



# Futureproofing Apartments Expo

14<sup>th</sup> November 2019





## Wattblock Overview



## Success Stories



## NABERS



## Solar on Strata





# Wattblock Overview



# Wattblock Overview

Wattblock has assisted over 1,000 apartment buildings with energy saving reports in the past 5 years.

We also do solar, hot water heat pump and electric vehicle feasibility studies as well as NABERS ratings.

Experience project managing sustainable retrofits in 90 apartment blocks.



# Council assistance for residential strata schemes



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62 apartment  
buildings



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106 apartment  
buildings



---

20 apartment  
buildings



---

10 apartment  
buildings



---

10 apartment  
buildings



Woollahra  
Municipal  
Council

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Implementing North  
Sydney program



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Implementing North  
Sydney program



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10 apartment  
buildings





# Success Stories



# Futureproofing Apartments Wins

**\$0.5m p.a. savings**  
identified in common  
areas across **62 blocks**

**2,600 tonnes p.a. carbon**  
savings identified

Completed upgrade  
projects are already  
saving **218 tonnes**  
carbon p.a.

Assisted over **4,000**  
**apartment dwellers**





# Switched to a better energy tariff



**12% savings**

34 Rangers Road, Cremorne



**11% savings**

10 McKye Street, Waverton



# LED Lighting in Common Area Upgrades

Over **\$35,000 of electricity savings p.a.** have already been achieved in the buildings below.



23 Gerard Street  
Cremorne



221 Ben Boyd Road  
Neutral Bay



34 Rangers Road  
Cremorne



16-18 Harrison Street  
Neutral Bay



10 McKye Street  
Waverton



39 Milson Road  
Cremorne Point



29 Albany Street  
Crows Nest



2 King Street  
Waverton



# Arden Building, St Leonards – Water upgrades



Water pumping costs have been reduced with Variable Speed Drives (VSD's)



Project in progress to replace ageing common area gas hot water with instantaneous gas system



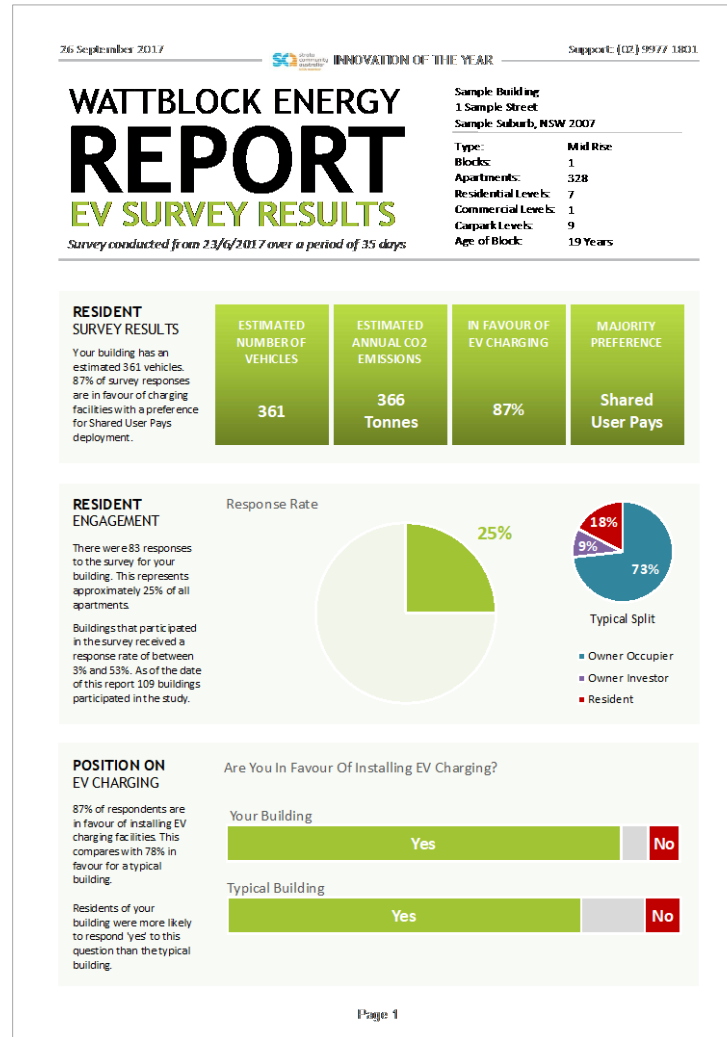
# Wondakiah – Passed an EV charging by-law

Wattblock EV Survey captured intentions in relation to Electric Vehicles

26 responses

62% of residents in favour of EV charging

Hired a strata lawyer and passed an electric vehicle charging by-law



APPENDIX 9

Special By-Law for Electric Vehicle Charging





# NABERS



# What is NABERS for Apartment Buildings?

- NABERS is the National Australian Built-Environment Rating System
- NABERS for Apartment Buildings was launched in June 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



# What is a good NABERS for Apartments star rating?

- NABERS for Apartment Buildings is a **six star rating**, 3 stars is average
- Separate star ratings for energy and water
- 120 apartment buildings have been rated nationally, 6 in North Sydney





# NABERS ratings in North Sydney area

**Cammeray Square**



**Energy Rating: 2 Stars**

**Water Rating: 2.5 Stars**

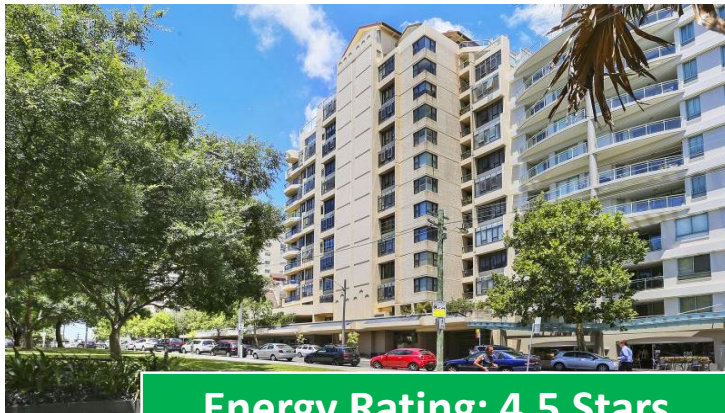
**48 Atchison Street, St Leonards**



**Energy Rating: 4 Stars**

**Water Rating: 3.5 Stars**

**102 Alfred Street, Milsons Point**



**Energy Rating: 4.5 Stars**

**Water Rating: 3.5 Stars**

**15 Atchison Street, St Leonards**



**Energy Rating: 4.5 Stars**

**Water Rating: 4 Stars**



# Solar on Strata



# 10 Hampden Ave Cremorne – Solar System

**Solar System Size:**  
12kW

**Installation Year:** 2012

Reducing the cost of  
common area lighting  
and lift



# 33 Fitzroy St Kirribilli – Solar System

**Solar System Size:**  
17kW

**Installation Year:** 2016

Reducing the cost of  
common area lighting





# 4-8 Kareela Rd Cremorne Point – Solar System

**Solar System Size:**  
20kW

**Installation Year:** 2018

Reducing the cost of  
common area lighting  
and lift



# Register tonight at our stand in Ross Crichton Pavilion



**Brent Clark**

CEO, Wattblock

Ph: (02) 9977 1801

[brent.clark@wattblock.com.au](mailto:brent.clark@wattblock.com.au)

[wattblock.com](http://wattblock.com)

Which best describes the primary contact person (check all that apply) \*

<input type="checkbox"/> Chairperson	<input type="checkbox"/> Lot Owner	<input type="checkbox"/> Strata Manager	<input type="checkbox"/> Consultant
<input type="checkbox"/> Strata Committee Member	<input type="checkbox"/> Resident	<input type="checkbox"/> Facilities Manager	<input type="text" value="Other"/>

How many apartments (lots) in this strata scheme? \*



# Case Study – Wondakiah LED Lighting Upgrade

300 Fluorescent Lights  
upgraded in Carpark &  
Firestairs

**NSW Energy Savings  
Scheme Upfront  
Rebate: ~\$25k**

**Total cost to strata:  
<\$29k**

**Estimated payback: <12  
months**

**Carbon savings: 175  
tonnes p.a.**



**ENERGY  
SAVINGS SCHEME**

# Belvedere, North Sydney- Carshare

199 residential  
apartments

3 carshare spaces and  
cars in visitor carparking  
area

Secure for non-  
residents to use and  
return the vehicles





# Cammeray Square - 11 Amherst Street, Cammeray

Energy Rating: 2 Stars



Water Rating: 2.5 Stars



Potential Projects: **LED lighting in carpark and 20kW of solar would increase energy rating to 5 stars**

# The Abode - 599 Pacific Highway, St Leonards

Energy Rating: 4 Stars



Water Rating: 3.5 Stars



Completed Project: **452 fluorescent tubes replaced with 313 Chamaeleon lights saving 89% on lighting costs and \$110,000 p.a.**



# 48 Atchison Street, St Leonards

Energy Rating: 4 Stars



Water Rating: 3.5 Stars



Past projects: **LED lighting project and Variable Speed Drives**

Current project: **Replace gas hot water boilers with instantaneous gas**

Potential Project: **60kW solar would increase energy rating to 5 stars**

# Harbour Lights - 102 Alfred Street, Milsons Point

Energy Rating: 4.5 Stars



Water Rating: 3.5 Stars



Potential Projects: **Motion sensed LEDs and carbon monoxide sensors for the carpark fans**

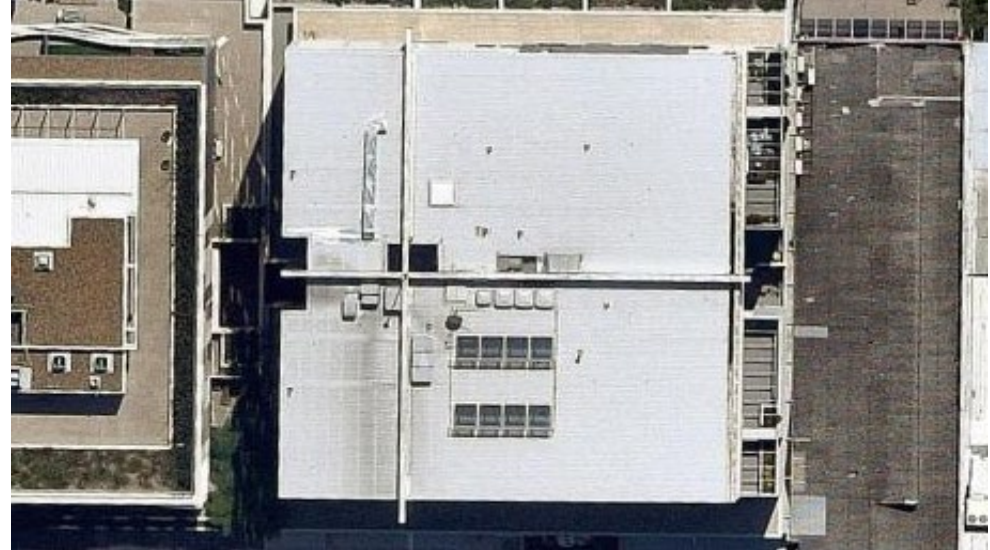


# 15 Atchison Street, St Leonards

Energy Rating: 4.5 Stars



Water Rating: 4 Stars



Key Point: **Completed a large number of environmental upgrades including solar thermal thanks to Paul Mitchell**  
**Already saving 200 tonnes of carbon emissions p.a. equivalent to taking “55 cars off the road”**

Potential Projects: **40kW solar would increase energy rating to 5 stars**

# 15 Atchison St, St Leonards – Solar Thermal Hot Water

**System Type:** Evacuated Tubes

**Installation Year:** 2012

Reducing the cost of gas for hot water heating by \$28,000 per year

**Carbon abatement:** 40 tonnes per year





# Power Factor Correction



## Power Factor Correction Unit

Reducing capacity charges on big energy bills



18 King Street  
Waverton



599 Pacific Highway  
St Leonards



15 Atchison Street  
St Leonards

# 80 Alfred Street, Milsons Point – Embedded Network

Apartments & Common areas have a smart meter network

Bulk buy electricity together to make savings of up to 30%





# Electric Vehicles are here in Australia



# Cammeray Square - Electric Vehicle Charging

Electric Vehicle Charge station installed into basement carpark.

Can be used by residents or non-residents.

