CASE STUDY: University of St Andrews **Approved by:** David Stutchfield, Energy Officer

HIGHLIGHTS:

Install Date:
August 2011

Test Period:
Aug 11 – Jul 12

Savings:
27%

Museum Building where Tadpole was installed

University of St Andrews is Scotland's first university and the third oldest in the English-speaking world, founded in 1413. Over six centuries it has established a reputation as one of Europe's leading and most distinctive centres for teaching and research.

UNIVERSITY OF ST ANDREWS INITIAL TEST:

University of St Andrews installed a Tadpole device in one of their museum buildings in August 2011 to investigate the impact it would have on energy consumption. The building was chosen so that its energy consumption could be metered and compared with the expected usage based on previous years. Meter readings were taken at the end of each month. This data was used to ensure that the performance of the Tadpole device could be accurately assessed.

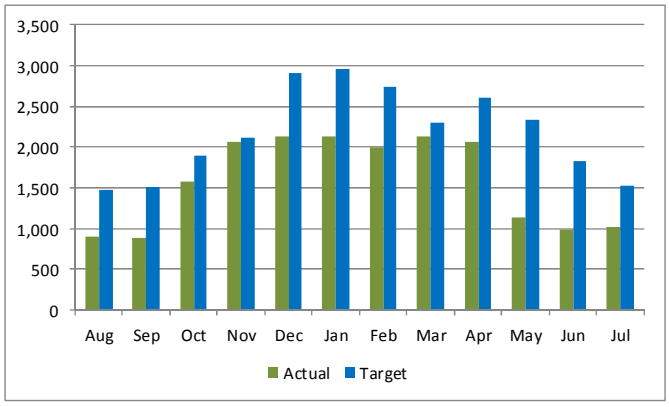
ANALYSIS TECHNIQUES:

The performance of the Tadpole device in the museum building was analysed using the energy consumption data taken at the end of each month. The energy consumption data from previous years was taken to provide an expected or target to give a comparative figure to analyse against.

RESULTS:

The installation of the Tadpole device at the museum building showed an average reduction in energy consumption of 27% over a rolling one year period from Aug 11 to Jul 12.

Month	2011-12 Actual	2011-12 Target	Variation kWh	Variation %
Aug	906	1,478	-571	-38.66
Sep	877	1,506	-629	-41.77
Oct	1,580	1,896	-316	-16.67
Nov	2,065	2,113	-48	-2.26
Dec	2,134	2,914	-780	-26.77
Jan	2,134	2,949	-815	-27.63
Feb	1,996	2,737	-740	-27.06
Mar	2,134	2,296	-162	-7.06
Apr	2,065	2,599	-534	-20.55
May	1,129	2,330	-1,202	-51.56
Jun	988	1,821	-833	-45.73
Jul	1,021	1,529	-508	-33.22
Total	**19,030**	**26,169**	**-7,139**	**-27.3**



Total Savings 27%

TADPOLE Innovation At Its Best