81	-	-	**81**
Other financial liabilities	394	-	-	**394**
Other liabilities	2	-	-	**2**
Total current liabilities	2,308	-	15	**2,323**
Non-current liabilities				
Borrowings	2,822	-	107[5]	**2,929**
Provisions	509	-	-	**509**
Other financial liabilities	432	-	-	**432**
Other liabilities	178	-	(39)[6]	**139**
Total non-current liabilities	3,941	-	68	**4,009**
Total liabilities	6,249	-	83	**6,332**
Net assets	8,390	(81)	(8)	**8,301**
Equity				
Issued capital	6,223	-	-	**6,223**
Reserves	(102)	-	-	**(102)**
Retained earnings	2,269	(81)	(8)	**2,180**
Total equity attributable to owners of AGL Energy Limited	8,390	(81)	(8)	**8,301**
Retained earnings at 1 July 2017	1,335	(77)	(7)	**1,251**

1. The remeasurement of the expected credit loss allowance recognised pursuant the simplified expected credit loss model.
2. The recognition of the right-of-use asset on the adoption of AASB 16 Leases .
3. The tax effect of the accounting standards adjustments.
4. The lease liability obligations due within a 12 month period from the balance date.
5. The non-current element of lease liabilities recognised on the adoption of AASB 16 Leases.
6. The derecognition of the straight line lease liability previously recognised pursuant to AASB 117 Leases.

38. Summary of other significant accounting policies (cont.)

(d) Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Parent Entity and entities (including special purpose entities) controlled by the Parent Entity (its subsidiaries). Control is achieved when the Parent Entity is exposed to or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

All intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

(e) Foreign currency transactions and balances

Transactions in foreign currencies are initially recorded in the functional currency by applying the exchange rates at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the exchange rate at the end of the reporting period.

Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the exchange rates ruling at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Foreign exchange differences arising on translation are recognised in profit or loss in the period in which they arise.

(f) Standards and Interpretations on issue not yet adopted

The following accounting standards, accounting standard amendments and interpretations are due for adoption for the year ending 30 June 2020:

- AASB Interpretation 23 *Uncertainty Over Income Tax Treatment;*
- AASB 2018-1 *Annual Improvements 2015-2017*
- AASB 2018-2 *Amendments to AASB 19 – plan amendments, curtailment or settlement*

The standards and interpretations listed above will not have a material impact on AGL's financial results or financial position on adoption.

39. Subsequent events

Share buy-back

On 8 August 2019, AGL announced its intention to undertake an on-market buy-back of up to 32,791,252 shares (being approximately 5% of AGL's issued ordinary shares). AGL reserves the right to vary, suspend or terminate the buy-back at any time.

Acquisition of Perth Energy Holdings Pty Ltd

On 8 August 2019, AGL announced it had agreed to purchase 100% of the outstanding share capital of Perth Energy Holdings Pty Ltd for consideration of up to $93 million, based on enterprise value. The transaction is on a cash and debt free basis and is subject to a number of conditions precedent, including regulatory approval, which were not satisfied at the date of this report.

There has not been any other matter or circumstance, other than that referred to in the financial statements or notes thereto, that has arisen since the end of the financial year, that has significantly affected, or may significantly affect, the operations of AGL, the results of those operations, or the state of affairs of AGL in future financial periods.

Directors' Declaration
For the year ended 30 June 2019

In accordance with a resolution of the Directors of AGL Energy Limited, the Directors declare that:

(a) in their opinion, there are reasonable grounds to believe that AGL Energy Limited will be able to pay its debts as and when they fall due and payable;

(b) the financial statements and notes thereto are in compliance with International Financial Reporting Standards, as stated in Note 38(a) to the financial statements;

(c) in their opinion, the attached financial statements and notes thereto are in accordance with the *Corporations Act 2001*, including compliance with accounting standards and giving a true and fair view of the consolidated entity's financial position and performance for the year ended 30 June 2019;

(d) there are reasonable grounds to believe that AGL Energy Limited and the subsidiaries identified in Note 27 will be able to meet any obligations or liabilities to which they are, or may become, subject by virtue of the Deed of Cross Guarantee between the Parent Entity and those subsidiaries pursuant to ASIC Corporations (Wholly-owned Companies) Instrument 2016/785; and

(e) the Directors have received the declarations required by s.295A of the *Corporations Act 2001* from the Chief Executive Officer and Chief Financial Officer for the year ended 30 June 2019.

Signed on behalf of the Board.

Graeme Hunt
Chairman

Sydney, 8 August 2019

Deloitte.

Deloitte Touche Tohmatsu
A.B.N. 74 490 121 060

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The Board of Directors
AGL Energy Limited
200 George Street
Sydney NSW 2000

8 August 2019

Dear Board Members

Auditor's Independence Declaration to AGL Energy Limited

In accordance with section 307C of the Corporations Act 2001, I am pleased to provide the following declaration of independence to the directors of AGL Energy Limited.

As lead audit partner for the audit of the financial report of AGL Energy Limited for the year ended 30 June 2019, I declare that to the best of my knowledge and belief, there have been no contraventions of:

- the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and
- any applicable code of professional conduct in relation to the audit.

Yours faithfully

Deloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

Jason Thorne
Partner
Chartered Accountants

Deloitte.

Deloitte Touche Tohmatsu
A.B.N. 74 490 121 060

Grosvenor Place
225 George Street
Sydney NSW 2000
PO Box N250 Grosvenor Place
Sydney NSW 1220 Australia

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Independent Auditor's Report to the Members of AGL Energy Limited

Report on the Audit of the Financial Report

Opinion

We have audited the financial report of AGL Energy Limited ("AGL" or the "Company") and its subsidiaries (the "Group"), which comprises the Consolidated Statement of Financial Position as at 30 June 2019, the Consolidated Statement of Profit or Loss, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Changes in Equity and the Consolidated Statement of Cash Flows for the year then ended, notes to the financial statements including a summary of significant accounting policies and the directors' declaration.

In our opinion the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

(i) giving a true and fair view of the Group's consolidated financial position as at 30 June 2019 and of its financial performance for the year then ended; and

(ii) complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of this report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the "Code") that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

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We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report for the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matter	How the scope of our audit responded to the Key Audit Matter
IT systems implementation AGL is in the process of implementing a new Enterprise Resource Planning system ("S4/HANA"). This implementation, referred to as PT3, has a significant impact on the IT systems, the business cycle processes and the key business process controls integral to the financial report. The IT systems across AGL are complex and there are varying levels of integration. These systems are critical to the integrity of the financial reporting process. Consequently, the effectiveness of IT systems inclusive of the implementation of S4/HANA and related PT3 processes is a key aspect of our external audit.	Our procedures included, but were not limited to: • obtaining an understanding of the internal risk management process, the IT systems and controls integral to the financial reporting process; • identifying IT systems and business process controls to include in the scope of our internal control testing; • testing the design and implementation of the key IT controls relating to the financial reporting systems; • testing the design and implementation of key business process controls integral to financial reporting; and • testing the completeness and accuracy of data migrated as part of the PT3 implementation by re-performing management's reconciliations by profit centre and account, inclusive of underlying sub-ledgers.
Unbilled revenue and unbilled distribution costs As at 30 June 2019, unbilled revenue of $898 million disclosed in Note 9 represents the value of electricity and gas supplied to customers between the date of the last meter reading and the reporting date where no bill has been issued to the customer at the end of the reporting period. As at 30 June 2019, unbilled distribution costs of $400 million disclosed in Note 17 represents the estimated distribution costs related to energy consumption between the date of the last invoice from the distributor and the end of the reporting period.	Our procedures included, but were not limited to: • obtaining an understanding of the process flows of key controls management has in place to determine the estimate of unbilled revenue and unbilled distribution costs; • understanding and challenging management's assumptions relating to volume, customer pricing and distribution tariff rates used in determining unbilled revenue and unbilled distribution costs by: ○ on a sample basis agreeing data underlying the calculation of the

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<table>
<tr><th>Key Audit Matter</th><th>How the scope of our audit responded to the Key Audit Matter</th></tr>
<tr><td>Significant management judgment is required to estimate electricity and gas consumption, pricing applicable to customers between the last customer invoice date and the end of the reporting period and applicable distribution tariff rates between the date of the last invoice from the distributor and the end of the reporting period.</td><td>estimated volumes to supporting systems, having performed sample testing of the key controls in those systems;
○ comparing the prices applied to customer consumption with historical and current data; and
○ comparing the distribution tariff rates applied to current tariff tables.
• in conjunction with our data analytics specialists:
○ calculating an independent estimate of the expected unbilled revenue at 30 June 2019 using AGL's historical customer consumption, AGL's purchase volumes and pricing data, and comparing our independent estimate to AGL's reported unbilled revenue.
○ calculating an independent estimate of the expected unbilled distribution costs accrual at 30 June 2019 utilising information supplied by distributors and tariff data, and comparing our independent estimate to AGL's reported distribution costs payable.

We also assessed the appropriateness of the disclosures in Notes 2, Note 9 and Note 17 to the financial statements.</td></tr>
<tr><td>Financial instruments

AGL enters into various financial instruments including derivative financial instruments to economically hedge the company's exposure to variability in interest rates, foreign exchange movements and energy prices. These financial instruments include longer term energy purchase and supply contracts which in some cases have significant contractual volumes and/or pricing linked to commodity prices or emission trading schemes.

As at 30 June 2019, derivative financial assets totaled $764 million (current assets of $267 million and non-current assets of $497 million as disclosed in Note 11) and derivative financial liabilities totaled $715 million (current liabilities of $596 million and non-current liabilities of $119 million as disclosed in Note 20). These financial instruments are recorded</td><td>Our procedures included, but were not limited to:

• obtaining an understanding of the internal risk management process, and the systems and controls associated with the origination and maintenance of complete and accurate information relating to financial instrument contracts;
• obtaining an understanding of the key financial instrument contract terms to assess the appropriateness of the relevant accounting applied in the financial statements;
• in conjunction with our treasury specialists, testing on a sample basis the existence and valuation of financial instrument contracts as at 30 June 2019. Our audit procedures included:
○ evaluating the integrity of the financial instrument valuation models, and</td></tr>
</table>

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Key Audit Matter	How the scope of our audit responded to the Key Audit Matter
at fair value as required by the relevant accounting standard. Significant judgement is required in the valuation and accounting for these financial instruments including: • understanding and applying contract terms; • forecasting future energy prices in the short and longer term; • forecasting future emissions trading outcomes and prices; and • applying discount rates.	○ assessing the incorporation of the contract terms and the key assumptions into the financial instrument valuation models, including future price assumptions and discount rates. We have also assessed the appropriateness of the disclosures included in Note 11, Note 20 and Note 36 to the financial statements.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Company's annual report for the year ended 30 June 2019, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

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- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial report of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in pages 58 to 81 of the Directors' Report for the year ended 30 June 2019.

In our opinion, the Remuneration Report of AGL Energy Limited, for the year ended 30 June 2019 complies with section 300A of the *Corporations Act 2001.*

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

Deloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

Jason Thorne
Partner
Chartered Accountants
Sydney, 8 August 2019

Shareholding Information

The following information is provided regarding the Issued Capital of AGL as at 30 June 2019:

1. The Issued Capital consisted of 655,825,043 fully-paid ordinary shares. AGL's fully paid ordinary shares are listed on the Australian Securities Exchange under the code "AGL". Holders of AGL's fully paid ordinary shares have, at general meetings, one vote on a show of hands and, upon a poll, one vote for each fully paid ordinary share held by them.
2. There were 114,217 holders of ordinary shares.
3. There were 2,517 holders of less than a marketable parcel of 25 shares.

Distribution schedule of ordinary shares

	No. of Holders	%
100,001 and Over	80	0.07
10,001 to 100,000	2,973	2.60
5,001 to 10,000	6,111	5.35
1,001 to 5,000	44,073	38.59
1 to 1,000	60,980	53.39
Total	**114,217**	**100.00**

Substantial shareholders of AGL

In a substantial holding notice dated 15 March 2017, BlackRock Group advised that as of 27 February 2017 it had an interest in 40,935,468 ordinary shares, which represented 6.09% of AGL's ordinary shares at this time.

In a substantial holding notice dated 14 June 2018, The Vanguard Group, Inc advised that as at 12 June 2018 it had an interest in 32,944,083 ordinary shares which represented 5.023% of AGL's ordinary shares at this time.

Shareholdings by geographic region

	Securities	%	No. of Holders	%
Australia	649,506,189	99.04	111,394	97.53
Hong Kong	129,421	0.02	53	0.05
New Zealand	5,119,830	0.78	1,869	1.64
United Kingdom	382,458	0.06	277	0.24
USA and Canada	422,112	0.06	450	0.39
Others	265,033	0.04	174	0.15
	655,825,043	**100.00**	**114,217**	**100.00**

Shareholding Information

20 largest holders of ordinary shares

Twenty Largest Holders as at 30 June 2019	Fully-Paid Ordinary Shares	% of Total Issued Shares
HSBC Custody Nominees (Australia) Limited	187,800,027	28.64
J P Morgan Nominees Australia Pty Limited	100,443,164	15.32
Citicorp Nominees Pty Limited	57,189,955	8.72
National Nominees Limited	18,259,052	2.78
BNP Paribas Nominees Pty Ltd <Agency Lending DRP A/C>	9,782,498	1.49
BNP Paribas Noms Pty Ltd <DRP>	4,993,808	0.76
HSBC Custody Nominees (Australia) Limited <NT-Comnwlth Super Corp A/C>	3,814,830	0.58
Argo Investments Limited	3,642,000	0.56
Milton Corporation Limited	3,570,141	0.54
HSBC Custody Nominees (Australia) Limited-GSCO ECA	3,205,240	0.49
BNP Paribas Nominees Pty Ltd <Agency Lending Collateral>	3,174,500	0.48
Citicorp Nominees Pty Limited <Colonial First State Inv A/C>	3,135,722	0.48
AMP Life Limited	1,947,422	0.30
Netwealth Investments Limited <Wrap Services A/C>	1,879,708	0.29
Custodial Services Limited <Beneficiaries Holding A/C>	1,618,006	0.25
BKI Investment Company Limited	1,483,708	0.23
Pacific Custodians Pty Limited <AGK Plans Ctrl A/C>	1,456,980	0.22
HSBC Custody Nominees (Australia) Limited	1,420,203	0.22
Carlton Hotel Limited	1,378,556	0.21
Australian Foundation Investment Company Limited	1,370,000	0.21
	411,565,520	**62.77**

Investor Information

Website access

AGL's Investor Centre is available online at **agl.com.au/investors**. The Investor Centre provides you with easy access to important information about AGL's performance, including annual reports, investor presentations, share price graphs and general security holder information.

The Shareholder Services section in our Investor Centre also provides access to update your details with the Share Registry, Link Market Services, including:

- checking your holding balance;
- viewing, saving or printing interest payment summaries, transaction summaries and dividend statements for shareholders;
- updating or amending your bank account or DRP Instructions for Shareholders;
- electing to receive communications electronically; and
- downloading a variety of forms.

Link Market Services also offers shareholders the ability to register and create a portfolio view of their holdings. Registration is free and enables shareholders to view and update multiple holdings in AGL (or other clients Link act as registry for) using a single login. To create a portfolio, please go to **linkmarketservices.com.au**.

Share Registry

Shareholders with enquiries about their shareholdings can also contact AGL's Share Registry:
Link Market Services Limited
1A Homebush Drive
Rhodes NSW 2138
Postal Address: Locked Bag A14, Sydney South NSW 1235

Telephone:	+61 1800 824 513 (free call within Australia)
Facsimile:	+61 2 9287 0309
Email:	aglenergy@linkmarketservices.com.au
Website:	**linkmarketservices.com.au**

When communicating with the Share Registry, it will assist if you can quote your current address together with your Security Reference Number (SRN) or Holder Identification Number (HIN) as shown on your Issuer Sponsored/CHESS statements.

Final share dividend

The final dividend of 64.0 cents per share, 80% franked, will be paid on 20 September 2019. As the final dividend will only be paid via direct credit, Australian and New Zealand shareholders need to nominate a bank, building society or credit union account within these jurisdictions. Payments are electronically credited on the dividend payment date and confirmed by a mailed or electronic payment advice. Payment instructions can either be lodged online or an appropriate form can be downloaded from Link Market Service's website.

Dividend Reinvestment Plan

AGL offers shareholders the opportunity to participate in the Dividend Reinvestment Plan. Shares are allocated under the Plan, free of transaction costs. The rate of discount, if any, applied to shares allocated under the Plan will be determined by the Directors at the time each dividend is declared. A zero discount was applied to the 2019 interim dividend and the same will apply to the 2019 final dividend.

On-market share buy-back and shares purchased on-market

On 8 August 2019, AGL announced its intention to undertake an on-market buy-back of up to 32,791,252 shares (being approximately 5% of AGL's issued ordinary shares). During the financial year ended 30 June 2019, 450,676 AGL shares were purchased on-market at an average price of $20.34 per share to satisfy employee entitlements under the AGL Share Reward Plan, AGL Share Purchase Plan, AGL Restricted Equity Plan and the AGL Long-Term Incentive Plan.

Reporting to shareholders

The *Corporations Act* requires AGL to provide shareholders with access to this Annual Report on AGL's website, unless a shareholder has specifically requested to be sent a printed or electronic copy. Shareholders seeking a copy of the Annual Report should subscribe online or contact the Share Registry. The Annual Report is also available on AGL's website.

Change of name, address or banking details

Shareholders who are Issuer Sponsored should advise the Share Registry immediately of a change of name, address or banking details for dividends electronically credited to a bank account. All such changes must be advised online or in writing and cannot be accepted by telephone. For a change of name, supporting documentation must accompany your written advice. Appropriate forms can also be downloaded from the Share Registry's website.

Shareholders who are CHESS Sponsored should instruct their sponsoring broker in writing to notify the Share Registry of any change.

Tax File Number (TFN)/Australian Business Number (ABN)

It is not compulsory to provide a TFN or ABN. However AGL will be required to deduct tax at the top marginal rate from the unfranked portion of any dividend paid to shareholders who have not provided either a TFN/ABN or details of a relevant TFN exemption. TFN/ABN notification forms can be obtained by contacting the Share Registry, by lodging your details online or by downloading the appropriate form from the Share Registry's website.

Consolidation of shareholdings

Shareholders who wish to consolidate multiple shareholdings into a single shareholding should advise the Share Registry or their sponsoring broker, whichever is applicable, in writing.

Company Secretaries

John Fitzgerald BA MA LLB
Melinda Hunter BCom LLB

Five-year Summary

		FY2019	FY2018[1]	FY2017	FY2016	FY2015
Profit						
Revenue	$m	13,246	12,816	12,584	11,150	10,678
Underlying EBITDA	$m	2,285	2,236	1,852	1,689	1,505
Underlying EBIT	$m	1,660	1,668	1,368	1,211	1,126
Statutory Profit/(Loss) after tax	$m	905	1,582	539	(408)	218
Underlying Profit after tax	$m	1,040	1,018	802	701	630
Financial position and cash flow						
Capital expenditure	$m	939	778	518	529	794
Total assets	$m	14,821	14,633	14,458	14,604	15,833
Net debt	$m	2,600	2,491	3,178	2,746	3,560
Gearing (net debt/net debt + equity)	%	23.5	22.9	29.6	25.7	28.6
Operating cash flow before interest, tax and significant items	$m	2,013	2,474	1,362	1,588	1,527
Credit rating[2]		Baa2	Baa2	Baa2	Baa2	BBB
Shareholder value						
Statutory earnings per share	cents	138.0	241.2	80.5	(60.5)	33.3
Underlying earnings per share	cents	158.6	155.2	119.8	103.9	96.4
Dividends declared	cents	119.0	117.0	91.0	68.0	64.0
Return on equity	%	12.5	13.1	10.2	8.3	7.2
Customer account numbers						
Electricity accounts	'000	2,277	2,235	2,250	2,262	2,279
Gas accounts	'000	1,431	1,406	1,403	1,419	1,456
Total customer accounts	'000	3,708	3,641	3,653	3,681	3,735
Dual fuel accounts	'000	2,070	2,027	2,008	1,962	1,917

1. Comparatives have been restated for the adoption of AASB 9 Financial Instruments and AASB 16 Leases.
2. Changed from Standard and Poor's to Moody's in FY16.

Glossary for the Business Value Drivers

All data relates to the year ended 30 June 2019 unless specified otherwise.

Term	Explanation
Customer Net Promoter Score (NPS)	NPS is a widely used measure of customer loyalty and is based on how likely a customer would be to recommend AGL as an energy provider. AGL's NPS is measured quarterly via an external survey that asks customers across all energy retailers "On a scale of 0-10, how likely is it that you would recommend Retailer X to a friend or colleague?" The NPS is calculated by subtracting the percentage of zeros to sixes from the percentage of nines and tens. The performance measure relates to the NPS measured in Q4 of the reporting year.
Ombudsman complaints	Reported figures represent complaints to the various state Ombudsman Offices that are provided to AGL for resolution. Enquiries and complaints referred to other agencies or instances where the customer has been advised by the Ombudsman to contact AGL directly are not included. Numbers are based on complaints figures provided by the Ombudsmen of New South Wales, Victoria, Western Australia and South Australia. Complaints recorded for Queensland are based on AGL's internal complaints reporting systems until November 2017, after which time AGL started receiving monthly reports from the Queensland Ombudsman.
Number of customers on Staying Connected	Staying Connected is AGL's program for customers who have been identified to be in financial hardship. The performance measure relates to the number of customers on the program as of 30 June in the reporting year.
Average level of debt of customers on Staying Connected	The average level of debt calculated represents the outstanding debt at the customer (rather than account) level as of 30 June in the reporting year.
Total average debt across mass market customer portfolio	The average energy debt represents the outstanding debt at the customer (rather than account) level as of 30 June in the relevant reporting year. Debt levels include GST. Data excludes 'unknown customers' and commercial and industrial customers.
Customer accounts	Data comprises AGL's residential, small and large business, and wholesale customers.
Customer churn	'Churn' is defined as a completed transfer of a customer to a competing retailer. This measure relates to residential and small business customers only and does not include commercial and industrial customers.
Reptrak score	Results refer to the latest RepTrak Pulse Report issued in FY19.
Community contribution	Data includes the AGL matched component only of donations raised to the Employee Giving program and fundraising events, not the donations given by employees. Matched amounts are included in the year in which the employee donations were made (even though the matched payment may have been made after the close the financial year).
Underlying Effective tax rate	AGL's underlying income tax expense expressed as a percentage of AGL's underlying profit.
Total Injury Frequency Rate (TIFR)	The rate is calculated as number of lost time and medical treatment injuries classified as TIFR related in a 12-month rolling period, per million hours worked in that 12-month period.
High potential near miss: recordable incident ratio	A Recordable Incident is a safety or environment incident that resulted in the injury or illness of a person requiring Lost Time or Medical Treatment, or an Environment Regulatory Reportable event. A High Potential Near Miss is an unplanned Event or error that did not result in injury, illness, equipment/property damage or fire but where the potential to do so is ranked high or above as per AGL's FIRM matrix. This includes a high potential first aid, compliance breach of permits, critical controls and/or lifesaving rules. A High Potential environment near miss is classified as any event where no actual regulatory breach or unauthorised environmental impact occurred but where the potential for this to occur is ranked high or above as per AGL's FIRM framework.
Employee engagement	Engagement scores are based on ORC International methodology. During FY19, employee engagement was measured twice (once in September 2018 and once in May 2019). The September 2018 score has been included as FY18's engagement score as it reflects a new baseline for engagement out of the FY18 financial year.
Gender mix in senior leadership pipeline (SLP)	The senior leadership pipeline refers to employees in Management Levels A, B, ELT and ET (excluding CEO). These are Hay Level 18 roles and above as classified using the AGL's Position Framework.
Code of conduct breaches	Performance measure relates to the number of substantiated material breaches of AGL's Code of Conduct. Material breaches are those ranked 'High' or above according to AGL's FIRM framework.
Attrition (total workforce)	Calculated based on the total number of voluntary departures per full-time equivalent. Includes fixed term, permanent full-time, and permanent part-time employees; excludes casuals, labour hire and contract workers.
Key talent retention	The performance measures relate to employees identified as 'key talent' from AGL's enterprise leadership team (ELT) and direct reports.
Operated scope 1 & 2 emissions ($MtCO_2e$)	Total scope 1 and 2 emissions from facilities over which AGL had operational control during the period. Operational control is defined by the National Greenhouse and Energy Reporting Act 2007.
Operated generation intensity (tCO_2e/MWh)	Total scope 1and 2 emissions divided by total sent out generation of electricity generation facilities over which AGL had operational control during the period. Operational control and sent out generation are defined by the National Greenhouse and Energy Reporting Act 2007.

Glossary for the Business Value Drivers

Term	Explanation
Controlled generation intensity (tCO_2e/MWh)	Total scope 1and 2 emissions divided by total sent out generation of electricity generation facilities over which AGL had operational control and/or had contracted for the electricity output of during the period. Operational control and sent out generation are defined by the National Greenhouse and Energy Reporting Act 2007.
Proportion of operated renewable generation output (%)	Total sent out generation of renewable electricity generation facilities over which AGL had operational control during the period. Operational control and sent out generation are defined by the National Greenhouse and Energy Reporting Act 2007.
Emissions intensity of total revenue ($ktCO_2e/\$million$)	Total scope 1and 2 emissions from facilities over which AGL had operational control during the period divided by total AGL revenue**.** Operational control is defined by the National Greenhouse and Energy Reporting Act 2007.
Environmental Regulatory Reportable incidents	Comprises incidents that trigger mandatory notification provisions under legislation and/or environmental licences.
Pool generation volume	Electricity that AGL generates that is sold into the National Electricity Market ("the pool") and considers marginal loss factors, non-scheduled generation and auxiliary usage.
Equivalent availability factor	Equivalent Availability Factor (EAF) measures the percentage of rated energy available when required. Power stations included are Liddell, Bayswater, Loy Yang A, Torrens Island power stations, Somerton and AGL Hydro power stations, and wind and solar farms under AGL's operational control. Site EAF is weighted by megawatt (MW) capacity.
Reportable privacy incidents	Data comprises 'reportable incidents' as defined by the Office of the Australian Information Commissioner.
Notifiable data breaches realised by a material risk relating to cybersecurity, data governance, or failure of internal controls	Material breaches are those ranked 'High' or above according to AGL's FIRM framework.

Corporate Directory and Financial Calendar

Directory

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Financial calendar[1]

8 August 2019
Full Year result and final dividend announced

22 August 2019
Record date of final dividend

23 August 2019
Record date of final DRP

19 September 2019
Annual General Meeting

20 September 2019
Payment date of final dividend

13 February 2020
Interim result and interim dividend announced (indicative)

13 August 2020
Full year result and final dividend announced (indicative)

1. The above dates are indicative only and may be subject to change.