Greenhouse Solutions Need Effective Government Policies

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The only energy technologies that are capable of reducing greenhouse gas emissions substantially and rapidly are efficient energy use, natural gas and the lower-cost renewable energy sources. However, as oil prices escalate, the limited reserves of natural gas are coming under increasing demand for electricity generation, heat and transportation, and so gas is not a major or long-term part of the solution. Capturing CO_2 emissions from coal burning is an unproven technological system, which could not make a significant contribution until the 2020s. Therefore, the main policy emphasis should be directed to the large-scale deployment of energy efficiency and renewable energy.

The huge economic savings from energy efficiency can pay for a large part of the additional costs of renewable energy. Although energy prices will rise as a consequence of responding to the threat of global warming, the number of units of energy used can be reduced by means of energy efficiency, thus stabilising energy bills.

Efficient energy use comprises a vast array of technologies and process improvements, including design of buildings, insulation, heating and cooling systems, electrical appliances, electric motors and drives, boilers, kilns and industrial processes. Within a decade, almost all such energy-using equipment, apart from buildings, has to be replaced anyway, giving big opportunities for cost-effective energy efficiency.

Demand for energy could also be reduced by phasing out off-peak electric hot water and replacing it with solar, gas and electric heat pump systems. As a result, several coal-fired power stations could be retired in Australia.

Before 2020, large contributions to electricity supply and industrial heat could come from wind power and by burning the residues of existing crops, such as sugar, wheat and plantation forests, in small rural power stations. Beyond 2020, we could obtain big contributions from solar power and hot rock geothermal power.

Between them, renewable energies can provide both base-load (24-hours a day) and peak-load power with the same reliability as the existing fossil-fuelled system. Because of their smaller scale, renewable energies can create several times more jobs in Australia per kilowatt-hour than fossil fuels, for example for metalworkers, electrical workers and plumbers.

An energy efficient, renewable energy future is technologically and economically feasible, but will not happen without the right policies from Federal and State Governments. Under the Howard government, these technologies were starved for funds and their huge potential was denigrated with false and misleading statements.

Before the December 2007 Federal election, Rudd Labor made some excellent policy promises for renewable energy. While the symbolism was good, implementation has been delayed unnecessarily:

- In the May 2008 budget, not a single dollar was allocated from the promised $500 million Renewable Energy Fund for development and deployment.
- Furthermore, renewable energy received no research funding from the promised $150 million Energy Innovation Fund.

- The promised expansion of the Mandatory Renewable Energy Target was delayed until 2009 and meanwhile the new government set up the Wilkins Inquiry to pronounce on whether 'complementary measures' were necessary once an emissions trading scheme is operational.
- A means test of $100,000 gross household income was applied to the rebate for residential solar electricity and the government has so far failed to replace the rebate with a gross feed-in tariff.
- The Government's Green Paper on climate change ignores or waters down several of the key recommendations of the draft Garnaut Review. For an effective emissions trading scheme, it is essential to auction all permits and to use the revenue raised to assist low-income and other householders to reduce their emissions and to fund new infrastructure.

These items add up to a pattern of delay for renewable energy that the former Howard Government would have been proud of. Rudd Labor should understand that it was elected partly on its promises to expand renewable energy. Increasingly the electorate is becoming aware that a promise delayed is a promise betrayed.

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