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# Sustainable Housing in Aged Care Facilities

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# Sustainability in Aged Care

- Overview of the Research
- Key Findings
- Issues and Recommendations
- Further Research



# Overview of the Research

- 1. What is the resource use of an Aged Care Facility in Perth, especially as it relates to energy efficiency in the built form
- 2. Is there capacity within the Aged Care Facility to make improvements to their resource use, in line with more general sustainability goals?
- 3. Can the Planning system support increased sustainability through reductions in resource use in the Aged Care sector?

# Research Objective

- To assess the current resource costs the case study presently faces and what capacity exists to reduce resource use and in particular energy and water, using a comparison to other similar sites around Australia.

# The Case Study

- The Bentley SwanCare site is a not-for-profit organisation located in the City of Victoria Park, south east of the city and within 10kms of the Perth CBD.





## Aerial View of Bentley Park site

- 15 hectares of land
- classified within the Town of Victoria Park's local planning scheme as Special Use and the site covered by a Master Plan
- 580 independent living units ranging in size from bedsits, 1 bedroom to 3 bedroom apartments and villas
- there are 283 care beds, (147 in low care and 136 in high care facilities)
- facilities on site including: medical services, supermarket, hair and beauty salon, meeting, social and recreational facilities





## What is sustainability in aged care?

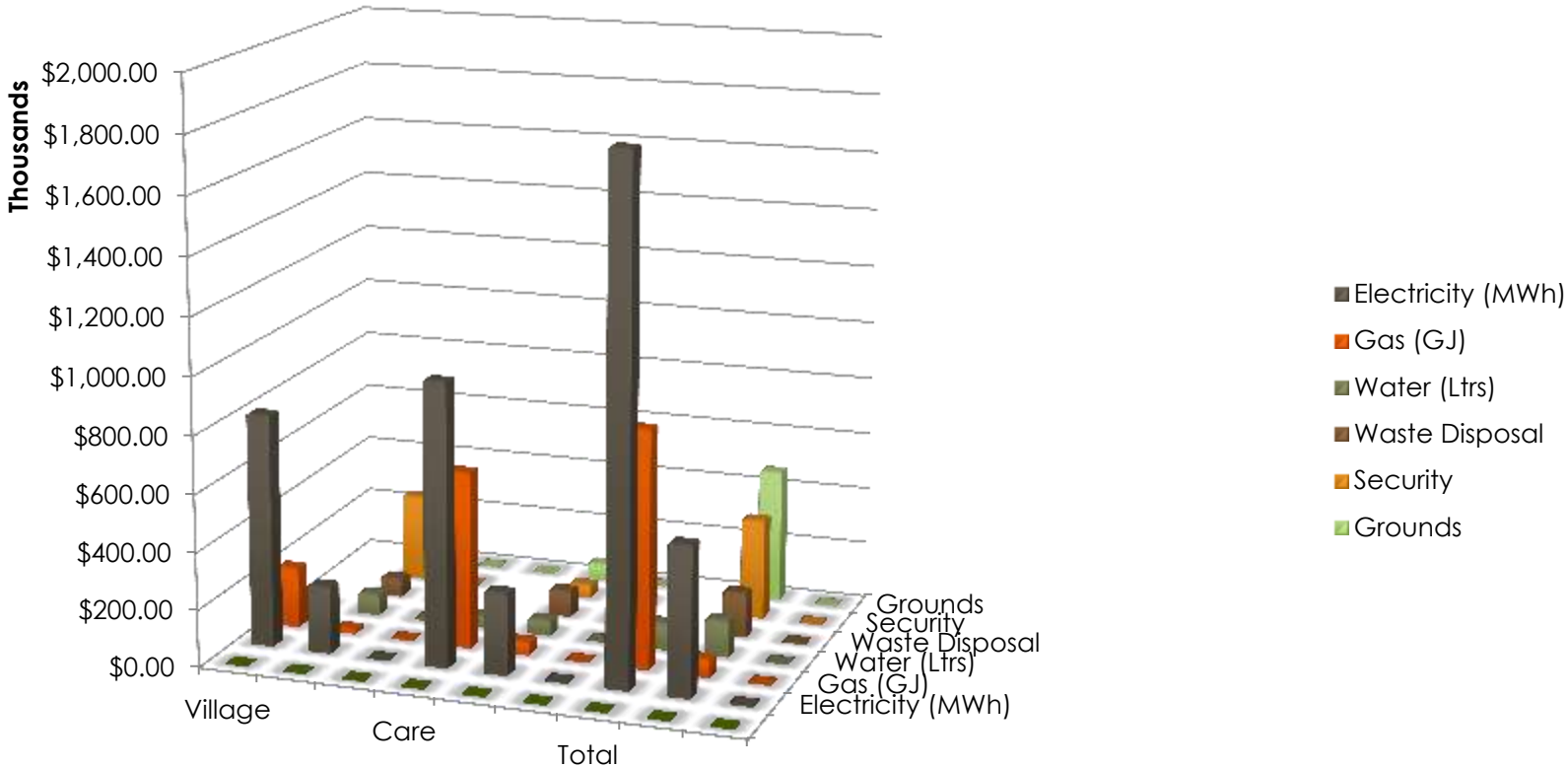
- Energy efficient building design and use
- Energy efficient appliances
- Low water use or reuse
- Consolidation of heating and cooling units
- Behaviour change to minimise resource overuse
- Adjusting temperatures of heating and cooling and hot water
- Energy efficient laundry design and use

# Key Findings

- High care units used significantly more electricity than low-care or independent living units - \$1,027ph/pa vs \$311ph/pa
- Design of the site is prioritised towards cars
- Good connection to public transport
- Design of the site does encourage social interaction
- Design of housing not focused on energy efficiency
- Planning system lacks framework to provide for aged



# High Energy Use



Minimal pedestrian focus



Parking on pedestrian pathways



Modern units



Older units

# Older style apartments





# Modern apartments





High care facility



High quality  
community spaces



Areas for social  
interaction



# Issues and Recommendations

- Lack of focus on sustainability from a strategic level and in the design of the site and buildings
- National Accreditation makes no reference to energy efficiency or sustainable design
- Potential for savings of in excess of \$50kpa
- Aging population increasing and resource costs increasing
- Planning system lacks framework to encourage Aged specific housing
- 30 different funding programs for aged care with eligibility criteria wide ranging

# Solutions

- Consolidation in funding sources to reduce complexity
- Funding assistance for facilities to adopt sustainable practices
- Better integration of needs of aging population into Planning system
- Include tangible rewards for passive design and use in BCA