



**REROC**  
**Energy & Innovation Conference 2023**  
**Wagga Wagga**

**“Our Circular Economy Journey to Date”**

This project is a NSW EPA initiative,  
with the grant funded from the  
Circular Solar Trials program

# “Our Circular Economy Journey to Date”

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Who

## 1. Introduction to Solar Renew

### Kurrajong – About Us

- Est. 1957 in Wagga
- Providing Support to over 1100 Riverina Locals
- Employing 700 Staff – 140 of those Supported
- Providing accommodation, therapy and a wide range of supports including employment
- A Registered NDIS Provider





Who

# 1. Introduction to Solar Renew

## Kurrajong Recycling

- 54 Chaston St, Wagga Wagga
- Recycling for over 60 years in our community
- The regions Largest recycler
- Processing over 22000 tonnes per annum
- Diverting over 30 commodities from landfill



Who

## 1. Introduction to Solar Renew Solar Professionals - Full Solar Life Cycle

Solar Professionals is a leading regional commercial solar installation and service company specialising in all facets of the solar plant lifecycle in-house from **pre-planning, design & construction to operations & maintenance and decommissioning & recycling**

### The Solar Assets Lifecycle



Why

## 2. Dealing with the Issue, Perception and end-of-life Solar Waste

***“It is forecast that over the coming decade, Australia will have one of the most significant accumulated solar panel waste streams in the World”***

International Energy Agency

MARIE STONE SCIENCE AUG 22, 2020 9:00 AM

### **Solar Panels Are Starting to Die, Leaving Behind Toxic Trash**

Photovoltaic panels are a boon for clean energy but are tricky to recycle. As the oldest ones expire, get ready for a solar e-waste glut.

### **Waste crisis looms as thousands of solar panels reach end of life**

By Nicole Masham

January 13, 2019 – 12:05am

Save

### **Stop removing your solar panels early, please. It's creating a huge waste problem for Australia**

Published: May 24, 2021 6:14am AEST

### **Solar Panel Waste: The Dark Side of Clean Energy**

Tons of solar panels installed in the early 2000s are reaching the end of their lifecycles, posing a serious problem for the industry to contend with. Current solar panel disposal practices are far from being environmentally friendly.

By Conor Prendergast | Dec 14, 2020 12:28 PM

***“E-Waste is the fastest-growing waste stream in the world, yet it contains precious metals and other materials we need to power our renewable energy transition which we need to recover and recycle more of this valuable resource. E-waste also contains hazardous materials that can damage the environment and put human health at risk if not managed safely. It is estimated that by 2030, the average Australian will generate almost 22 kg of e-waste per year. In 2019 alone, Australia sent over \$430 million worth of materials within e-waste, to landfill. These wasted resources included 84% of the solar panel systems and household electronics that Australians discarded”***  
**DCCEEW**



**14%**

of the country's solar systems develop a major fault every year and stop working altogether.





### 3. How – Our Solution & Approach

The Solar Industry is a relative immature industry so look for similar solutions in more mature industries, attract like minded organisations and individuals. Target the most desired outcome of the Waste Hierarchy. Support R&D

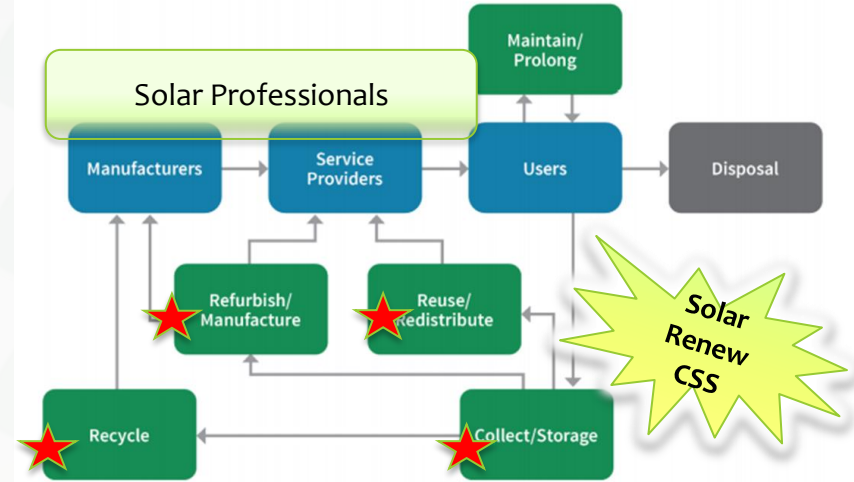
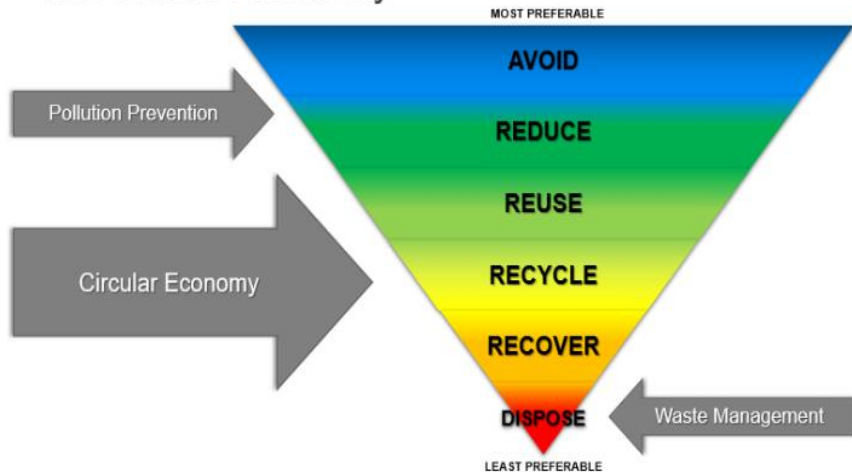


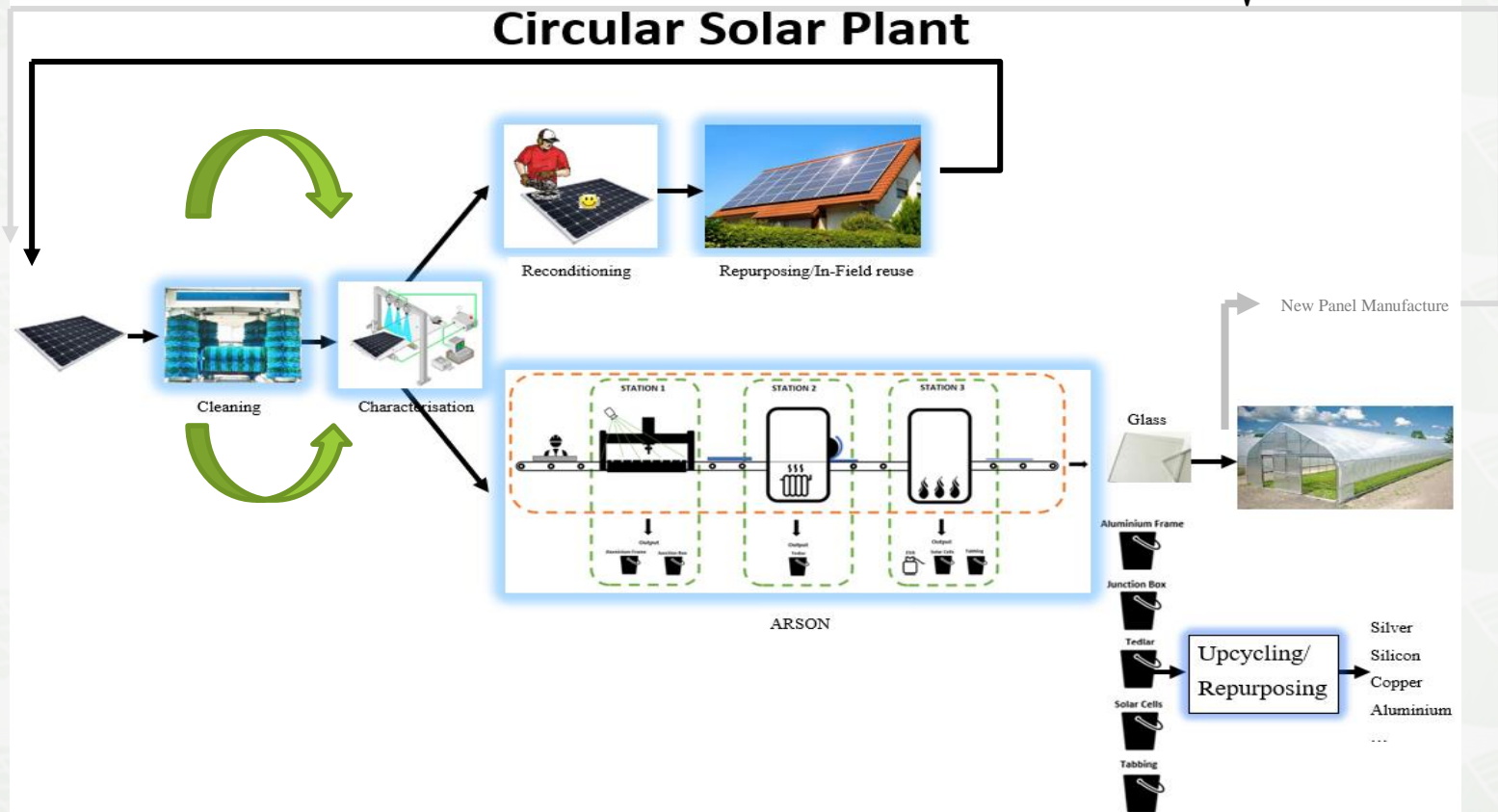
Figure 1. Circular economy supply chain for solar panel and battery systems

#### The Waste Hierarchy



How

# 4. Recycling



**Circular Solution Solutions Pty Ltd –Technology**  
Automation, improved throughput, additional functionality





How

# 5. How – Reuse – Solar Renew

Dubbo Regional Council (DRC) is a pilot site for a first-of-its-kind project to reuse solar panels.

In June 2022, an 8kW solar system made up of second hand (serviceable) solar panels was installed on the Small Vehicle Receiving Centre at council’s Whylandra Waste and Recycling Centre in Dubbo



## The Partnership



NSW Office of Energy and Climate Change  
Sustainability Advantage





# SolarRenew

A Kurrajong Recycling and Solar Professionals partnership





## 6. Details

# Solar Renew Contact & Drop off Details



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