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21 April 2008

Re: *Report on Emissions Trading*

Dear Professor Garnaut

AGL Energy (AGL) welcomes the opportunity to provide a submission on the discussion paper prepared by the Garnaut Climate Change Review, *Emissions Trading Scheme Discussion Paper*.

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

Yours sincerely

Kirsty Norris  
General Manager  
Carbon Solutions

## 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 electricity generators and other disproportionately impacted industries, AGL supports a proportion of free allocation of permits to ensure that existing generator future earnings losses are addressed.
- AGL believes that economic assistance for adverse distributional impacts should be focused on companies that: suffer disproportionate losses of asset value as a result of the changed regulatory environment; 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 believes that electricity generators should be compensated as a result of the changed regulatory environment.
- 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 ENERGY SUBMISSION ON EMISSIONS TRADING SCHEME DISCUSSION 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 over 3 million customers in New South Wales, Victoria, South Australia and Queensland. 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), 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 and dispatch rights for the Oakey and Yabulu power stations in QLD.

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 construction include Hallett wind farm (95 MW) and Bogong hydro power generator (140 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:

- **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 (a Clean/Renewable Energy Target) and market based policies that provide a financial incentive for low emission technologies to be deployed (emissions trading).

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

AGL accepts scientific consensus that the concentration of greenhouse gases in our atmosphere needs to be stabilised at levels below 550 parts per million to avoid 'dangerous' climate change. The Intergovernmental Panel on Climate Change believes that global anthropogenic greenhouse gas (GHG) emission reductions in the order of at least 50% are required by the middle of this century to achieve this outcome.

AGL supports three key policies to achieve these targets and mitigate the costs associated with climate change:

- Expedited development and implementation of a national emissions trading scheme which uses the broader long-term GHG emissions reduction target as its goal.
- The deployment of clean technologies through a single national clean energy obligation.
- Appropriate adaptation measures to ensure that Australia is not adversely impacted by climate change already 'locked in' by existing GHG concentrations in the atmosphere

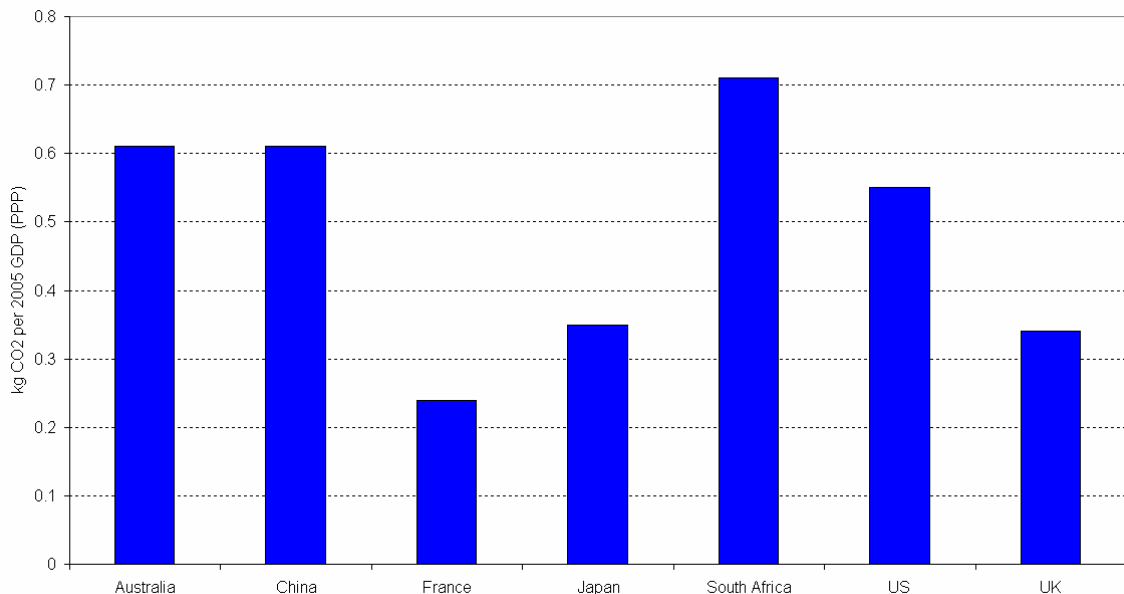
These policies should be developed using the following principles:

- *National Character* - Policy and measures should be developed so that they operate nationally and not on a State or regional basis.
- *Economy wide approach* - GHG abatement should be tackled across all sectors of the economy.
- *Least cost abatement* - GHG abatement should be pursued on a least cost basis.
- *Management of price impact* - Price shocks to energy end users and export industries should be minimised through appropriate compensation policies.
- *Coverage* - GHG abatement policy should cover carbon dioxide equivalent and therefore all of the six main greenhouse gases.
- *Equitable allocation of emissions rights* - Investments made in the context of current regulatory settings should be recognised and appropriately compensated.

#### 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>1</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 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.

<sup>1</sup> Source: Options for Moving Toward a Lower Emission Future by AGL, Frontier Economics and WWF-Australia, p.12.

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.
- 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. 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.
- 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. 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 caution should be shown 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 very different in nature from those proposed to date in Australia. In addition, the European economy is very different from the Australian economy with a significantly lower emissions intensity. The costs per unit of GDP associated with a cost of carbon are lower in Europe than in Australia. From a policy design perspective, the proposed Australian State-based schemes (e.g. National Emissions Trading Taskforce and the National Emissions Trading Task Group) overcome the major shortcoming of the EU Scheme by setting targets over a longer timeframe.

## **7. Linking an Australian Emissions Trading Scheme to Other Schemes**

AGL does not support early linkages to other national or international emissions trading schemes such as the EU ETS. It is important that the domestic scheme be allowed to establish itself over a number of years before linking is considered. Linking early without developing the necessary understanding of the impacts of the scheme could undermine its longevity as a policy measure. Furthermore, it is not clear that any of the international schemes currently in development are as wide in scope as the proposed Australian emissions trading scheme.

AGL does support existing potential linkages such as through the Clean Development Mechanism and Joint Implementation. These mechanisms could be used in a limited fashion to develop an early 'flavour' of international trading without opening up the entire scheme to potential problems associated with other national schemes.

## **8. 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 and are disproportionately impacted (e.g. electricity generation).

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>2</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.

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<sup>2</sup> Energy in Australia, Australian Bureau of Agricultural and Resource Economics, p. 11.

## 9. Key Design Principles

### 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 annual 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.

### Duration and Trajectory of the Caps

Investments in energy infrastructure often have lifetimes of 40 years or more. Firm annual targets should be set for at least ten years with long-term annual gateways set for emissions up to 2050 to provide investment certainty while allowing for changes in international agreements or scientific understanding. 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.

### 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.
- **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 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.

#### Point of Liability (Sector Specific)

AGL does not support the inclusion of waste facilities as liable entities in an emissions trading scheme. Operators of landfill facilities are unlikely to be significant traders of permits. Furthermore, the transaction costs associated with the inclusion of waste are likely to be significantly higher than any benefits achieved for smaller landfills. AGL believes that by allowing reductions in waste related emissions to be included as offsets, the same economic incentive can be provided.

Greenhouse gas emissions are produced at all levels of the supply chain when natural gas is produced, transported and consumed (reticulated natural gas). Based upon this supply chain analysis, AGL believes that:

- Gas producers should be liable for greenhouse emissions at the point of gas production (e.g. wellhead).
- Gas pipeline operators should be the liable party for greenhouse emissions associated with the transportation of natural gas (e.g. fugitive emissions and emissions associated with combusting gas for compression purposes).
- Gas retailers should be the liable party for greenhouse gas emissions associated with combustion of gas by small end users of the product.
- Larger users should be the liable party for greenhouse gas emissions associated with combustion of gas by larger end users of the product.

AGL believes that generators (greater than 30 MW) should be the point of liability within the electricity sector in an Australian emissions trading scheme.

#### 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.

#### 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.

## Permits

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.

## Allocating Permits

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 and/or consumers.
- **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.

A relatively small proportion of free allocation is an appropriate policy response to ensure businesses, including electricity generators, are compensated for economic losses associated with the changing regulatory environment. 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.

If businesses are not compensated for economic losses associated with a changing regulatory environment, investment may be redirected towards countries with lower 'sovereign risk'. As such, AGL believes it would be prudent for government to allocate a relatively small proportion of overall permits to negatively impacted businesses to compensate for losses in asset value. This would still ensure that a large proportion of permits is available for auction.

#### Permit Issuance

As outlined above, AGL believes that date-stamped permits should be allocated to negatively impacted businesses at the beginning of the scheme to compensate for loss of asset value. All other permits should be auctioned. These auctions should take place frequently (several times a year). At each auction, both 'current year' and 'future year' permits should be sold. All revenues from permits sold should be used for emission mitigation purposes.

#### 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 and Emissions Trading Task Group 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 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.

## **10. 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.