



## CROW Newsletter June 2022

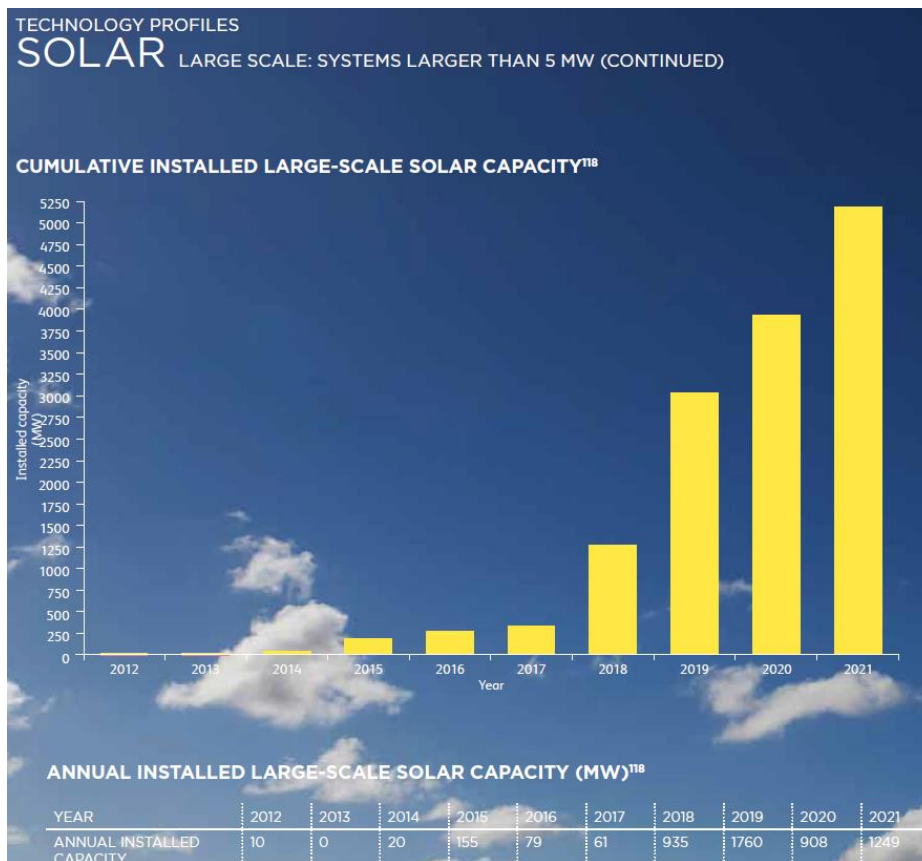
### First, some sobering news

This research warns that dramatic reductions in emissions are needed soon to stay anywhere near a temperature rise of 1.5 degrees.

<https://reneweconomy.com.au/without-big-emissions-cuts-warming-of-1-5-degrees-to-be-locked-in-before-2024/>

### Increases in renewable energy generation to this point

The [Clean Energy Report Australia 2022](#), published by the Clean Energy Council (peak body for the renewable energy and energy storage industry in Australia), shows this chart of the growth in Australian large scale solar from 2012 through 2021 (p. 84).



The capacity of Australian small and medium scale solar (i.e. mostly rooftop solar) is over three times that of the large scale solar above.

Total wind and solar generation in 2021 was almost 8 times as much as in 2011.

Just in 2017 we were celebrating the installation of the biggest grid battery in the world in South Australia – the Hornsdale Power Reserve (or “Tesla Big Battery”), which had storage of 129 MWh. At the end of 2021, just the utility scale batteries *under construction* will have storage of about 9 times that of the 2017 “Tesla Big Battery”.

### **Further very large increases in renewable energy generation needed**

To reach net zero emissions, further large increases in renewable energy capacity, and transmission networks to support it, are needed, according to the Australian Energy Market Operator’s (AEMO’s) [draft 2022 Integrated System Plan](#) (4MB)(Dec 2021).

### **Social licence in the energy transition**

With the consideration of all this building of new generation and transmission, the issue of social licence has become prominent. Social licence can be defined as “*the level of acceptance or approval that stakeholders and communities extend to a project, site, company or industry*” (Governance Institute).

Whereas AEMO’s 2020 Integrated System Plan (ISP) only had one passing mention of social licence, the draft 2022 ISP (linked above) has about 15 mentions of the expression and a section or two focussed on it.

Moving to a net zero grid means “there will be a significant increase in the land needed for generation, storage and transmission assets.” (p. 89).

“All major projects will need careful design to meet environmental, economic and social licence expectations. (p. 10)

There is an emphasis in the draft 2022 ISP on earlier proactive engagement with communities to be affected. There may be some opportunities to “consolidate an integrated approach to land use planning that optimises multi-purpose land use and aligns with local interests” (p. 89).

### **To triple transmission capacity, landowners and neighbours need to be paid more**

One way to get social licence – by Andrew Blakers, a very highly regarded figure in renewable energy (at ANU for many years):

“Australia needs to triple its transmission capacity to access more low-cost solar and wind and achieve zero greenhouse emissions.

“New transmission needs to be built quickly to reach zero emissions in 2050. This requires social licence if it is to proceed smoothly. In a democracy, the only practical method of facilitating social licence is to ensure that compensation payments are perceived to be fair.”

“It is obvious that hosts of new transmission towers will be unsatisfied while ever wind turbine hosts receive more compensation. Why should wind and solar farm hosts be paid much more than hosts of the transmission lines running from those wind and solar farms?”

“...transmission companies can’t easily offer higher compensation to land holders because of 20th Century rules governing regulated transmission. Thus, social pushback delays new transmission. This absurd impasse means that everyone pays higher electricity prices.

“The impasse can be readily and quickly resolved by reforming transmission rules. Alternatively, State Governments could bypass the rules (e.g. for Renewable Energy Zones), or could directly provide additional land holder compensation. Fortunately, pegging transmission compensation to windfarm compensation adds little to wholesale electricity costs.”

[you can read more [here](#)]

### **Offshore wind**

Offshore wind may reduce the need for new transmission (and land-use generally). The draft 2022 ISP suggests that the development of offshore that connects to existing transmission easements may have easier social licence than land-based projects.

The most advanced offshore wind proposal is the “Star of the South”, to be located off the coast of Gippsland. (It has proposed to underground the land-based part of its link to the transmission infrastructure of the Latrobe Valley.)

<https://reneweconomy.com.au/industry-super-fund-snaps-up-10-pct-stake-in-australias-biggest-offshore-wind-project/>

A map of proposed offshore wind projects can be seen at the RenewEconomy website -

<https://reneweconomy.com.au/offshore-wind-farm-map-of-australia/>

There are now about 20 offshore wind proposals for Australia, some in locations to take advantage of existing transmission infrastructure (e.g. off Newcastle)

Costs for offshore wind have dropped enough now in Europe that some projects do not need any government subsidy -

<https://reneweconomy.com.au/offshore-wind-auctions-to-favour-projects-with-lowest-carbon-footprint-as-costs-plunge/>

### **A few points on the recent steep increases in electricity prices**

Energy market analyst David Leitch says that the effects of flooding on coal supplies is under-appreciated. This problem in the coal supply chain is likely to correct quite a bit over coming months, lowering the exposure to the particularly high gas prices with more coal generation coming back online as electricity demand declines in the spring.

<https://reneweconomy.com.au/la-ninas-big-hit-on-coal-is-forgotten-factor-behind-australias-energy-crisis/>

[Tristram Edis writes](#) of three worthwhile responses to the energy crisis:

- speed up the overly lengthy connection processes so that the hundreds of megawatts of completed renewable capacity can start to supply the grid
- help low-income consumers get access to more energy efficient equipment and housing

*“Fixing this problem is not expensive – \$10,000 of upgrades per home will leave renters with comfortable homes and affordable energy bills – permanently. It will also free up more gas for Australian manufacturers.”*

But it is not a short term solution

- And, *“serious consideration should be given to a short-term Putin Windfall Profit gas levy. Where gas is exported at very high prices, for example \$20 or more per*

*gigajoule, it is not unreasonable for the government to take a share of that windfall profit on behalf of the Australian people, who ultimately own the gas resource.”*

Edis argues strongly against “capacity payments” that extend the life of (and problems with) coal generators.

<https://ieefa.org/articles/what-real-cause-australias-energy-crisis-and-what-should-we-do>

At least residential customers are cushioned from the rises in wholesale prices. For example, even with the recent approximate 16% increase in the default electricity price, electricity prices are still below what they were several years ago. In November 2021 the [ACCC 2021 Inquiry into the National Electricity Market](#) stated:

- “From the overall cost peak in 2013–14 to 2020–21, the average effective price decreased from 32.2 c/kWh to 27.0 c/kWh, a drop of 5.3 c/kWh (or 16%) in 7 years” (p. 15)
- And (p. 6) “The average cost per unit of electricity supplied to residential customers (27.0 c/kWh in 2020–21) is now at its lowest level in 8 years.”