

# Circularity for Solar Energy

Demonstrating quality and  
value in 'pre-loved' PV  
panels

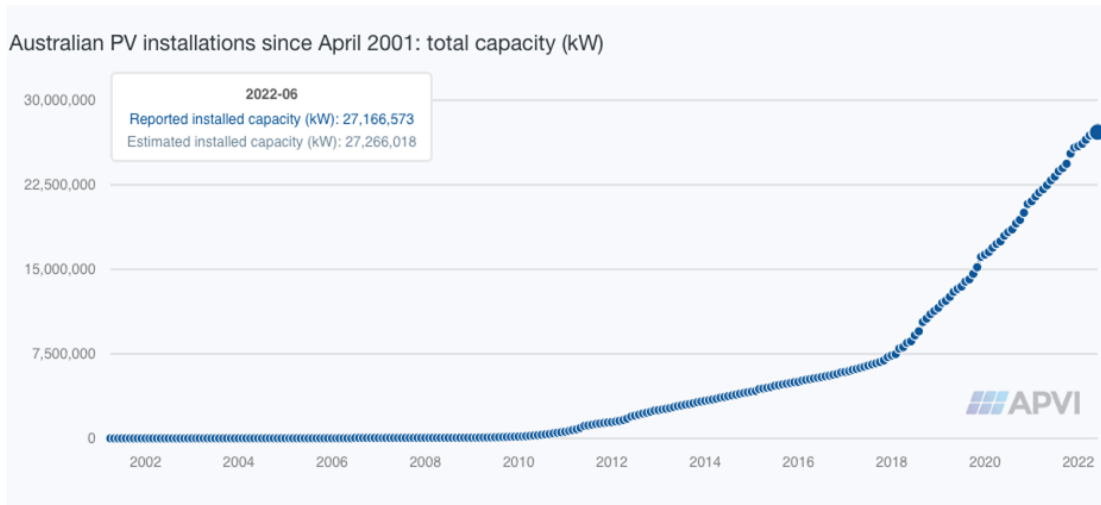


# Today's Take Aways

- The problem
- The solution
- CPVA pilot project and mission
- Sustainable energy future

# Setting the Scene

- 90 – 100 million solar panels
- 27.2 GW capacity
- 22% of renewable energy mix
- 33% annual growth

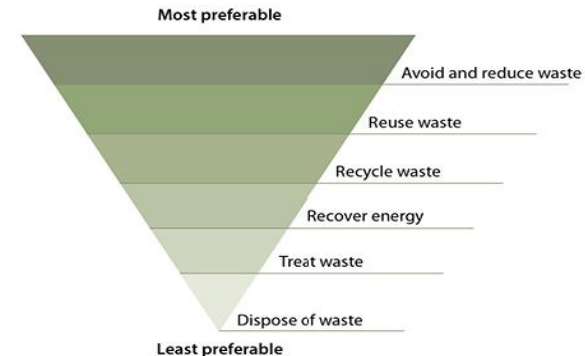


# An Unfortunate Reality



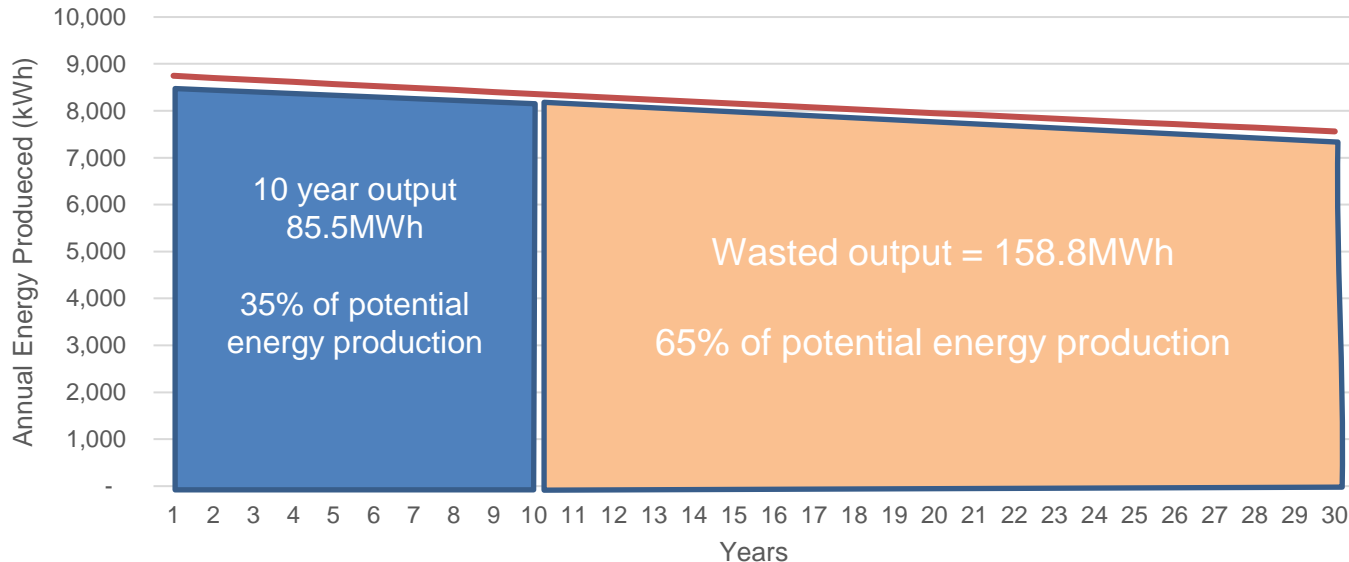
# Limited Options

- Dump in landfill
- Partial recycling and landfill (most panels in Vic)
- Full recycling - very limited
- Ship overseas - some social benefit, but mostly problematic
- Reuse - very limited, a **big** opportunity



# Recycle or Reuse?

6.6kW Solar system annual energy output over 30 year life  
(0.5% performance degradation per year)



Potential unutilised energy if panels removed after 10 years

Would you  
throw your  
car in the bin  
after 3 years  
or  
80,000kms?

# Questions To Answer

- Why are the panels coming off the roof?
- Can panels be reused?
- Are they safe?
- Do they still perform well?
- Are they in good condition?
- How do we encourage panel reuse?

# Panel Testing Pilot Project

- Visual inspection
- Wet leakage
- STC power output
- Electroluminescence



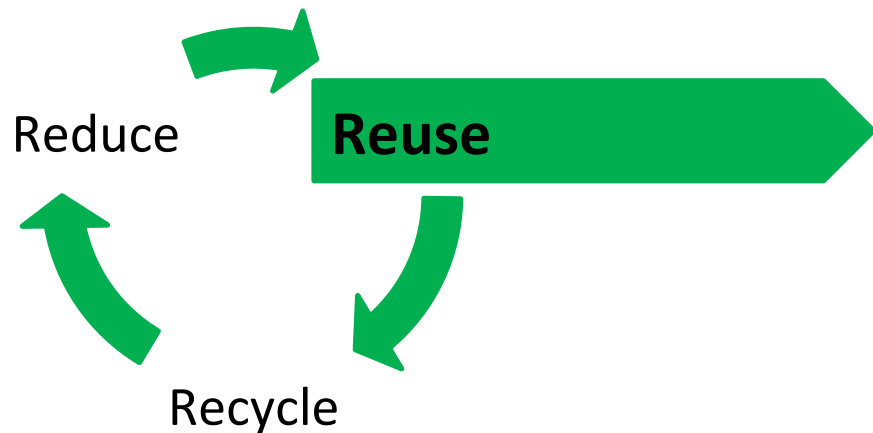
- ✓ 96% power output
- ✓ All safe
- ✓ Negligible micro-cracking
- ✓ Proof of concept – used panels can be reused

**PV  
LAB**

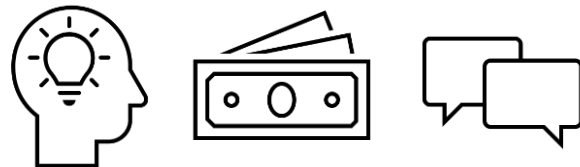


# Simple Solution

Keep panels generating energy for as long as possible



How do we  
increase demand  
for used panels?



# Simple Solution, Challenging Reality

- Legislative barriers
- Economic barriers
- Technical barriers
- Trust
- Network



**CPVA =  
Trust**

The 'roadworthy certificate' for  
used solar panels!

# Panel Testing and Certification



- Safety
- Performance
- Quality
- Assurance
- Tracing – Net Zero

# Consumer Markets



- **Reclaimed PV Panels Market Assessment**
- Consumer market expectations
- Reuse applications
- Policy barriers and levers

# Sustainable Energy Future

- Circularity for solar energy is essential
- Net Zero – so much more than emissions reduction
- Social, economic and environmental benefits
- CPVA Certification can drive consumer markets
- Continue to build national and international networks

**Thank you**