# Leading the transition: Synergy's role in DER management and integration

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#### Synergy in a snapshot





WA's largest electricity generator and energy retailer



**1.1 million +** electricity customers



Generate ~6,500 GWh of electricity p.a



Workforce of 1,500+ employees and contractors





## Synergy's energy transition pathway to 2050

#### Support all customers through the energy transition.



Retire coal-fired power stations.



Invest in renewable generation and storage assets.



Refocus efforts on DER management.

Work towards net zero emissions.





#### **DER** – from consumer to prosumer

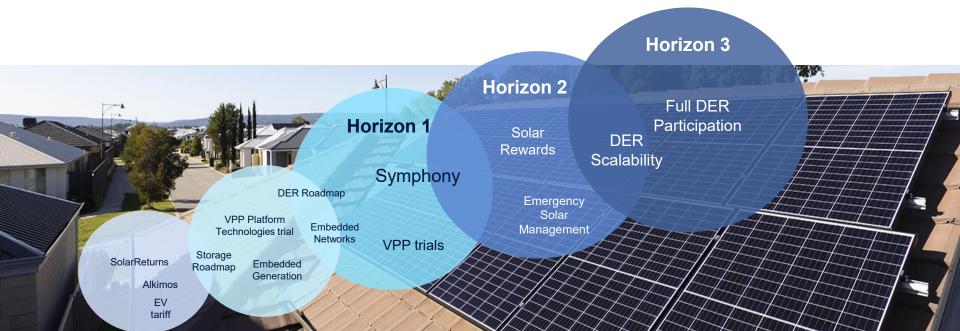




#### **Our DER journey**



Each project provides **building blocks** with interlocking benefits that leads the pathway to **WA's decentralised energy future**.



#### **Enabling Virtual Power Plant (VPP) technology**





VPPs enable full integration of DER into the energy system.



By aggregating latent capacity, Synergy can unlock and share significant additional value.



Synergy has developed Battery Rewards to incentivise customer participation in VPP services.

- More than 40% of homes in Western Australia currently have rooftop solar. Providing over 2GW of energy into one of the largest disconnected grids in the world.
- Unmanaged rooftop solar and other DER poses significant challenges to grid stability and market operations.
- Effective coordination is essential to allow continued uptake of solar and battery systems, driving towards a decarbonised SWIS and increased customer value.

#### **Project Symphony – Blueprint for DER aggregation**



Innovative pilot completed in 2023.

DER such as rooftop solar, batteries, and select appliances managed as a VPP.

Project Symphony findings confirmed the value of VPPs in the SWIS and gave a glimpse of a future where the full capabilities of DER can be realised.



#### **Project Jupiter – Taking the blueprint into practice**



Commencing in 2025, Project Jupiter is a three-year initiative to integrate DER at scale within the SWIS without compromising system reliability and security.



Synergy partnership alongside Western Power, AEMO and EPWA, and funded by ARENA.



Project Jupiter will be the first live DER marketplace that's integrated with the WA wholesale energy market.



Builds on the recommendations and learning from Project Symphony and other initiatives.



The project will accelerate opportunities for WA households to join Virtual Power Plant products.



Project Symphony demonstrated how DER devices can deliver value to the system, market and WA customers.



Project Jupiter will build on this success to demonstrate commercial VPP operation at scale.

#### Enhancing value through consistency and alignment





### Aligning with national DER remote management approach.



Synergy is adopting CSIP-Aus as the preferred standard for remote management of all DER.



The adoption of CSIP-Aus will enable us to enhance our existing ESM program.



Improved remote management enables us to create value for customers through innovative products.



Synergy has developed resources for industry which outline our remote management requirements.

#### Delivering a more sustainable energy future



- Ensuring integration and participation of DER is a critical step in the energy transition.
- Synergy is committed to enabling customers to play an active role in the transition by unlocking latent capacity of DER.
- Industry and customers must partner to reveal DER's greatest value, both now and into the future.



## Thank you

