Australia Missing its Time in the Sun

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After much discussion, Australia finally has a new national Government and there are positive signs with respect to the growth of cleantech and, in particular, utility scale renewable energy projects.

The new Labor Government did a deal with the Greens that will deliver the upper house and finally managed to win over two independents to control the lower house. The Liberal/National Coalition would have required all three of the independents to support it into office but failed despite some good efforts at pork barrelling. Labor;s victory is undoubtedly a win for environmental investments.

Climate politics in Australia has been a sad affair over the last twelve months. The proposed Emission Trading Scheme was watered down and then finally killed off. Climate change was no longer a topic of choice for senior politicians, and the ACT Australian Cleantech Index significantly underperformed the general market.

The public reaction to this backing away from climate change issues was interesting. There was a loss of confidence in the Labor Government that they would deliver on any of their promises and, at the same time, there was increasing support for the climate sceptic leader of the Opposition. The election produced a 5% swing against Labor, with around 3.5% going to the Greens.

This result has the potential to put emissions trading back on the agenda, and may even drive some additional support for utility scale renewable energy projects.

To date there has been relatively little large scale activity in renewables. According to the Clean Energy Council, there are currently 1,769MW of operating wind farms, up from around 1,300MW at the end of 2008, with many more wind farms under development. Other than that, however, there has been scant progress.

The recent growth in installed wind capacity is being driven by the Large-scale Renewable Energy Target (LRET) legislation that will force energy retailers to purchase 20% of their power from renewable sources by 2020. This will account for some

41,000GWh/yr. If all of this were to be delivered by wind, which is possible, then it could equate to over 15,000MW of installed capacity.

There are no large scale solar plants operating in Australia: unfortunately, the land of sun is not delivering in this respect. Australia takes great pride in its connection with Ausra's first 1MW pilot plant built near Sydney in 2004, and that Dr. Zhengrong Shi, the founder of Suntech, wanted to launch his company in Australia. Sadly, both of these were unable to raise any financial backing locally and took their projects elsewhere.

There have been many large scale solar projects mooted. Solar Systems had a 154MW heliostat project that, despite A$125 million in Government funding, went into administration earlier this year. EnviroMission is still pushing its kilometre high solar chimney, although it is now focused on the US market. Wizard Power is building a Government-funded 2MW demonstration plant utilising its Big Dish technology, while other projects are being driven by companies such as Acquasol and Vast Solar.

The big hope for large scale solar has been the A$1.5 billion Solar Flagships scheme that, when launched, claimed it was going to enable 1GW of installed capacity. These ambitions were quickly scaled back: most of the money has been delayed several years and some of it is now allocated elsewhere. However, eight companies, half concentrating thermal and half flat-plate pV, were short-listed earlier this year to install 'mature' technologies. One thermal and one pV project are scheduled to be awarded significant funding in early 2011 to build 150+ MW power stations.

Some wave projects are being developed through companies such as Carnegie Wave Energy, BioPower Systems and Oceanlinx. The only one with significant backing is utilising Ocean Power Technologies' PowerBuoy that secured a A$66 million grant.

Geothermal is the other area attracting significant investment. There are currently ten listed companies prospecting for hot rocks around Australia, with Geodynamics and Petratherm being the leaders in this field. However, the long timeframe to generating positive cash flows and limited Government support has led to a loss of confidence by investors, and many of these companies are now struggling to stay afloat.

Australia has outstanding renewable energy resources and a wealth of emerging intellectual property. However, it lacks two things that would enable it to take advantage of these attributes. First, the Australian investment community has limited interest in the sector and, to some extent, has been scared off by losses suffered in biofuels and geothermal stocks. This has created an opening for international investors to enter the market, and my company is working with a number of Asian funds looking to benefit from the opportunities this presents.

Secondly, whilst some sectors, such as wind farms, are benefitting from the regulatory environment, there is little stability or long term signals in the path towards renewable energy. This results in regulatory risk becoming a big issue for both project developers and funders.

So back to the election. The Greens will undoubtedly be pushing hard for a strong movement in the direction of industry development for renewables. The introduction of feed-in tariffs for particular technologies and for large scale projects is possible. The LRET might even have a portion quarantined for non-wind technologies.

To date, Australia has been wasting its opportunities to shine in its own potent sun. Maybe now is the time for the momentum to change so that we will see significant investment in large scale projects using a variety of technologies. There is of course another option, but my optimism does not allow me to think about that!

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