



25 March 2009

The Secretary  
Senate Standing Committee on Economics  
PO Box 6100  
Parliament House  
CANBERRA ACT 2600

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## **Inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme**

### **1. Introduction**

The National Generators Forum (NGF) welcomes the opportunity to make a submission to the Senate Standing Committee on Economics inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme.

The NGF directly represents the 21 major power generators operating in Australia's National Electricity Market (NEM). Verve Energy and Griffin Energy in Western Australia are associate members.

The installed capacity of NGF members approaches 45 000MW, which is more than 95 per cent of the total Australian market. These generation assets are valued at more than \$A40 billion, with annual sales of over 192 000 GWh with a value last year of A\$11.9 billion. The NGF membership encompasses coal, gas, diesel, wind, biomass and hydro electricity generators.

### **2. A smooth transition is critical to achieving policy objectives**

It has been the NGF's strong contention that:

- a well designed CPRS is the centre-piece of an effective, efficient climate change policy framework;
- a smooth transition from the current economy to one with a CPRS and associated price on carbon is critical to achieving the Australian Government's policy objectives; and

- transitional assistance is not designed to subsidize emissions from the energy sector (contrary to the views of some commentators) but to make the energy transition possible.

The importance of getting transitional design elements calibrated correctly at the outset of the CPRS cannot be overstated because they bear so heavily on the economic, environmental and public policy outcomes. The introduction of a CPRS sets in motion an economic transformation of epic proportions and, as such, represents the most significant and potentially dislocating policy reform in Australia to date.

The stationary energy sector's transition is central to the economy's transition. Electricity generation, an integral input to virtually all production and consumption activities in the economy, is responsible for about 35 per cent of national emissions and will represent about 50 per cent of the scheme's coverage initially.

The challenge for the energy sector is the efficient transformation of the industry to a low carbon future. When considering the magnitude of this challenge it is important to highlight that:

1. for the electricity generation sector alone, the reduction in asset values associated with the CPRS are expected to be in the order of A\$10 to 20 billion depending on scenario and NPV impact period (based on NGF modelling);
2. the requirement for new investment in electricity generation capacity is expected to be in the order of A\$30 billion (to satisfy expected growth in demand on a business-as-usual basis);
3. private equity already faces significant merchant risk in the national electricity market; and
4. debt markets are currently constrained more than usual because of the global recession.

The purpose of transitional assistance is to ensure energy sector investors, existing and new, large and small, are financially able and willing to make the investments necessary to achieve an efficient transition in the face of these challenges. Fundamentally, transitional assistance ought to:

- avoid financial impairment of existing generation assets and their owners;
- avoid sovereign and regulatory risk and associated costs facing new assets and their owners;
- minimise risks to security and reliability of supply in the national electricity market; and ultimately
- maximise the cost effectiveness of the CPRS (and hence achieve its policy objectives).

Incumbent investors have already commenced their transition toward a low emission future with performance improvements on current assets, and growth strategies and investment project pipelines that include substantial investments in low emission generation technologies. Poorly calibrated transitional assistance, at best, will delay these investment projects and their benefits to the Australian economy. At worst the capital behind these investment projects would be diverted offshore to less risky, higher yielding investment projects.

### **3. Critical transitional issues not addressed adequately in the White Paper or draft legislation**

The NGF supports the establishment of an Electricity Sector Adjustment Scheme (or ESAS). However, the quantum of assistance is significantly lower than the amount required to achieve the Government's policy objectives. This assertion is supported by the Commonwealth Treasury's own modelling which found the negative impacts on the generation sector to be significantly higher than the level of assistance proposed for the ESAS Fund.

The ESAS Fund has been established for a period of five years, based on impacts on the generation sector over a ten year period. However the transition towards a low emission future, and therefore impact on generation asset values, is likely to occur over a period of decades.

As such the NGF believes that the ESAS should provide additional assistance, to offset the full impact on generation asset values over a longer timeframe, to ensure the Government's policy objectives are met. Providing additional assistance via ESAS can be structured to accommodate the Government's existing annual allocation of permits (and therefore auction revenue).

Much of the public commentary around the ESAS is characterised by the assertion that the public is subsidising electricity sector emissions – this assertion is incorrect. The ESAS Fund is designed to ensure that sovereign risk does not result in investment drying up, as investors perceive the sector as too risky relative to other opportunities. The government must ensure that the assistance to coal fired generators is commensurate with full asset value loss to avoid creating regulatory risk and thereby threatening future investment.

Related to the effectiveness of ESAS and the viability of existing coal-fired generation assets are the credit and working capital implications of a the CRPS (as currently designed in the White Paper and projected in the draft legislation). The requirement to purchase permits at auction to cover the carbon liability is substantial and onerous. Other CPRS design features in the White Paper but still to be translated into regulation, such as those relating to auction design, can be improved upon to minimise this burden and ultimately help to ameliorate the risk of adversely affecting the investment environment.

### **4. A cautious approach to determining transitional assistance is required**

Treasury modelling conducted for the White Paper is optimistic in its assumptions about the potential impact of the CPRS on existing assets in the coal-fired electricity generation sector. The potential costs of poorly calibrated transitional assistance require a conservative 'insurance' approach be taken, in the interests of the energy sector and the community.

The Commonwealth Government commissioned three different models (MMA, ACIL and ROAM) to examine the wealth impacts of a CPRS on the coal-fired electricity generation sector. It should be noted that economic modelling of the electricity generation sector is highly sensitive to fuel costs, demand growth and the volume of international abatement credits.

MMA results were the lowest in terms of the negative wealth impacts on the coal-fired electricity generation sector, followed by ROAM and then ACIL (reporting the highest negative wealth impacts). It appears that only one of these models (MMA) was used as part of Treasury's broader modelling of the CPRS impact and that little if any sensitivity analysis was conducted, emphasising the need for caution when

designing a public policy response to such a significant issue. Moreover, it is not made clear in the White Paper exactly how the Government derived the quantum of assistance under ESAS (A\$3.5 billion real) from the range of modelling results presented in the White Paper.

The NGF engaged Intelligent Energy Systems (IES) to conduct a further assessment of the White Paper modelling results. The IES market-based modelling was strongly consistent with results from the ROAM and ACIL models and suggests that the MMA modelling is based on highly optimistic assumptions. IES estimated a negative wealth impact of A\$12 billion over 10 years for the sector as a whole, with higher impact for coal-based plant offset by gains for renewables. This is well in excess of the A\$3.5 billion proposed in the CPRS White Paper.

## **5. Possible improvements to the White Paper and CPRS Legislation**

The NGF believes that the following improvements should be made to the CPRS Legislation:

1. Ensure that transitional assistance fully reflects asset value loss over 20 years.
2. Transitional assistance could be delivered over a shorter period.
3. Ensure that critical working capital issues are adequately dealt with.

The current assistance package does not reflect the asset impact modelling by ACIL Tasman and ROAM referred to in the White Paper or additional NGF modelling. These suggest the sector needs around 400 million permits (as compared to 130.7 million permits). Industry modelling suggests the actual impact is considerably higher, given that is based on 20-year asset valuations.

This additional assistance needs to be seen in the context that the sector will be providing the Government with 4 billion permits between 2010 and 2030. Further, the auction design process needs to allow for deferred settlement. Debt re-financing is emerging as a major problem which will compound the sector's ability to raise credit lines for purchasing emissions permits.

## **6. Conclusion**

The National Generator Forum has consistently supported a properly designed emissions trading scheme which ensures the right environment for new investment by not destroying the value of existing generation capacity. In doing so, it also believes that a smooth transition from the current economy to one with a CPRS and associated price on carbon is critical to achieving the Australian Government's policy objectives. The CPRS, as currently devised, does not meet this standard.

As the CPRS is currently devised, there is real risk of:

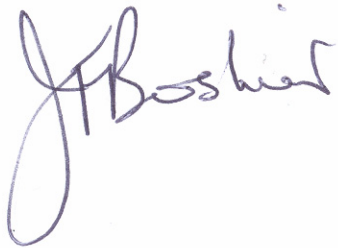
- Not providing the right incentives for the sector to smoothly transition to a low carbon future, thereby undermining Australia's energy future;
- Creating a mismatch between the Government's goals for low emissions generation and what will be delivered;
- Systemic failure of electricity markets as a result of damage to balance sheets;
- Increased market volatility and prices as firms seek to recoup value for their substantially shortened economic life;

- Increased price pressures on emissions intensive trade exposed sectors;
- Reliability concerns as generators review all expenditure;
- Exacerbating already difficult debt refinancing issues.

These issues would be ameliorated if the Government ensured the CPRS transitional design elements are correctly designed and implemented at the scheme's outset.

The National Generators Forum would welcome the opportunity to appear before the Committee to explain these views in more detail.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'J Boshier', with a large, stylized initial 'J'.

John Boshier  
Executive Director