



# TECHPLAN RENEWABLE ENERGY SOLUTIONS - CAPABILITY STATEMENT



## Company Overview

Techplan is experienced in delivering integrated robotic solar array cleaning solutions, integrated electrical, electronic, fast charge batteries, and control solutions across the Solar Industry.

We have a highly experienced team of consultants and a genuine strength in technology, research and development, manufacturing, panel cleaning technology, maintenance, and logistics.

Strong relationships with leading OEM partners and the ability to customize our own project approach means our customers can be confident that they are receiving the best possible panel cleaning solution suited to their needs and the needs of the project.

When you choose Techplan and its partner Boson, you are selecting a trusted brand and a company with a proven commitment to delivering safe, reliable, advanced technologically, and best value products, services, and solutions.

Techplan is primarily focused on supporting Australia's growing renewable energy sector and playing a part in its development and ongoing maintenance and panel cleaning with innovative robotic dry panel cleaning solutions. We have the scale and experience to provide solutions to your largest, most complex solar arrays with our partner Boson.

We are equipment agnostic and can work with your preferred suppliers' panels or custom design a solution to your specific requirements. We believe in delivering robust solutions that are packaged for quick deployment to increase efficiency and reduce on site labour during the install phase.

## Recent Experiences

Techplan and its partner Boson have experience in Solar Farms in remote areas that are subject to Sandstorms, Salt mist, High Seasonal Temperature Differences and Snow. As a key supply partner to two of the world's largest solar farm projects in desert areas our robotic cleaning products are well proven and tested to take on the harsh Australian Outback.

## Solar Farm Integrated Technological Solutions

Techplan is focused on supporting utilities or industrial scale solar projects including both photovoltaic or thermal solar especially in the field of custom robotic solutions for panel cleaning and maintenance.

### Key elements of Techplan's offering:

- Solar Farm Array robotic cleaning technology
- Mass deployment in existing solar farms
- Efficient ceramic axis self-lubrication systems with specially designed brushes to dry clean sand, dust, and bird droppings efficiently
- Intelligent deployment of Robot Cleaner mobilization adjustable remotely via SCADA.
- Programmed to work only in the early morning or late evening to maximise daytime power generation
- High Weather resistance Battery and Charging Systems
- Waterless cleaning has proven to be greater than 95 % efficient.
- The Robots are weather resistant with a whole aluminum body with plastic and ceramic bearings that are self-lubricating
- High strength metal parts made by 3D liquid forging
- Outstanding gap spanning features specifically designed to your project requirements
- Various Solar Panel Inclines can be accommodated by design
- Increase your annual power generation by 6% to 30%
- Data sources: Impact of Soiling on PV Module Performance for Various Climates. By Dr. Werner Herrmann, TUV Rheinland Energie und Umwelt GmbH, 2015
- Installation, testing, and commissioning
- Ongoing asset management and maintenance support