



White Paper

One AGL: From Laggard to Leader

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AGL's business context is rapidly shifting and requires successful stewardship of the inevitable energy transition

Over the past 24 months, momentum towards renewable energy has accelerated significantly. Leading developed countries and heavy emitters such as the U.S., E.U., and the U.K. now have commitments to reduce emissions by at least 50-68% before 2030¹. Australia ranks among the worst in the OECD in terms of the energy transition². It is the world's worst per capita polluter from the use of coal, with per capita emissions from coal-fired generation four times larger than the global average³. Australia has made progress in increasing its share of renewable energy sources. However, compared to other OECD jurisdictions, we lag in our transition to clean energy.⁴

The federal election in May 2022 has given the incoming Labor Government an indisputable mandate to accelerate the energy transition. Climate change was one of the most critical issues among voters in this election,⁵ evidenced in part by the unprecedented wave of success of independent candidates that put climate change at the heart of their campaigns, and the election of three green members in Brisbane. Labor's pre-election climate change commitment was a 43% CO₂e reduction by 2030 vs 2005 (compared to the Coalition's 26-28% target) and to have renewables constituting 82% of the National Electricity Market. While Labor's plan is consistent with 2°C of global warming, crossbenchers and the Greens are pushing for an even more ambitious reduction of 50% by 2030 (in line with 1.5°C).⁶ Delivering on any of these targets will be almost impossible without a rapidly accelerated exit from coal-fired power generation.

The pace of energy transition globally has strong tailwinds and is accelerating. Historically, the rate of the energy transition has been consistently underestimated by stakeholders, including leading institutions such as the International Energy Agency (IEA)⁷. The cost of renewable energy (mainly solar panels, wind turbines and batteries) has declined significantly faster than projected, and the date for peak oil has moved forward. Covid and geopolitical supply chain shocks notwithstanding, structural peak coal has been reached ahead of expectations. Planning for an accelerated energy transition presents a chance for AGL to be at the forefront of this change and take advantage of the associated opportunities.

Particularly salient for AGL is that electrification is a vital driver of the clean energy transition. Energy requirements historically powered by fossil fuel sources (e.g., petrol cars, gas heating and cooking) are increasingly electrified. The IEA projects that the share of electricity for final energy consumption will increase from 38% to 47-60% by 2040, subject to various scenarios⁸. Australia has made progress, increasing the share of renewable electricity generation in the NEM to 33% in the past year⁹, most notably through the highest rooftop solar penetration globally (30% of Australian buildings).¹⁰ However, most of Australia's electricity generation (61% in the past year) still stems from coal.¹¹ Australia's reluctance to embrace EVs has shifted electricity demand into the future compared to other developed economies.

An accelerated exit from coal is inevitable to meet the 2030 82% renewables target that Labor has set and the Glasgow Financial Alliance for Net Zero target to align with a 1.5°C pathway. The question is not if but how we make this transition.

Central to our nation's success is the leadership role AGL must rise to in terms of leveraging its leading market position and ability to facilitate capital investment at an unprecedented scale. If the transition were to happen without the active leadership of Australia's most important energy providers,

shareholder value would continue to be eroded, employees and communities would be left behind, rehabilitation funding would be put at real risk and opportunities for growth from developing and managing investments in renewable energy assets would be missed.

AGL's challenges arise during a pivotal moment in energy and capital markets. The World Economic Forum points to the unprecedented challenge of rolling off Russian oil and gas without investing in new fossil fuel capacity elsewhere and pursuing within the IEA 2021 Net Zero safe climate pathway.¹² The World Economic Forum recognises the cost of just the energy system transition to net zero by 2050 is estimated at \$37 trillion from 2020-2050.¹³

Record growth in ESG¹⁴ and impact investing over recent years is in marked contrast with the exit of institutional investors from the AGL share register. This can be reversed with a clear plan that pivots investor sentiment from divest, towards invest.

A measured, accelerated transition to clean energy sources this coming decade will deliver significant economic, social, and environmental benefits, and provide a permanent solution to the rampant fossil fuel inflation currently undermining the global economy. As AGL moves to lead this shift, it could take advantage of these benefits and deliver significant ongoing value for shareholders and, as one of Australia's largest energy providers, also help steward Australia's energy industry to clean energy and address its environmental and social stewardship challenges.

"The exponential rise of ESG and impact investment presents an enormous opportunity for bringing divestment capital back into AGL through a clear 1.5°C net zero plan underpinned by technology and innovation. Stewardship is essential."

Mara Bún

Sustainable investment and technology scale-up leader, economist

Chair of Board of Australian Impact Investments / Non-executive Director of Australian Ethical Investments / Advisor with The Salmon Project / Former President and Chair of Australian Conservation Foundation / Former Non-executive Director (Treasurer) of Bush Heritage Australia / Former Senior Analyst at Macquarie Bank and Morgan Stanley / Former member of Executive Management Council, CSIRO

AGL needs to resolve its governance issues to address the threat to its declining core business by investing in growth

Rather than taking a leadership position to steward Australia's energy transition, AGL has been internally focused on a flawed demerger plan, weighed down by poor governance, having missed the accelerating pace of change in the energy market. AGL has been a laggard, eroding shareholder value and missing opportunities for growth.

Since June 2017, AGL's shareholders have lost 68% of their investment (compared to a 28% gain in the S&P/ASX100 Index).¹⁵

While its peers are proactively managing the transition and bringing forward the closure of their coal power plants, AGL has failed to address the decline in its core business and re-invest profits from coal into growth. In June 2021, AGL's chair made statements to the effect that, 12 months prior, he and the Board did not anticipate the level of the change that would occur in the electricity market and the acceleration of that change in the Board's thinking.¹⁶

Poor governance decisions have contributed to shareholder value erosion. These include failure to maintain ageing power plants, poorly executed share buybacks, significant losses on onerous renewable energy contracts, the costly failure of the Crib Point LNG terminal, insufficient legacy gas supply, underestimating environmental restoration costs, and overly costly technology investments. Critically, the board has failed to develop a plan which articulates a viable regional economic future for employees and communities.

The most recent example of poor governance leading to detrimental outcomes is the Board and Executive's proposed plan to demerge the company into two separate entities. This proposal was strategically flawed, costly to implement, has wasted time and would have further eroded

shareholder value. Demerging the two businesses would have created a terminal coal-fired power business with cost and reliability issues and sub-scale firming renewable generation, and a strategically limited energy retailer without the breadth to manage the cost and complexity of risk, and reduced capacity to invest for growth.

Given the fallout of the federal election and the significance of climate change in the result, the pressure on AGL will only increase.

The proposed demerger fundamentally missed the opportunity to re-invest the proceeds from AGL's core business into new growth and continued the flawed logic of capital allocation decisions (e.g., share buyback). It would have left Accel at risk of insolvency through CAPEX blowouts and wholesale energy pricing risks and ensured AGL could not be re-rated for ESG due to embedded coal and gas offtake agreements.

Further, the demerger would have been unfavourable for shareholders creating significant transaction costs (\$260 million), an increase in head office operating expenses, net tax inefficiencies, higher cost of borrowings, and the risk of a credit rating downgrade.

Finally, under the proposed plan, AGL would have emitted up to 635 million tonnes of carbon equivalent over the coming 23 years, of which well over 250 million could be averted.¹⁷

The recent decision by the company to step away from the demerger plan is encouraging. The proposed strategic review creates a chance for the company to change direction. This review will be challenging as AGL has painted itself into a carbon corner but to assist early thinking this document presents a preliminary strategic framework and an alternative plan outlining the key strategic moves for AGL to shift from being a laggard to a leader in the energy transition.

AGL must address its declining core business - and seize the opportunity to steward the energy transition by executing five strategic moves concurrently

AGL has a strong but fundamentally flawed core (Horizon One) business today. Its core profits stem from high emissions, and inflexible, coal-fired power generation, which will inevitably decline and depress its valuation. It is imperative that AGL responsibly accelerates the exit from coal and ahead of the closure schedule re-invests the proceeds generated during the remaining short period of profitability to become a modern gentailer, leading in the energy transition (Horizon Two) and delivering new business through technology investments, enhanced two-way power flow tools and disruptive business models (Horizon Three). AGL must pursue all three horizons concurrently.

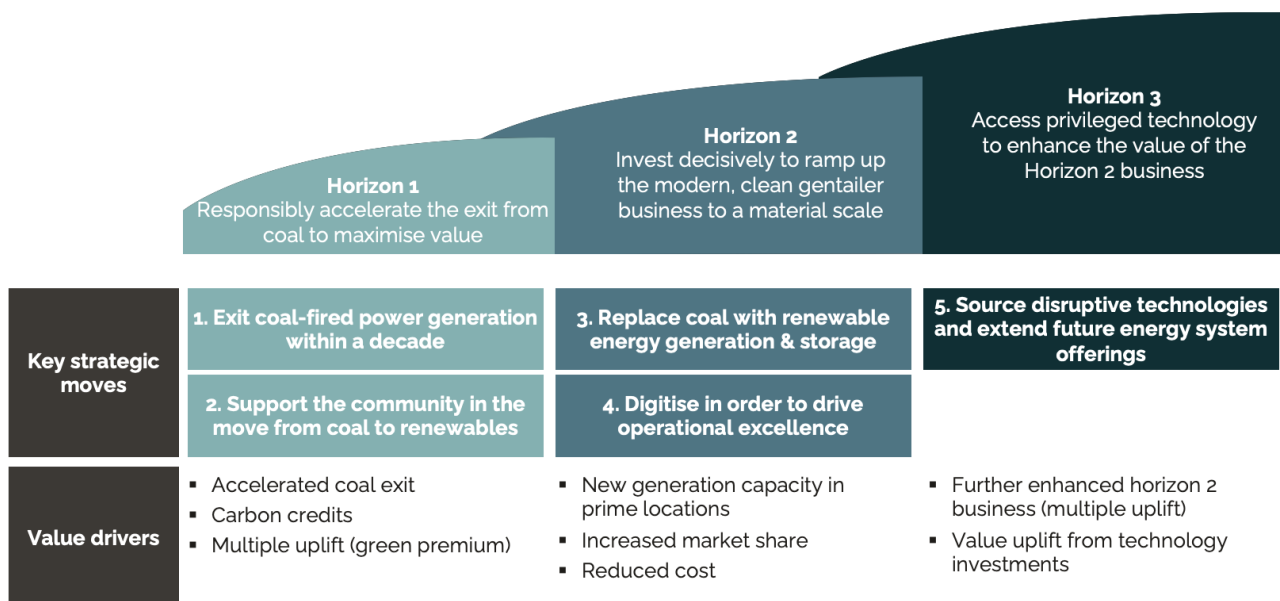
Horizon One: Responsibly accelerate the exit from coal to maximise value

Today, the electricity sector comprises ~33% of Australia’s emissions and is particularly carbon-intensive due to its heavy reliance on coal. AGL remains Australia’s largest producer of greenhouse gas emissions. AGL’s operational emissions in FY21 were 40.8 million tonnes of CO₂e or approximately 8% of Australia’s total emissions.¹⁸

AGL’s generation business, which comprises around 70-75% of gross profits, is inevitably in decline due to its reliance on coal. Attempting to extend coal-fired power generation would result in significant capital outlays and operational costs, further eroding shareholder value and alienating its clients.

An accelerated exit from coal will facilitate a more ambitious CO₂e reduction target by 2030-32, in line with 1.5°C Paris targets, the new Labor targets, and global investor expectations.

One AGL: From laggard to leader



Decommissioning of coal-fired power sites and associated coal mines, at a NPV cost of a minimum of ~\$1.454 billion¹⁹, must be conducted to mitigate community disruption and minimise environmental damage and contamination for centuries to come.²⁰ Concerns have been expressed that AGL has still under-accrued for environmental rehabilitation, which could lead to the Latrobe Valley community being left with legacy contamination.²¹

There are two key strategic moves AGL must make to maximise value from its Horizon One business and set it up for the future.

1. Exit coal-fired power generation within a decade

There is a limited window of time to replace the declining core business. The former chairman of the Energy Security Board, Dr Kerry Schott, has predicted that coal-fired power will disappear from the NEM by the mid-2030s, if not earlier, which would cut some generators' rated life by more than a decade.²² AGL's peers (including Origin and Energy Australia and Western Power) have already either brought forward the announced retirements of coal-fired power stations, or indicated they would do so.²³

The 'stay-in-business' costs of extending coal-fired power generation will become unviable. The CAPEX requirements to keep coal plants running continue to grow as their reliability deteriorates both due to ageing infrastructure and a warming climate, increasing risk of extreme temperatures and high peak demands.²⁴ For AGL, 'sustaining' CAPEX has grown from just 10% of total CAPEX in FY12 to 76% in FY21, or from \$80m to \$534m over that period.²⁵ By comparison, CAPEX invested in growth (including renewables) declined from \$690m to \$173m over the same period.²⁶ The cost of capital will continue to increase for these end of engineering life coal plants whose closure dates are not aligned with the Paris Agreement (i.e., by 2030-32).²⁷

With aging comes falling reliability, ongoing and unforeseen breakdowns and outages

are more and more likely. This will only lead to greater risk and price volatility for Australian businesses.

AGL is certainly not immune to these risks: over the past five years, Loy Yang A has experienced a unit trip or breakdown 47 times (and is in the midst of dealing with a significant outage that's taken out a quarter of its capacity²⁸), Liddell has had 25, while Bayswater has had 15.²⁹ Consequently, insurance costs continue to grow, resulting in AGL now having to self-insure.

Further, extending the life span of coal is becoming untenable from an ESG perspective. AGL needs to embrace the investment opportunities and reduce its emissions impact to ensure investor and customer sentiment alignment, particularly given the federal election results means both federal and state governments are now aligned on accelerated decarbonisation pathways. AGL's investors have already demanded Paris-aligned business plans in the 2021 AGL climate resolution.

AGL must responsibly accelerate its exit from coal and address several critical items in planning out that exit.

Grid stability is a central constraint limiting the speed of increase in variable renewable energy penetration in Australia and has been cited as the key reason for the slow transition away from coal. To facilitate an accelerated and orderly exit from coal, AGL will need to closely collaborate with AEMO to inform and align with the Integrated System Plan (ISP) as well as with other regulators and federal and state governments to ensure grid stability and to plan a reasonable, expedited exit strategy and decommissioning cost.

Finally, AGL has an opportunity to outline its various potential pathways to monetise accelerated carbon emission reductions.

2. Support the community in the move from coal to renewables

Without mitigation, the impact of exiting coal on the regional communities it currently supports is substantial. Exiting coal-fired power plants will impact a workforce of approximately 1,700 employees.³⁰

AGL can support and provide opportunities for the impacted communities, particularly by evolving its workforce to enable them to participate in non-coal employment.

First, AGL is encouraged to establish a robust dialogue and participation mechanism with both workers and unions and take on board the principles outlined by the Australian Council of Trade Unions (ACTU) Guidance Document from Feb 2021.³¹ On the ground presence and support are vital and powerful in these communities, with government buy-in on retraining, redeployment, and reskilling.

Second, AGL is encouraged to utilise the multiple pathways through which it could help its affected workforce. There is job creation potential in rehabilitating the closed sites given the substantial costs associated with decommissioning coal-fired power plants to limit the long-term damage and impacts. The distributed energy sector is starved of skilled workers; AGL could get a competitive edge in the employment market by establishing worker transfer schemes and re- and up-skilling schemes to prioritise redundant workers for jobs in renewable energy. Building large-scale renewable power generation and storage at or near the current coal-fired power generation sites presents an opportunity for both re- and up-skilling of impacted workers. Finally, AGL will need to allocate capital for worker support and work with both federal and state governments to secure matching retraining support.

Horizon One can yield significant value to shareholders, including enhanced cash yield and optimised CAPEX and OPEX through an accelerated exit from coal, multiple uplift, and lower cost of debt from leading energy transition, and the potential monetisation of

avoided CO₂e emissions through carbon credits.

Horizon Two: Invest decisively to ramp up the modern, clean gentailer business to a material scale

In its current form, AGL's renewable energy business development team is sub-scale and unsustainable. It must be rapidly scaled up over the next decade. AGL must decisively invest the proceeds from its coal operations to build a renewables development platform, including generation and storage assets, and become a modern gentailer. Having a position at both ends of the value chain (generation and retail) reduces the cost and complexity of trading, hedging and risk management and allows AGL to reduce wholesale price risks³² by matching time-of-day generation with customer load, including leveraging virtual power plant, electric vehicle, and demand response management technologies.

The demand side of this value chain also presents AGL customers with the opportunity to participate in distributed energy trading models that embed 'Prosumer' value.³³

3. Replace coal with renewable energy generation and storage

With the ongoing fall in levelized cost of electricity (LCOE) for renewables, the LCOE to build new renewables is materially superior to building inflationary new coal or gas-fired power plants even absent a carbon price and may soon become cheaper than the marginal cost to operate black coal-fired power stations³⁴. Renewable energy from solar and wind will inevitably become the dominant source in Australia at the expense of coal, further driven by a trebling of Australia's world-leading distributed residential generation. AEMO's 2022 ISP projects the share of coal generation to decline from the current 63% to 15-20% in 2040 in the Centre Scenario and just 5% in the Step-change Scenario which AEMO now

considers to be the most likely scenario. The latter is likely required to achieve Labor's 2030 CO2e reduction target and align to Paris targets.

Building renewable power generation and storage is one of the most significant infrastructure investment opportunities for the next decade and beyond. To replace 5GW of coal-fired power generation requires 12GW in renewable generation capacity with storage. Overall, in Australia, 50GW of new large-scale renewable energy will be built in the NEM until 2042 according to AEMO.³⁵ To support this substantial investment of \$20 billion into transmission infrastructure will be required according to Labor's Rewiring the Nation plan.³⁶ Should Australia become a renewable energy superpower as per AEMO's Hydrogen Superpower scenario, much more than 50GW will be built.³⁷ Europe alone is seeking 80-120 GW of additional solar and wind generation to by 2030 to supply green hydrogen.³⁸

"The required quantum of renewable development is possible with a clear plan that signals confidence to co-investors. We have learned that renewable energy technology evolves faster than anticipated, supporting this transition."

Miles George

Renewable energy leader and director, engineer

Non-Executive Director, Collgar Wind Farm, Australian Conservation Foundation / Former CEO, Infigen / Former Non-executive Director, Spark Infrastructure / Former Advisory Board Member CGN Capital Partners Infrastructure Fund III / Former Chairman, Clean Energy Council / Founding CEO QLD Gov CleanCo / Former Panel Member, AEMC & AEMO

AGL is in a prime position to take advantage of this investment opportunity. It will be investing at the right time and benefit from the market transition. On the East Coast, AGL is Australia's largest gas retailer with 32% market share and the second-largest

electricity retailer with 24% market share³⁹. With its large customer book, AGL already has a significant offtake for a large renewables generation and storage portfolio at sites already connected to the transmission grid. Its coal-fired power plants present valuable land assets that could be converted to renewable energy sites with transmission assets in place. Its gas customers will increasingly need to move away from gas and toward electricity especially at homes across Australia.

The shift from coal and then gas to renewables will require a build or acquisition of strong developer capabilities within AGL and the development of long-term partnerships with other key players. AGL currently outsources renewables development through PowAR, in which it holds a 20% stake. PowAR recently acquired Tilt Australia, which has 2-3GW in projects in the pipeline and can potentially provide low-cost sites for wind power generation in the future. Accessing funding and offtake agreements to finance large-scale development projects will be equally crucial. AGL will be able to use its strong balance sheet to access funding and leverage its scale to negotiate favourable terms.

As a next step, there are some details AGL will need to address in developing an execution plan. It will need to determine the right mix between generation (wind, solar) and storage (batteries, pumped hydro) and the right regional mix. AGL will need to collaborate closely with regulatory bodies like AEMO, AER, and AEMC, and federal and state governments to ensure grid stability and stakeholder support as AGL exits coal. Finally, AGL will need to conduct a capability assessment for building and operating a large-scale renewables business and develop its plans accordingly.

NextEra Energy, a North American energy company, has successfully demonstrated a similar strategy by accelerating the retirement of legacy coal assets and transitioning to renewables. It has delivered 15 years of net profits growth of 7.5% CAGR, driving EPS and DPS growth of 5.5%

annually. This has underpinned the best share market performance of all US gentailer firms through a strategy of consistent improvement in customer service and affordability, whilst optimising the firm's financial structure and sustained utility cashflow returns to drive a steady, accelerated, planned decarbonisation. NextEra has been the largest global investor in zero emissions capacity and its enabling infrastructure for the last decade, with 2021-2024 on track to see another 23-30GW of firming renewables capacity added. Investors have been rewarded by sustained outperformance by being the leader in driving the US electricity transition.

4. Digitise to drive operational excellence

Historically, operational excellence was considered a key differentiator for AGL. However, in recent years it looks to have failed to translate significant investments in technology and digitisation into cost reductions and operational improvements. Leveraging existing capabilities and investing in additional digital capabilities presents a material opportunity for AGL to drive operational efficiencies, reduce costs, and enhance customer processes.

AGL has reported investing heavily in digital assets, specifically technology transformation and data platforms (which they called CXT and PT3⁴⁰), but that doesn't appear to have translated to strong revenue or cost reduction benefits. With a more intensive focus on using these assets to digitise processes and customer experiences, we expect there are significant cost savings and customer experience benefits still to be generated.

The future energy system requires real-time orchestration and monetisation of distributed customer assets, including solar, home batteries, and electric vehicles. AGL has exclusive local access to deploy Ovo's Kaluza Platform⁴¹. This platform looks highly capable of transforming AGL's customers to be ready to be part of the distributed energy system of the future and monetising these assets through demand response

management and trading. The focus on the demerger looks to have distracted AGL from rapidly deploying this necessary and differentiated capability to compete with Origin's Kraken platform.

Additionally, the nature of trading is rapidly changing. An integrated AGL has data and insights from the broadest range of generation and storage assets in the NEM, so should have a differentiated ability to use digital assets and machine learning to optimise its trading yields. Distributed energy systems and batteries present a significant future opportunity, and AGL must augment its capabilities to take advantage.

We estimate AGL has invested up to \$100 million in acquiring Southern Phones (\$27.5 million⁴²) and building out Broadband and Mobile product capabilities. The telecommunications sector is profit-challenged and requires significant scale for competitive advantage and is not expected to add material shareholder value. We recommend AGL considers options to divest or de-risk the telecommunications asset and seek to build and monetise closer to core capabilities that enable customers to manage their home energy needs.

Horizon Two can yield significant value to shareholders. Firstly, there are significant development opportunities for new renewables in prime locations with grid connection and behind-the-meter economic hubs, which will deliver flow-on employment and local economy benefits. An AGL that has publicly committed to a 1.5°C decarbonisation pathway and digitisation will also likely be able to increase market share through better customer experiences and brand perceptions as a leading clean energy company. Finally, AGL can reduce operational costs and improve customer experience through digital transformation.

Horizon Three: Access privileged technology to enhance the value of the Horizon Two business

No single company can consistently out-innovate the market as a whole. Therefore, no matter how effective AGL's internal innovation is and how well it integrates into the Australian innovation system, the innovation around the transition to clean energy is taking place on a global scale.

AGL must create efficient mechanisms for identifying, validating, and investing in the most promising world-class technology ventures outside the company to tap into that flow.

A vertically integrated AGL, leading in the energy transition, with a scalable set of renewable energy assets, will be a highly attractive partner for clean energy start-ups, V.C.s, and other corporates, allowing AGL to access privileged technology and reduce its cost of investing.

Such privileged access will enable AGL to enhance the value of its Horizon Two business to accelerate the transformation to a modern gentailer and uplift its value.

5. Source disruptive technologies and extend future energy system offerings

A re-focused AGL with a compelling commitment and transition plan to decarbonisation and energy transition will have an advantage in sourcing disruptive technologies. One AGL will also have the financial resources and investor support to invest at scale in disruptive technologies (e.g., direct investment, competitions such as X-Prize) that can then be used to boost its own business and potentially extend its product and services suite.

Australia has world-leading penetration of solar systems on residential rooftops. With 3.2GW installed alone in 2021,⁴³ the cumulative installed degraded capacity of solar panels in the NEM reached nearly 13GW. Under the current trajectory, this capacity will increase almost four-fold by 2050 and more than eight-fold under

AEMO's most ambitious energy transition scenario. Developing the capability to build technology platforms that manage distributed energy systems can become a strong differentiator and opportunity to extend AGL's core business.

AGL can further accelerate its transition by rolling out future energy system offerings to its customers. AGL's large customer base and brand present an opportunity to extend and lead the way in future energy system offerings, including distributed energy systems and consumer financing, enhanced gas-to-electricity switching and consumer financing (green financing), and E.V. charging.

Horizon Three will drive value to shareholders by enhancing the Horizon Two business through privileged technology and extended energy system offerings and value uplifts from the technology investments themselves.

"Companies driving this industry transformation with governments will be at the forefront seeing and capturing new growth businesses. Where the electricity and software industries converge at the customer end will provide great investment opportunities."

Clem Doherty

Technology investor, electrical engineer (power systems), strategy leader

Advisory Board of the ANU Battery, Storage & Grid Integration Program / Pre-venture technology investor / Former board member and advisor at Cleanspace Technology Pty Ltd and ResMed Inc. / Former member of McKinsey & Co APAC Board and lead of Telecommunications Sector / Formerly High Voltage Grid Network Planning and Software Engineering for ECNSW

AGL will have several levers to fund the execution and create significant shareholder value

Transitioning from a laggard to a leader will require substantial investments over the next decade

Exiting coal within a decade will require supporting the community through up-skilling and re-skilling and redundancy payments for workers for which no suitable re-deployment alternatives can be found. Further decommissioning of coal-fired power stations and land restoration costs must be considered.

Replacing approximately 5GW in coal capacity will require building approximately 12GW in firmed renewable capacity with storage ready for deployment before coal-fired power generation is shut down. Such a capacity would come at a capital cost of approximately \$24 billion with AGL's share being around \$12 billion (debt and equity), assuming a 50/50 partnership with Global Infrastructure Partners (or equivalent). We expect these investments to yield significant returns with an IRR of ~8%⁴⁴.

AGL will further need to invest in leading technologies. These investments will enhance AGL's ability to generate profits from extending the core business. Further, deploying technology that AGL fully or partially owns to the vast customer base of its core business will result in an immediate value uplift.

AGL will have several significant sources of funding at its disposal

We estimate that AGL will be able to maintain the current core earnings streams for much of the next decade. Our assumption on wholesale electricity prices over the next decade is that they will remain volatile and above the long-term average as closures impact electricity supply. We note the risk that CAPEX blowouts related to coal fired power station breakages are likely to recur.

Executing the proposed strategy will yield several potential positive cashflow levers such as cost reduction from operational enhancements, increased market share, enhanced trading profits through better digital capabilities, and extended core services such as financing residential distributed energy systems. In addition, there is potential to monetise carbon credits with demonstrable additionality and endurance from early coal closure and the build of renewable energy generation and storage.

With a transparent plan for the energy transition and a strong balance sheet, AGL will have the ability to raise significant debt to fund the required investments in $\geq 50\%$ new renewable power generation and storage. Further opportunities exist through capital recycling by progressively selling down stakes in renewable assets once development profits are proven, and construction risks are removed. Finally, there are opportunities for portfolio optimisation by divesting underperforming non-core assets (e.g., Southern Phones).

Leading climate action will make AGL a more attractive partner for impact and ESG investors. They should be able to convince such investors that the revised rapid closure strategy deserves ESG and impact capital to enable an expedited transition.

Re-rating of AGL stock will drive significant shareholder value uplift

AGL's stock currently trades at a prospective P/E multiple of 10-12x for FY23e. Investing in growth assets and removing the drag of coal on the current stock's valuation will drive a significant adjustment and re-rating. Such an investor proposition has been successfully demonstrated by U.S. energy company Nextera, which, over a long-term period, has grown EPS and driven shareholder value through an increased P/E ratio from and orderly thermal capacity closure and reinvesting in firmed renewables and customer service capacity.

New Leadership will be required to implement the new strategy we have outlined in this document

Implementing this strategy for AGL requires new leadership. Executing an ambitious growth strategy requires a specific skill set and mindset and, a clear break from traditional incumbent thinking. It will also need a commitment to the energy transition, engaging with diverse stakeholders, including communities, workforce, investors, customers, federal and state governments, and interest groups.

The opportunity presented by the resignation of the Board and CEO opens the door to a significant change in corporate direction. Several of the members of the current Executive team are highly experienced and skilled energy industry veterans who will be instrumental in executing this strategy. Others we know are keen to join the Board and competent to lead this transition.

This document does not present a final strategy or execution plan for AGL but rather a blueprint for the new CEO and Board to develop a detailed business case and execution plan by the end of the calendar year.

High level execution plan

	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Phase 1: Execution strategy and stakeholder engagement	Onboarding of new Board members and CEO						
	Strategy refinement and detailed business case						
	Key stakeholder engagement and consultation (investors, workforce, regulators, governments, interest groups)						
Phase 2: Detailed implementation plan and change management					Detailed execution plan and organisational alignment		
					Workforce change management plan		
					Financial / capital framework		
					Internal and external communications plan		

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Endnotes

- ¹ <https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/> ;
<https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/> &
<https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>
- ² OECD 'Going for Growth' Report 2021
- ³ <https://ember-climate.org/insights/research/per-capita-coal-power-emissions-2022/>
- ⁴ <https://australiainstitute.org.au/post/new-analysis-australias-energy-transition-among-worst-in-oecd/>
- ⁵ <https://www.abc.net.au/news/2022-05-26/climate-change-election-what-are-labors-plans/101094986>
- ⁶ <https://theconversation.com/the-teals-and-greens-will-turn-up-the-heat-on-labors-climate-policy-heres-what-to-expect-183532>
- ⁷ <https://www.weforum.org/agenda/2021/10/how-cheap-can-renewable-energy-get/>
- ⁸ IEA World Energy Outlook 2020
- ⁹ <https://opennem.org.au/energy/nem/?range=all&interval=1y>
- ¹⁰ <https://www.saurenergy.com/solar-energy-news/after-rooftop-solar-australia-leads-the-world-on-per-capita-solar-too>
- ¹¹ <https://opennem.org.au/energy/nem/?range=all&interval=1y>
- ¹² <https://www.weforum.org/agenda/2022/05/re-wiring-the-financial-system-to-double-down-on-the-energy-transition/>
- ¹³ Ibid.
- ¹⁴ <https://www.reuters.com/markets/us/how-2021-became-year-esg-investing-2021-12-23/>
- ¹⁵ Yahoo Finance Australia
- ¹⁶ <https://reneweconomy.com.au/inflection-point-is-agl-demerger-too-late-to-save-the-fossil-fuel-behemoth/>
- ¹⁷ Climate Energy Finance calculations using AGL's greenhouse gas footprint data
<https://www.2021datacentre.agl.com.au/environment/greenhouse-energy/operational-greenhouse-gas-footprint>
- ¹⁸ <https://www.accr.org.au/news/investor-briefing-shareholder-resolution-to-agl-energy-ltd-on-paris-goals-and-targets/>
- ¹⁹ AGL Energy Demerger Scheme Booklet, Section 8.4.5 p.27
- ²⁰ <https://envirojustice.org.au/mediareleases/concerns-escalate-over-rehabilitation-of-agls-loy-yang-power-station-after-demerger-announced/>
- ²¹ <https://envirojustice.org.au/wp-content/uploads/2021/03/2021-03-25-EJA-AGL-Loy-Yang-rehab-risk-final.pdf>
- ²² <https://www.afr.com/policy/energy-and-climate/coal-power-likely-gone-by-2035-schott-20211011-p58yuq>
- ²³ <https://aemo.com.au/-/media/files/major-publications/isp/2022/draft-2022-integrated-system-plan.pdf>
- ²⁴ AEMO, 2019 Electricity Statement of Opportunities, August 2019, and CSIRO GenCost 2021-22
<https://publications.csiro.au/publications/publication/Plcsiro:EP2021-3374>
- ²⁵ AGL Energy Ltd, FY21 Half Year Result, February 2021
- ²⁶ <https://www.accr.org.au/news/investor-briefing-shareholder-resolution-to-agl-energy-ltd-on-paris-goals-and-targets/>
- ²⁷ <https://www.smithschool.ox.ac.uk/sites/default/files/2022-02/The-energy-transition-and-changing-financing-costs.pdf>
- ²⁸ <https://www.afr.com/companies/energy/agl-suffers-outage-at-loy-yang-as-coal-worries-grow-20220420-p5aepa>
- ²⁹ https://coalimpactsindex.com.au/coal-index/?_sft_category=breakdowns&_sft_post_tag=bayswater&sf_paged=2
- ³⁰ AGL Energy Demerger Scheme Booklet, p.130
- ³¹ https://www.actu.org.au/media/1449436/securing-a-just-transition_feb2021.pdf
- ³² <https://www.afr.com/companies/energy/wholesale-gas-prices-capped-in-apocalyptic-energy-market-20220530-p5apqf>
- ³³ <https://reneweconomy.com.au/ten-ways-for-states-to-fast-forward-consumer-investment-in-net-zero/>
- ³⁴ <https://reneweconomy.com.au/building-new-solar-now-cheaper-than-keeping-coal-plants-open-bnef/>
- ³⁵ RepuTex Energy, The economic impact of the ALP's Powering Australia Plan
- ³⁶ Ibid.
- ³⁷ <https://aemo.com.au/-/media/files/major-publications/isp/2022/draft-2022-integrated-system-plan.pdf>
- ³⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0301>
- ³⁹ AGL Energy Demerger Scheme Booklet, Section 8.3.5 p.17
- ⁴⁰ <https://www.agl.com.au/content/aglenergy/nsw/en/about-agl/media-centre/asx-and-media-releases/2020/june/agl-announces-ground-breaking-strategic-cloud-partnership-with-microsoft>
- ⁴¹ <https://www.kaluza.com>
- ⁴² <https://www.agl.com.au/about-agl/media-centre/asx-and-media-releases/2019/december/agl-rings-in-a-new-era-with-acquisition-of-southern-phone-company-finalised#:~:text=Over%20the%20past%20few%20weeks,move%20into%20data%20and%20telecommunications>
- ⁴³ <https://www.abc.net.au/news/rural/2022-02-08/record-amounts-of-rooftop-solar-installed-during-lockdown/100805838>
- ⁴⁴ Climate Energy Finance estimates