

**Submission
No 250**

SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

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Sustainability of energy supply and resources in NSW.

A late submission in response to the impact of the COVID 19 lock -down.

This submission outlines a suggestion that the NSW government facilitate the construction of solar 'car-ports' in car-parks across NSW towns and suburbs. The 'car-ports' would shade public car parks and generate electricity from solar panels

Government measures to re-start the economy following the COVID 19 crisis should meet a number of criteria. They should be quick to implement, have a wide geographical impact, achieve long term economic and environmental goals and generate employment and skill-development. The jobs created should provide safe employment where social distancing can generally be maintained.

If you take a cursory look on Google maps at any medium to large rural town or outer suburb you can see that a large proportion of the area is taken up with unshaded bitumen or concrete carparks. In my local region, for example, both Orange and Bathurst hospitals have over 20% of their land area devoted to car parking. In schools and TAFE colleges the proportion is smaller, but still significant. Car parks at fast food franchises and supermarkets probably take up a higher proportion of the property. These unshaded car parks are major contributors to the urban heat sink effect, increasing temperatures in summer and increasing vehicle emissions as drivers of hot cars are more likely to use air-conditioners.

Public carparks are normally located near facilities that are high energy users (libraries, schools, hospitals, swimming pools etc) Covering part of these car parks with solar car-ports would generate considerable electricity, reduce urban temperatures and increase the safety of any passengers waiting in those carparks on hot days.

Their construction could generate long-term savings in electricity, jobs across rural and suburban Australia including the manufacturing and fabrication industry and reduce the impact of climate change on urban temperatures. More sophisticated solar 'car-ports' could incorporate water collection and storage, battery storage and EV vehicle charging stations. This would help stabilise the grid, encourage local tourism and maintain urban vegetation in times of less predictable rainfall.

The NSW Government should immediately establish an office to identify & prioritise suitable state-owned car-parks in hospitals, schools, TAFE college and other suitable properties and call for tenders to design & construct solar car-ports there. Secondly a state government fund should be established for local government authorities with suitable car-port plans to apply for state government funding to assist with their construction.

In summary such a plan could relatively quickly and cost -effectively....

Create safe jobs in fabrication and installation across NSW.

Reduce energy costs in the adjacent public buildings

Reduce NSW carbon emissions,

Collect water for urban use.

Be adapted to incorporate EV recharge facilities.

Help stabilise the grid without any additional transmission costs.

Provide prototypes, economies of scale and a skill base for solar 'carports' to be constructed in privately-owned car parks.

Yours respectfully

Bob Hill

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