

# **Accelerating Community Transition to Renewable Energy**

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## Background

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- Declared a climate emergency  
October 2019
- Made pledges and  
commitments to act on  
climate change October 2020

## Pledges (abbreviated)

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1. Purchase 100% of Council's energy from renewable sources
2. Change all streetlights to energy efficient technology
3. Transition Council's fleet being fully renewables powered
4. Reduce waste to landfill
5. Adopt sustainable procurement policies

# Commitments

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- **Promote and accelerate a community renewable energy transition**
- Continue building community capacity towards net zero emissions and climate resilience
- Transition toward renewables powered transportation
- Assist residents in behaviour change education
- Assist residents in designing new low energy buildings

## Purpose: Commitment Progress Update

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“Promote and accelerate a  
community renewable  
energy transition”

## Traditionally...

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- Education
- Marketing & Promotion
- Council facilities led action

# What we've heard from you....

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1. Innovate
2. Accelerate
3. Leadership



# accelerate

/ək'seləreɪt/

*verb*

(especially of a vehicle) **begin to move more quickly.**

"the car accelerated towards her"

- increase in rate, amount, or extent.

"inflation started to accelerate"

Similar:

speed up

hurry up

get faster

move faster

go faster

drive faster



- **PHYSICS**

undergo a change in velocity.

"an accelerating electron radiates off some of its energy"



# Community Outcomes

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1. Carbon emissions reduction
2. Lower cost of living
3. Trust in Council as a community partner

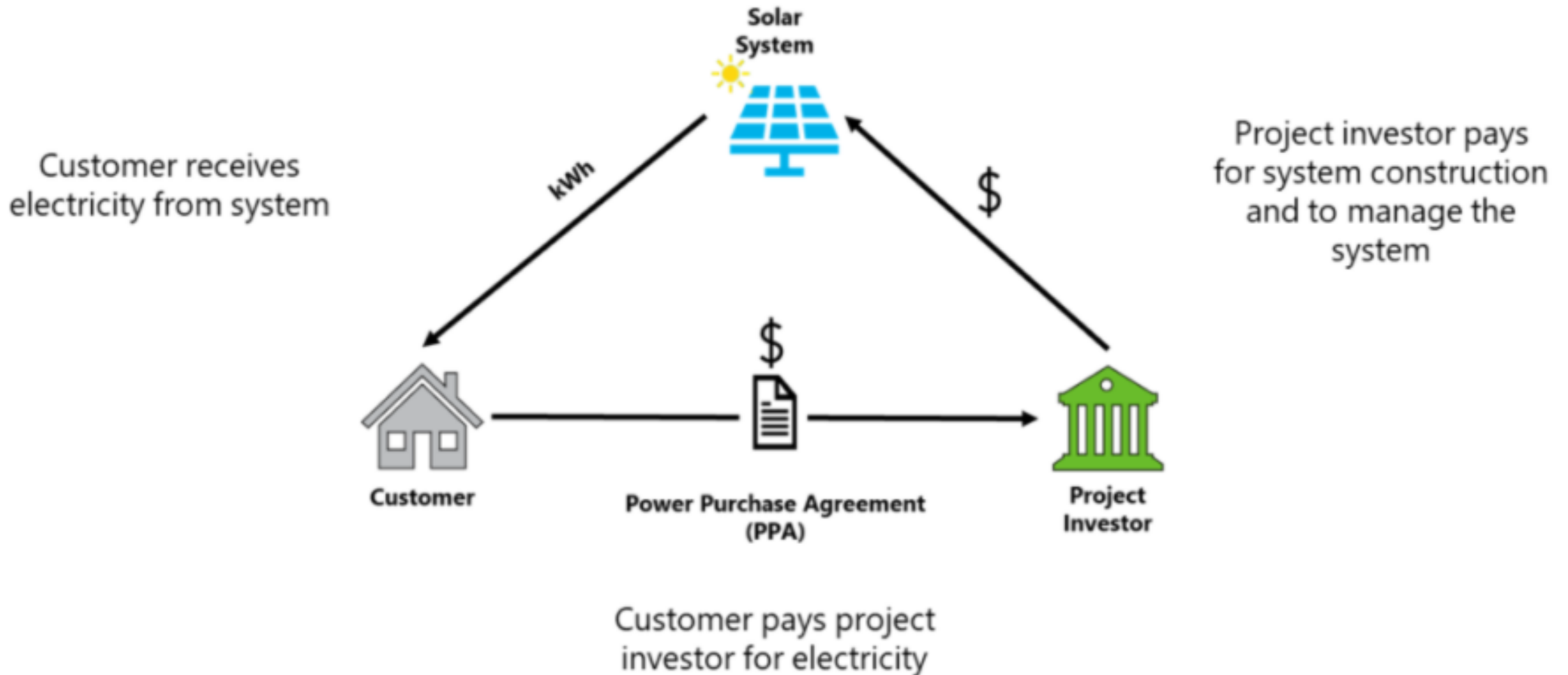
## Making Sure it's Possible

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1. A behind the meter 'Purchase Power Agreement' (PPA)
2. A 'Virtual Power Plant' (VPP)
3. The 'Mini-Grid' Model

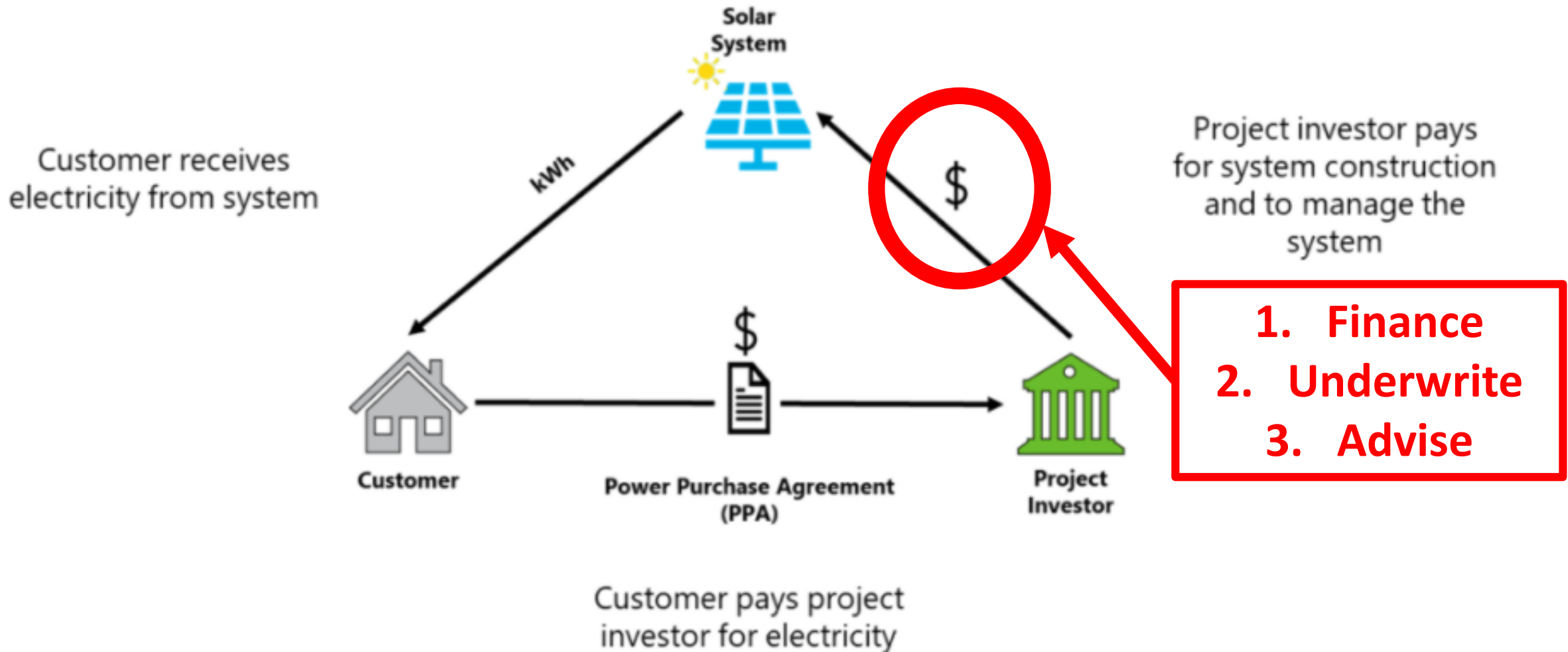
# What is a PPA?

Simple Diagram of a Solar PPA



# Where might Local Government fit?

Simple Diagram of a Solar PPA



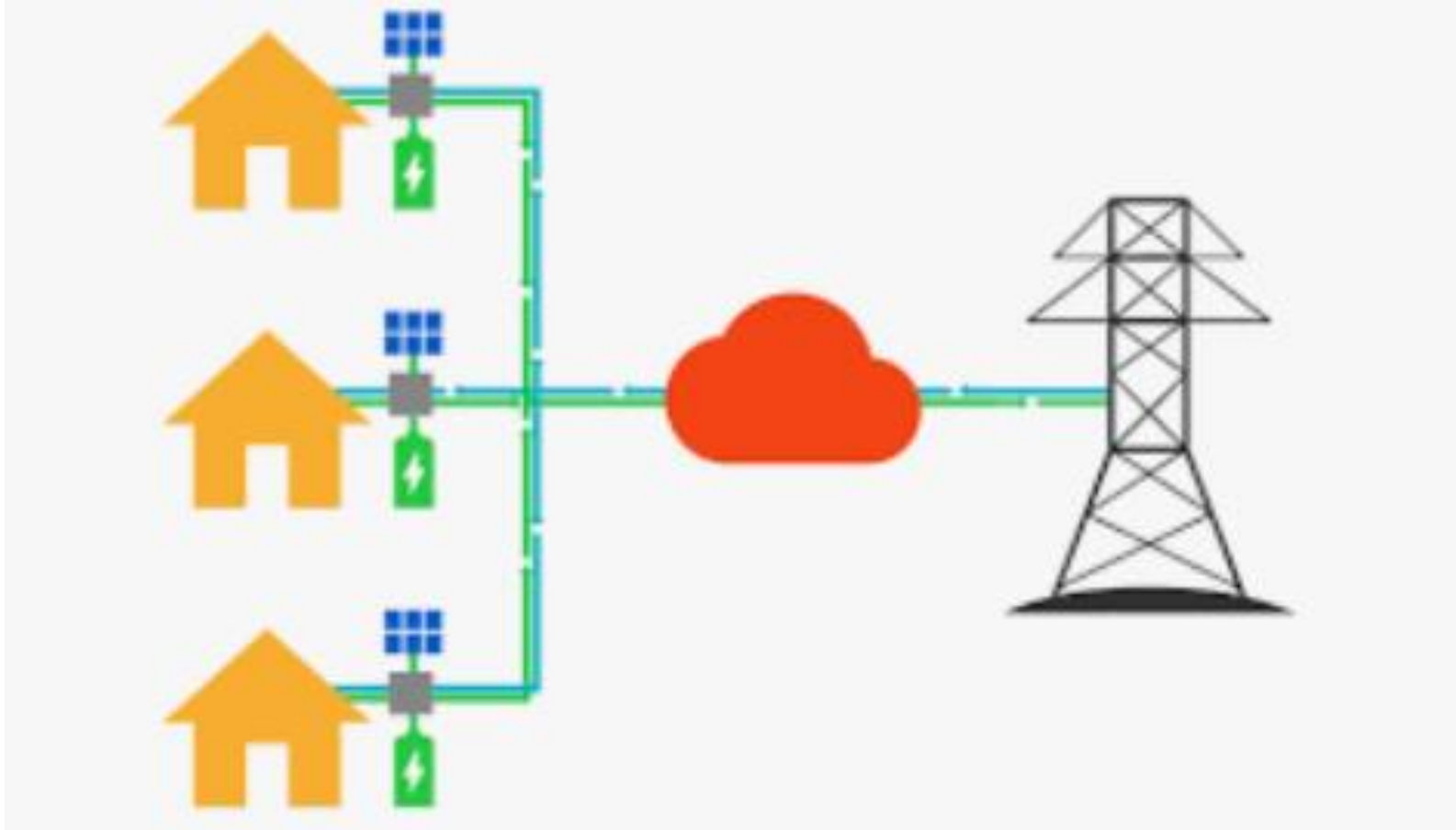
# Questions

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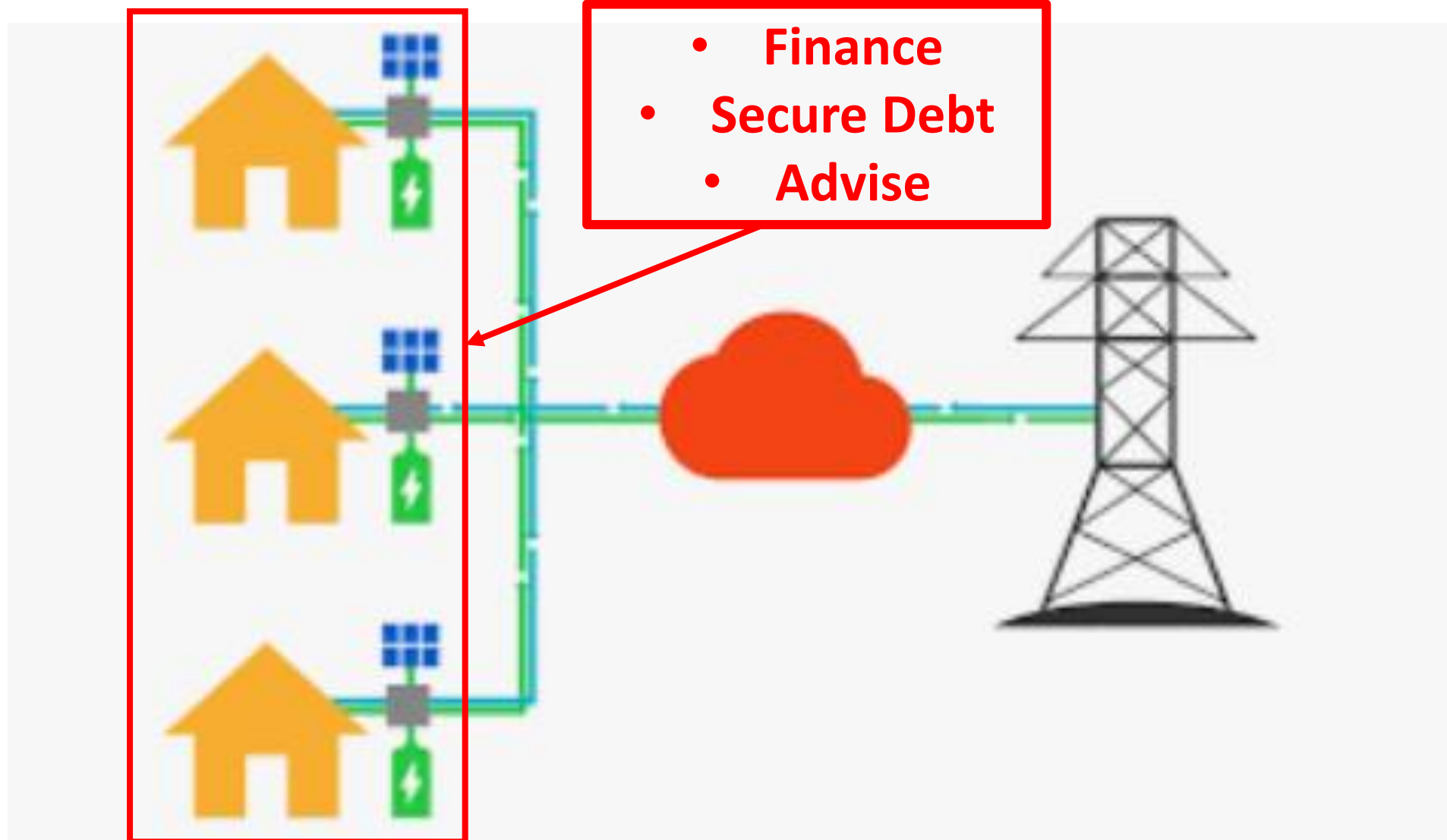


# What is a VPP?

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# Where might Local Government fit?



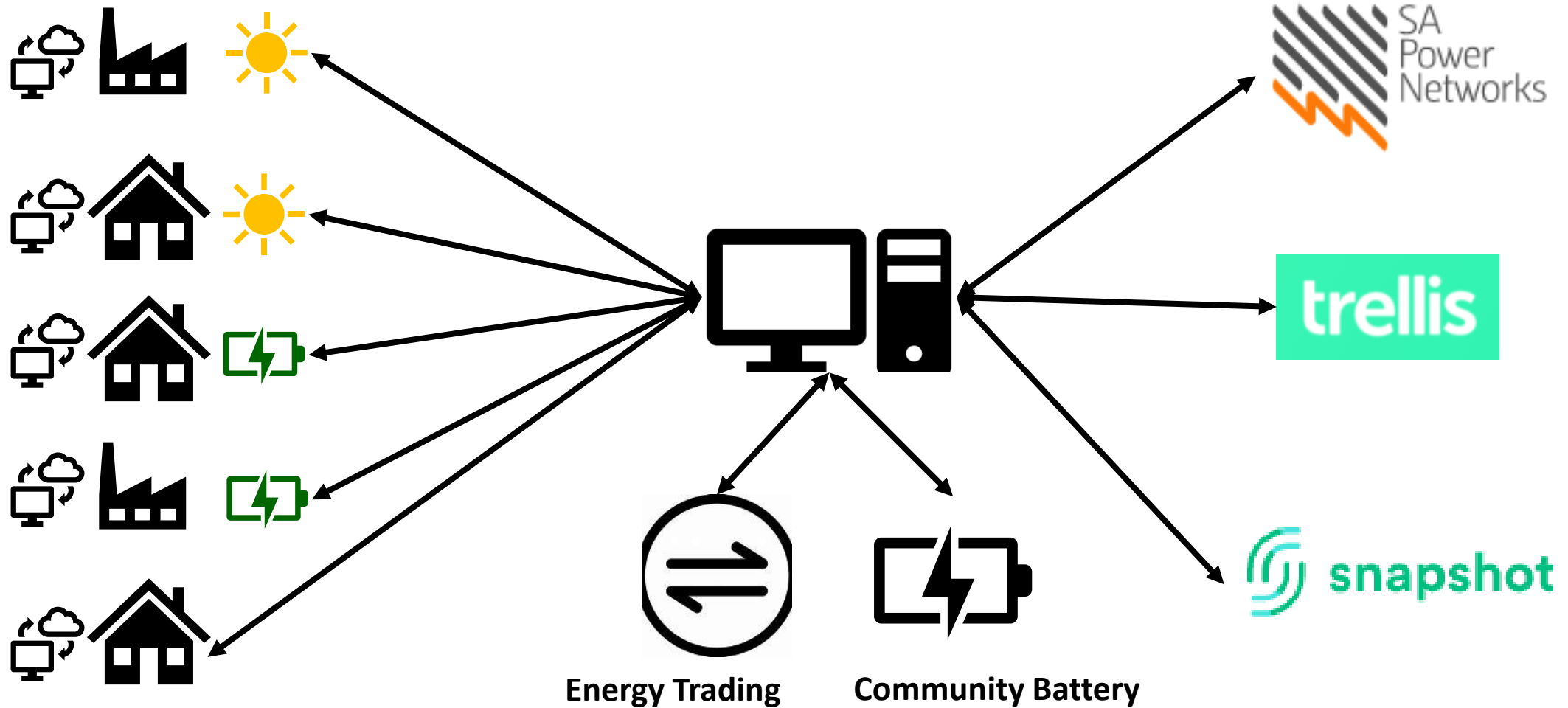
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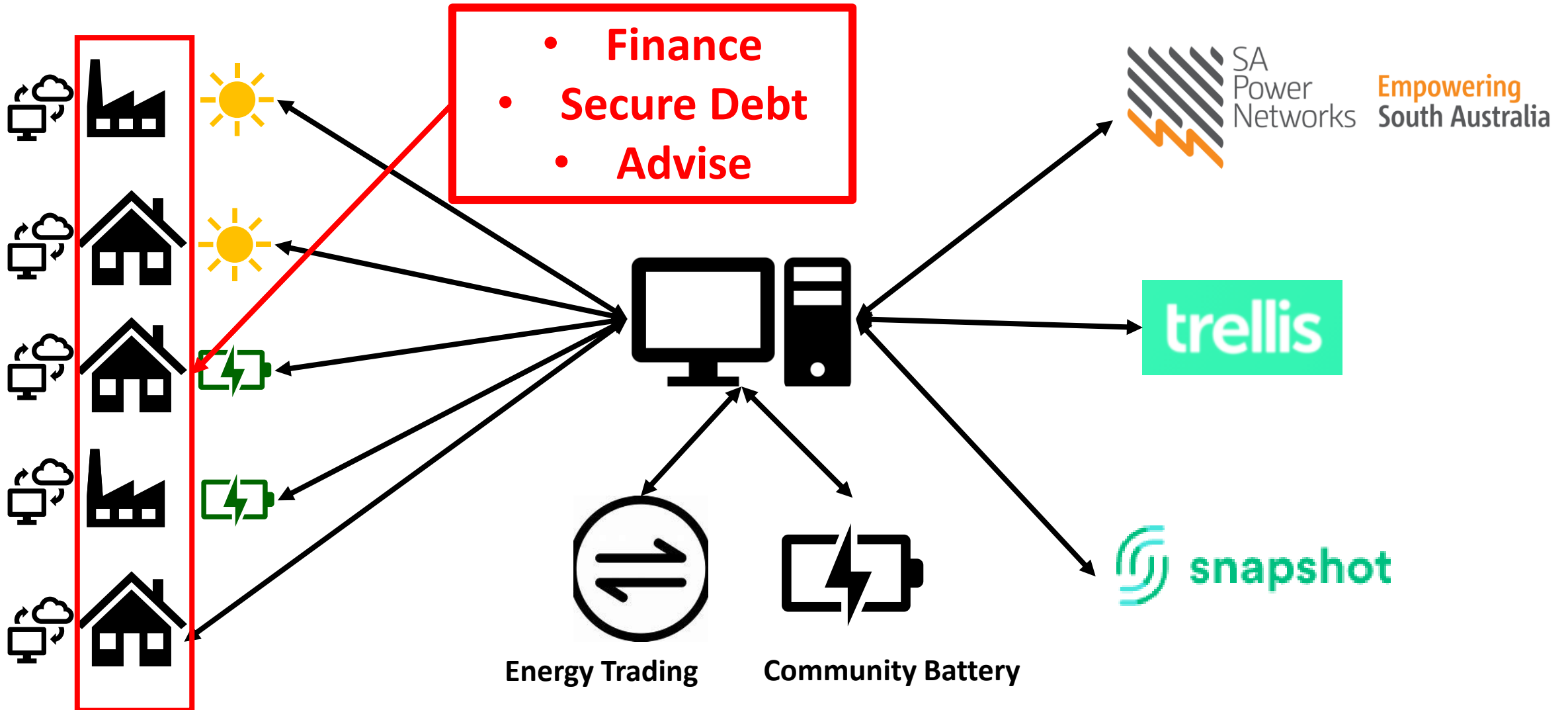




# The “Mini-Grid” Model



# Where might Local Government fit?



# Questions

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## Who will it serve?

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### “Everyone”

- Owner occupiers
- Tenanted properties
- Commercial properties
- Council properties

# Industry Engagement Feedback

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- Office of SA Chief Entrepreneur
- Alignment with SA Power Networks Grid Strategy



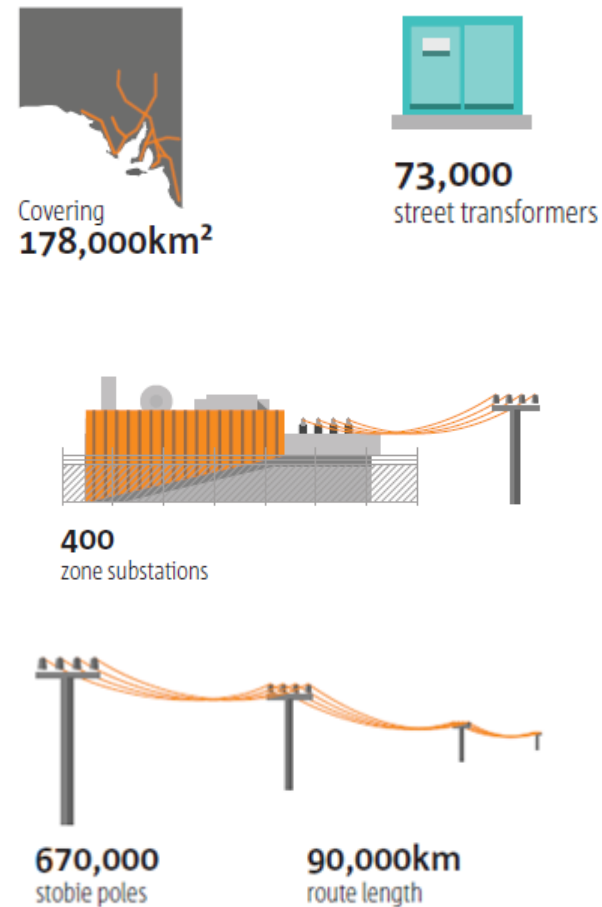
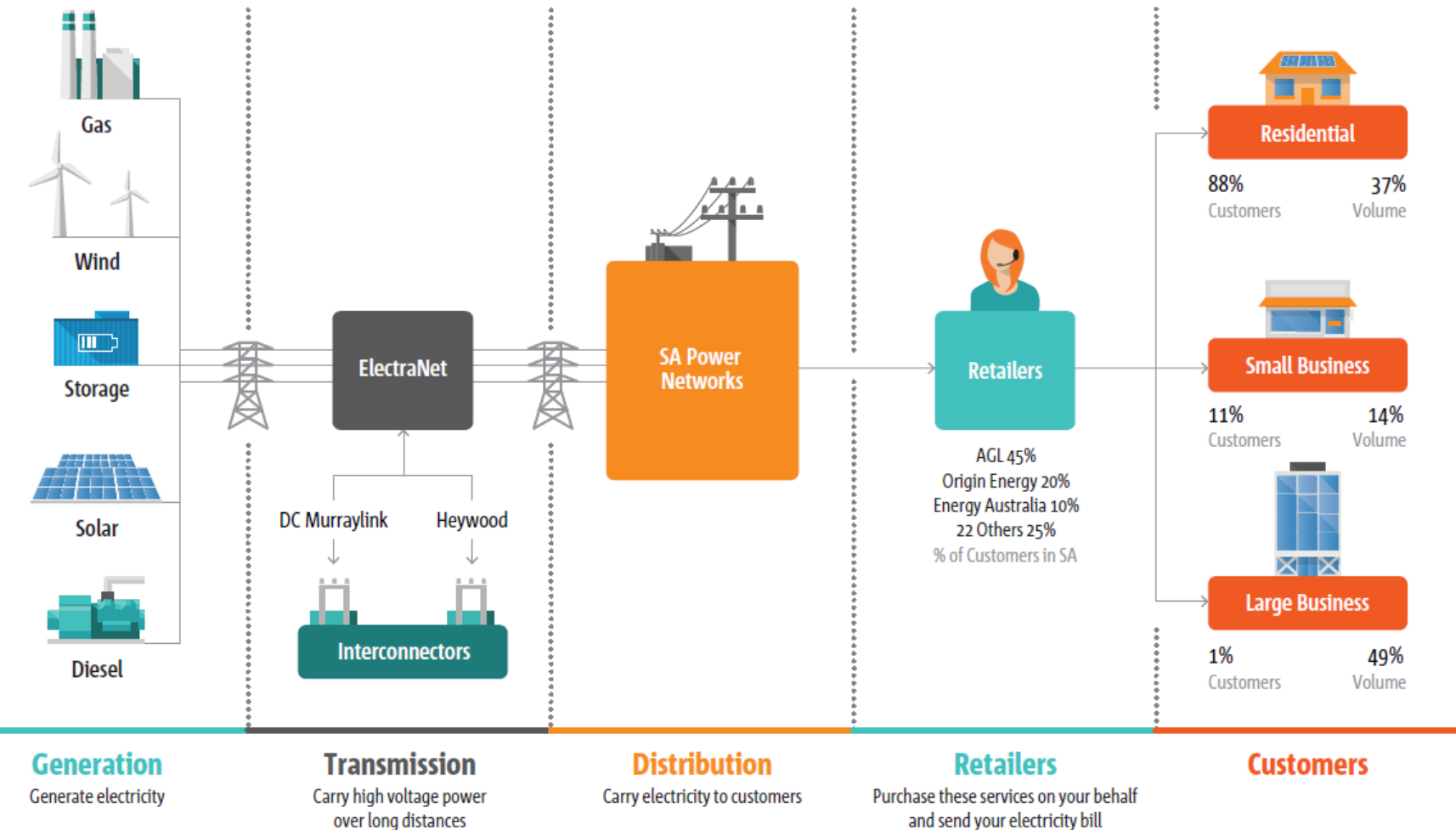


SA Power Networks

# Distributed Energy Transition

Mitcham City Council – June 2021

# SA Power Networks





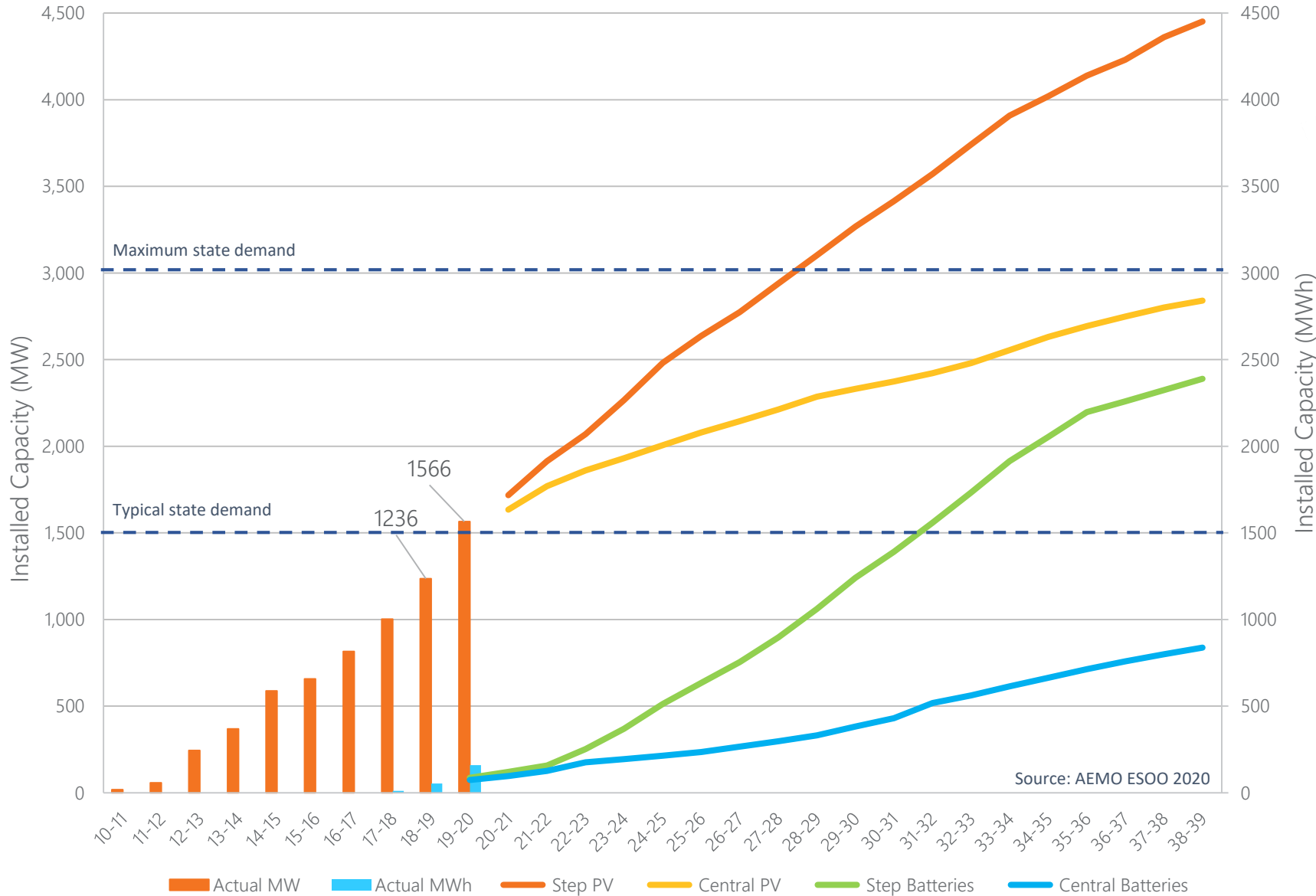
# Challenges and Opportunities

- SA Power Networks 3 key challenges
  - Increased financial pressure
  - Aging assets
  - Distributed Energy Transition
- Opportunities
  - Decreased energy prices for customers through increased utilisation of assets
  - Enabling transition to renewable energy system
  - Supporting customer choice





# South Australia DER forecasts



**>300,000 systems**, >1 in 3 customers with PV – world's highest

State's largest generator

Record growth year-on-year



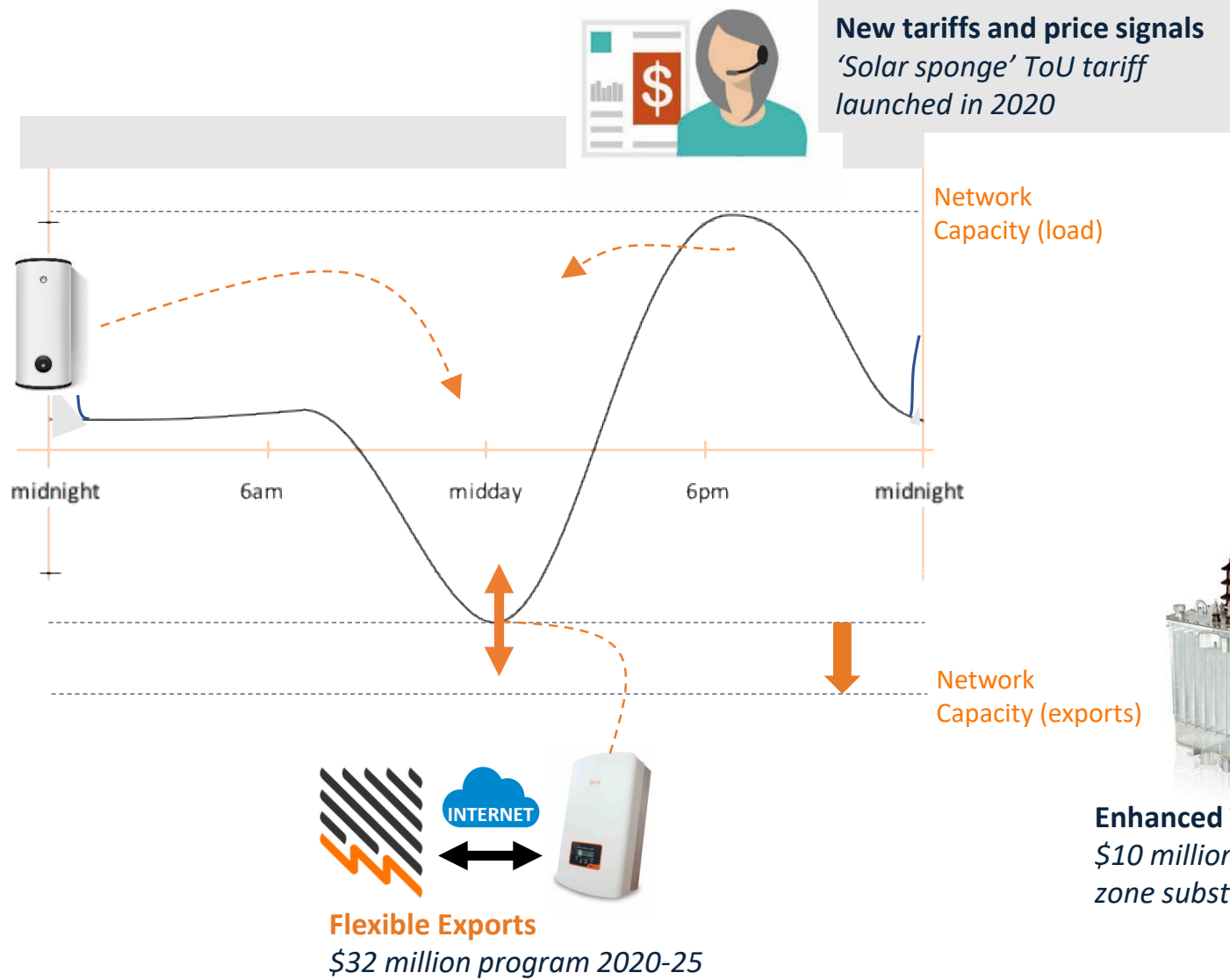
**Forecasting 90,000** batteries in coming years under SA Government schemes

Positioned to be a world leader in VPP adoption

10 active VPPs in the state

# Active initiatives

**Shifting controlled load into the solar trough**  
*Smart hot water trial in SA in 2021*



# Our Vision of the Future

- Increase the community's access to the benefits of Distributed Energy Resources
- Smart DER actively contributes the energy system
- Continued growth and transition to a decentralised flexible network



## Next Steps

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- Approach the market (June/July)
- Report to Council on opportunities, benefits and risks (Aug/Sept)
- Update on Pledges (June)