SAVPP Summary

July 2023

LAST EDITED
July 13, 2023

South Australia's Virtual Power Plant

Net-zero and low-cost energy for public housing tenants

Key benefits for tenants:

- The **cheapest energy rate** in South Australia for all energy consumed
- **Battery backup** to keep the lights on
- **Net-zero** carbon emissions electricity
- Increased **visibility of energy usage** through the Tesla app

Key benefits for South Australia

- **Zero capital cost for tenants, government and community housing**
- **Increased grid resilience**
- **Soak up daytime solar that can be used or exported during peak times**
- **Electrical, switchboard and wiring upgrades to properties**

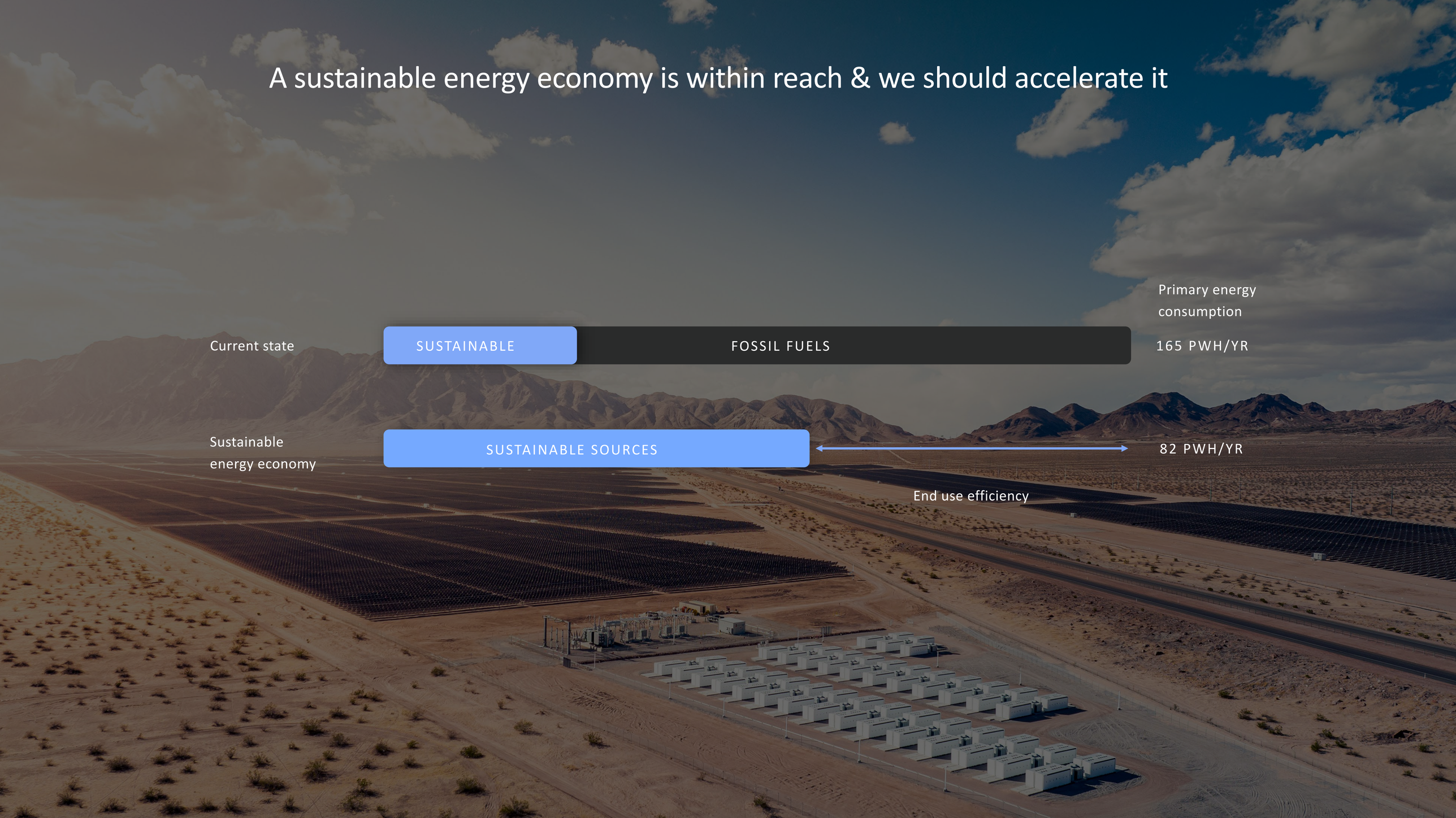
https://www.tesla.com/en_au/sa-virtual-power-plant

Our energy economy is dirty & wasteful

Over 80% of global energy comes from fossil fuels

Only 1/3 of global energy delivers useful work or heat

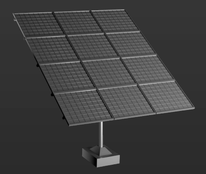
A sustainable energy economy is within reach & we should accelerate it



The plan to eliminate fossil fuels

Reduction in fossil fuel use

35% | 21% | 22% | 17% | 5%



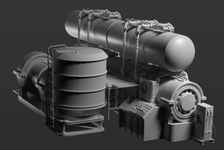
Renewably power the existing grid

Displaced fossil fuels

46 PWh/yr

Switch to electric vehicles

28 PWh/yr



Switch to heat pumps

29 PWh/yr

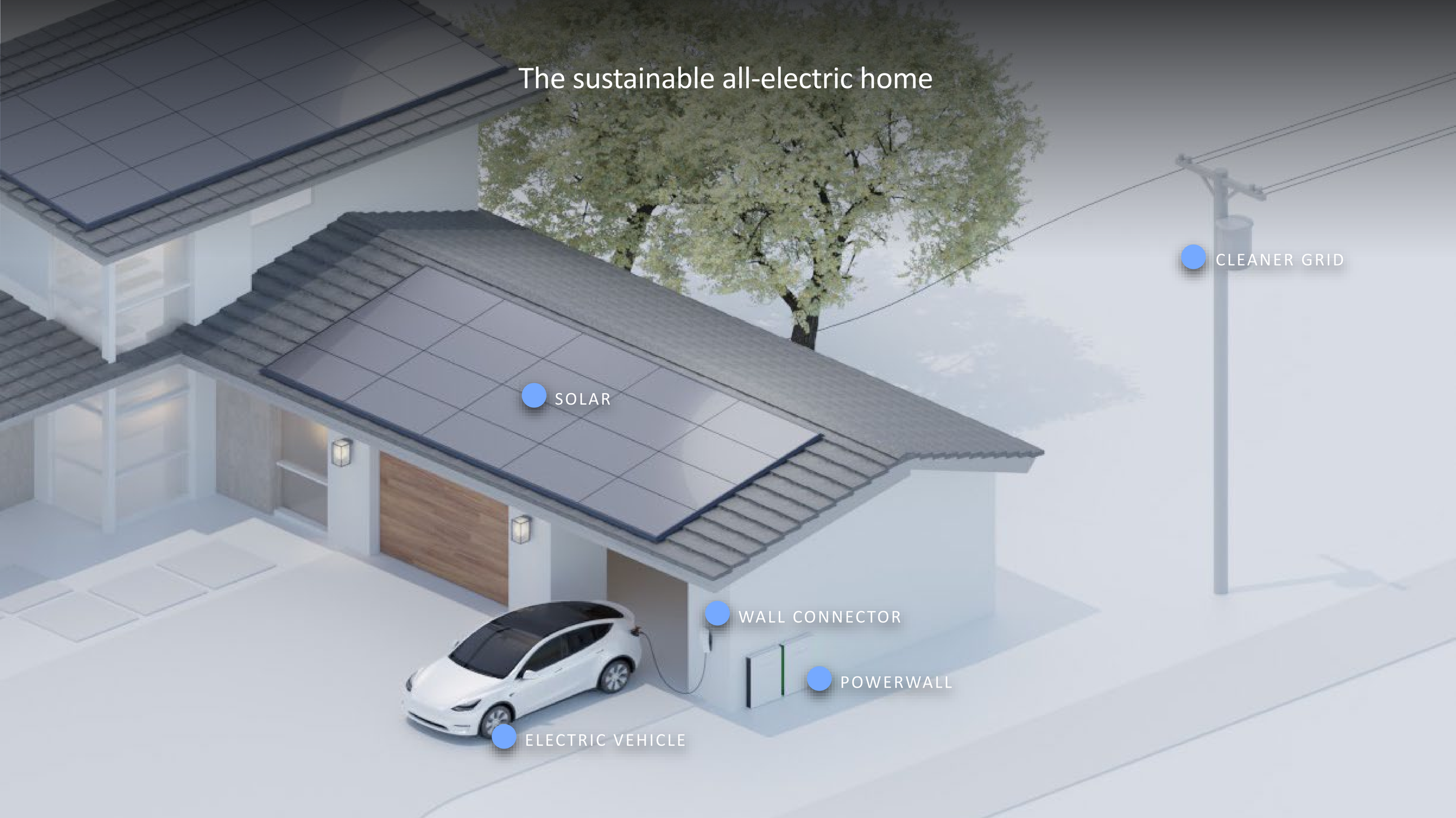
High temp heat delivery & hydrogen

22 PWh/yr

Sustainably fuel planes & boats

7 PWh/yr

The sustainable all-electric home



STORE ENERGY FROM SOLAR

USE YOUR STORED ENERGY ANYTIME TO POWER YOUR HOME

IN THE EVENT OF A BLACKOUT

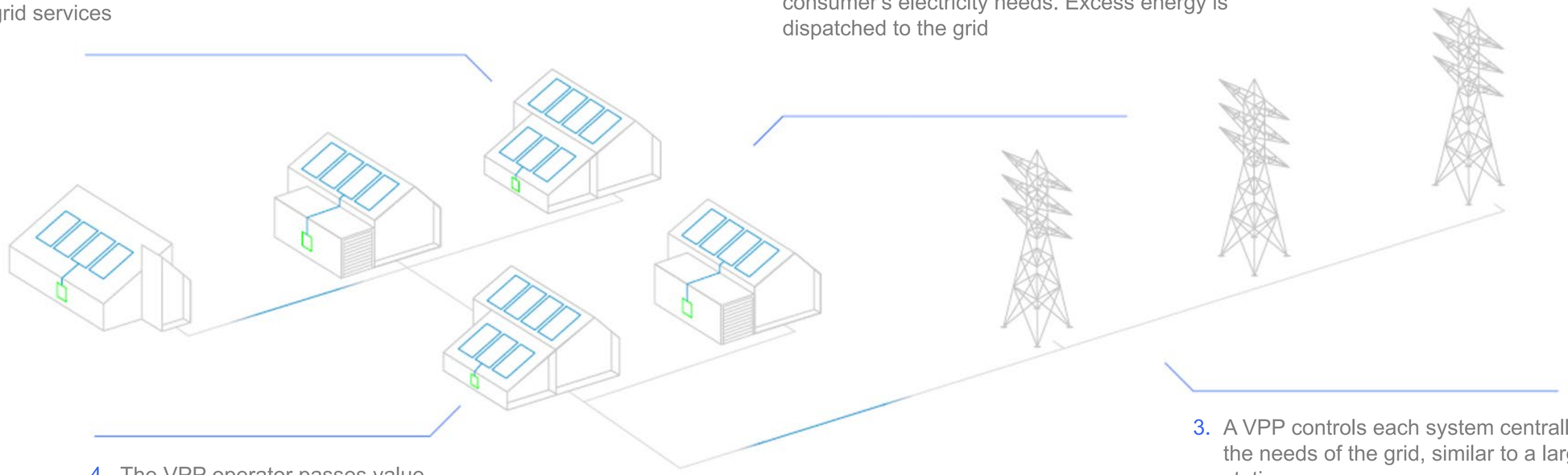
RECHARGE WHEN THE SUN RISES OR WHEN THE GRID TURNS BACK ON

What is a Virtual Power Plant?

VPPs are a network of battery energy storage systems working together to provide grid support

1. A virtual power plant (VPP) is a network of solar and battery systems working together to generate and store energy for on-site use, feed energy into the grid and provide grid services

2. The energy from these systems is used for each consumer's electricity needs. Excess energy is dispatched to the grid



3. A VPP controls each system centrally to support the needs of the grid, similar to a large power station.

   The VPP exports energy during peak times and provides critical grid services

4. The VPP operator passes value back to consumers through a lower power bill

South Australian Virtual Power Plant Development

	Phase 1: Demonstrate capability	Phase 2: Develop commercial model	Phase 3A: third party finance and service growth	Phase 4: Expand VPPs to non-solar PV suitable sites
				
Customers	100 solar PV systems and Powerwalls	1000 solar PV systems and Powerwalls	3000 solar PV systems and Powerwalls	1,500+ Powerwall Only systems 1,500+ Powerwall & PV systems
Property Owners	SA Housing Authority (SAHA)	SAHA	SAHA	SAHA Community Housing
Financing and revenue streams	$2m SA Grant	$20 million SA loan FCAS and energy market revenues Customer retail revenues	$48 million Tesla equity $8.2 million ARENA funding $10m SAG funding FCAS and energy market revenues Customer retail revenues	Fully funded by Tesla equity FCAS and energy market revenues Customer retail revenues
Objective	Demonstrate aggregation capabilities	Prove out customer retail model Proof of concept for market participation	Attract debt financing Demonstrate new market services – inertia, FFR and voltage support	Enable tenants living in properties unsuitable for solar PV to share in the benefits of DER Expand the program to tenants living in Community Housing Provider properties
Status	Complete	Complete	Due for completion by June 2023	Q2 2023 launch

SAVPP Customer Journey

Desktop Audit

Properties are desktop audited remotely to assess suitability for system installation.

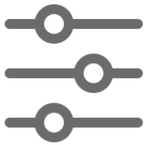
Registration

Tenants are invited to register their interest to join the SA VPP.

If required, a site assessment is booked.

Site Assessment

If required, a site assessment is undertaken to confirm site suitability for system installation.



Retail Sign Up

Tenants are invited to join the program.

They immediately begin receiving the cheapest energy rate in South Australia.

They can cancel at any stage before, during and after retail sign up.

Installation

An installation appointment will be booked and undertaken by a qualified Certified Installer.

Once complete, tenants will be able to access battery backup.

Example Communications

Messages

SA Gov Msg: Available to Community Housing tenants. Access the lowest electricity rate in your community when connecting to South Australia's Virtual Power Plant.

Joining is easy, r
interest and Tesl
the rest.

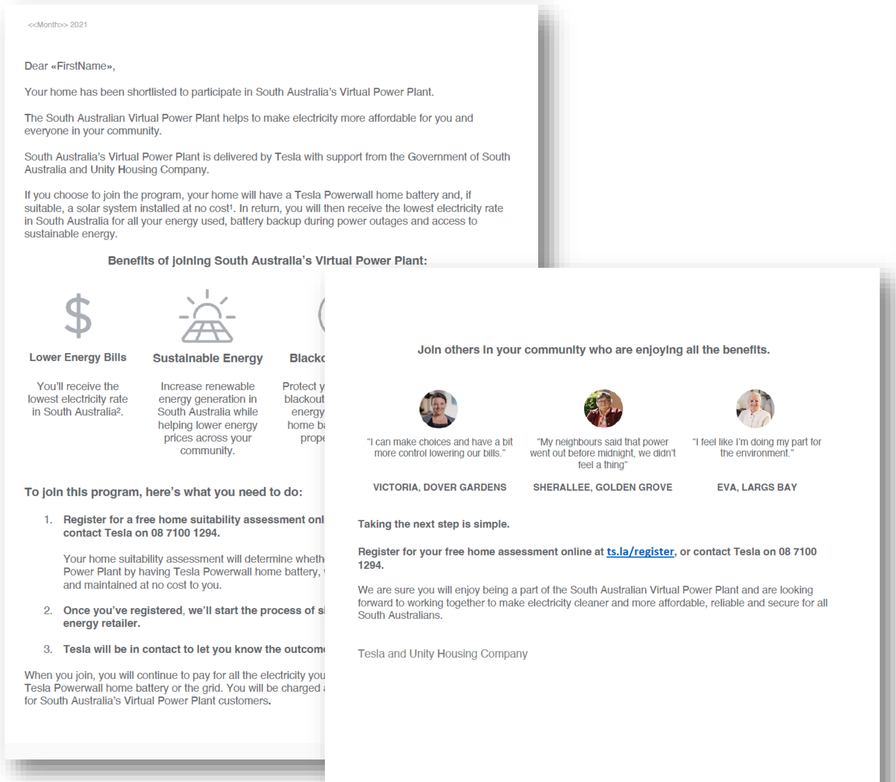
Visit ts.la/jointod
08 7100 1294 to

SA Gov Msg: Available to SA Housing Authority Tenants. Access the lowest electricity rate in your community and receive access to blackout protection when you connect to South Australia's Virtual Power Plant.

Joining is easy, register your interest and Tesla will manage the rest.

Visit ts.la/jointoday or phone 08 7100 1294 to register.

Letters



<<Month>> 2021

Dear «FirstName»,

Your home has been shortlisted to participate in South Australia's Virtual Power Plant.

The South Australian Virtual Power Plant helps to make electricity more affordable for you and everyone in your community.

South Australia's Virtual Power Plant is delivered by Tesla with support from the Government of South Australia and Unity Housing Company.

If you choose to join the program, your home will have a Tesla Powerwall home battery and, if suitable, a solar system installed at no cost[1]. In return, you will then receive the lowest electricity rate in South Australia for all your energy used, battery backup during power outages and access to sustainable energy.

Benefits of joining South Australia's Virtual Power Plant:

Lower Energy Bills

You'll receive the lowest electricity rate in South Australia[2].

Sustainable Energy

Increase renewable energy generation in South Australia while helping lower energy prices across your community.

Blacko

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To join this program, here's what you need to do:

1. **Register for a free home suitability assessment onl contact Tesla on 08 7100 1294.**

   Your home suitability assessment will determine wheth Power Plant by having Tesla Powerwall home battery, and maintained at no cost to you.

2. **Once you've registered, we'll start the process of s energy retailer.**

3. **Tesla will be in contact to let you know the outcom**

When you join, you will continue to pay for all the electricity you Tesla Powerwall home battery or the grid. You will be charged for South Australia's Virtual Power Plant customers.

Join others in your community who are enjoying all the benefits.

"I can make choices and have a bit more control lowering our bills."

VICTORIA, DOVER GARDENS

"My neighbours said that power went out before midnight, we didn't feel a thing"

SHERALLEE, GOLDEN GROVE

"I feel like I'm doing my part for the environment."

EVA, LARGS BAY

Taking the next step is simple.

Register for your free home assessment online at ts.la/register, or contact Tesla on 08 7100 1294.

We are sure you will enjoy being a part of the South Australian Virtual Power Plant and are looking forward to working together to make electricity cleaner and more affordable, reliable and secure for all South Australians.

Tesla and Unity Housing Company

[1]Solar and Powerwall will be installed on your property at no charge, however you won't own the system and will pay for all energy used from solar, Powerwall and the grid at the cheapest generally available residential rate available in SA.

[2]Energy Locals & Tesla guarantee this offer will be the cheapest generally available single rate residential offer in SA, assessed against the entire market at each annual reprice (within 60 days of each financial year), until 31 August 2023. If a tier 1 Energy Retailer releases an offer with a cheaper rate between each annual reprice, Energy Locals and Tesla will reduce the SAVPP offer to align with the cheaper competitive offer (within 60 days of becoming aware of the cheaper offer). Contact us at 08 7100 1294 to find out more.

[3] Tesla will perform your home's suitability assessment to determine one of the following options for your home:

- Tesla Powerwall and solar installed at your home
- Tesla Powerwall with no solar installed at your home
- No Tesla Powerwall or solar installed at your home, but with access to the lowest electricity rate in South Australia

Postcards

Your exclusive invitation from Tesla and Unity Housing Company

"Joining South Australia's Virtual Power Plant and having solar and a Tesla Powerwall home battery installed has reduced our energy bills, saving us money.

It's also great knowing that we power the house with renewable energy while also helping the environment."

Tracey, Gilles Plains

Congratulations
Your home has been shortlisted to join the world's largest Virtual Power Plant

Benefits You Will Receive

Lower Energy Bills
You'll receive the lowest energy rate in South Australia.[2]

Blackout Protection
Protect your home against blackouts by using stored energy with Powerwall home battery.

Sustainable Energy
Increase renewable energy generation in South Australia while helping lower energy prices across your community.

Support the Grid
Power your home with a clean energy plan.

Monitor Your Energy
Monitor your home energy use anytime, anywhere with the Tesla app.

Register Your Interest
Visit ts.la/invite
or call 08 7100 1294

Powerwall Only Expansion

What is Powerwall Only?
Launched in May 2023, Phase 4 of the South Australian Virtual Power Plant will enable tenants living in properties unsuitable for solar PV to join the program with a Powerwall Only system configuration.

These tenants receive the same program benefits as all other tenants.

How does it work?
The Tesla Powerwall battery is optimised to charge from the grid when electricity is cheapest. These systems then support self-consumption behind the meter during peak demand periods when wholesale market prices are higher.

Importantly, these systems are still able to provide FCAS, respond to wholesale market pricing and provide additional contracted services – such as FFR.

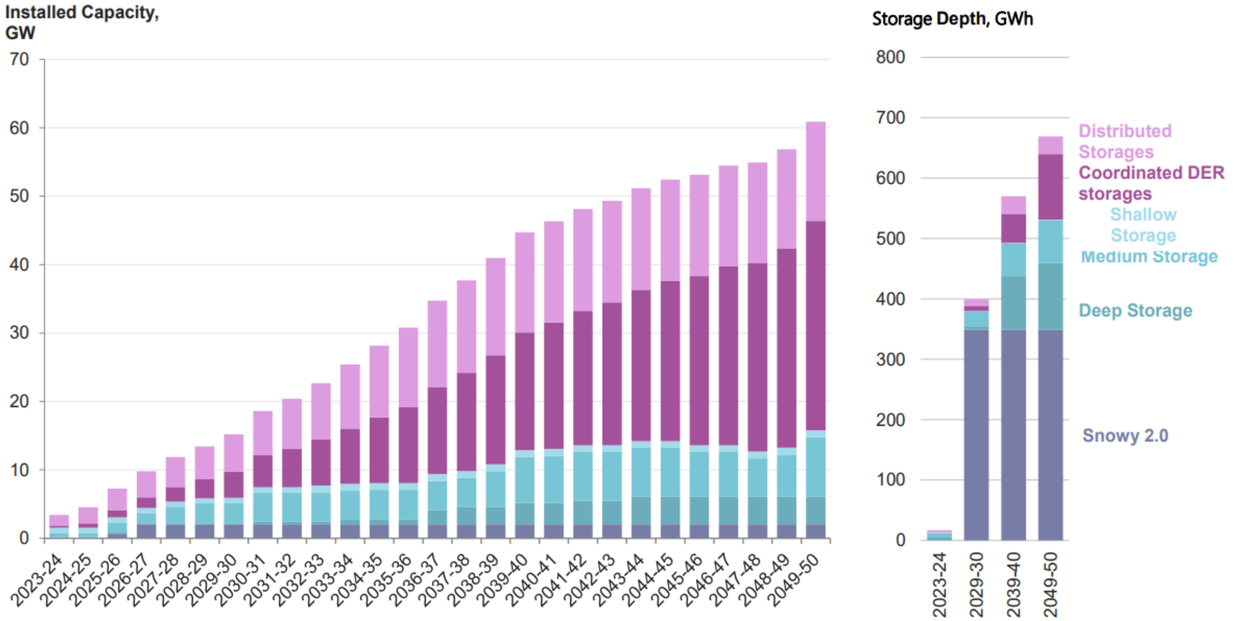
Combined with the lower CAPEX requirements per site due to the absence of solar PV, Powerwall Only configured systems will provide significant benefits to the NEM.

Expected energy transition to 2050

('Step Change' scenario)

Storage capacity
to increase by a factor of 30
(Batteries, virtual power plants, pumped hydro.)

NOW	2030	2050
2 GW	15 GW	61 GW



Benefits of Powerwall Only

Social and Community Benefits

- People living in properties unsuitable for solar PV will be able to join a VPP and share in the benefits of renewable energy.
- Unlike solar PV, Systems can be relocated if a property is due for sale, demolition, transfer or refurbishment.
- Total system CAPEX is significantly less – but these systems can still access the same market revenues as normal VPP systems with solar PV

Market Benefits

- Systems can still access the same market revenues as VPP systems with solar PV
- Rather than charging up with on-site solar PV, the systems can often be paid to charge from the grid when prices are negative.
- Powerwall Only systems will help DNSPs deal with minimum demand challenges, reducing the need to curtail solar PV generation
- This surplus grid energy can be stored in the Powerwall Only systems and used when it's actually needed – during evening peak demand periods.