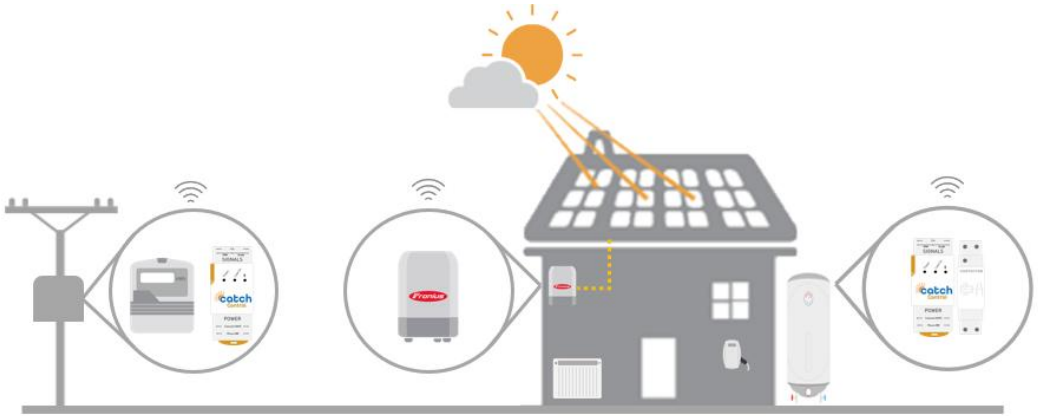

catch
power
SEIA 2025 - The future of solar savings and control

Introduction

We provide **hardware and software**

which **automatically orchestrates** solar and loads.



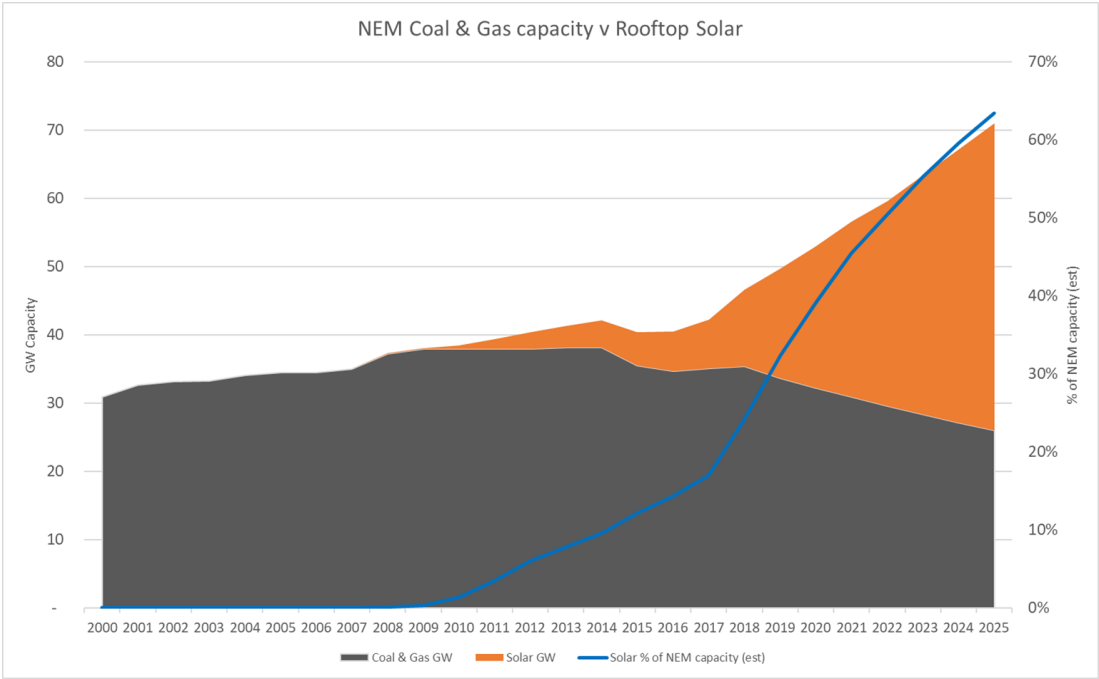
Contents

1. Why and how Centralised control works

1. How can consumers increase their savings

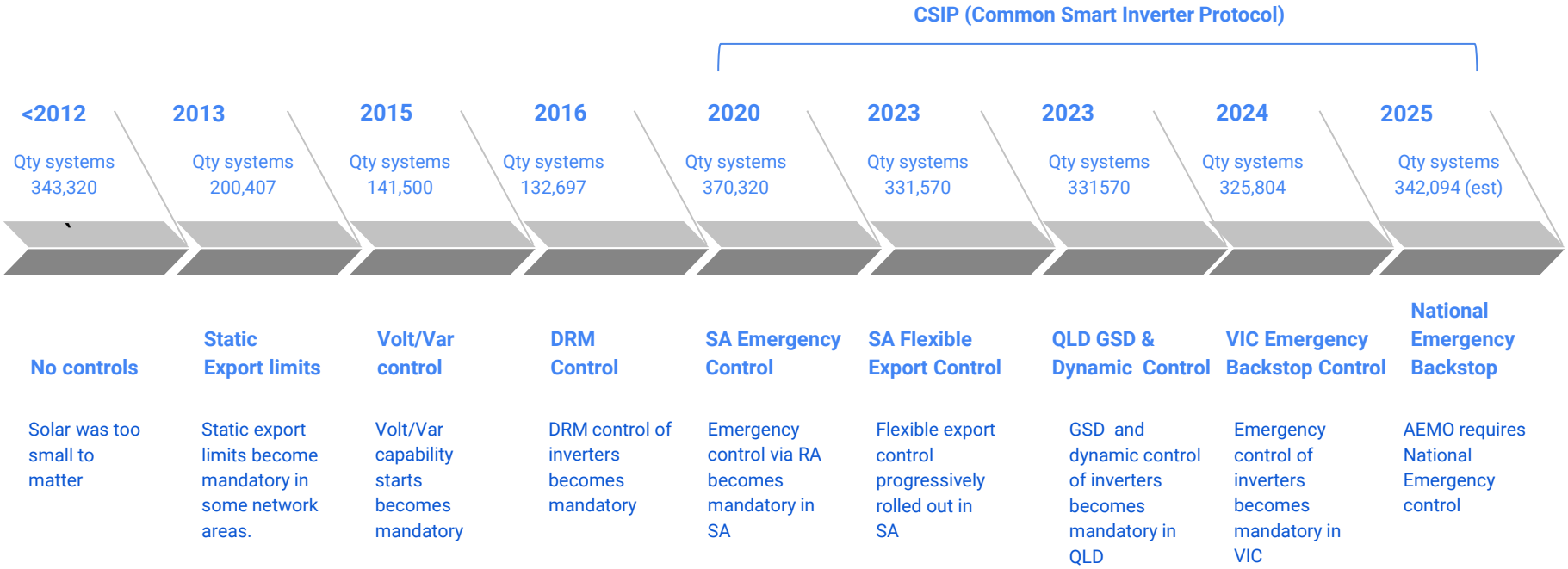
Why and how centralised control works

Why



Quote of the year “Installers thought they were sparkies but they've actually become essential service providers who now represent 60% of NEM generation assets”

Control mechanisms



QLD GSD Control

AEMO	DNSP	QLD GSD	INVERTER
		  *Pending	
National forecasts & constraints	Local forecasts & constraints	Local signal interface	Local signal receiver

Ripple Control

DRM signal

QLD/SA Flexible/Dynamic Control

AEMO	DNSP	AGGREGATOR		INVERTER
AEMO		CSIP	RTU/TCP signal	
National forecasts & constraints	Local forecasts & constraints	3rd party & OEM interface		Local signal receiver

NSW Backstop Control

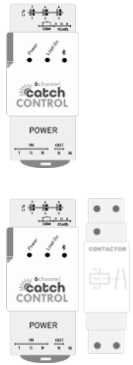
AEMO

DNSP

AGGREGATOR

INVERTER

CSIP



*Pending

DRM signal

Contactor signal

National forecasts & constraints

Local forecasts & constraints

3rd Party interface

Local signal receiver

VIC Backstop Control

VIC Backstop Control

AEMO	DNSP	AGGREGATOR		INVERTER
National forecasts & constraints	Local forecasts & constraints	CSIP	3rd party or OEM interface	RTU/TCP signal	Local signal receiver

VIC Backstop Legacy Control

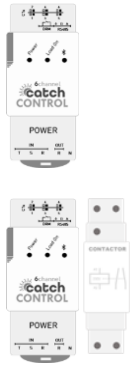
AEMO

DNSP

AGGREGATOR

INVERTER

CSIP



*Pending

DRM signal

Contactor signal

National forecasts & constraints

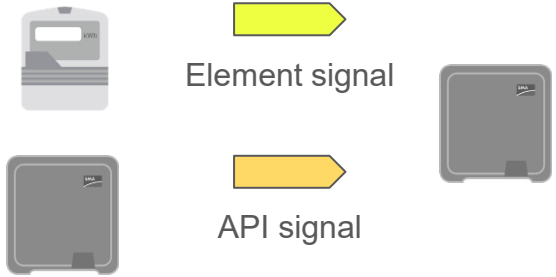
Local forecasts & constraints

3rd Party interface

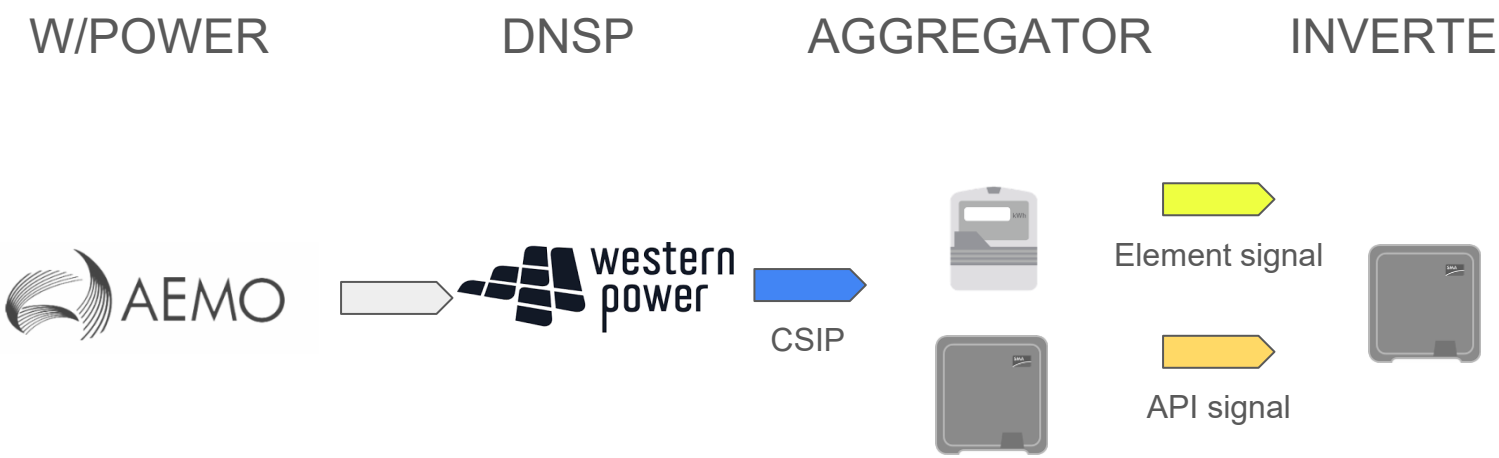
Local signal receiver

WA Backstop Control (today)

W/POWER	DNSP	AGGREGATOR	INVERTER
AEMO	western power	API	Element signal API signal
WA forecasts & constraints	Local forecasts & constraints	Meter or OEM interface	Local signal receiver



WA Backstop Control (tomorrow)



Importantly

- CSIP is increasingly becoming standard
- Load increasingly being controlled
- National Backstop/Dynamic is starting this year
- Legacy/Upgrade standards still a work in progress

Maximising solar savings

Maximising savings

The simple way to save

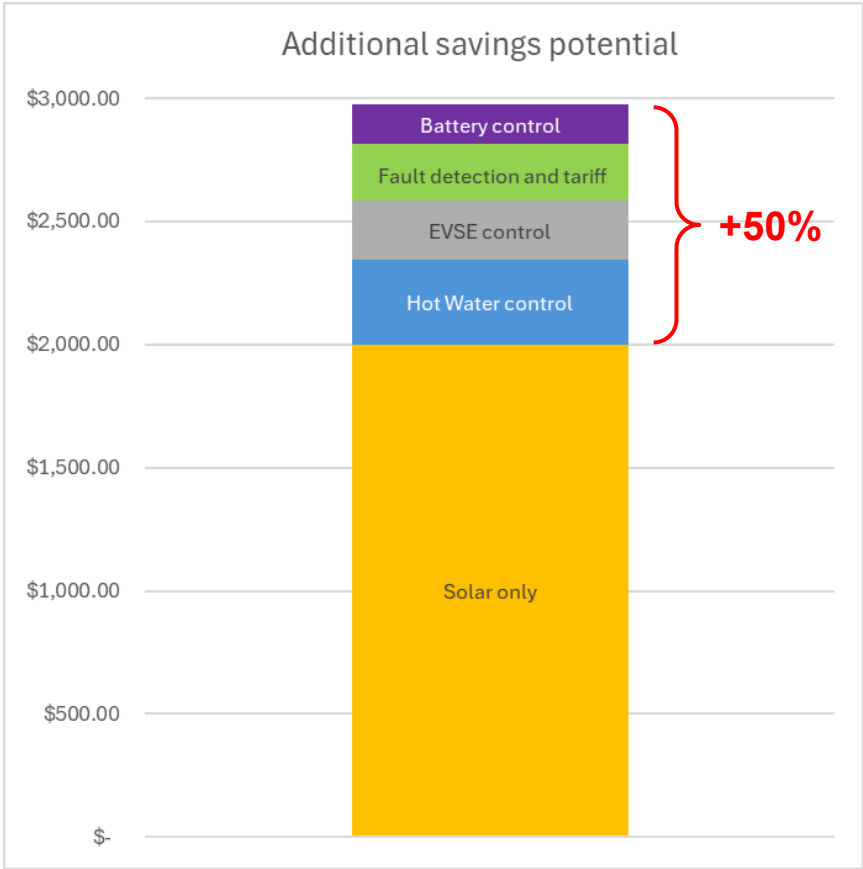
- Solar self consumption
- Exported energy

The smart way to save

- Hot water control - $180 - $380 pa
- EVSE control - $180 - $350 pa
- Tariff & fault control- $145 - $320 pa
- Battery control - $150 - $250 pa

*Larger systems, lower FITs and higher insolation increase savings
**VPP, Heat Pump excluded

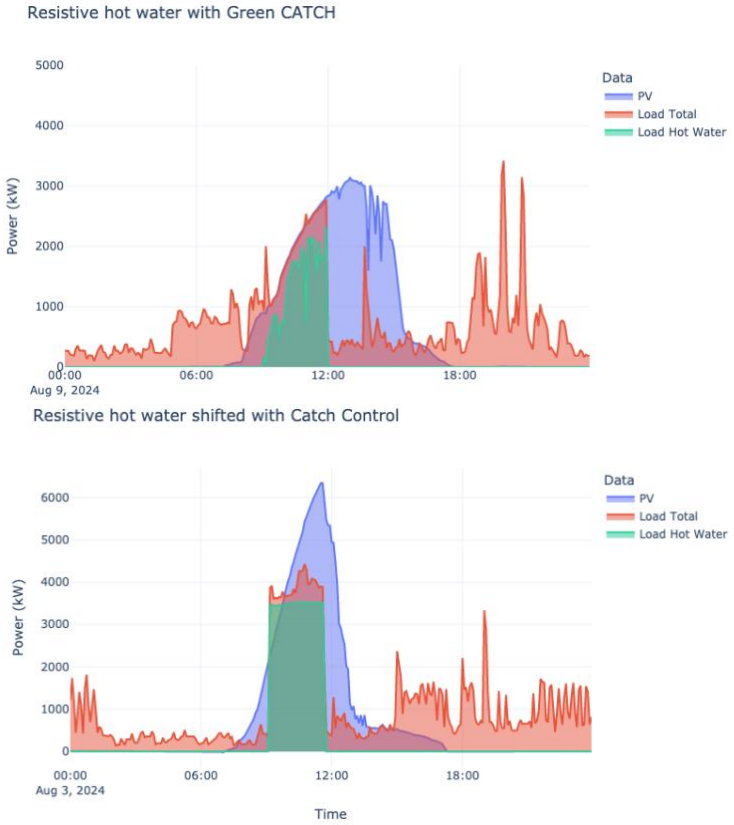
Reference **White Paper**



HW savings

Analysis shows:

- HW element control provides the biggest savings potential
- Diverters are outstanding, single purpose devices
- Timers can't account for excess
- Smart control provides best of both worlds
- $180 - $380 pa extra savings
- (Diverter saves $55 more pa ave)



Battery savings

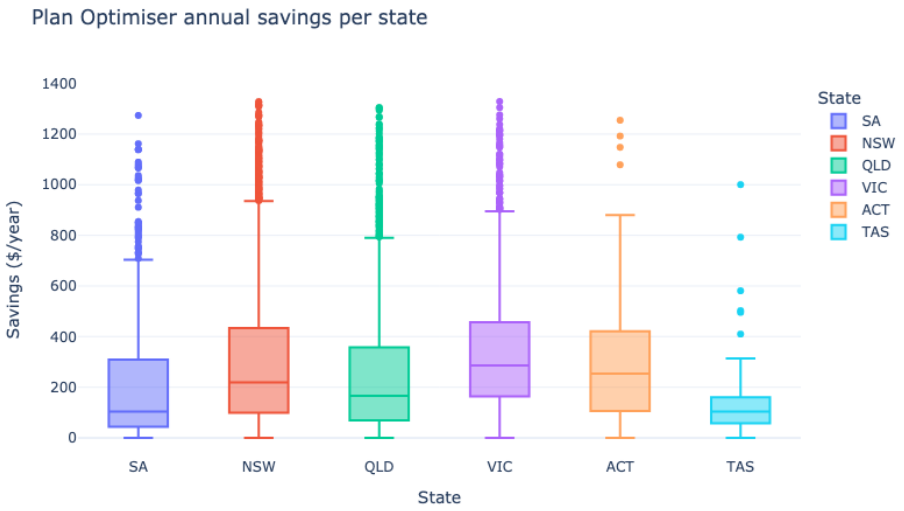
Analysis shows:

- Leveraging wholesale trading adds significant savings
- Automation is key
- Leverage via:
  - Load control
  - Forecasting
  - Tariff matching
- $150-$250 pa of extra savings

Tariff savings

Analysis shows:

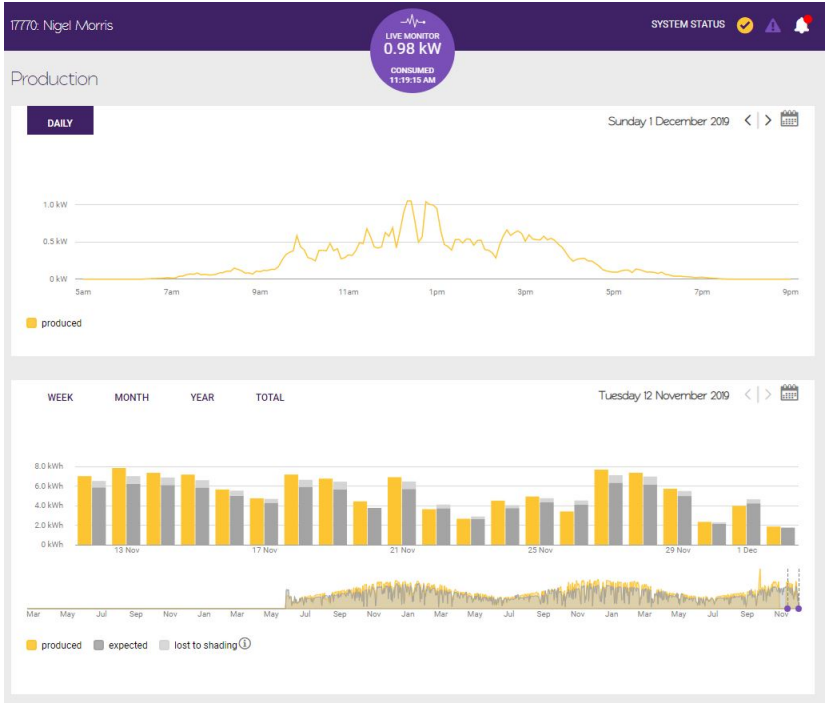
- Analysis of 28,000 solar owners shows massive savings scope
- Can be leveraged by load control/load shifting, especially if wholesale trading is used
- $145 - $320 pa of extra savings



Performance savings

Analysis shows:

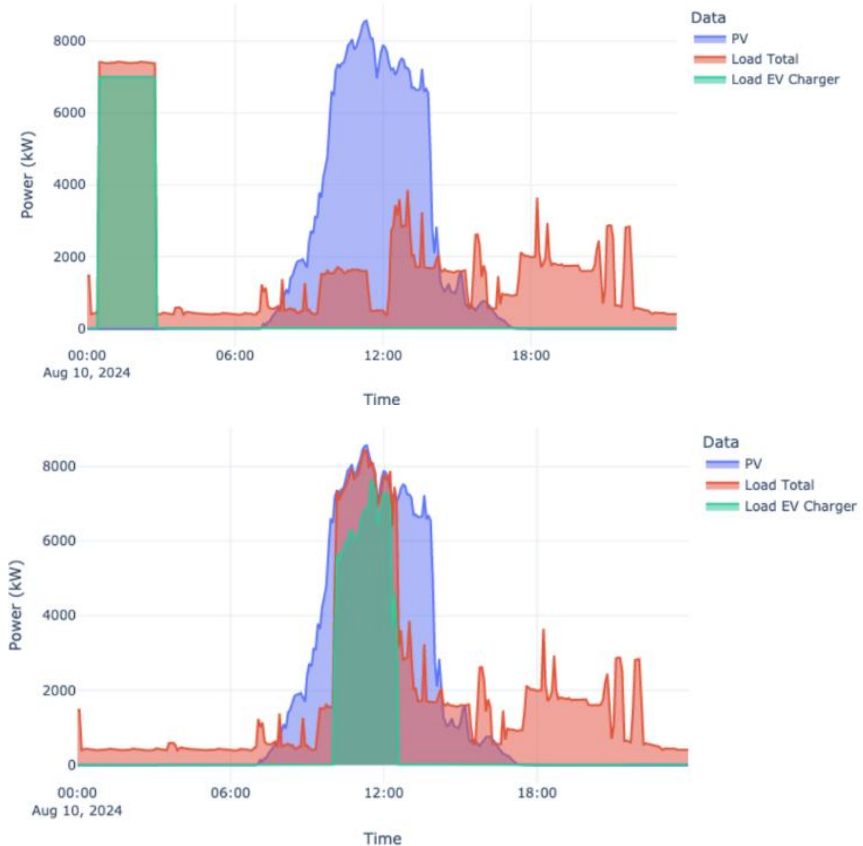
- In 2024 we showed 37GWh and $9.1M of extra savings by early fault detection
- Key is detecting faults accurately and fast
- $132 pa ave extra savings



EVSE savings

Analysis shows:

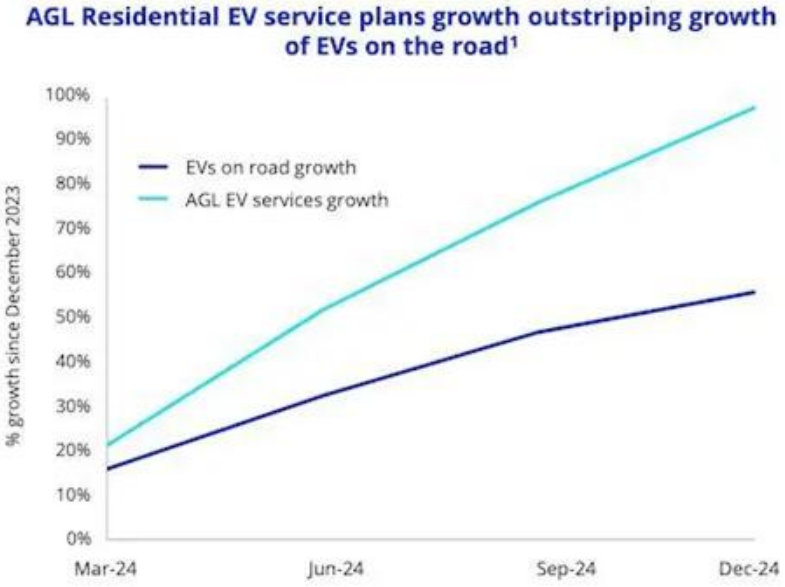
- Smart control blends solar self consumption and best tariffs
- 75% of savings come from controlled solar charging
- $180 - $350 pa extra savings



EVSE savings

EV tariffs are hugely popular

- 75%+ have solar
- Discounted rates (eg 8ckWh) fill the solar gap
- Automation and scheduling is the key
- $180 - $350 pa extra savings



1) EV Council - www.electricvehiclecouncil.com.au
2) AEMO 2024 ISP Step Change Scenario

Recap

Control

- Centralised control is here to stay and expanding (EV, V2G etc)
- Evidence that is allowing larger system to be installed already
- CSIP is a fundamentally good system designed by solar industry

Savings

- As FITs reduce finding new ways to save is essential
- Load control becoming much easier
- Automation and AI based learning is real
- Read the **White Paper** - **scan the QR!**

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