



RAFE CHAMPION

OBJECT

Submission No: 193240

Organisation:	Key issues: <i>Social and economic, Land use, Energy transition</i>
Location: <i>New South Wales 2089</i>	
Submitter Type: <i>an individual making a submission on my own behalf</i>	
Attachment: <i>ABC OF INTERMITTENT ENERGY one page.docx</i>	

Submission date: 8/18/2024 9:41:18 PM

SEVEN OBJECTIONS

1 The ABC of intermittent energy.

- A. *Input to the grid must continuously match the demand.*
- B. *The continuity of RE is broken on nights with little or no wind.*
- C. *There is no feasible or affordable large-scale storage to bridge the gaps.*

The ABC explains that the transition to wind and solar power is impossible with current storage technology. Consequently we are approaching a tipping point when coal capacity runs down to the point where there is not be enough dispatchable capacity to meet demand on windless nights.

<https://newcatallaxy.blog/2023/07/11/approaching-the-tipping-point/>

2 The human and environmental impact through all the stages from mining in remote places overseas to the disposal of toxic junk in local landfill

3 Protecting farmland. See Article 2 from the Paris Agreement in 2015.

This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; That means no solar projects, no wind projects, no battery projects on rural land.

4 There is no business case for the unreliable energy providers in the absence of subsidies and mandates.

5 The rising cost of energy has driven many energy-intensive enterprises to the wall or overseas, with more to come.

6 National security is undermined by sourcing most of the expensive and unreliable energy infrastructure from a potentially hostile nation.

7 The opportunity cost, which is hardly ever mentioned. That is not the cost in dollars that just adds to the national debt. We don't actually see that, it is just a number that gets bigger every month. The opportunity cost is all the useful things that we don't get to see, things that we could have got for the same amount of money, like hospitals, schools, roads, bridges, disability services, police, military hardware etc.

Instead we spend tens of billions to get more expensive and less reliable energy with a tragic environmental impact from assets that will be stranded as soon as the subsidies and mandates stop.

AND WE ARE APPROACHING A TIPPING POINT when coal capacity runs down to the point where there is not enough to meet the base load, the minimum supply required day and night.

THE ABC OF INTERMITTENT ENERGY

AND THE TIPPING POINT

WHY WIND CAN'T REPLACE COAL

- A. Input to the grid must continuously match the demand.
- B. The continuity of RE is broken on nights with little or no wind.
- C. There is no feasible or affordable large-scale storage to bridge the gaps.

So the transition to wind and solar power can't proceed with current storage technology.

Wind droughts happen with little or no wind across SE Australia, for up to 3 days.

LOOK AT THE NEMWATCH WIDGET AT SUNRISE AND SUNSET TO SEE HOW MUCH WIND CONTRIBUTES TO A HOT BREAKFAST OR COOKING AND COOLING AT DINNER!

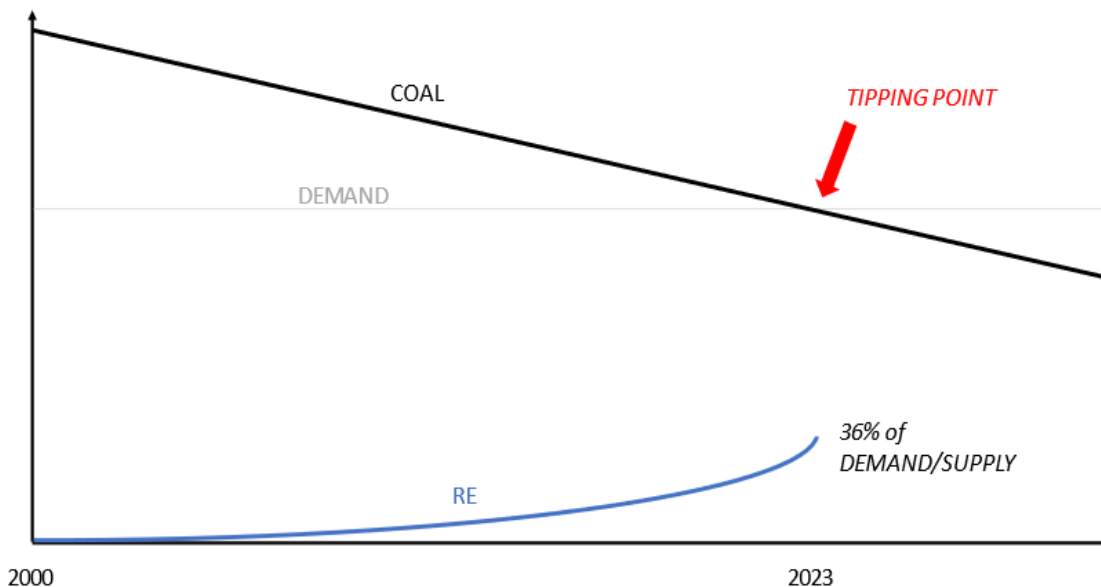
<https://www.nem-watch.info/widgets/reneweconomy/>

Over the last 12 years coal capacity in SE Australia ran down as plants closed and were not replaced.

When more capacity is lost, a gap will open up between capacity and demand.

The chart will be revised to correct some details, the reduction from 2012 instead of the year 2000, more clarity about the level of demand that is band from 30GW the minimum base load overnight and 35+ during extreme hot weather.

Approaching the tipping point



The expectation is that RE will make up the difference but on windless nights there

is no wind and solar power. Installing more capacity does not help.