WATTBLOCK ENERGY REPORT

PREMIUM ASSESSMENT

Prepared For: Owners Corporation
1 John Street
Brisbane QLD 4000
Block Type: High Rise
Total Floors: 16 + 4 Parking
Total Units: 82

Estimated 3-STAR NABERS ENERGY RATING

Common Energy: $39,139 p.a. | Apartment Energy: Est. $137,500 p.a. | Water: Est. $42,977 p.a.

FAST PAYBACK OPPORTUNITIES

Wattblock estimates the annual energy costs for your common areas can be reduced by 44% after all fast payback projects.

ESTIMATED COST REDUCTION	ESTIMATED ANNUAL SAVINGS	ESTIMATED PROJECT COSTS	ESTIMATED PAYBACK
44%	$17,331	$35,797	2.1 Years

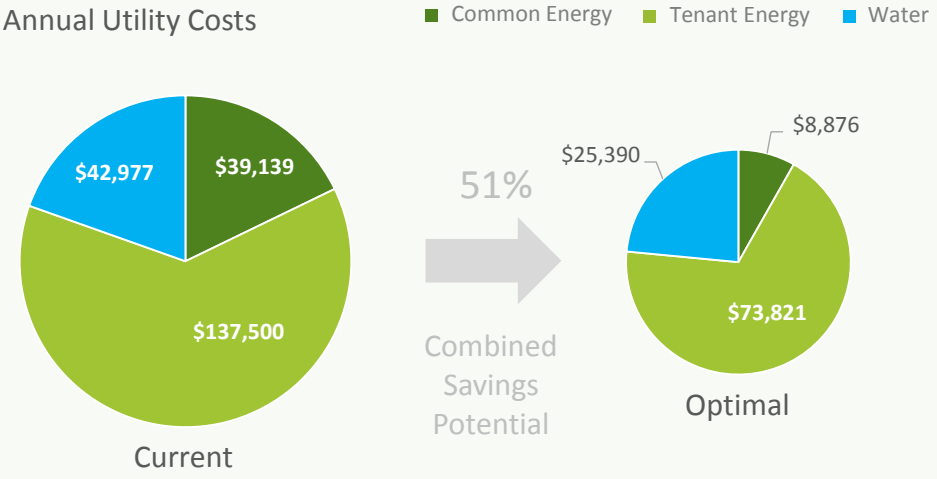
Note: All figures are GST inclusive.

SUSTAINABILITY ROADMAP

Energy efficiency upgrades (e.g. LED lighting) and renewable technologies can lower your energy bill by reducing grid usage.

The energy rate for tenants can be reduced through the use of bulk billing.

Water savings can be achieved by targeting water leakages and efficiency.



LOW HANGING FRUIT

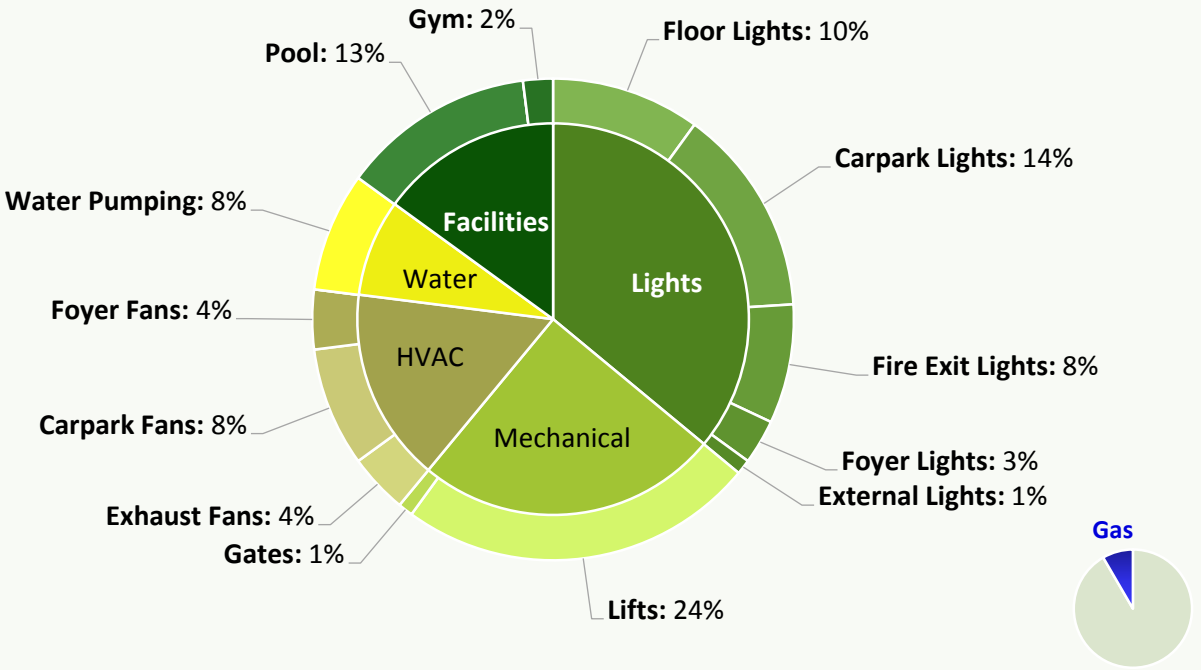
Wattblock recommends the top projects for your block as summarised in the table.

	Projects	Description	Est. Savings	Est. Cost	Est. Payback
1	Carpark Lighting	Replace fluoro tubes in basement carpark with LED.	$3,848	$7,274	1.9 Years
2	Common Area Lighting	Replace common area lighting in foyers, floors, fire escapes and garden with LED.	$8,162	$19,370	2.4 Years
3	Ventilation Fans	Install timers for ventilation fans in garbage room and foyer.	$741	$502	0.7 Years
4	Swimming Pool	Improve the energy efficiency of water pumps.	$609	$1,502	2.5 Years
5	Power Factor Correction	Install a power factor correction unit to improve the efficiency of power usage.	$3,972	$7,150	1.8 Years

COMMON AREA ENERGY CONSUMPTION

Understanding which assets are likely to be contributing to your block's common area energy consumption is the first step in building an energy reduction roadmap.

* Split by energy costs

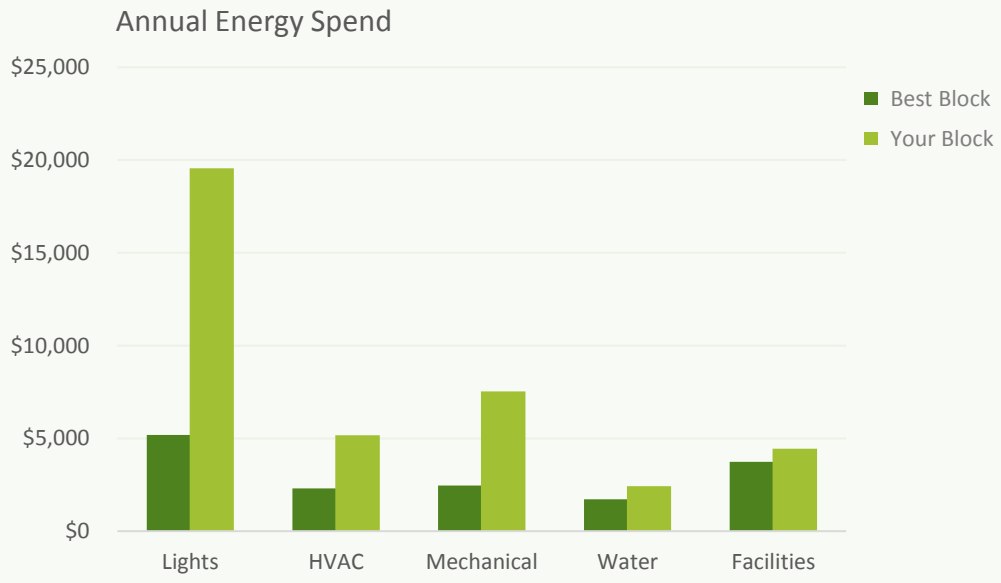


COMMON AREA ENERGY SAVINGS

Total annual common energy cost of $39,139 includes $29,967 in energy billing and $9,172 in light bulb replacements.

Best block compares your block with its optimal future state. This is based on proven savings in other best-in-class buildings.

Note: HVAC stands for Heating, Ventilation and Air Conditioning systems.

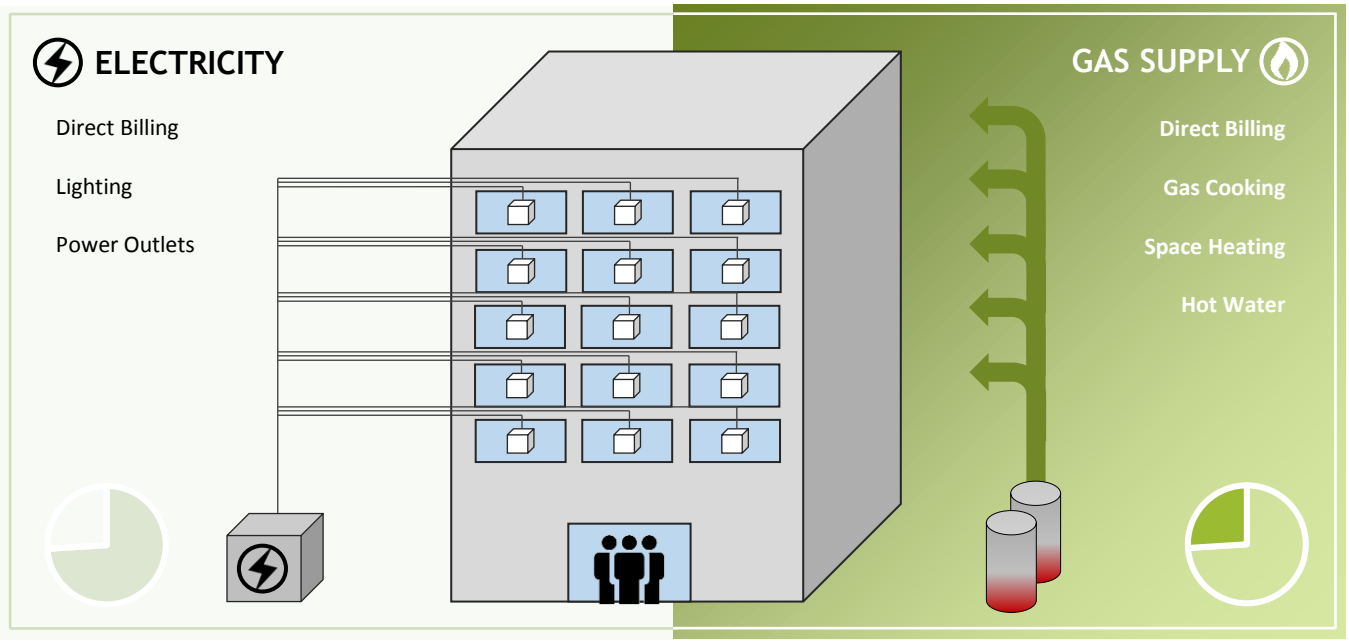


	Best Block	Your Block	Difference	
Lights	$5,192	$19,564	$14,372	✓
HVAC	$2,309	$5,173	$2,864	✓
Mechanical	$2,457	$7,539	$5,082	
Water	$1,716	$2,418	$702	
Facilities	$3,730	$4,445	$715	✓

✓ Low risk and easy upgrade opportunity

INDIVIDUAL APARTMENT ENERGY CONSUMPTION

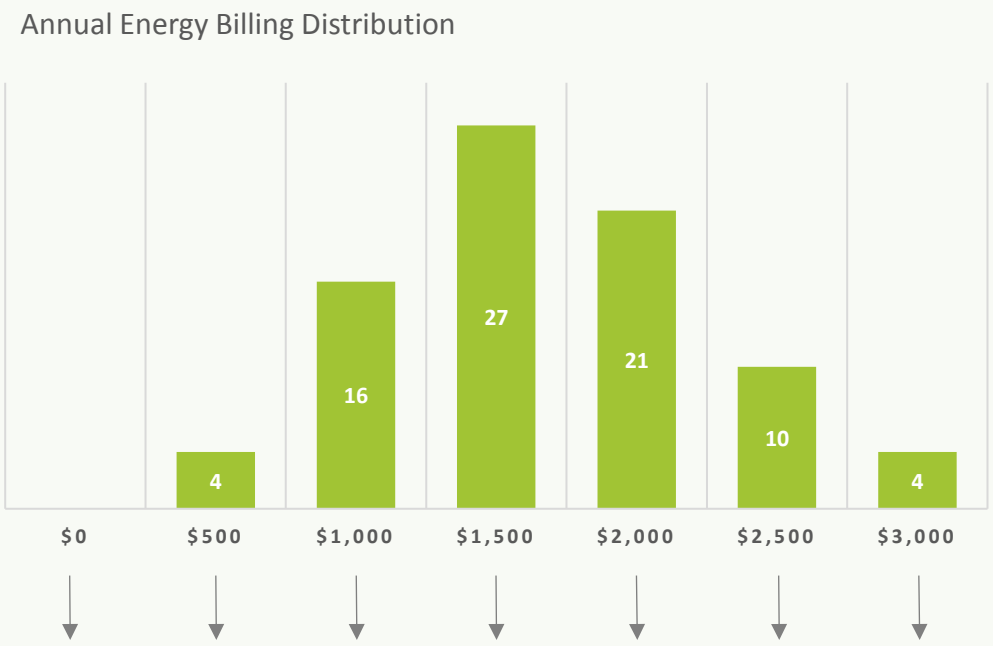
Coordinating electricity purchases across common areas and individual apartments provides mutual benefit.



INDIVIDUAL ENERGY BILLING

Wattblock estimates the annual energy cost for all individual units to be $137,500. This cost is distributed among 82 apartments as follows.

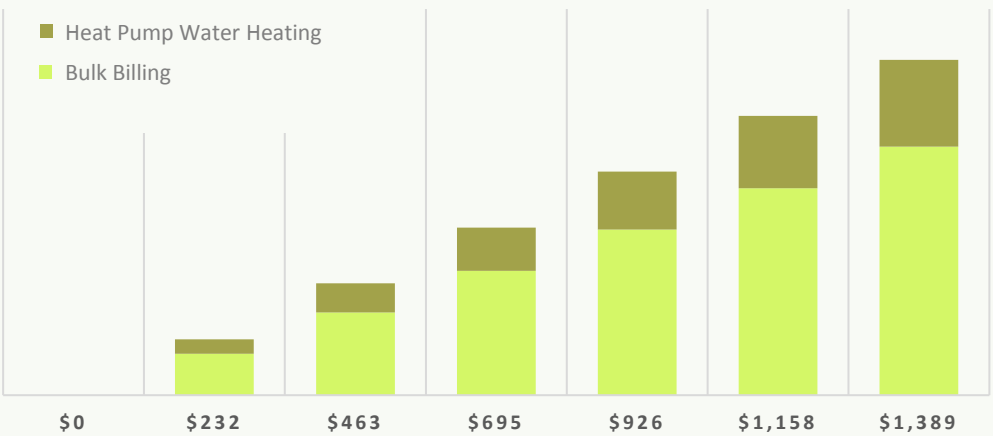
For example, it is estimated that there are 21 apartments which are spending about $2,000 per year on energy usage.



BULK BILLING ANNUAL BENEFIT

The Owners Corporation can secure energy for apartments at lower rates. Savings can be passed on to residents or provide additional income to the Owners Corporation.

For example, an individual unit currently spending $2,000 p.a. could reduce their bill by $926.



WATER USAGE ASSESSMENT

Average water usage is compared against benchmark data to provide an indication of potential water savings opportunities including elimination of base flow leakages.

WATER SAVINGS OPPORTUNITY

Estimated cost saving opportunity includes elimination of water leaks and other water efficiency measures.

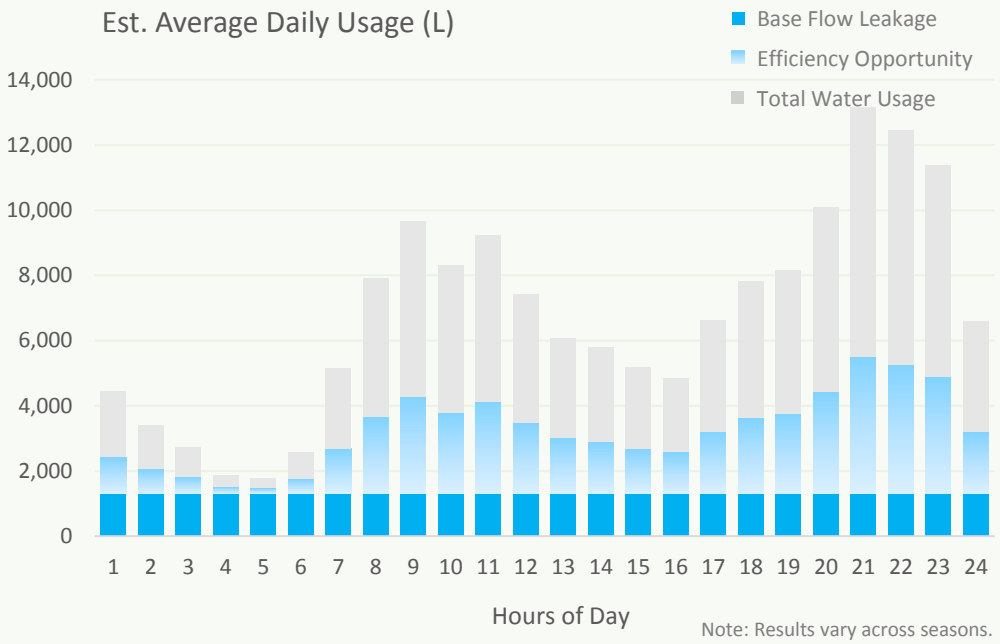
DAILY WATER USAGE PER APARTMENT	ESTIMATED ANNUAL COSTS PER APARTMENT	ESTIMATED ANNUAL SAVINGS OPPORTUNITY	PERCENTAGE SAVINGS OPPORTUNITY
662 L Typical Usage Range	$524 Avg 2.6 Bedrooms	$214	41%

Note: Excludes fixed charges.

DAILY USAGE PROFILE

Analysis shows higher daytime usage with peaks in the morning and evening.

Total savings opportunity of $214 per apartment can be split between $112 of water efficiency gains and $102 of water leak fixes.

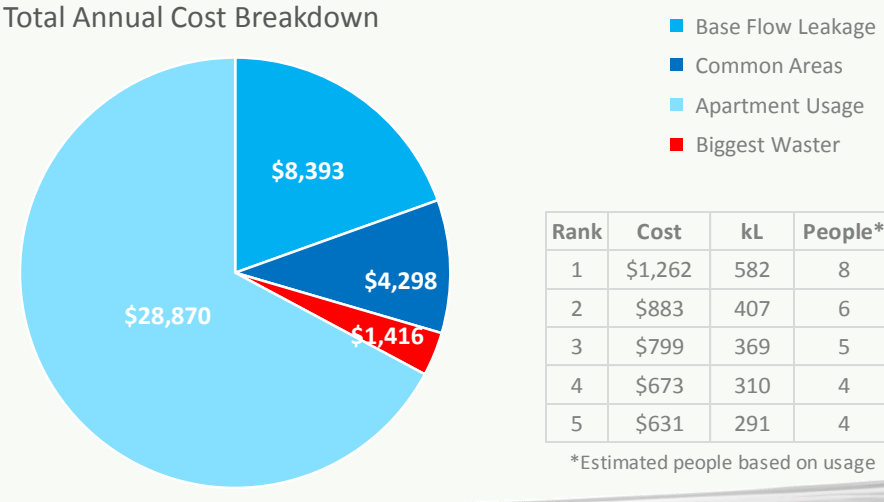


Note: Results vary across seasons.

TOTAL COST BREAKDOWN

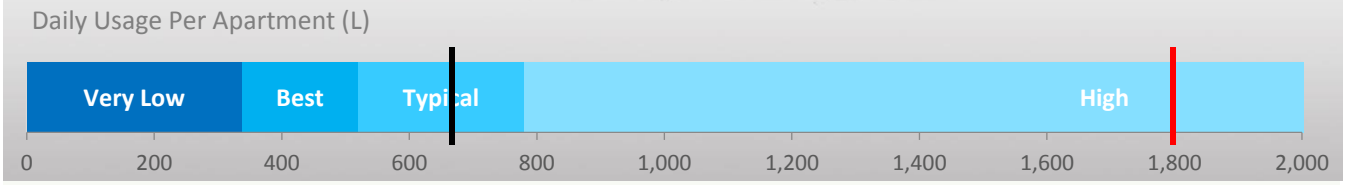
Water savings in common areas like pools and toilets can be achieved through inspection by plumbers and other professionals.

Further savings can be achieved through engaging residents with information and checklists.



Rank	Cost	kL	People*
1	$1,262	582	8
2	$883	407	6
3	$799	369	5
4	$673	310	4
5	$631	291	4

*Estimated people based on usage



SOLAR + BATTERY IMPACT ASSESSMENT

Solar energy viability depends largely on available roof space for solar panels, the electrical usage over the day and across seasons of the year. Adding batteries enables a larger solar system to be installed.

ENERGY SAVINGS OPPORTUNITY

This entire page assumes all energy efficiency projects (e.g. LED lighting) have already been completed.

Add Batteries
Based on Tesla Powerwall

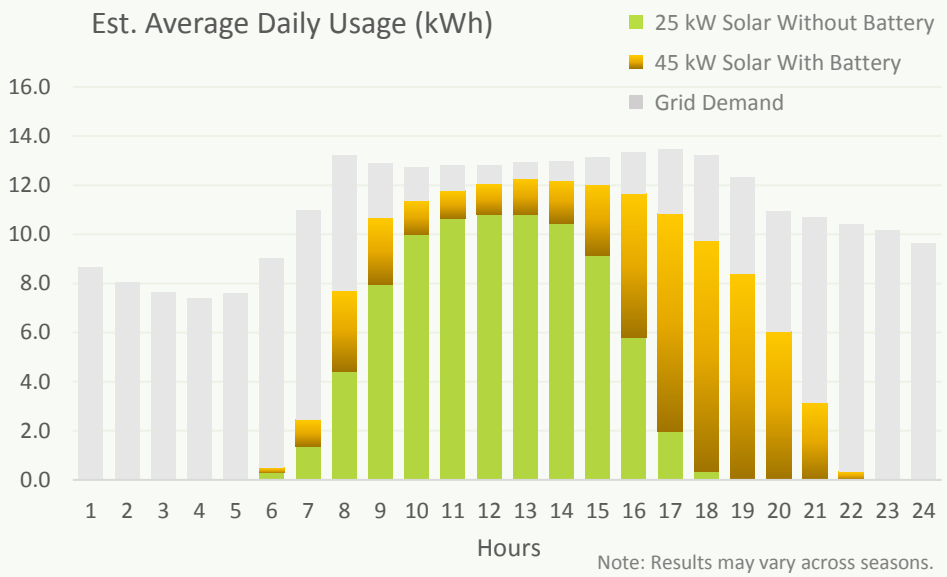
SOLAR SYSTEM SIZE	ESTIMATED ANNUAL COST SAVINGS	ESTIMATED PROJECT COSTS	ESTIMATED PAYBACK
25 kW 100 Solar Panels	$3,743	$30,000	7.2 Years
45 kW 180 Solar Panels	$6,528	$112,913	16.3 Years

Note: Contact Wattblock for alternative system configurations.

LOAD PROFILE ASSESSMENT

Taking into account the available roof space and your common area energy usage, a 25 kW solar energy system is possible.

This can be increased to a 45 kW system with 56 kWh of batteries.



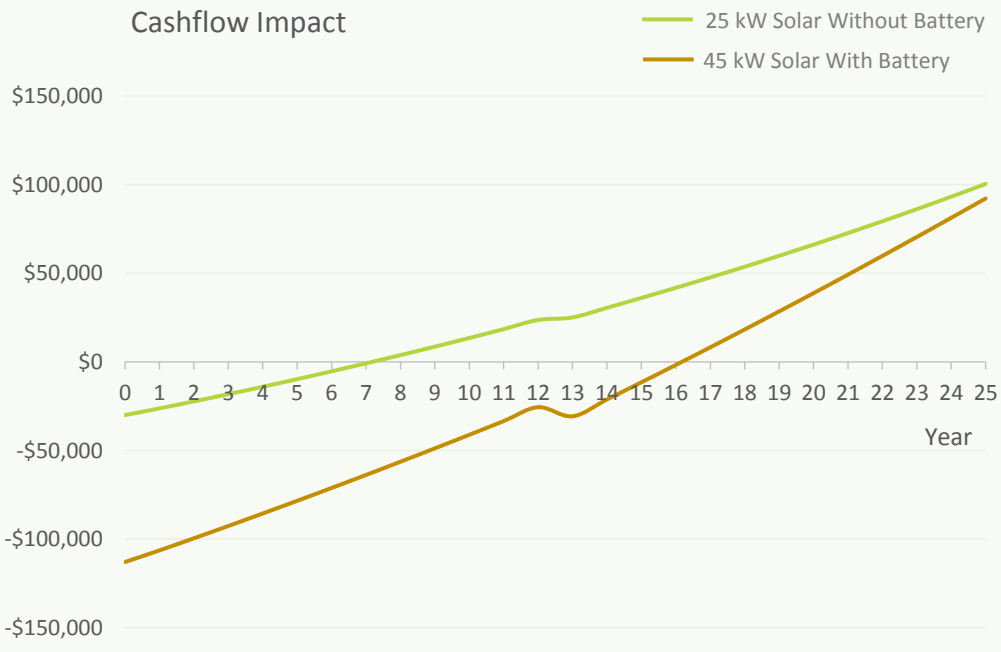
Note: Results may vary across seasons.

SOLAR PAYBACK ASSESSMENT

Upfront purchase of the 25 kW solar energy system without batteries is estimated to cost $30,000 with a 7.2 year payback.

The 45 kW system with 56 kWh of battery is estimated to cost $112,913 with a 16.3 year payback.

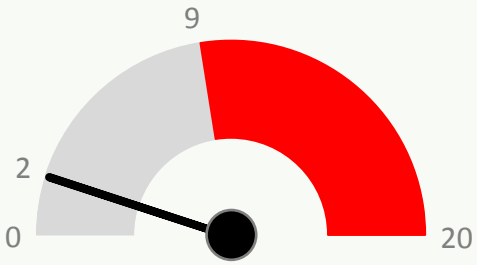
Solar energy suppliers may also offer a no upfront cost installation via a power purchase agreement.



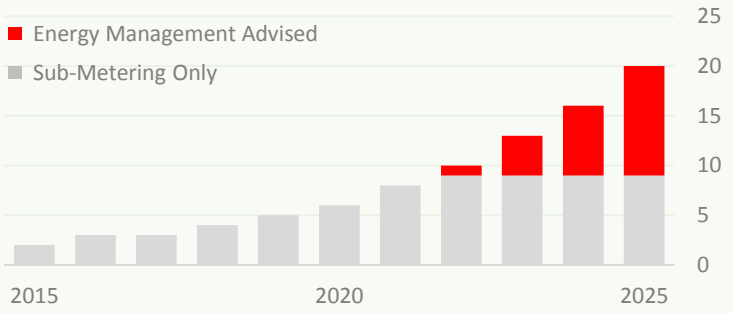
Note: Includes inverter and battery replacement in year 12.

ELECTRIC VEHICLE CHARGING

Understanding how Electric Vehicles (EVs) will affect common area and individual energy costs will help committees in working with current and future EV owners.



Electric Vehicle Count



Electric Vehicle Projection

Wattblock estimates that your building has 2 electric vehicles today and will grow to 20 by the year 2025. Your common area energy supply can support 9 electric vehicle recharge stations before an energy management system will be needed.

Energy management regulates EV recharge to avoid excess demand charges or disrupting other facilities such as lighting and lifts. Number of electric vehicles include hybrids and is based on statistical averages unless an EV sub-metering system is in place.

Hazard Warning

SOLUTION 1
COMMON UNMETERED

This solution is most common where there are power outlets in the carpark. There are no set-up costs but the strata pays for the usage.

WHO PAYS
STRATA

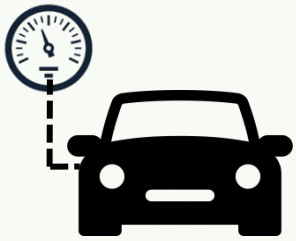
SET-UP COST
$0
Per Electric Vehicle

OPERATING COST
$489 p.a.
Based on 15,500 km p.a.

COST PER 1,000 KM
$31.56
Electric Powered km

RECOMMENDED

SOLUTION 2
COMMON METERED



User pays sub-metering of common power for EV recharge enabling lower cost and helps with power management.

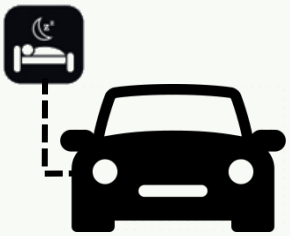
WHO PAYS
OWNER

SET-UP COST
Est. $2,500
Excluding Charging Unit

OPERATING COST
$849 p.a.
Based on 15,500 km p.a.

COST PER 1,000 KM
$31.56
Electric Powered km

SOLUTION 3
PRIVATE CONNECTION



Connecting an EV charger to private power still requires strata approval. This can be costly to set-up and usage costs will be higher as well.

WHO PAYS
OWNER

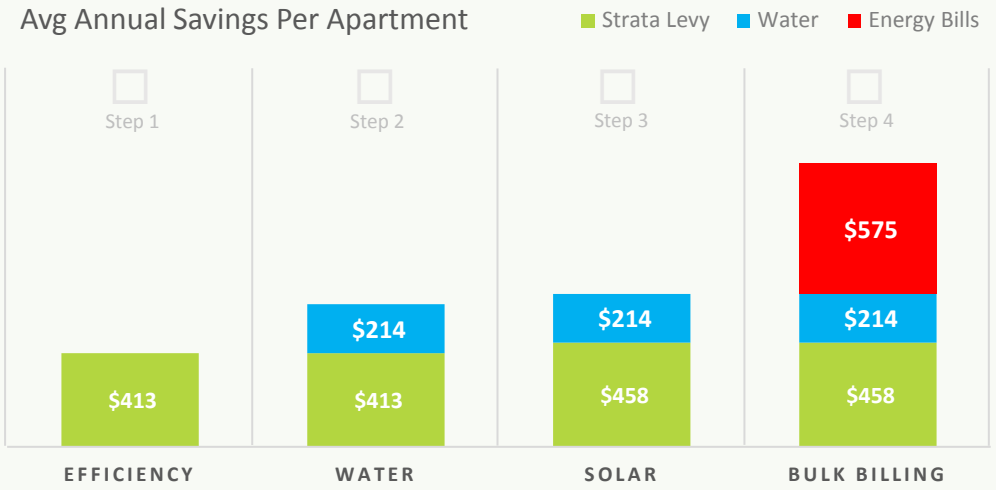
SET-UP COST
Est. $8,000
Excluding Charging Unit

OPERATING COST
$514 p.a.
Based on 15,500 km p.a.

COST PER 1,000 KM
$33.13
Electric Powered km

CUMULATIVE COST REDUCTION

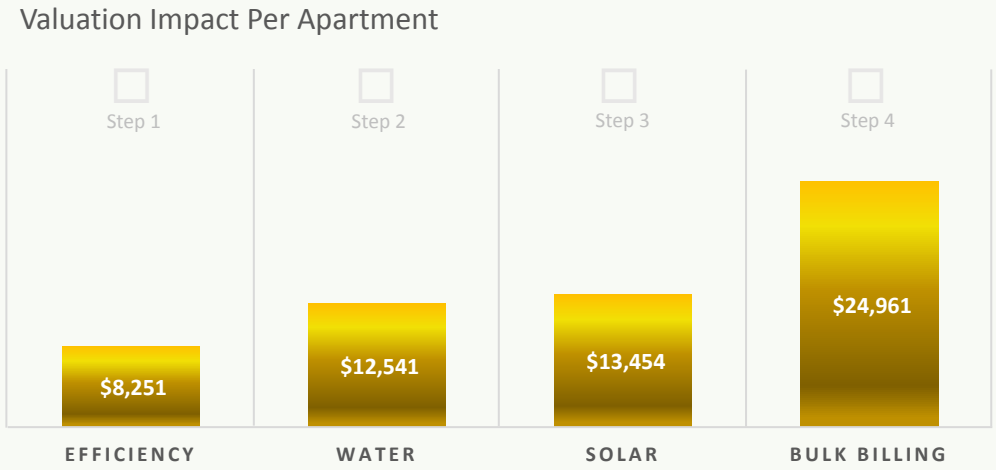
Individual units are estimated to save $458 p.a. on strata levies, $214 p.a. on water bills and $575 p.a. on apartment energy bills after implementation of all identified initiatives.



PROPERTY VALUATION IMPACT

A building with lower operating costs is worth more because net income to property owners is increased.

Total valuation increase represents an average of $24,961 per apartment.



Note: Valuation impact is based on 20x multiple of cash flow.

ENVIRONMENTAL ACHIEVEMENT

Following sustainability initiatives your block will exceed the national carbon reduction target of 5% set for 2020. If every block did this, we would be well on our way to exceeding the target.

PROPORTION OF POPULATION LIVING IN THIS BLOCK TYPE 3.8%	AVERAGE OCCUPANCY RATE PER APARTMENT 2.6	NUMBER OF BLOCK RESIDENTS 213	ENERGY USE PER APARTMENT (MJ / YR) 26,170
CURRENT BLOCK CO_2 EMISSIONS (TONNES/YR) 632	EMISSIONS SAVINGS OPPORTUNITY (TONNES/YR) 106	EQUIVALENT NUMBER OF TREES PLANTED 1,583	NATIONAL CO_2 REDUCTION TARGET 2020 CONTRIBUTION 334%