











# \$1.1M Battery Storage Demonstration Project in Government Buildings

## Selected Sites

Site	Continuous Output Capacity	Storage Capacity
[REDACTED]	[REDACTED]	[REDACTED]
Adelaide High School	100 kW	115 kWh
[REDACTED]	[REDACTED]	[REDACTED]
Adelaide Council Depot (separate contract)	22.5 kW	64 kWh

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# Challenges we have had to work through

- Development Approvals.
- Legal Opinions differ on the need for Development Approval
- SA Government is currently developing a position on battery installation in Class 3 to 9 buildings.
- Metropolitan Fire Service concerns around signage and fire ratings.
- Stakeholder engagement with culturally significant buildings

# Thank You

For Further Information

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# Integrating Clean Energy in SA Government



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Confidentiality-I#-A#



Government of South Australia  
Department of the Premier  
and Cabinet

# \$1.1M Battery Storage Demonstration Project in Government Buildings

## Stage 1 – EOI (mid 2015) Objectives:

- maximize the energy cost savings across the nominated sites
- contribute to Carbon Neutral Adelaide (>15% of GHG from buildings within the Adelaide City Council are attributable to government buildings)
- procure the best quality products with low technical risk
- ensure a quality maintenance regime, integrated FM arrangements
- include a communications component, with high demonstration value for commercial and industrial sectors
- foster economic benefit to South Australia

# \$1.1M Battery Storage Demonstration Project in Government Buildings

## Buildings in Scope

<ul style="list-style-type: none"><li>• Adelaide Railway Station</li></ul>	<ul style="list-style-type: none"><li>• Metro Fire Station</li></ul>
<ul style="list-style-type: none"><li>• Adelaide High School</li></ul>	<ul style="list-style-type: none"><li>• Botanical Gardens Goodman Building</li></ul>
<ul style="list-style-type: none"><li>• Gilles Street Primary School</li></ul>	<ul style="list-style-type: none"><li>• SA Health Hanson Institute</li></ul>
<ul style="list-style-type: none"><li>• North Adelaide Primary School</li></ul>	<ul style="list-style-type: none"><li>• Adelaide City Council Depot (separate contract)</li></ul>
<ul style="list-style-type: none"><li>• Sturt Street Community School</li></ul>	<ul style="list-style-type: none"><li>• TAFE SA – City Campus</li></ul>
<ul style="list-style-type: none"><li>• State Library of SA</li></ul>	<ul style="list-style-type: none"><li>• South Australian Museum</li></ul>
<ul style="list-style-type: none"><li>• Art Gallery of SA</li></ul>	<ul style="list-style-type: none"><li>• Parliament House</li></ul>

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## Stage 2 RFP (February 2016)

- 7 respondents selected to go to RFP from 28 EOI submissions

## Stage 3 – Installation

- Contract awarded to **ZEN Energy** November 2016
- 512.6 kWh of lithium ion batteries across 4 sites
- GreenSync energy management platform
- Potential for use as bundled ‘power plant’
- benefits estimate - \$119,136 Year 1, rising to \$145,872 in Year 6.
- peak demand management through load control, peak shaving
- over 10 years - IRR of 7.5%, NPV of \$107,842

# \$1.1M Battery Storage Demonstration Project in Government Buildings

## Selected Sites

Site	Continuous Output Capacity	Storage Capacity
Art Gallery	22.5 kW	64 kWh
Adelaide High School	100 kW	115 kWh
State Library	100 kW	270 kWh
Adelaide Council Depot (separate contract)	22.5 kW	64 kWh



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