Our Build Completion event, featuring an exclusive unveiling of the car, will now be on the 12th of September. The Send-Off event will still be happening on the 24th of September to farewell members competing in the race. Please keep your evenings free for these days so you do not miss out!

The Tech Team have recently been testing the solar cells which involves connecting the cells to a machine that sends an electrical current through them. This lights the cells up, making it easier to detect any cracks, short circuits and other defects present.

The team recently hosted a visit from the ACT Chief Minister Andrew Barr to our workshop. Mr Barr was very interested in the Sol Invictus project and enjoyed getting to know the team. We are extremely thankful and privileged to have a minister who recognises the environmental challenges we are facing.

Earlier this year the Tech Team finished designing the car’s frontal surface area, making it as small and smooth as possible to maximise speed. The chassis is now being completed by Sydney Composites, our carbon fibre manufacturer, who will ensure seamless joins between the top and bottom shell so that airflow does not slow the car down.
Adelaide Trip

Last week some of our team members visited our sponsor Tindo Solar in Adelaide. There they spent a few days encapsulating the solar cells for the MTAA Super Charge 2.

The solar cells are an extremely important component of our car because they generate the electricity that powers it, without them the car would not run. Because they are so important, we must do everything we can to protect the cells and ensure optimal performance.

This is where encapsulation comes into play. The solar photovoltaic (PV) module is a bit like a lasagne dish – there are layers of different materials laminated together, each with a specific function. One of these layers is the encapsulation film which has the role of providing optical and electrical transmissivity and keeping out moisture. The film is made up of a glue (or encapsulant) that binds the components and stops harmful elements reaching the cells.

The encapsulation film shields the solar cells from the environment and mechanical damage. It protects them from shocks and jerks as well as various weather conditions including rain, snow and dust. This increases the performance, life span and reliability of the solar cells.

The choice of encapsulant is important as we want material that can withstand the harsh conditions of the Australian outback. In the solar industry, ethylene-vinyl acetate (EVA) is the most popular encapsulant because of its proven track record, excellent durability and low-cost. Although EVA can be damaged by UV rays, it is because of these benefits, and the established reliability of EVA, that we have chosen to use EVA in the MTAA Super Charge 2.

This past week has been a busy one at MTAA Super Sol Invictus. Our fantastic crew who went over to Tindo Solar in Adelaide have returned with the solar modules to go onto the MTAA Super Charge 2, and they look great! The team is getting busy organising for the Build Completion event early next month, and our drivers are having a sweaty time training with ANU Sport and preparing themselves both physically and mentally for the race. Stay tuned for more updates from here as we draw ever closer to the big race!

~Avik Mason, Project Lead~