

Nuclear won't deliver the lowest-cost energy system

Rooftop solar and distributed energy resources will deliver the cheapest form of energy whereas nuclear energy will likely be too expensive and slow to solve any problems for Australia, said Rewiring Australia founder and chief scientist Dr Saul Griffith.

"A lowest cost energy system will maximise rooftop solar and distributed energy resources, because that delivers the lowest priced electricity to consumers, while also lowering transmission requirements," said Dr Griffith.

Rooftop solar in Australia is delivering energy at five cents per kilowatt hour while new nuclear power in the US is delivering it at 20 cents before it even hits the grid.

"Electrification could bring \$1.7 trillion in savings for Australian households but there is a risk that a focus on nuclear will prevent this cost of living dividend being realised.

"Nuclear is proposed as so-called "baseload" power, which has never been the problem for Australia. The challenge is meeting demand peaks and industrial loads at low cost.

"Industry needs energy to be very cheap, something that nuclear is not, so it's not solving any real problems here."

Dr Griffith proposed that Australia should be involved in the research effort to develop genuine next-generation nuclear technologies, both fusion and fission. This could contribute to international efforts to lower the price and increase the safety of nuclear power.

"Some countries that are small, cold, and with higher population density and minimal solar and wind resources will need nuclear to replace fossil fuels, but Australia has the opposite population and geographical characteristics," said Dr Griffith.

"Furthermore, we are a water-starved nation and each nuclear power plant will guzzle 1.8-2 litres of water per kilowatt hour of electricity produced." A GW-sized nuclear plant will need up to 2 million litres of water every hour, which will limit its applicability in Australia.

Contact details:

Charlie Moore: 0452 606 171