Energy prices will triple without a carbon price

Business Spectator's Giles Parkinson writes: 14/04/2010

Australians are being prepped for steep rises in energy costs -- partly the result of the proposed emissions trading scheme. But that is not quite the whole story, according to Grant King, the CEO of Origin Energy.

He thinks the price of energy to consumers might be three times the current tariff by 2020 -- a situation not inflated because we might have a carbon price, but because of the real possibility that we won't have one.

King is one of the most refreshing of speakers about Australia's energy future because he has a broader vision of the energy challenge than most and can explain it in layman's terms. Granted, he does have a strong interest in pushing the case for gas, and his company has got a lot of it to sell from the coal seam gas reserves in Queensland.

He also avoids some of the shrill claims and doomsday scenarios that have blighted so much of the energy debate in this country. And the most important myth he dispels is the idea we will somehow run out of power and the lights will go off.

It won't happen, he says, because companies like his will invest in the sector and stand ready to do so. It's just that those investment choices will be made at the greatest efficiency and the lowest risk of capital in light of the prevailing policies, and in the absence of certain policy drivers, most notably a carbon price, that will almost certainly result in higher costs to consumers.

The second myth he strives to dispel is that building out Australia's energy requirement is somehow going to be too hard. It's not, he says, because the task is no more daunting than what has been achieved in the past 40 years, both in terms of population growth (90 per cent) and energy consumption (about 600 per cent).

It's merely a question of how we want the final mix, and that will be influenced not just by the nature of the policies, but their timing.

In a speech to CEDA in Sydney on Tuesday to mark the launch of the "Vision Series", King made some interesting observations about the two policies that are in place -- the 20 per cent renewable energy target by 2020, and the pledge to cut 5 per cent in emissions.

And his take was that we will have trouble meeting either target, but particularly that of emissions reductions, because of the absence of a third policy -- a carbon price.

On the RET, King has some sobering views on the ability of other energy sources to help meet that target: large scale solar is a long way away from being cost competitive, and geothermal is unproven and unlikely to contribute much before 2020. That leaves pretty much wind, and wind only, to meet the RET, and King estimates that 7000-8000MW of wind turbines will be needed to meet the RET, and will need to be "balanced" by up to 6000MW of open cycle gas plants, which can be fired up quickly to meet peak demands.

"And that will have a profound impact on our entire generation system, both in terms of its operation and, ultimately, in terms of its cost," he says. "And our contention would be that is largely yet uncosted into the price of renewable energy."

As for other clean energy sources that could help Australia meet its 5 per cent emissions reduction target, King says carbon capture and storage will likely be "incredibly expensive" and unlikely to contribute much before 2030, and nuclear, not even on the political agenda, could not possibly be an option before 2020, or even 2030.

"You cannot build or permit many of the technologies that people are talking about in that timeframe, and you certainly wouldn't take on the risks attached with many of the emerging technologies in that timeframe."

Furthermore, he notes the absence of a carbon price will mean the economic case for most renewables is not sustainable over the longer term. Even in wind, he notes, there was a real risk that no carbon price beyond the end of the RET in 2020 could create stranded wind assets -- something of an irony in the current debate over coal-fired power stations.

The other great hope for Australia to reach a 5 per cent emission reduction target is through energy efficiency, but King has serious doubts about that, despite the improved efficiency of many household appliances. King blames it on the hunger for large screen TVs, which he says are having an extraordinary impact on household consumption. And, he notes, air conditioning only has a relatively small market penetration but is growing quickly.

Even if we could achieve energy efficiency gains, the simplistic promise that this would save money may not hold true, King says, because it would not fundamentally change network costs, and may make them more expensive. "To put in perspective what it might take to achieve that target of 5 per cent if the only levers we were willing to pull was energy efficiency -- so how much energy people used in their homes -- and the renewable energy target, we would need to see a 20 per cent reduction in household energy consumption by 2020 and we would need to double the amount of renewable energy installed by 2020 -- so from, say, 7000 to 14,000 megawatts of wind. Clearly, we don't need that much generation in terms of the growth that we're facing, so we would actually need to force the retirement of thousands of megawatts of coal-fired generation in order to do that."

Sadly, he says, there are few signs that politicians have the resolve to address the issues.

"My fear is that our policymakers and politicians are fatigued by the challenge that we face and will not revisit the issue in the current electoral cycle.

"If it's not revisited over the next few months and our parties don't find an agreed way forward...for another four years, that means we will make the least risky decisions we can make and we will end up with a mix of generation and an electricity system that will not be what we want for the long term but will nonetheless be what we get as a result of the current policy environment."