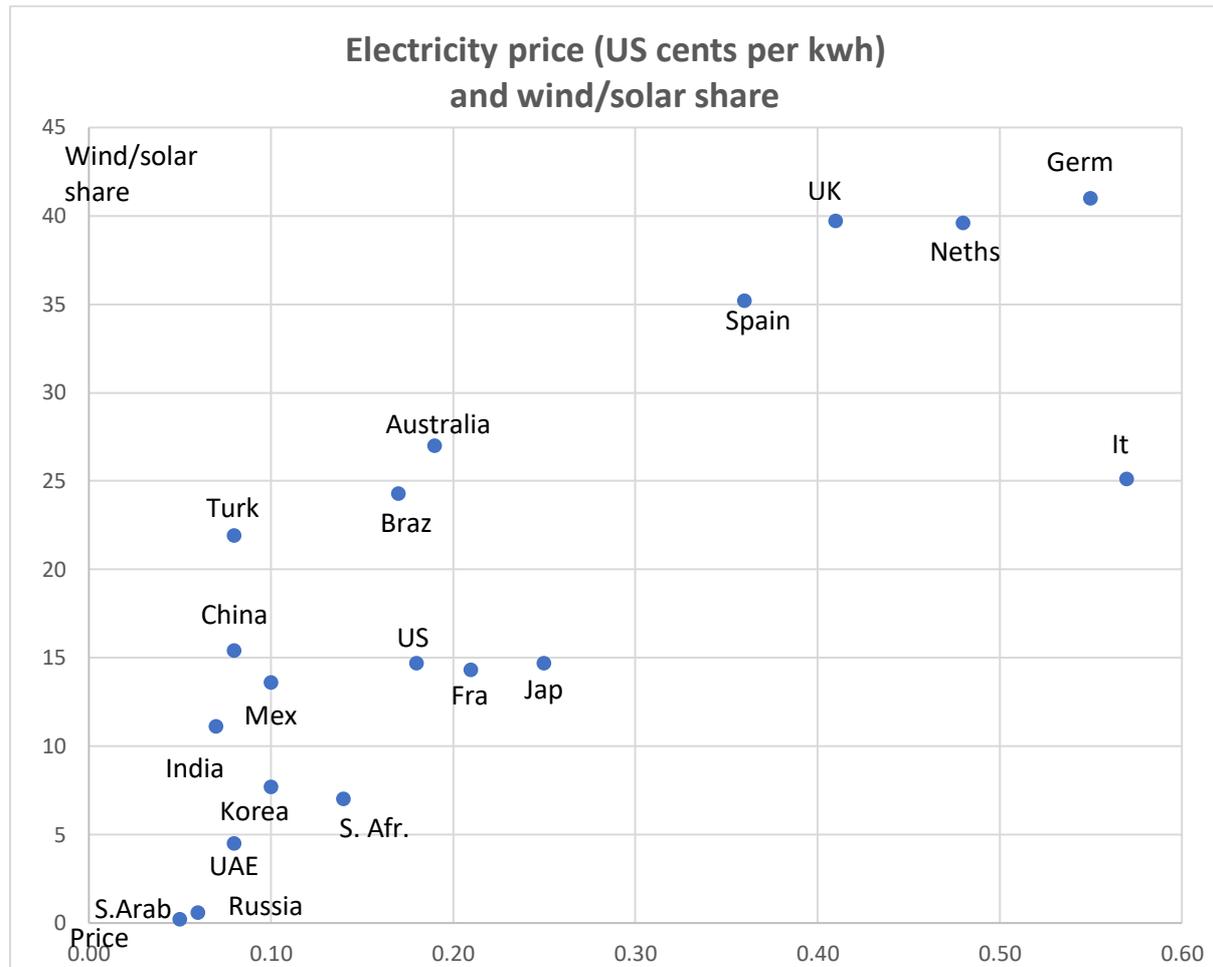


Glenellen Solar Submission by Alan Moran

Increased level of wind and solar cause higher energy prices. This can be seen from international comparisons of price and the solar/wind market shares.

The readily available data by country for the [wind/solar renewables](#) share and price of [electricity](#) show a high share of renewables is concomitant with high electricity costs. The cheapest electricity is found in the nations with the lowest renewable energy share: Saudi Arabia, Russia, India, UAE and Korea. Germany, the UK, the Netherlands, Spain and Italy have high prices and high renewables shares.



The key assessment considerations include **energy security**. If the Glenellen project proceeds it will deliver electricity at excessive costs with unacceptable reliability.

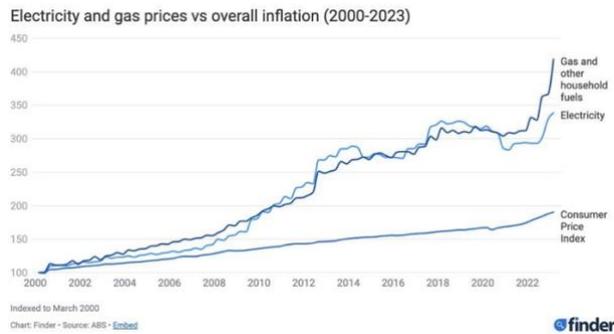
The project is said to contribute 200 MW of renewable energy to the National Electricity Market.

Though commercial for the sponsors, the project's cost to the community is considerable. The Glenellen Farm, in addition to its market revenue, will obtain a subsidy through the Large Scale Generation Certificate scheme that is currently \$52 per MWh. The wholesale price of electricity before renewable energy subsidised supplies started to eat into the coal

fired generators' market, and thereby cause them to be uneconomic, was rather less than \$52 per MWh. The subsidy from the electricity consumer of about \$30 million per year.

Last year the wholesale price in NSW was \$145 per MWh. The direct subsidies to renewables dominate their revenues and the effect of subsidised renewable energy supplies forcing out cheaper coal, has been a 3-4 fold increase in the wholesale market price to the great disbenefit of the community as a whole.

The ABS data shows that general prices this year are double their 2000 level, while electricity prices are three and a half times their year 2000 levels.



That price trajectory will continue. Though renewables are said to be cheaper than coal (and gas and nuclear) this is only the case if costs of firming of the intermittent renewables are excluded and if we exclude the costs (now set to rise considerably) of providing the increased transmission.

Firming costs are incurred because the proposed facility's unreliable high-cost renewable energy must be balanced. We cannot rely on electricity to be supplied only during daylight hours and subject to the vagaries of weather.

The project sponsors would not incur these costs themselves, but the replacement of existing coal capacity, on which the project is founded, requires such an additional cost to allow present levels of reliability. To achieve this, the community will incur costs sixfold the stated cost of the project itself.

It is notable that [Chinese coal plants](#) are to receive an additional payment of 330 yuan (\$45.25) per kilowatt of installed capacity per year. This capacity payment is to ensure coal plant is adequately remunerated and that their economics is not undermined by wind/solar cutting in and out. China, in introducing these subsidies to coal, is concerned that its growing level of wind/solar will impact in the security and reliability of its network. Subsidies to wind and solar in Australia have brought these sources to supply some 25 per cent of supply, a much higher share than in China and, accordingly, we should have a much greater concern about the deleterious effect these supply sources have on our own network.

On top of this, increased transmission is necessary because renewable energy involves a less dense and more diffuse supply. In this respect, the plan would cannibalise the transmission available for more dependable and lower cost supplies.

The proposal is clearly against the public interest and on grounds of energy security alone, the Commission should reject it.