



# WGV | GEN Y House: A New Era of Shared Energy

White Gum Valley Estate (WGV) is a modern, sustainable residential development in the City of Fremantle, Western Australia that is an Innovation through Demonstration project.

With more Australians living under strata title, the 100 dwelling medium density precinct features cutting edge energy-saving initiatives that reduces resident's living expenses, such as shared solar photovoltaic and storage systems, energy trading between residents and a shared electric vehicle. WGV aims to demonstrate how strata developers can achieve an 80% reduction in grid sourced energy and 70% reduction in mains water consumption through a shared utility governance model which is scalable for national application.

Nestled within WGV is the Gen Y house, a 'living laboratory' showcasing millennial inspired sustainable living.

**"Before we were just using energy and water unconsciously, the ability to track our use means we now consume with awareness"**

*- Gen Y Resident*



White Gum Valley

Location: White Gum Valley Fremantle  
Western Australia

Project: Gen Y House (WGV)

Solution: 9kW Solar + 9kWh Powercore  
(BYD version) energy storage

Commissioned: September 2017

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## BALANCE SOLUTION

Balance worked closely with the Gen Y house project developers and stakeholders to ensure major energy efficiency measures could be implemented. This included;

- Shared roof top 9kW PV solar system
- BYD Distributed Energy Storage System (DESS) – LiFePO4 battery technology
- Balance’s in the cloud live Power Monitoring Expert (PME) Dashboard, showing individual apartments their energy and water use, improving efficiencies.
- Peer to Peer energy trading capabilities for strata setting
- Shared Electric Vehicle (EV), on site charging station and grid integration

## RESULTS

The Gen Y house has is now recognized Australian wide as a benchmark of sustainable living. The energy sharing and storage platform has instigated the launch of PowerLedger, a Blockchain peer to peer energy trading platform.

- ✓ Tenants have 24/7 clarity of their gas, electricity & water usage that enables them to reduce and/or change their behaviors.
- ✓ Significant reduction in reliance from utility based resources
- ✓ Platform to capture data that will be used by Curtin University



Gen Y House was the first Balance Energy installment within the WGV precinct. Balance’s Energy Solution has now been applied to SHAC and Evermore apartments.

“There is a real sense of pride in the Fremantle community that there is a development of this quality and that Fremantle is showing national leadership in terms of what a sustainable community can look like”

- Mayor Brad Pettitt, City of Fremantle

Example of Balance’s Energy Topography at Gen Y House (WGV)

