

## **Government, Competitive Energy Markets and the Environment**

*By The Honorable Kim Yeadon MP\**

### **Introduction**

I would like to begin by highlighting the major issues on the conference agenda:

- Efficiency
- Environment and
- Security of supply.

At first glance these conference themes may look contradictory.

How do we achieve greater efficiency without sacrificing our valuable environmental resources and at the same time ensure a secure, safe and reliable supply?

Resources are limited. However society's demands on those resources are not. Trade offs have to be made.

A key role of government is to make these trade offs or create the environment in which trade offs can effectively be made by producers and consumers in the economy. In recent years the energy sector has been dominated by reform particularly in the electricity sector, which is the focus of my talk today.

These reforms represent a fairly radical departure from the way energy services have traditionally been delivered - certainly in this country. A central feature of these reforms is that most of the important resource allocation, pricing and quality decisions are now being made through market processes, rather than by government. However, while markets work well in delivering some services, they don't always work well enough. Under these circumstances, government can play an important role.

Today I want to talk about the role of the government in the competitive energy sector, not only in ensuring that markets work well, but also in establishing those markets. In particular, I want to focus on the role of government and the management of valuable *environmental* resources in the context of a market.

While government has made considerable progress in managing the economic efficiency of the electricity sector, there is much more to be done in getting producers and consumers to take account of the environmental resources they use - particularly in the area of greenhouse emissions.

The New South Wales (NSW) Government is keen to provide industry with a number of market based options to deal with the greenhouse problem. Waiting only makes the task harder for business.

### **What is the Overall Role of Government?**

In thinking about the role of government in the energy sector, it is perhaps worth starting more generally. At the broadest level, government is expected to reflect the collective views of society through the structure and operation of government policy and law. And in reflecting those views there is an expectation that government will not only ensure that the economic cake is as large as it can be, but ensure that

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the cake is divided between the community in a fair and equitable manner.

So how have these broad principles been applied to the energy sector and electricity in particular in Australia?

### **Electricity Reform**

In Australia and NSW in particular, the government has developed and implemented a series of competitive electricity market reforms as a way of making the economic cake larger. Competition has encouraged low cost production, and the competitive market has seen those lower costs passed directly on to consumers.

We estimate that since May 1995, when the NSW Government commenced its electricity reforms, NSW electricity customers have saved over \$1.3 billion in real terms on their power bills. These savings have been a key driver in the introduction of competition. And it is customer choice that is the engine of competition. If customers don't have the right and ability to be supplied by an alternative producer, then competition won't occur.

The electricity reforms in NSW revolve around the creation of choice to stimulate the operation of a market, which then, through the "invisible hand" results in resource allocations that are apparently optimal in the sense that the fewest resources are used to meet customers' energy demand. NSW Government policy was required to bring this market about. It wasn't going to happen by itself. Thus, one role of government is to explicitly identify areas in the economy where markets can be useful, and then to develop and implement policies that give rise to the operation of a competitive market. But an important question remains, once the market is established, in whatever form, is the "invisible hand" enough, or should there be a "fleshy hand" where government continues to guide the development and operation of markets?

I believe that governments do have a legitimate, ongoing responsibility to ensure that markets continue to deliver the best outcomes for consumers. Energy markets and electricity in particular are immature. In fact the National Electricity Market in Australia has only been operating since December 1998, just 18 months.

It would be surprising if the market rules and regulations worked well from the start with no need for refinement or even a complete rethink in some instances. If such refinements or fundamental changes are ultimately required, is it appropriate for government to leave it up to producers in the market to rearrange the operation of the market by themselves, without any oversight or approval from government?

Absolutely not.

The simple reason is that producers do not have the interests of the consumers nor of the economy at heart. However, governments do have an interest in such outcomes and, therefore, are perhaps best placed, or at least motivated, to design and implement arrangements that achieve the most efficient outcome.

Markets are created by government to achieve certain policy outcomes. They are designed to benefit the entire community.

In the case of electricity in NSW, our government separated the monopoly generator into three competing generators and it has worked hard to develop stronger

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## **Government, and Energy Markets** *(continued from page 13)*

interconnection with other States to broaden the boundaries of the market, and in doing so creating a more competitive market.

Another key feature of these reforms was the creation of dedicated bodies to administer the market, the National Electricity Market Management Company–NEMMCO–and the National Electricity Code Administrator–NECA.

NEMMCO was expected to run the market according to the market rules, as enshrined in a National Electricity Code, while NECA was expected to independently monitor whether market participants were following these rules.

The various state governments participating in the National Electricity Market appoint the members of the Boards governing NEMMCO and NECA and in doing so, may, theoretically at least, exercise their power over the market through the Boards.

The purpose of these organisations was to put government at arms length to the development and operation of the National Electricity Market – in effect remove government from making decisions about the way the electricity market works.

There is an important question as to whether this approach is desirable. Let me illustrate by way of example, why I think it is not only desirable, but imperative, that the government continue be involved in the ongoing management of markets, and the electricity market in particular.

One feature of the Australian National Electricity Market is its regional structure. The market operates in a way that establishes a single price that prevails across the market unless there are transmission constraints between the states. When this occurs the price in one state, the one that imports power over the constrained transmission interconnect, rises above the price in the exporting state. This was designed to reflect to producers and consumers the need to invest in new capacity or to cause customers to reduce demand to avoid causing these high prices.

This same concept can be applied at a much more micro level whereby prices could vary in lots of different places across the country, reflecting *local* shortages of transmission capacity.

At first glance, it would appear sensible that if the government has accepted that some form of aggregate regional pricing is an appropriate mechanism to influence the quantity of transmission capacity supplied and demanded, then it should follow that even greater regionalisation of the power system will deliver even greater economic gains.

Indeed, this is the belief of NEMMCO and NECA, the appointed guardians of the market. However, there is one factor that has been missed in this logic. In the process of localising the market, by creating multiple pricing regions, this effectively makes each generator a larger player in a smaller market, thereby effectively reducing the competitiveness of the market.

As we all know, if you reduce competition then you can expect higher prices that reflects nothing more than a producer's desire for more profits. At the time of designing the National Electricity Market rules, the participating governments had before them a detailed consideration of these alternative models. Ultimately, these governments of the day sacrificed the economic purity of pricing transmission capacity at a micro-level for a more competitive generation market, which was the key objective of the reforms.

This trade off made customers better off than under the

alternative. It also made the economy better off. And as agents for both, the government had, and still has every right to ensure that this policy is delivered.

NECA has other ideas. It has forcefully attempted to override government policy, and breach its responsibilities under the Code to encourage competition, by seeking to overturn the existing market rules in favor of some theoretical construct which ultimately would undermine the achievement of the objectives of the electricity reforms.

Thus, it is clear that government needs to be vigilant and ensure that its reform aims are realised over time. This is not a surprising conclusion. After all, as I have already pointed out, even in the purest forms of markets the government's "fleshy hand" steers the market on a continuous basis to produce outcomes that benefit consumers.

For the National Electricity Market, this probably means that the governance structures of NEMMCO and NECA need to be changed so that their interests are more strongly aligned with the reform aims of the governments that brought these organisations about.

In this regard, the NSW Government is leading the development of new governance arrangements and is working closely with other States to ensure that more effective arrangements can be put in place to ensure continual improvement in outcomes for customers.

### **Government and the Environment**

I now want to turn my attention to an area of the energy sector that the NSW Government has focused on and the Australian Federal Government has seriously neglected – the environment.

We all acknowledge that the energy sector is a large user of environmental resources, and a major greenhouse emitter. Being the main user of non-renewable environmental goods around the world, the energy sector is a great place to start. It is where we will get most 'bang-for-buck'.

But what needs to be done?

The NSW Government has focused on providing market based solutions such as trading in carbon sequestration. However, the Federal Government has failed to deliver for industry across Australia.

The Federal Minister for the Environment, Senator Robert Hill, has effectively quashed any chance of an emissions trading market developing in this country.

Let me explain.

Recently, Senator Hill said at a recent address to the Pew Center on Global Change in Washington that:

*"... the Government is considering the full ramifications of a possible domestic trading scheme. As we have argued for emissions trading internationally to reduce the cost of abatement, there is obvious logic in facilitating such a market-based mechanism within our domestic economy for the same objectives"*<sup>1</sup>

I agree. But Senator Hill goes on to say:

*"... our government has consistently cautioned that decisions on emissions trading in Australia cannot be made*

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<sup>1</sup> "Beyond Kyoto – Australia's efforts to combat global warming", A speech to the Pew Center on Global Climate Change, by Senator Robert Hill, Washington, 25 April 2000. [www.environment.gov.au/minister/env/2000/sp25apr00.html](http://www.environment.gov.au/minister/env/2000/sp25apr00.html)

*independently of developments internationally”*

What this effectively means is that the Federal Government will consider any and all market based schemes to reduce carbon, but will act on none of them until there is international agreement on an appropriate scheme by the signatories of the Kyoto Protocol. This effectively means that the Federal Government will do nothing meaningful on creating a market for emissions in the foreseeable future. Instead, we will have to be content with putting in place administrative schemes that attempt to encourage or coerce producers to look at alternative technologies, or to entice customers into acting in an environmentally responsible way.

While these can be effective in reducing greenhouse gas problems, they are a poor cousin to a market-based scheme that internalizes the cost of emitting greenhouse gases into the energy sector. The key to the success of initiatives such as emissions trading is government, community and business working together. The Carr government has recognised that all Australian governments have a responsibility to the community to deliver real reductions in emissions. We also have a responsibility to provide business with a flexible framework that will allow targets to be met at the least cost.

Requirements to reduce emissions can be disruptive if we choose to ignore them, or they can be a trend that we manage and steer to a successful outcome. To succeed, however, we have to be pro-active and innovative in our policies and actions. This is not a zero sum game. We have been proactive on greenhouse, but we have sought to create opportunities rather than costs.

This is the foundation of the NSW Government approach - creating market opportunities. Clearly, though, the longer we delay, the harder it will be to reach greenhouse reduction targets. That is why NSW cannot support the “wait and see” approach which has been adopted by the Federal Government. There is a global imperative to address climate change and it will not go away. But I believe there are also other good reasons to act now. There is a first mover advantage for NSW and Australia if we face up to this issue now. That’s why we developed carbon rights legislation, believed to be the first in the world. We undertook the first real trades for carbon sequestration in Australia.

I would like to point out that NSW has not developed an emissions trading scheme, as opposed to the framework for carbon rights, as such a scheme needs to be implemented at a national level. Industry works within a national economy, and an emissions trading scheme needs to be developed at a national level.

All of this is about realising an environment in which investments in renewable energy, emissions reductions and carbon sequestration make good commercial sense. Consistent with this approach, State Forests of NSW released an Information Memorandum earlier this year to attract investment in planted forests for carbon offsets. As a result, the Tokyo Electric Power Company recently signed a letter of intent with State Forests to establish up to 40,000 ha of forest in the coming decade. It’s a deal that could be worth up to \$120 million of investment in our state. And I believe more such investments will follow.

This early private carbon market in no way reduces the need for early introduction of a national emissions trading regime Australia-wide. But it does allow Sydney to position itself as a major global centre in the carbon market and in

other emerging environmental securities. The NSW Government has recognised the need to develop a market, establish the property rights and allow industry to work within that framework, rather than leave them with no framework. Something the Federal Government seems intent on doing.

Doing nothing until 2008 is not an option – not for government and not for industry. All that delay does is increase the risk profile for investors in the greenhouse solution for the next 8 years. It’s about helping the economy to adjust in a planned way rather than forcing a solution at the last minute. We can turn problems into opportunities, threats into new markets and potential impacts into new jobs - that is the foundation of our strategy for NSW.

### **Conclusion**

In conclusion, governments can and should play a key role in the management of the energy sector, and particularly as it relates to the management of the environment. In the first instance the government should identify opportunities to allow goods and services to be provided by a competitive market. If this is possible, then the government should implement such arrangements. When the government has established these market arrangements, it needs to put arrangements in place to preserve competition and deny producers the opportunity exploit market power.

Where competition is not possible, then government needs to consider regulation as a way of protecting the interests of consumers. But it should only do this if regulation is better than a poorly operating market.

In terms of the energy sector and the environment, the government needs to go one step further than creating a market, it needs to create property rights so that a market is a possibility. This needs to happen as matter of urgency, or we burden the entire community with expensive solutions. It simply is not good enough to wait for someone else to act.

The NSW Government has taken the lead and established a firm set of policies to allow the market to operate effectively.

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