

# ANU College of Engineering & Computer Science

## New 500m<sup>2</sup> paraboloidal dish solar concentrator at ANU

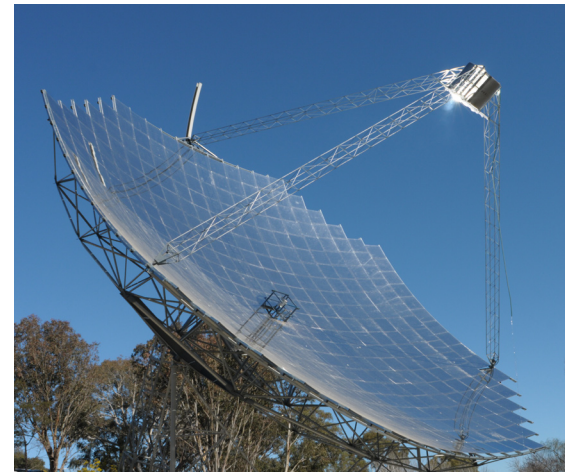
The new ANU 500m<sup>2</sup> solar dish is the largest paraboloidal dish solar concentrator in the World. It concentrates the sun's radiation over 2000 times and can drive high temperature processes such as steam for power generation and chemical reactions for fuel production.

The Australian National University put extensive research and engineering design effort into building the first (400m<sup>2</sup>) Big Dish solar concentrator as a prototype capable of producing clean energy for large-scale consumption.

Current global demand to find sustainable alternatives to fossil fuels for energy have accelerated this research, and the result is the design and build of a "Generation II" Big Dish re-engineering for cost effective commercial production and use in large solar thermal plants.

The dish technology is being commercialized by Canberra-based Company, Wizard Power. The prototype was developed with funding from Wizard Power and the Australian Government Renewable Energy Development Initiative (REDI).

The new approach to solar concentrator systems offers a cost-effective, sustainable and viable solution for the world's large-scale energy needs, and is set to be part of the rapidly growing global renewable energy industry.



500m<sup>2</sup> dish tracking the sun



Dish frame being lowered into place

### SPECIFICATIONS

Aperture	494m <sup>2</sup>
Focal length	13.4m
Average diameter	25m
Average rim angle	50.1°
Mirror reflectivity	93.5%
Number of mirrors	380
Mirror size	1165mm x 1165mm
Total mass of dish	19.1t
Total mass of base and supports	7.3t

### Further Information

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