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Secretariat to the Task Group on Emissions Trading  
c/-Department of the Prime Minister and Cabinet  
PO Box 6500  
CANBERRA ACT 2600

7 March 2007  
Re: *Task Group on Emissions Trading*

Dear Dr Parkinson

AGL Energy (AGL) welcomes the opportunity to provide a submission on the discussion paper prepared by the Commonwealth Task Group on Emissions Trading.

AGL is committed to engaging with Government and other stakeholders about the most efficient way to reduce greenhouse gas emissions. The AGL Greenhouse Gas Policy calls upon the State and Commonwealth Governments to agree on a national greenhouse gas reduction target for 2050 with clear interim milestones. AGL supports the use of market mechanisms (including emissions trading) to achieve this goal.

To ensure ongoing consultation, AGL believes that representative groups should be established to provide input on the features of any proposed scheme. Representative groups should incorporate industry participants (such as AGL), community groups and environmental stakeholders.

Please find enclosed AGL's submission. Should you require further information, please contact Tim Nelson, Manager Carbon and Renewable Strategy on (02) 9921 2516 or by email at [tanelson@agl.com.au](mailto:tanelson@agl.com.au).

Yours sincerely

Jeff Dimery  
General Manager  
Merchant Power

## Executive Summary

- AGL is well placed to comment on emissions trading because of the diversity of our operations. We operate across the supply chain and have investments in energy retailing, coal-fired electricity generation, gas-fired electricity generation, renewables and upstream gas extraction.
- AGL accepts the scientific consensus that greenhouse gases in our atmosphere need to be stabilised at concentrations below 550 parts per million so as to avoid 'dangerous' climate change.
- AGL supports appropriate early action taken by Australia to reduce emissions. Taking action now to cost effectively transition the economy towards a lower emissions profile will reduce future costs associated with action taken at the international level.
- AGL supports the development of a national emissions trading scheme to reduce greenhouse gas emissions.
- It is critical that long term emission reduction targets be set. Because of the long-lived nature of many assets in the energy sector, targets should be set until at least 2050.
- AGL believes that electricity generation should be covered when the scheme commences.
- AGL does not believe that new entrants should be allocated permits as all companies will be facing the same investment scenario. For existing generation, AGL supports a high proportion of grandfathering of permits to ensure that existing generator future earnings losses are addressed.
- It should be noted that the economic cost of reducing emissions is determined by only two variables: the target being pursued (i.e. the quantity of abatement required) and the cost of lower emission technologies (i.e. the price of abatement). All other design features of an emissions trading scheme essentially determine the distributional impacts of the scheme (i.e. distribution of costs and benefits).
- The cost of reducing emissions over time is likely to be manageable when considered as an economy-wide issue. This has been demonstrated by numerous studies undertaken by the National Generators Forum, the Australian Business Roundtable on Climate Change, the Energy Supply Association of Australia, ABARE and AGL (with Frontier Economics and WWF-Australia). Importantly, all of these reports show that the costs of reducing emissions are manageable and when technological growth is considered, the costs are likely to be even lower.
- AGL believes that economic assistance for adverse distributional impacts should be focused on companies that: are subject to a high degree of international competition; produce products that have prices which are set on world markets; and face competition from countries that impose no comparable emission constraints.

## **AGL ENERGY SUBMISSION ON EMISSIONS TRADING TASK GROUP ISSUES PAPER**

### **1. Introduction**

AGL Energy (AGL) is Australia's leading energy company. AGL is well placed to comment on emissions trading because of the diversity of our operations. We operate across the supply chain and have investments in energy retailing, coal-fired electricity generation, gas-fired electricity generation, renewables and upstream gas extraction. The diversity of this portfolio has allowed AGL to develop a detailed understanding of the risks and opportunities presented by climate change policy and emissions trading.

AGL is Australia's largest retailer of gas and electricity with 3.3 million customers in New South Wales, Victoria, South Australia and Queensland. We also have an additional 0.8 million customers in the Australian Capital Territory and Western Australia through joint ventures with ActewAGL and AlintaAGL. AGL has significant investments in upstream energy markets. We own and operate 645 MW of hydroelectric power generation assets, the Torrens Island gas-fired power station (1280 MW)<sup>1</sup>, the Somerton gas-fired peaking power station (150 MW) and a number of landfill gas, biogas and biomass generation facilities. AGL also has a 32.5% equity investment in the Loy Yang A power station.

AGL is developing a number of new energy assets. It is important to note that all of these assets are consistent with a carbon constrained future. The assets in development include Hallett wind farm (95 MW), Bogong hydro power generator (140 MW), Townsville gas-fired power station (370 MW), Bluff wind farm (45 MW), Dollar wind farm (79 MW) and the Macarthur wind farm (330 MW).

### **2. Climate Change Policy Overview**

AGL recognises that climate change is a critical issue facing all countries. AGL accepts the scientific consensus that greenhouse gases in our atmosphere need to be stabilised at concentrations below 550 parts per million so as to avoid 'dangerous' climate change. Based upon this principle, AGL believes that policies should be developed internationally and nationally that place Australia on a pathway of reducing its greenhouse gas emissions in a way that is compatible with this objective.

It is crucial that Australia continue to engage with other nations on the need to reduce global greenhouse gas emissions. Without a broad international agreement that includes all emitters over the longer-term, achieving the stabilisation objective outlined above will be impossible. That said, AGL supports appropriate early action taken by Australia to reduce emissions.

It is important that governments focus on all sources of greenhouse gas emissions. In Australia, this should include stationary energy, transport, agriculture, industrial emissions and waste. Policies should be developed which allow for reductions in all of these sectors. AGL does not necessarily believe that each sector should be covered by emissions trading or another single policy. However, policies should be established to ensure that overall emission reduction requirements are fairly distributed across these sectors.

There are likely to be a range of appropriate non-emission trading policy responses for individual sectors. For example, it may be more efficient in the transport sector to require new vehicles to meet increasingly stringent emission intensity targets (thereby encouraging the use of fuels such as LPG, CNG and hybrid vehicles).

The level of abatement required in individual sectors should be determined using the following two principles:

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<sup>1</sup> AGL has recently acquired this power station from Truenergy – financial close is scheduled for 1 July 2007 (AGL Media Release – 29 January 2007).

- **Lowest Marginal Costs:** Theoretically, abatement should be pursued in each sector so that the least cost options for reducing emissions are pursued up to the point where the abatement task is achieved.
- **Equity:** Some sectors will have significantly more lower cost opportunities than others. Consideration will need to be given to ensuring that sectors are not disproportionately burdened on the basis of cost. Each sector (with the possible exception of agriculture) will have scope for reducing emissions in the longer term through the deployment of new technologies. Policies should be developed to ensure that technological development is pursued across all sectors, not just stationary energy.

In the stationary energy sector, AGL believes that there are two policy drivers necessary to reduce greenhouse gas emissions: policies to encourage the development of low emission technologies and market based policies that provide a financial incentive for low emission technologies to be deployed. There is significant potential for the States and Commonwealth to combine existing approaches such as the proposed State-based emissions trading scheme and the \$500 million low emission technology fund.

### **3. AGL Greenhouse Gas Policy**

AGL supports the development of an emissions trading scheme to reduce greenhouse gas emissions. However, a national emissions trading scheme should be developed jointly by the States and Commonwealth. The development of a State-based scheme would be a second-best outcome.

The AGL Greenhouse Gas Policy supports the establishment of a long-term greenhouse gas emissions reduction target for 2050 and the creation of market-based mechanisms to achieve this goal. Notwithstanding current uncertainties, AGL believes that a prudent approach is to internally cost carbon in current business decision making.

AGL supports Australian Governments reaching agreement on policy principles for the management of greenhouse gas emissions. The proposed principles are:

- **National management:** Greenhouse gas abatement policy and measures should be developed on a national basis. The intent of existing State based schemes should be incorporated into a national scheme to avoid confusion, lower compliance costs and achieve uniform outcomes.
- **Clear policy objectives:** A clear emissions reduction objective should be set and be consistent with international approaches to emissions reduction.
- **Economy wide approach:** Greenhouse gas abatement should be tackled across all sectors of the economy.
- **Least cost abatement:** Greenhouse gas abatement should be pursued on a least cost basis. This may involve the introduction of a carbon trading scheme so that least cost outcomes, such as efficiency of use and the inclusions of offsets, can be determined by the market. AGL believes that the use of natural gas in the generation of electricity will prove to be a significant low cost way for Australia to reduce greenhouse gas emissions. Impediments to least cost outcomes should be avoided.
- **Management of price impact:** Clear consumer price signals should be allowed. Price shocks to energy end users and export industries should be minimised through phased programs and long-term policies.
- **Coverage:** Greenhouse gas abatement policy should cover carbon dioxide equivalent and therefore all of the six main greenhouse gases.
- **Equitable allocation of emissions rights:** A critical factor relates to the allocation of an emissions base, and rights to emit. Investments made in the context of current

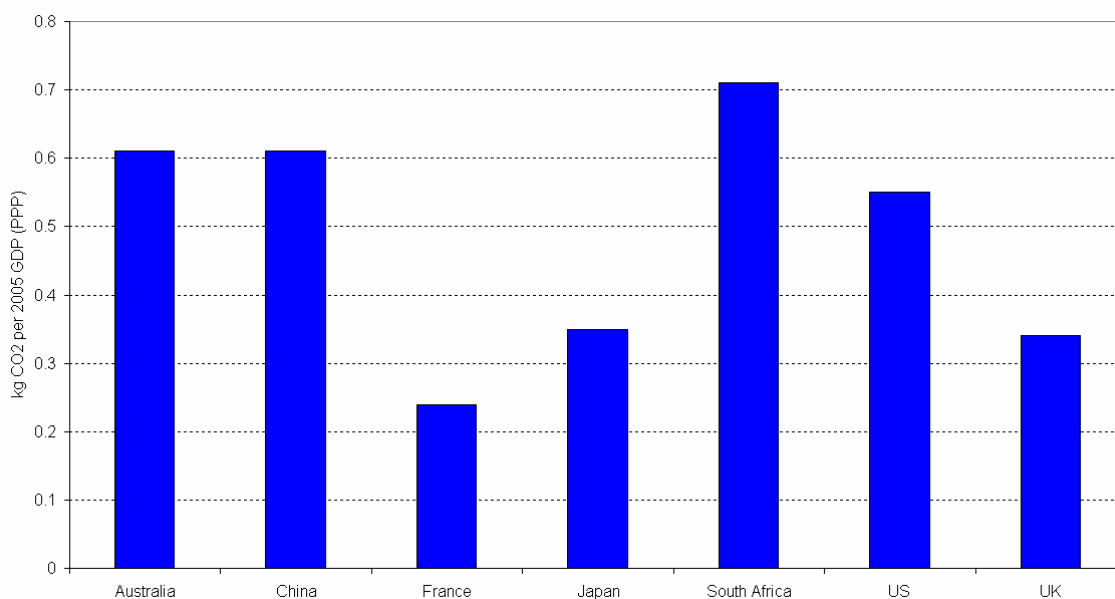
regulatory settings should be recognised. For example, equitable 'grandfathering' of emission levels should be considered.

- Administrative simplicity: A national approach should be administratively simple and facilitate international linkages.
- Development of new technologies: Technologies that can reduce greenhouse gas emissions should be supported.

#### 4. Implications for Australia of a Carbon Constrained Future

It is important that Australia take early action to reduce greenhouse gas emissions. The Australian economy is relatively greenhouse intensive. Chart 1 shows how the emissions intensity of Australia per unit of GDP is significantly higher than many other parts of the world.

Chart 1: Emissions Intensity<sup>2</sup>



The continued growth of the Australian economy may be impacted when a comprehensive international agreement to reduce emissions is negotiated. As carbon is priced, Australia will bear a higher cost than many other parts of the world based upon current emission intensities. Taking action now to cost effectively transition the economy towards a lower emissions profile will reduce any future costs associated with action taken at the international level which may be largely beyond Australia's control.

#### 5. Cost of Reducing Emissions Over Time

It should be noted that the cost of reducing emissions is determined by only two variables: the target being pursued (i.e. the quantity of abatement required) and the cost of lower emission technologies (i.e. the price of abatement). All other design features of an emissions trading scheme essentially determine the distributional impacts of the scheme (i.e. distribution of costs and benefits).

The cost of reducing emissions over time is likely to be manageable when considered as an economy-wide issue. This has been demonstrated by numerous studies undertaken by the National Generators Forum, the Australian Business Roundtable on Climate Change, the

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<sup>2</sup> Source: Options for Moving Toward a Lower Emission Future by AGL, Frontier Economics and WWF-Australia, p.12.

Energy Supply Association of Australia, ABARE and AGL (with Frontier Economics and WWF-Australia). Importantly, all of these reports show that the costs of reducing emissions are manageable and when technological growth is considered, the costs are likely to be even lower.

Modelling undertaken by AGL, Frontier Economics in 2006 showed that:

- The total cost to the economy of reducing emissions by 40% relative to today's levels by 2030 in the electricity sector would be between \$5.19 billion and \$24.16 billion (NPV) or approximately 0.6% - 2.8% of GDP.
- The cost estimates presented above were based upon existing generation technologies being deployed. Australia has vast reserves of natural gas. With an emissions profile half that of black coal, the widescale deployment of natural gas has the potential to cost effectively lower emissions significantly.<sup>3</sup>
- As existing and emerging technologies are forecast to improve over time, the cost is likely to be even lower than these estimates.

While the overall cost impact is likely to be manageable, the impact on individual sectors within the economy is likely to be different. Policy makers have shown in the past that where particular policies disproportionately impact on individual industries, specific measures can be used to ensure that these industries are not adversely impacted. The use of permit allocation within an emissions trading scheme is a good example of a policy approach designed to address disproportionate impacts.

## **6. Current Carbon Pricing**

AGL currently factors carbon considerations into all major investment decisions. However, it is the lack of certainty around future carbon pricing policies that is creating significant investment uncertainty throughout the energy sector. It is critical that Australian governments establish long term emission reduction targets and implement market-based policies to support them. Because of the long-lived nature of many assets in the energy sector, targets should be set until at least 2050.

## **7. Global Emissions Trading**

AGL believes that a comprehensive global agreement on individual country emission reduction obligations is necessary to address climate change. A global agreement based upon long-term (2050) and interim emission reduction outcomes in individual countries is the only way that climate change can be addressed as it is a global issue. This is a far more important consideration as it focuses on outcomes rather than policy measures, such as emissions trading, which are used to achieve an outcome.

It should be noted that emissions trading is only one of a number of policy measures that could be deployed domestically to reduce emissions. It is unlikely that a global emissions trading scheme covering all countries and all emissions will ever be developed. This is because:

- Individual countries will have different views on the most appropriate policy response to reduce emissions in their own countries.

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<sup>3</sup> In a report prepared for the National Electricity Market Management Company, ACIL Tasman has estimated the following cost structures for new coal and gas generation in various Australian regions: the long-run marginal cost of combined cycle natural gas-fired generation is between \$38.37 and \$53.72 per MWh of electricity sent out; and the long-run marginal cost of coal-fired generation is between \$31.06 and \$35.33 per MWh of electricity sent out. Based on these cost estimates, a relatively small carbon price would create significant demand for gas-fired generation.

- It is impractical to include some sectors of the economy in an emissions trading scheme because of the significant administration costs and lack of technological alternatives.

Instead, 'linking' of domestic schemes designed to achieve domestic targets (negotiated at the international level) is achievable and therefore more likely. For example, if both Australia and New Zealand implemented emissions trading schemes that reflected a commitment to reach agreed targets, they could be linked so that an emissions permit in Australia could be bought by a company in New Zealand and vice versa. Each scheme would still be operated at the domestic level for the purposes of compliance.

In this context, development of recognised systems, processes and measurement techniques is critical. The focus of international linkages should be on ensuring that abatement created in Australia is recognised under international treaties (e.g. Kyoto, AP6). Careful consideration needs to be given to the issue of 'linking' because of the small size of the Australian carbon and abatement markets. Australia is more likely to be a 'price taker' than 'price setter' in this context.

The purpose of an emissions trading scheme is to reduce Australian emissions relative to an Australian target (which has been set to achieve a global objective based upon other nations adopting similar initiatives). It is important to note that there is no 'magic pudding' with regard to emissions trading and international linking. International carbon trading will only be environmentally effective if all nations adopt agreed targets which are reflected in the level of permits allocated in each emissions trading scheme.

AGL believes that the Task Group and others should be careful in applying too much weight to the outcomes seen to date in schemes such as the EU Emissions Trading Scheme. It is important to note that the EU Scheme is in its 'learning stage', it is very short in nature with caps only applying over a very short time period and there is significant regulatory uncertainty surrounding the operation of the scheme. From a policy design perspective, the proposed Australian State-based scheme overcomes the major shortcoming of the EU Scheme by setting targets over a longer timeframe.

## **8. An Australian Emissions Trading Scheme**

AGL strongly supports the development of a national emissions trading scheme. The major risks associated with implementing anything other than a national scheme are:

- **Perverse Policy Outcomes.** If an emissions trading scheme is implemented in one or more jurisdictions but not all jurisdictions, investment decisions may be distorted and greenhouse emissions may actually increase. All of the States and Territories (except WA and NT) are connected through the national electricity market. A scheme that is not implemented in all States and Territories could simply result in greenhouse intensive energy being exported by the non-covered jurisdiction (carbon leakage).
- **Higher Transaction Costs.** One of the primary objectives of the national energy market reform process is to minimise the different regulatory requirements in each of the jurisdictions. Most energy retailers compete in a number of States. Different regulatory requirements impose unnecessary costs on retailers which lead to higher end prices for consumers. Multiple greenhouse trading schemes (e.g. NSW Greenhouse Gas Abatement Scheme, 13% QLD Gas Scheme and Mandatory Renewable Energy Target) impose unnecessary costs on retailers and consumers.

## **9. Implications for Industry Performance and Competitiveness**

As outlined in a previous section, Australia has a higher proportion of emissions per unit of economic output relative to many of our competitors. This could significantly reduce Australia's competitiveness in the future if a global agreement is negotiated which requires Australia to reduce emissions. It is in this context that AGL believes Australia should take early action to reduce emissions in a cost effective manner which minimises any impacts on Australian industry and consumers.

A domestic emissions trading scheme need not impact on existing industry. While there will be a cost associated with reducing greenhouse gas emissions, it is the distribution of this cost across the economy that will determine whether individual industries are advantaged or disadvantaged. AGL believes that mechanisms such as permit allocation could, and should, be used to assist industries that are export/import competing.

Australia has significant reserves of natural gas and coal. According to the 2005 BP World Statistical Review, Australia has:

- 2.46 trillion cubic metres of natural gas reserves. This is approximately 1.4% of world reserves. At current production, these reserves would last around 70 years.
- 78,500 million tonnes of coal reserves (roughly half of which is Anthracite and bituminous with the other half being sub-bituminous and lignite). This is approximately 8.6% of world reserves. At current production, these reserves would last around 215 years.

If designed correctly, a domestic emissions trading scheme may not impact on the vast majority of Australia's fossil fuel production as it is export focused. In this context, it should be noted that more than three quarters of Australia's black coal production is destined for export.<sup>4</sup> As Australian fossil fuel reserves are some of the highest quality reserves in the world and given that global emissions only need to be reduced, not eliminated, it is likely that countries currently using high quality Australian fossil fuels will continue to do so.

Australia is already well regarded for its knowledge of emerging low emission fossil fuel technologies. The introduction of market based mechanisms that encourage the deployment of low emission technologies will further assist the development of these technologies. Over time, the removal of carbon dioxide from existing and new fossil fuel power stations could become an entirely new source of revenue for Australian resource companies.

## **10. Key Design Principles**

### Commencement Date

AGL supports the establishment of an emissions trading scheme by 2010. However, it is crucial that the rules underpinning the operation the scheme are known well in advance. If adequate notice of the rules is not given, there is likely to be significantly more permit price volatility early in the life of the scheme. AGL believes that there is sufficient time for the development of the legislation, rules and other instruments well ahead of its commencement.

### Coverage of Emitters

In previous submissions to governments, AGL has stated that when assessing which sectors should be covered, the following principles should be used:

- **Potential for Emission Reductions:** Sectors that have no potential to reduce emissions should not be covered by an emissions trading scheme. Instead, policies should be established that focus on technological improvements and other factors that will drive emission reductions over time.
- **Suitability of Emissions Trading:** Some sectors are more suited to emissions trading than other policy responses and vice versa. For example, it would be very difficult to place liabilities on farms because of livestock emissions. Nonetheless, Governments should develop further emission reduction policies for sectors that are not suited to emissions trading.
- **Emissions Contribution of Sector:** Consideration should be given to the total emissions of the sector relative to the overall emissions footprint.

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<sup>4</sup> Energy in Australia, Australian Bureau of Agricultural and Resource Economics, p. 11.

- Existing Reporting and Regulatory Frameworks: Where possible, existing regulatory and reporting frameworks should be used to minimise the reporting burden on businesses.

AGL believes that electricity generation should be covered when the scheme commences. AGL believes that all other sectors of the economy should be assessed using the principles above and included in the scheme if appropriate. AGL believes that sector specific emission reduction policies should be developed for those sectors not included in an emissions trading scheme.

AGL believes that coverage should be determined up front. The phase in of additional sectors could significantly alter the overall emission reduction target and the level of abatement available to meet it. As the price of permits will be determined by the overall target and the cost of abatement options available, phasing in additional sectors is likely to significantly alter long-term prices and lead to increased price volatility.

Because of these price impacts, including additional sectors after the scheme is established and operating has the potential to significantly alter the commercial viability of investments in low emission technologies and abatement projects. This will increase the risk premium that is applied to new projects and increase the overall cost of compliance. If additional sectors are to be included, a period of at least five years notice should be given to minimise any price volatility.

#### Coverage of Greenhouse Gases

Any emissions trading scheme should be focused on reducing anthropogenic emissions. Industry is best placed to determine the most cost effective way of achieving such a reduction. AGL supports the inclusion of all six greenhouse gases under the Kyoto Protocol. Reducing emissions of gases other than carbon dioxide may be a more cost effective way of reducing greenhouse gas emissions in the short-term than reducing emissions of carbon dioxide.

However, the scheme should also be designed to minimise compliance and administration costs. In this context, reporting should be as simple as possible. Carbon dioxide equivalent (CO<sub>2</sub>e) should be used to minimise the reporting burden. A simple format should be used where standard conversions are utilised to report an aggregate measure of emissions based upon their global warming potential.

#### The Overall Scheme Cap

The overall national emissions abatement target should be related to the overarching outcome being pursued: the stabilisation of greenhouse gases in the atmosphere at an acceptable level. Given that greenhouse gas emissions occur all over the world and there is still no universally accepted view by Governments about the reductions that individual countries should pursue, some degree of estimation will be required.

It is crucial that long-term and interim targets for the entire economy be set as soon as possible based upon the best available scientific information. The setting of short-term targets provides no certainty for investors in the electricity generation sector (where asset lives are several decades). Once an economy wide target is set (e.g. 60% reduction in emissions by 2050), consideration should be given to setting a collective target for those sectors covered by the emissions trading scheme and all other sectors. It is unclear why and how a target for the electricity sector would be set in the absence of a national target being in place.

#### Duration and Trajectory of the Caps

Investments in energy infrastructure often have lifetimes of 40 years or more. A long-term gateway should be set for emissions up to 2050 to provide investment certainty. Given that technological developments are required to reduce emissions in the future, the targets

should be relatively small in the first few years of the scheme and gradually increase over time. This gradual 'transitioning' of the economy will minimise the economic costs associated with reducing emissions. The report "Options for Moving Towards a Low Emission Future" by AGL, WWF-Australia and Frontier Economics outlines the costs associated with pursuing different pathways. A copy has been attached to this submission.

### Banking and Borrowing

AGL supports the inclusion of banking and borrowing in an emissions trading scheme. Banking adds to the environmental effectiveness of the scheme (by allowing early abatement to be recognised in later periods). AGL believes that market participants are unlikely to bank permits for long periods of time. This is because there is an opportunity cost associated with holding permits (i.e. if they were sold, the money obtained could be used for another investment). The inclusion of limited borrowing would ensure that liable parties are not penalised for relatively small mistakes made during the course of the scheme that have no bearing on its environmental effectiveness.

### Penalty

The penalty should be set just above the estimated marginal cost of compliance (determined by economic modelling). By setting the penalty at this level and adjusting the penalty over time to account for inflation, there is no financial incentive for industry to avoid reducing emissions. However, if the modelling has significantly underestimated the cost of compliance, the penalty will act to cap the cost of the scheme. This will provide business with investment certainty.

If a business fails to meet its obligations, the penalty paid should be used by government to purchase additional abatement. This would remove the need for a 'make good' provision. If penalty payments are assigned to an abatement fund, AGL does not believe that there is any justification for inclusion of a make good provision.

### Offsets

AGL supports the inclusion of domestic offsets in an emissions trading scheme. Offsets are a key way of reducing the cost to business of complying with the scheme while ensuring that environmental outcomes are achieved. All forms of offsets such as industrial activities and forest sequestration should be included in the scheme.

However, it should be noted that there is a trade-off between the target adopted and offsets. This needs to be taken into account when assessing whether offsets should be permitted. As outlined in a previous section, AGL believes that targets should also be set for other sectors. If projects from these sectors are permitted as offsets in the emissions trading scheme, targets will need to be adjusted to ensure environmental effectiveness.

### Permit Allocation

AGL believes that an emissions trading scheme should have only one form of permit – the annual permit. AGL believes that this approach (whereby permits would be 'date stamped' with the first year they become valid) allows for long-term certainty because the permits can be allocated ahead of time allowing participants to know their shortfalls and surpluses over a longer time period. AGL strongly supports that permits be structured as secure property rights. Given that the community in general benefits from action taken to address climate change, it is fair that certainty be provided to those impacted.

A number of design principles should be considered when determining permit allocation. These design principles recognise that permit allocation can significantly impact on the distribution of costs and benefits under an emissions trading scheme.

- **Investment Recognition:** Investments made before the introduction of the emissions trading scheme should not be unfairly disadvantaged. While there has been debate about climate change for several years, owners and managers of capital (particularly

public company Directors) have not been in a position to respond to this debate because of a lack of regulatory certainty.

- Revenue: Where auctioning is used to distribute permits, the revenue raised should not be used for general Government purposes. The money should be allocated for emission reduction projects developed by industry.
- Early Action: Some industry participants have altered production processes to reduce their emissions intensity. Action taken before the implementation of the emissions trading scheme should be taken into account by the scheme administrators.
- New Entrants: If an emissions trading scheme is to be successful, new entrants (with lower emission intensities) will be required. A free permit allocation process to existing generators would not disadvantage these new entrants.
- Investment Certainty: The permit allocation process should provide long term certainty for industry participants.

It is important to note that the 'value' of permits is theoretically determined by the overall target and the cost of technologies required to reduce emissions. The method of allocation should not alter the overall cost of compliance. It is important to note that even if permits are allocated for free, they still retain an economic value. The permit holder has the ability to sell the permit for its market value. Theoretically, auctioning and free allocation should not alter the underlying cost to consumers and the economy of an emissions trading scheme. However, the method of allocation does have significant impacts on equity and sovereign risk.

AGL is strongly opposed to permits being 'sold' by Government to industry. The value of permits should be determined by the market and represents the cost of deploying technologies to reduce emissions to the target level. Selling permits simply redistributes wealth from industry participants to the Government. There is no policy justification for selling permits to industry.

Another method of permit distribution involves auctioning. AGL does not support the use of significant auctioning as a means of distributing permits. When any good or service is 'auctioned' in a market, the seller is providing some valued good or service to the market. An emissions permit is an 'artificial' financial instrument that has been created by Government. If permits are auctioned, the Government is effectively altering the conditions under which an investment is permitted to operate (even though it may have been constructed prior to the scheme's commencement).

Free allocation (of permits or a baseline) is a more appropriate policy response as businesses would not be required to outlay funds up front to continue operating. This would minimise the sovereign risk associated with introducing a new requirement on existing businesses. It would also not disadvantage new entrants. An existing generator would have an incentive to sell permits where the permit revenue is greater than the cost of abatement (investing in plant upgrades and the like). There would be no incentive for the generator to hold onto the permits as it could earn additional revenue by selling them to a new entrant.

AGL does not agree that a high proportion of grandfathering will result in overall windfall gains for generation companies. The value of grandfathered permits for existing generation companies is a function of higher pool prices, the intensity of the plant being operated, quantity of electricity produced by the generator, the value of permits allocated and the length of time which permits are grandfathered for.

This last point regarding the length of time permits are grandfathered is critical. It has been assumed that full grandfathering results in windfall profits for existing generators as has been seen in the EU Emissions Trading Scheme. AGL believes that there are only limited lessons to be learned from this scheme. This is because the EU Scheme has only been in operation for a very short period of time and medium term targets have not even been established.

The impact of grandfathering upon individual generators is dependant on all of the factors listed above but the overall time period is the most crucial factor. Modelling completed by AGL (and other economic forecasters) shows that:

- In the short-term, existing generators can increase overall revenues with full grandfathering. This is because of the combination of factors listed above (higher pool prices, changes in output etc).
- In the medium term, full grandfathering of permits is likely to produce an equitable outcome. As greenhouse gas emission targets are tightened, existing generators become less able to compete because of their higher cost structures. At the limit, this can cause generators to shut down completely. The grandfathering of permits compensates generators for the loss in economic value as a result of lower output and operating revenues.
- In the long term, full grandfathering of permits is likely to produce a positive outcome for existing generators. This is because an infinite grandfathering arrangement provides the generator with an infinite source of revenue (as the permits can be sold even if the plant does not operate).

Based upon this analysis, there is likely to be an optimal length of time during which permits should be grandfathered. Alternatively, there is likely to be an optimal level of grandfathering which should be adopted for a fixed time period. AGL believes that the calculation to determine permit allocation should be done over the expected life of the asset prior to the emissions trading scheme being implemented and should compare Business as Usual profits with those expected in the emissions trading environment.

In summary, AGL does not believe that new entrants should be allocated permits as all companies will be facing the same investment scenario. For existing generation, AGL supports a high proportion of grandfathering of permits.

#### Assistance to Trade-Exposed and Energy Intensive Industries

Energy intensive industry, low income households and trade exposed industries may be adversely impacted where they are unable to respond to price signals. In particular, AGL believes that assistance should be focused on companies that:

- Are subject to a high degree of international competition;
- Produce products that have prices which are set on world markets; and
- Face competition from countries that impose no comparable emission constraints.

As a large electricity retailer, AGL sells a significant portion of its electricity and gas to large customers that exhibit these characteristics. It is therefore in AGL's economic interests to work with governments to ensure that economic impacts on these customers are minimised. The permit allocation arrangements proposed by the National Emissions Trading Taskforce for these customers are supported by AGL.

#### Transitional Arrangements

AGL believes that significant consideration needs to be given to arrangements for incorporating existing schemes into the an emissions trading scheme. These schemes include the NSW Greenhouse Gas Abatement Scheme, QLD 13% Gas Scheme, Commonwealth Mandatory Renewable Energy Target, Victorian Renewable Energy Target and proposed NSW Renewable Energy Target.

AGL has the following arrangements in relation to these schemes:

- Retail contracts: AGL contracts for NGACs and RECs with commercial customers for periods of between 1 to 5 years.
- Counterparty Contracts: AGL has a contract position for its regulatory requirements under each of these schemes.
- Projects: AGL has a number of projects (such as landfill generators) where the price of RECs and NGACs impacts on the viability of these projects.

AGL and other businesses cannot make investment decisions until actual decisions are made by Government (reflected by changes to the legislative or regulatory environment). It is important that Governments limit uncertainty by not speculating on possible changes to the regulatory environment unless the changes are likely to occur.

Before a emissions trading scheme is introduced, Governments will need to outline exactly how existing certificates (and their underlying schemes) are to be treated. It will be necessary to design the emissions trading scheme so that investments made under existing schemes will be no worse off under the new scheme.

## **11. Other Policies**

As outlined in the beginning of this submission, AGL believes that two policies are required to address greenhouse gas emissions in the electricity sector:

- A comprehensive emissions trading scheme with long term targets that provides businesses with incentives to deploy least cost options to reduce emissions.
- Market based measures that ensure that incremental improvements in low or zero emission technologies are deployed. An example of this type of policy is the Mandatory Renewable Energy Target. Without this policy, the lumpy nature of capital investment in generation may not produce the incremental improvements in technology required to reach the significant cuts in emissions required by the middle of this century.

One of the most important but overlooked design features of an emissions trading scheme is the ability for additional costs to be passed through to end consumers. AGL believes Governments would need to remove barriers to cost reflective energy pricing before an emissions trading scheme could be successfully implemented.