

# Supporting the household energy transition through solar and electrification



**Stan Krpan, CEO Solar Victoria**  
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Solar  
Victoria





## What we have achieved



# Over 300,000

homes and businesses  
have benefited from a  
Solar Homes Program rebate



## 2.2 million

tonnes of carbon  
emissions saved

## 1.7 GW

installed solar  
power capacity



## \$500m

paid in rebates



## \$200m

in loans



## 4,000

Jobs created

(Target = 5,500 in the life  
of the program)

# 10,150

## Solar Homes Program audits to date.

(Comprehensive, risk-based. Auditing 5% of installations)



**Installation safety has improved dramatically.**

2021-22: 0.2% unsafe  
2022-23: 0.1% unsafe

Sampling 5% of rebated installations

# 2,109

## WorkSafe site inspections

# 1,031

## Energy Safe Victoria site inspections



# 128

## solar retailers and installers suspended or cancelled from the program (since July 2019).

29 have been reinstated after meeting remediation requirements



# There are still issues to address

Since Australian standard AS/NZ 5033:2021 there has been a decline in compliance levels and increase in rectifications.

Solar PV issues identified:

- Inadequate installation.
- Unprotected wiring and systems.
- Inadequate documentation.
- Poor protection from water and weather.

Battery installations issues identified include:

- Inadequate wiring.
- Inadequate earthing.
- Badly installed isolation
- Lack of physical protection for the battery system.





# Guidance and Technical Standards

We've worked with Energy Safe Victoria to roll out a compliance strategy which includes:

- Publishing our audit checklists
- Developing technical sheets, webinars and auditors taking an educative approach

## Targeted communications:

- Letters to high risk or poor performing retailers and installers
- Referral of poor performing installers to ESV and VBA

## Training Programs:

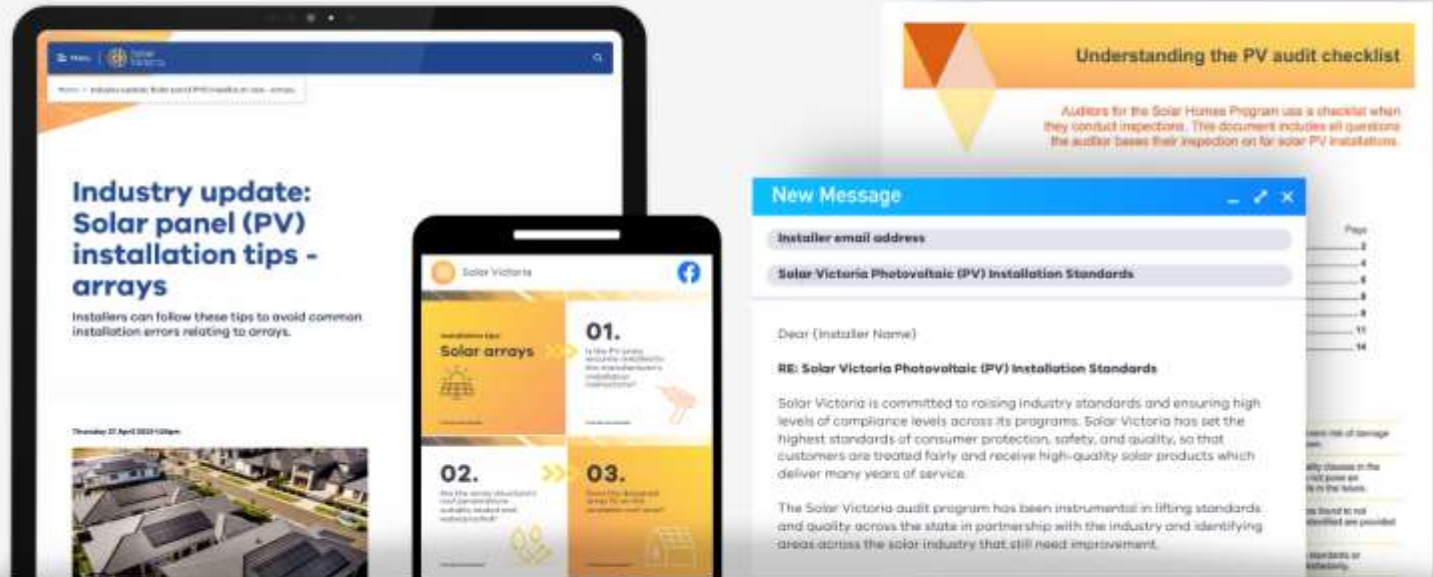
- Technical mentoring program
- Mini-training modules

## PV guidance

- ESV joint guidance sheet
- Top tips for PV installations (in dev)
- Top 6 non conformances
- Solar PV Guidance sheets x 3 (in dev)

## Battery guidance

- Labelling
- Battery Installation Guidance sheets x 3
- Next three Battery Guidance sheets in series (in dev)



## Regulatory frameworks as enablers

We must understand the existing regulatory framework and ensure it's fit for purpose. We've taken an active interest in ensuring this is the case for solar and batteries.

This includes:

- Class of Licenced Electrical Inspector.
- Professional development for electricians.
- Our Battery safety project.





# Partnerships

- Regulatory Partnerships
- Industry and Consumer Reference Group
- Compliance strategy



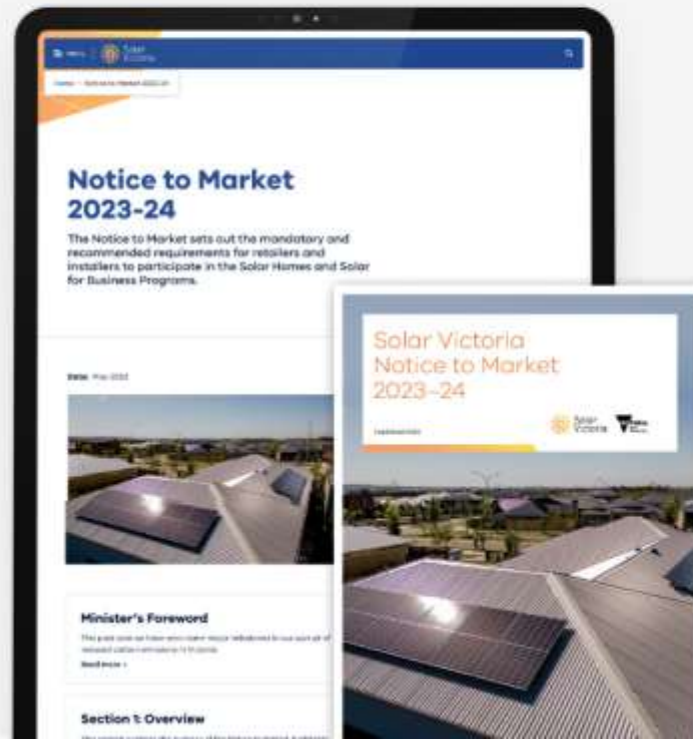
Solar Homes subsidises 85% of solar installs. We work closely with industry to lift standards and quality:

- Inverters are 'smart' and internet enabled since 2019.
- Products are approved to high standards.
- Mandatory safety training for all workers.



## Notice to Market

Provides the solar industry in Victoria with a clear overview of the rules and expectations for participation in the Solar Homes and Solar for Business programs.



### Mandatory:

- Dynamic Exports/CSIP-AUS
- Hot water heat pumps timer
- Serial numbers
- New Energy Tech Consumer Code
- Consumer protection – Warranties

### Recommended:

- Hot water heat pump fit-for-purpose for climate
- Power quality response region settings
- Victorian Energy Compare
- Performance warranty for solar PV panels
- Battery performance AS/NZS 5374:2023
- Electricity data
- Hot water tank sizing



### **Community support, and bringing the community with us, is critical.**

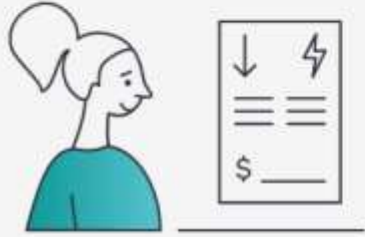
We do not dictate to our customers, we engage with them. True engagement means meeting people where they are. Understanding our customers gives us real insight into their priorities.





# Customer Insights

#1 reason for going solar:



**Save money on energy costs**



**73%**

of customers are saving more, or as expected



**79%**

of are interested in another Solar Vic rebate



Customers are considering alternatives to gas heating and cooking, and further **electrification options.**





# Electrification

We have an engaged cohort of three million solar customers (600,000 in Victoria)



**60%** plan to, or have replaced their **gas central heating with an electric or split system**



**54%** plan to, or have replaced their **gas hot water with an electric heat pump system**



**2 in 5** are considering purchasing an electric vehicle



**50%** plan to, or have replaced their **gas stove with an electric or induction cooktop**

**64%** plan to, or have replaced their old **electrical appliances with more energy efficient models**

# New opportunities for Australia

- Local manufacturing, assembly, R&D
- End of life handling (re-use, refurbishment, recycling)
- Energy Innovation Fund
- Energy Technologies Manufacturing Fund
- National Reconstruction Fund (\$3b in renewables)
- Breakthrough Victoria Fund  
Solar Recycling Challenge





# Six lessons for Electrification

**1**

**Implementation  
is complex**



**2**

**Understand  
and manage  
the risks**



**3**

**The regulatory  
framework**



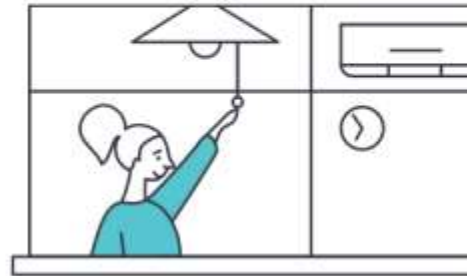
**4**

**Partnerships**



**5**

**Social  
licence**



**6**

**Understand  
the customer**



# Thank you



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