Twitter Thread by Ketan Joshi





I don't have time to make this detailed, but here's a little thread about the world's first major politically-charged blackout that was blamed on renewables, in South Australia, in 2016......

On September 28, 2016, an unprecedented tropical storm progressed rapidly across South Australia. Truly - this thing was unusual. The sky folded in on itself. It tore towns to bits.

Australia's <u>@climatecouncil</u> pointed out that the storm was so unusual at least partly due to the influence of climate change, and that this is due to get worse.

https://t.co/76ekkfJpR8

I'm going to use brief snippets from my book to fill this out! The storm's primary impact on the grid was the destruction of several major transmission lines. When I say destruction - I mean they snapped like twigs.

Here's what happened in the following seconds:

- A voltage spike from the line falls
- Wind turbines automatically shut off due to software settings that trigger shutdown during a spike
- The interconnector to Vic tried to compensate, failed and died
- All of SA blacked out

Within the next ~12 hours or so, nearly all customers without power were restored, due to the fast actions of the grid manager. But before that, a massive system of misinformation, media errors, misunderstandings and intentional lies began exponentially inflating in size.

On that night, Australia's national broadcaster aired an interview on the blackout between......a anti-wind farm politician, and their political editor (who doesn't like wind either).

You can guess what happened: a stream of major falsehoods.

https://t.co/ZHuNT717X9

It was haphazard scattershot. All they knew is wind farms did it, they just didn't know how. They were blowing too hard. They were offline. The variation was too great. The power was "unsynchronised" (??). It was pure imagination.

All media outlets - the big ones, the small ones, the left-wing ones, the right-wing ones - worked on the assumption that something *inherent* to wind power was to blame

Except: the software settings that caused them to shut off during the voltage spike? It was fixed immediately

Every single blackout in Australia after Sep 2016 was blamed, in some way, on renewable energy. It became the default reaction - assume renewable energy did it, and ignore the lengthy reports that come out later demonstrating how failing thermal power stations were the cause

Much of this was political, but much of it was driven by a media environment that, dominated by News Corp, was itself political, or ill-equipped to grasp the mechanics of the event itself

Even as total grid outages remained flat, media cov'g of renewables causing blackouts rose:

The blackout became a mechanism of delaying climate action. The prospect of a new 'clean energy target' was killed by the hammer of 'OH SO YOU WANT ANOTHER SOUTH AUSTRALIA??'.

Seen the pic of Aus' PM holding a lump of coal? That was about blackouts.

Since then, South Australia has grown into a renewable energy powerhouse. The grid operator implemented a few tricks, learnt lessons now manages roughly **double** the amount of wind and solar, with lower imports and falling gas output - including through Aus' worsening heatwaves

It's getting global attention. <u>@NatBullard</u> wrote recently about how the state's solar power has grown so significantly that there are brief moments where solar output matched grid demand.

https://t.co/YypdBH5YBx

Australia's fantastic grid operator, <u>@AEMO_Media</u>, led by <u>@aazibelman</u>, has been creating 'integrated system plans' that model different amounts of VRE. SA will be > 100% renewables pretty soon - exporting clean power to other states.

https://t.co/3SZRhkMA28

All this good stuff? It was badly delayed by a huge 4-5 years of total wasted time. Pointless, circular debates that all missed the heart of the problem, widespread misinformation, and a culture within media and politics that actively loathed evidence or critical analysis.

This is what both Texas and California potentially face. Every single blackout is now caused by renewables, until proven otherwise. Narratives will be set by large media outlets and worsened by political operatives.

Or: they could skip it entirely and pre-empt the delayers

Anyway, if you'd like to read the full story, please Buy My Book[™]. We're solidly in the era of the 'Climate blackout' now - in cause, in blame, consequence and solutions. And South Australia has the template that all the worst players are going to follow

https://t.co/I5JiWwOJ6f

Oh also links I forgot to post:

Blackout report from grid operator https://t.co/770Pgci2VI

A post I did on it: https://t.co/tijq9EGQNE

Live Aus grid data: https://t.co/RjzssuC5OX

V v v good VRE integration study: https://t.co/kqCPZpzulw

Oh! also - a relatively detailed study by Aus' grid operator on the potential impacts of climate change on a grid that is undergoing a transition. Every high-VRE grid in the world is going to have a 'South Australia' moment - so this is important!

https://t.co/p5Y5p8NztL

Augh, I totally forgot to include it, but there's also the time that the West Australian mining lobby paid for fake accounts to content trying to spread fear and doubt and panic about renewables causing blackouts:

https://t.co/ftEZQfqEFD