



Smart Energy Future Expo – Apartment Blocks

Wattblock Overview

Wattblock has assisted over 1,000 residential strata schemes with energy reports

We've also project managed the energy upgrade of 40 apartment blocks e.g. LED, solar, hot water

We are a My Green Apartments vendor for North Sydney Council, assisting 13 residential strata buildings with LED and electric vehicle preparation

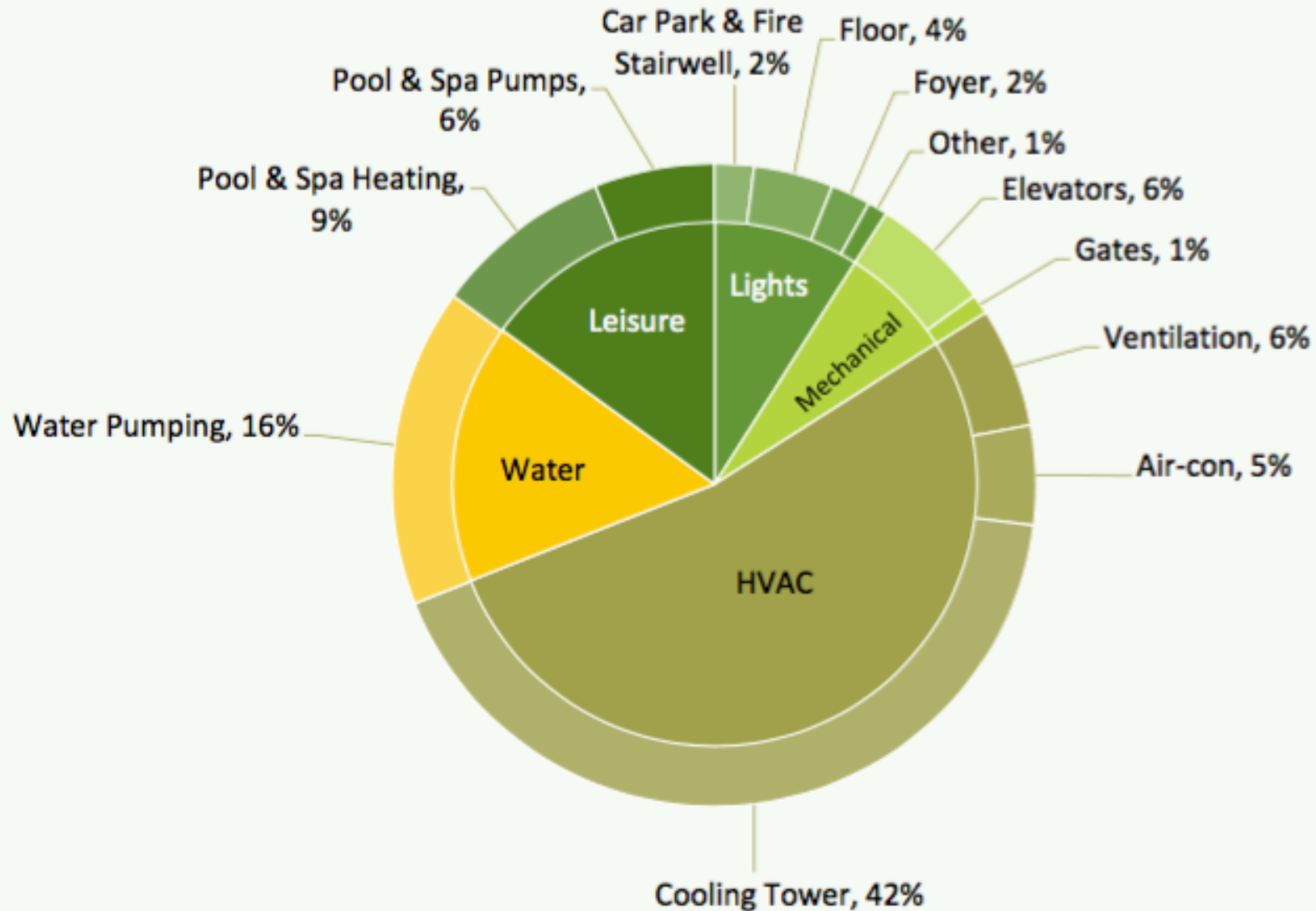


Apartment Blocks we've assisted in North Sydney



Taking a deeper dive into common area energy

Common area electricity can represent up to 60% of a residential strata's total consumption.



The LED lighting trend – dimmable lights in common areas



The Trend in Carbon Monoxide Ventilation

1. Carbon monoxide ventilation on constant drive is the worst
2. Carbon monoxide ventilation fans on timers is better
3. Carbon monoxide ventilation systems with CO sensors and variable speed drives is even better
4. Carbon monoxide jet vent systems (think harbour tunnel) are coming to strata buildings soon.



CO ventilation on CO Sensor



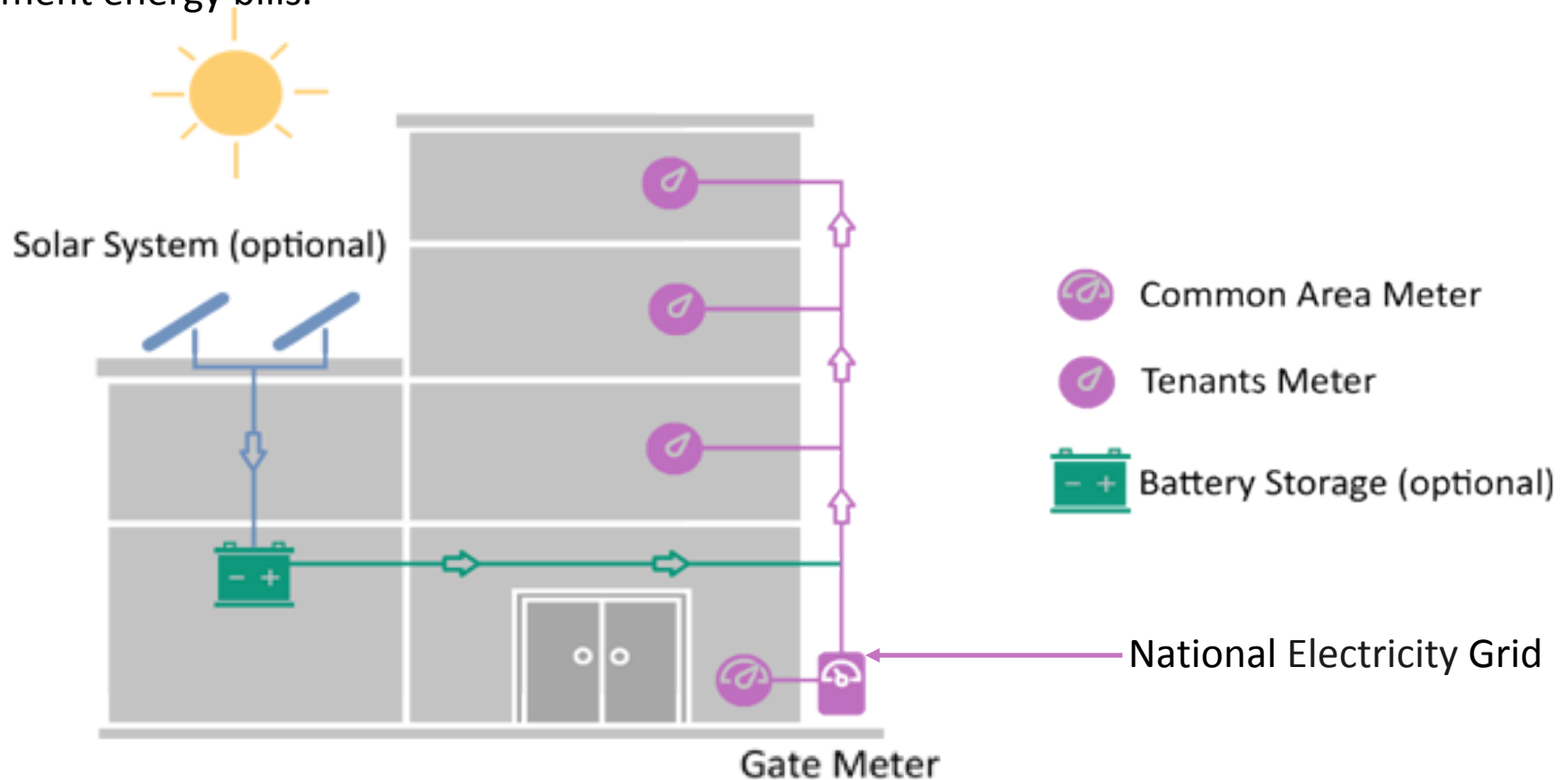
CO 'Jet vent' systems

What is an Embedded Electrical Network?

An embedded network is formed when a **gate** meter is placed between meters of multiple customers in an apartment block and the poles and wires that form part of the national grid.

Over 300 residential strata buildings have implemented embedded electrical networks.

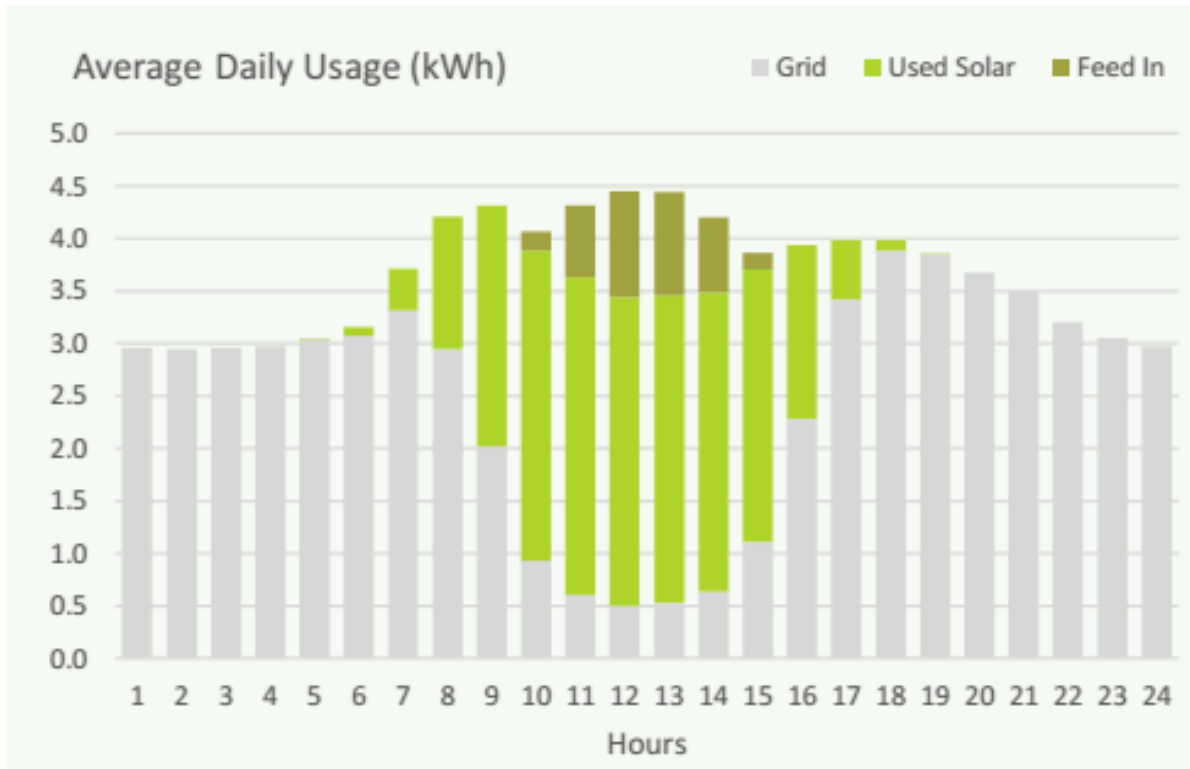
Allows the residents to 'bulk buy' electricity together and get up to 30% discount on their internal apartment energy bills.



Solar Photovoltaic (PV)

Two factors need to be considered when sizing solar for a strata building.

The Load Profile of the building and the available roofspace. Either of these can be the limiting factor for designing the right-sized solar system.



Batteries

Batteries may or may not be suitable for the common areas of residential strata schemes in 2018.

- How large is your strata scheme?
- Do you have an embedded electrical network operating?



White Gum Valley – Peer to Peer Energy Trading

Whitegum Valley is a Landcorp development near Fremantle.

50% of apartments have solar & battery storage.

Trial site for Peer 2 Peer energy trading system from Powerledger.



Renewable Energy for Heating Water – Sunshine or Air?

Solar thermal hot water heating uses evacuated tubes



Electric heat pump uses air temperature to heat water 'like a reverse refrigerator'



Electric Vehicles

Over next 10 years Electric vehicles are expected to reach 25% of new vehicle sales, meaning an additional 250,000 vehicles on the road in Australia each year. How many electric vehicles can charge in a strata basement before the lifts stop working?



What is NABERS for Apartment Buildings?

- NABERS is the National Australian Built-Environment Rating System
- NABERS for Apartment Buildings is being launched June 5th 2018
- Just like the STAR rating system you see when buying a new fridge, except it covers energy / water consumption paid for by the Owners Corporation



Questions



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