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Easy target

RENEWABLES CONTRIBUTION TO EMISSIONS TARGET

We project that Australia will comfortably meet its 2030 28% emissions target for the electricity sector due to existing and announced policies supporting energy efficiency, renewables and closures of high emissions coal plants. The Commonwealth Government will receive credit for State renewable policies that contribute to meeting the 2030 emissions target, while admonishing them for any energy security issues that may result.

An urgent priority for climate policy in electricity is how to ensure energy security in a market increasingly dominated by intermittent renewable generators. This urgency should be evident in recent electricity market events and this is why the Federal Government should reconsider its position on an Emissions Intensity Scheme. This scheme will provide greater certainty for investors in existing and new thermal generators that must play a vital role in managing the transition of the power sector.



THE PRIME MINISTER COMMITS AUSTRALIA TO INTERNATIONAL TARGETS

On 10 November 2016 the Prime Minister, The Honourable Malcolm Turnbull, announced that he had signed, on behalf of the Australian Government, the Paris and Doha Agreements which formalised Australia's 2020 and 2030 emission reduction targets.

At the time of this announcement the Prime Minister said:

“Australia now joins 100 other countries in ratifying the Paris Agreement, which entered into force on 4 November 2016.

Australia has a strong track record on international emissions reduction targets. We beat our first Kyoto target by 128 million tonnes and are on track to meet and beat our second Kyoto 2020 target by 78 million tonnes.”¹

Given the Federal Government has not committed any further funds to their Direct Action policy, they have categorically ruled out any form of market based mechanism to reduce emissions in the electricity sector or elsewhere in the economy, and they have called for the abolition of the State based renewable schemes, many people are wondering how the Federal Government expects to achieve its 2030 targets. This is important especially as the Prime Minister said that:

“Australia has a strong track record on international emissions reduction targets”²

EMISSIONS IF THE STATES CONTINUE WITH RENEWABLE SCHEMES

The Federal Government has been attacking the State Governments for committing their jurisdictions to State based renewable energy schemes. The most ambitious of these non-Commonwealth renewable schemes is the Australian Capital Territory, which aims to be powered by 100% renewable energy by 2020. The Victorian Government has committed the State to renewable energy generation targets of 25% by 2020 (which would be achieved in any case under the Commonwealth Renewable Energy Target) and 40% by 2025. The Queensland Government is committed to a 50% renewable target by 2030. The Victorian, Queensland and ACT renewable targets will be achieved by compensation arrangements that operate at the State level. By contrast, the South Australian government has an ‘aspirational’ target of 50% renewables by 2025. However, the South Australian government does not materially financially support the development of renewables. All but one wind farm developed in South Australia

¹ Prime Minister of Australia (2016), Ratification of the Paris Agreement on Climate Change and the Doha Amendment to the Kyoto Protocol, 10 November, Weblink: <https://www.pm.gov.au/media/2016-11-10/ratification-paris-agreement-climate-change-and-doha-amendment-kyoto-protocol>

² *Ibid.*

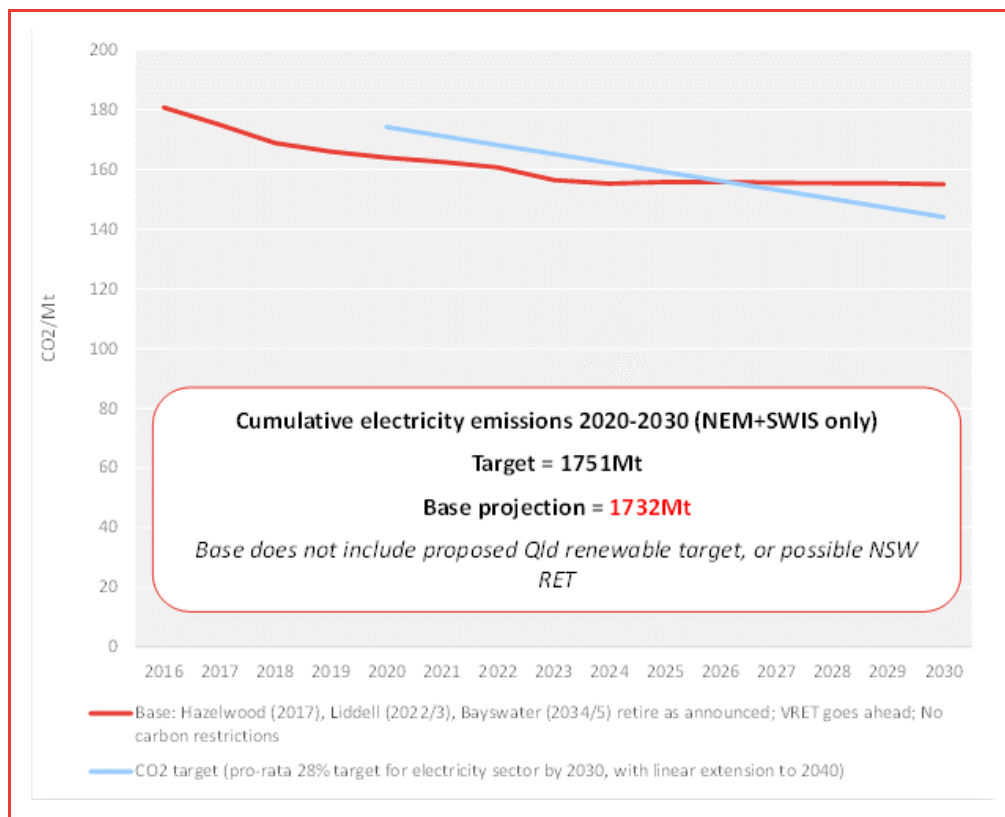
has been developed off the back of the Commonwealth Renewable Energy Target scheme. It is important to be clear about this, the Federal Government's criticism of the South Australian government for the high take up of renewables in that State is due to the Commonwealth's subsidies, not South Australian government subsidies. The only non-Commonwealth wind farm in South Australia has been sponsored by the ACT renewable scheme. Having said this, it is fair to say that the South Australian government has embraced the development of renewable generation. It is also fair to say that even if the South Australian government didn't embrace renewables to the same extent, the relatively higher electricity prices in South Australia (due mainly to the higher generator market power in that State - a consequence of inadequate structural reforms many years ago) would have attracted the renewable investment in any case.

Figure 1 below shows what happens to electricity emissions if the States continue with their renewable schemes and there is no Federal Government policy to replace or extend Direct Action and the closure of black coal generators proceeds as per announcements (an almost certain outcome with the operation of State based renewable schemes).

The blue lines shows a straight line trajectory of Australian electricity emissions (NEM+SWIS) from 2020 to the pro-rated level it needs to be to achieve Australia's 28% target. The red line reflects expected electricity supply emissions when it is assumed that Victoria and the ACT keep their renewable schemes and there are no new funds for Direct Action, the RET finishes in 2030 and no carbon pricing scheme and the aforementioned black coal generator closures occur. Note, this projection does not include any yet to be developed Queensland renewable scheme.

Under this scenario cumulative emissions in the electricity sector are estimated to be 1,732 Mt against a requirement under the target of 1,751 Mt. This means that Australia is on course to achieve its targeted reductions *under current policy settings (including the proposed VRET)*.

Figure 1: Emissions when Victoria and ACT keep their renewable schemes and no Federal Government emission reduction policy



Source: Frontier Economics. Demands is based on AEMO 2016 Medium projections

CONCLUSION

The State renewable electricity schemes are undoubtedly an expensive way of reducing greenhouse gases. However, in the absence of any Federal Government national scheme, these State based schemes will continue to reduce electricity supply emissions and, together with other complementary policies, look likely to achieve the Federal Government's commitment under the Paris Agreement. Unfortunately for the States the Federal Government will continue to attack them for adopting these policies while no doubt continuing to take credit for the decline in emissions.

The problem with having no national approach to reducing emissions in the electricity sector and instead relying on the States to do the heavy lifting through a patchwork of renewable schemes is that the resulting large quantities of intermittent renewable generation will create widespread power system security problems. This will exacerbate the price rises that will follow by having such large quantities of renewable generation.

The best way to achieve the electricity industry emission reductions would be to integrate the electricity and green markets through a policy such as the emissions intensity scheme.

Instead of being underway on an orderly transition of our power supply technology Australia is consumed by a political debate about whether a carbon pricing regime is good policy or not. The reality is that it doesn't matter what politicians or the media thinks about the merits of a carbon price. What matters is what investors in new generation supply think. If investors believe that over the life of their investment in new generation there is a prospect that a carbon price will be introduced then they will be duty bound to ensure that those investments are viable under a carbon pricing regime. This will mean that they will tend to invest in projects that emit a low amount of greenhouse gases, that is, renewables. The States will and are stepping in to support these projects in the absence of any coherent or effective national electricity emissions reduction policy.

If the Federal Government wanted to maximise the chances that its natural endowment of fossil fuel resources played a role in the future, then it needs to give investors greater certainty so they can consider the relative investment merits of all technologies.

The longer the Federal Government delays giving this investment certainty the less likely it is that Australian can exploit these fossil fuel resources as the time available to recover the costs of the necessary investment will become shorter and then the economics will swing in favour of renewables that will have longer economic lives. In the meantime the lack of investor certainty will result in more sub-optimal investment and decisions which will lead to even higher and more volatile electricity prices and further and more widespread deterioration of power system security.

If the Federal Government introduced an emissions intensity scheme, it could more effectively make the case that the State based renewable schemes were not necessary as an emission intensity scheme could incorporate renewables. Incorporated into an emissions intensity scheme renewable generators would be forced to compete in the same market on a competitively neutral basis. In the absence of any effective Federal Government policy to reduce greenhouse gases the States will continue to argue that they are filling the policy vacuum left by the Federal Government.

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