

# ATTACHMENT A

# BUSINESS CASE SUMMARY FOR GREEN SQUARE AQUATIC CENTRE TRIGENERATION

### Attachment A

## **Business Case Summary – Green Square Aquatic Centre Trigeneration**

BUSINESS CASE SUMMARY		
	Cogeneration to service Aquatic Centre & City Facilities	Cogeneration to service Aquatic Centre only
Capital Cost Estimate	Set out in Confidential Attachment B	Set out in Confidential Attachment B
Lifetime Net Present Cost	\$98,000 to \$253,000	\$214,000 to \$331,000
Annual average operational cost savings	\$47,000	\$23,000
Lifetime Carbon Abatement (25 years)	10,300 tonnes CO2-e	7,763 tonnes CO2-e
Contribution to Organisational Carbon Reduction Target	1%	0.8%
Cost of Carbon Abatement (per tonne CO2-e)	\$9 to \$24	\$28 to \$43
GreenPower Cost of Carbon Abatement (per tonne CO2-e)	\$49 per tonne	\$49 per tonne

#### Key Business Case Assumptions

- The Lifetime Net Present Cost is what this project would cost above business as usual over the lifetime of this infrastructure.
- To arrive at this figure a discount rate of 8.5% has been used
- Lower cost in range is direct project cost. Upper cost in range adds in maximum contingency and internal project management charges.
- It is assumed the project lifetime is 25 years.
- The modelling uses 'industry standard' gas price and electricity price forecasts by ACIL Allen.
- Carbon charges have been removed from the energy price forecasts.

#### **Financial Implications**

The Capital Works Budget that was placed on exhibition as part of the Integrated Planning and Reporting documents in May 2014 includes a budget allocation for Green Square Private wire and Trigeneration. The capital cost estimate is set out in Confidential Attachment B. The private wire connection will be funded from the existing budget for electricity connections to the City's buildings. A contingency amount of \$94,500 for the private wire has been set aside from the approved budget.