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ViewPoint

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Back to the Future Comments on the Energy Strategy

The Government's draft Energy Strategy and Energy Efficiency and Conservation Strategy, which was released in December last year, was a step in the right direction in coordinating New Zealand's disparate and often failing electricity system. However, the recommendations contained in those documents did not redress the ongoing problem of price increases and inadequate supply and distribution of electricity.

The report's focus on renewable energy and energy saving was generally the correct approach for the Government to take, however New Zealand's energy demand is growing at 2.3% net of savings (almost double that in the National Energy Strategy, which means the problem is much more immediate than the 1.3% growth quoted in the report would suggest). Unfortunately, calling on consumers to use less electricity will not stem the increasing demand for electricity. Instead, utilising New Zealand's available hydro and geothermal resources, to support the real level of growth that inevitably mirrors our increasing population, would be a better course of action to ensure a more sustainable and affordable future.

The CMA has continued to advocate that more hydro and geothermal development is necessary to enable wind generation to bridge the gap before marine generators and alternate fuel sources can be put in place. Wind is complementary to hydro and geothermal generation, rather than a one for one replacement. The problem with wind is that it doesn't always blow and there are questions as to its load factor, so the more wind, the more other sources of generation are needed to provide the back up. Wind generation is not a solution of itself.

If the Government can consolidate and correctly implement its energy strategies, then New Zealand can rebuild its reserve capacity using a mix of hydro, geothermal and wind over the next 10 to 15 years. After that, tidal and marine sources are there to be exploited. Further out into the future, nuclear (fission certainly and perhaps fusion) becomes the carbonless solution. Nuclear power should not be eliminated from New Zealand's energy debate. It is better scheduled out for the next 25 or 30 years, by that time, the northern hemisphere will have developed the technology as an acceptable solution to all but the greenest of the green.

An "electricity first/transport fuels next" approach needs solutions, with cost and political point scoring on a "low carbon aspiration" in mind, needs to make way for pragmatic carbon policies. Methane is a much more effective greenhouse gas than carbon dioxide and any credible low carbon policy must address all carbon emissions across all sectors of the economy, not just a select few. Anything less is political grandstanding, warming the hearts of politicians that might, in the end be more important than warming the planet.

In aspiring to a clean, green future, this Government and those that may follow, need to consider that in 1971 renewable resources made up over 75% of New Zealand's electricity generation but by 2005 that figure had fallen to around 53%. It should also consider that by 2030, New Zealand's electricity usage will have increased by 77%, based on the CMA's estimated growth rate of 2.3% required to restore reserve capacity, retire old plant and sustain the growth in demand.

Assuming that net load factors remain unchanged to achieve the renewable ratio in electricity generation we had in 1971, taking growth at even 1%, we have to double the total capacity of all our existing renewable generation. If growth is closer to 2.3%, we will need this much again. This highlights just how big this task facing New Zealand's energy system really is.

The energy strategies were a step in the right direction, but low carbon, comparatively low electricity prices and secure supply aspiration will be more effective in driving New Zealand towards urgent development of large hydro and geothermal plants, a robust north-south 400kv transmission backbone, backed by wind, bio-diesel and later marine and nuclear sources. Maybe then we can get back to what we had in 1971 - a 75% renewable content in electricity generation, and a secure supply of electricity at some of the lowest prices in the world. *[end]*