

## **Save Our Surroundings (SOS)**

*SOS is an umbrella group for like-minded concerned and impacted citizens that oppose the proliferation of industrial scale weather-dependent "renewables" and their negative impacts on local and global environments and communities. The independently run SOS groups share and distribute information and are currently: SOS Central West NSW, SOS-Gulgong, SOS-Mudgee, SOS-Wellington, SOS-Orange, SOS-Greater Hume, SOS-Riverina and SOS-Qld.*

SOS has great concerns with the ability of any of the proposed options being able to deliver on any, let alone all, of the objectives contained in the DPIE's opening paragraph as reproduced below:

*"The November 2020 Electricity Infrastructure Roadmap (the Roadmap) describes how the NSW Government plans to develop our world-class renewable energy resources, modernise the State's electricity system and provide NSW consumers with a more affordable, reliable, secure and sustainable electricity supply."*

The *Wind and Solar Electricity Generation are the Answer. Seriously? April 2021* research paper (Attachment 1) details many, but not all, of the problems with renewables and why they have not and cannot provide cheaper electricity in the long run. Also, weather dependent renewables can never be reliable due to their output intermittency and reliance on very costly storage options, or be secure due to weather vulnerability (wind, lightning, storm, hail, fire) or sustainable due to better evolving technologies, limited input materials and China's dominance in manufacturing such products cheaply.

SOS raised some of our concerns with our local MP who passed these onto Mr M Kean, NSW Minister for Energy and Environment, after he made similar claims in the media in November 2020. Our redacted communication is shown at Attachment 2. However, Mr Kean is yet to reply.

Attachment 3 lists many of the conditions SOS believe are necessary, as a minimum, before any access licences are granted. These massive industrial developments, which take up thousands of km<sup>2</sup> of land and require up to 10 times the resources (land and materials) then that required by much better electricity generating alternatives. These alternatives, such as, modern nuclear, gas and coal generators are being constructed in large numbers by many countries, especially China and India. Meanwhile, Australia continues to expand the use of very inefficient outdated technologies of wind (windmills and wind power started hundreds of years ago, while the first genuine solar cell was invented in 1883 and the first practical solar cells in 1954).

The DPIE issues paper is designed to make it as easy as possible for the developers of, and investors in, industrial renewables plants. However, there is no guarantee, indeed even any consideration, of how retail electricity prices will not only reduce but by how much. The NSW Strategy paper suggests a \$40pa reduction by 2040 for each consumer. Such a miniscule "saving" will do nothing to keep or attract new manufacturing industries and create more jobs than those lost as a result of a transition to more renewables. Also, there is no mention that the current \$13 billion in subsidies and favourable advantages to the renewables industry in Australia will be withdrawn as a result of even more certainty and benefits suggested under the DPIE proposals (e.g. Government guaranteed minimum wholesale price, compensation under models 2A and 2B, etc).

The pictorial by NSW Energy of the proposed "modern complex electricity system" clearly demonstrates why jurisdictions that have 30% or more "renewables" in their electricity generation

mix have amongst the highest electricity prices in the world and have failed to provide its consumers with a more affordable, reliable, secure and sustainable electricity supply. Complexity adds costs!

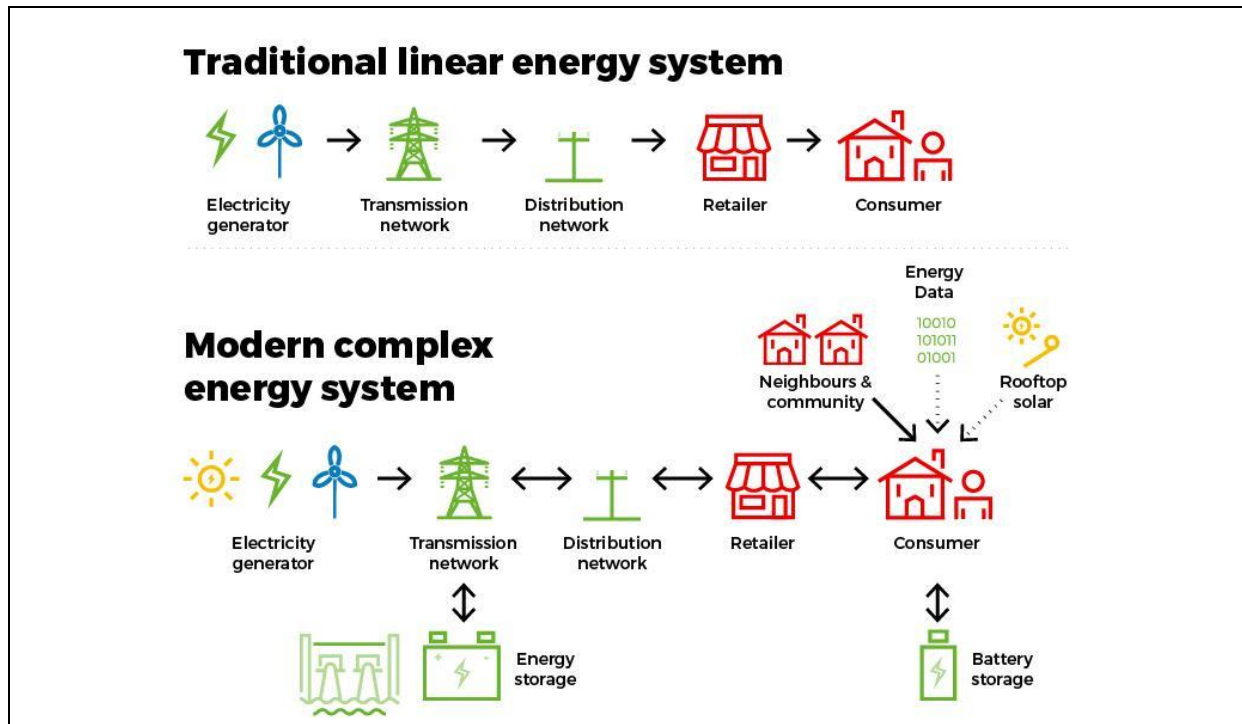


Diagram from NSW Energy 18/12/20 [Renewable Energy in NSW | Energy NSW](#)

A fundamental flaw in the whole renewables design and the proposed access models is the assumption that wind, solar and storage capacities (nameplate in MWac) are equivalent to the nameplate capacities of nuclear, gas fired and coal fired generation plants. Clearly, for example, a 250MWac solar or wind electricity generation plant with capacity factors well under 35% can never generate electricity when required as can, for example, a modern 250MWac dual fuel Combined Cycle Gas Turbine (CCGT) with a capacity factor of around 90% and which can operate 24/7. Hence, the stated 3000MW capacity increase for the REZ-CW, which already has 15 solar and wind plants operating or under construction, can be achieved at significantly much less cost with just four 250MWac CCGTs. These CCGTs can be located close to the majority of consumers and so without the need for constructing hundreds of kilometres of new transmission infrastructure and very expensive storage options. These storage options will also require huge amounts of electricity to replenish their storage capacity, even when the sunshine and wind are limited or not available at all. Yet the proposals do not include any incentive for investment in real cheaper 24/7 electricity generation plants to be constructed. In fact the opposite is occurring.