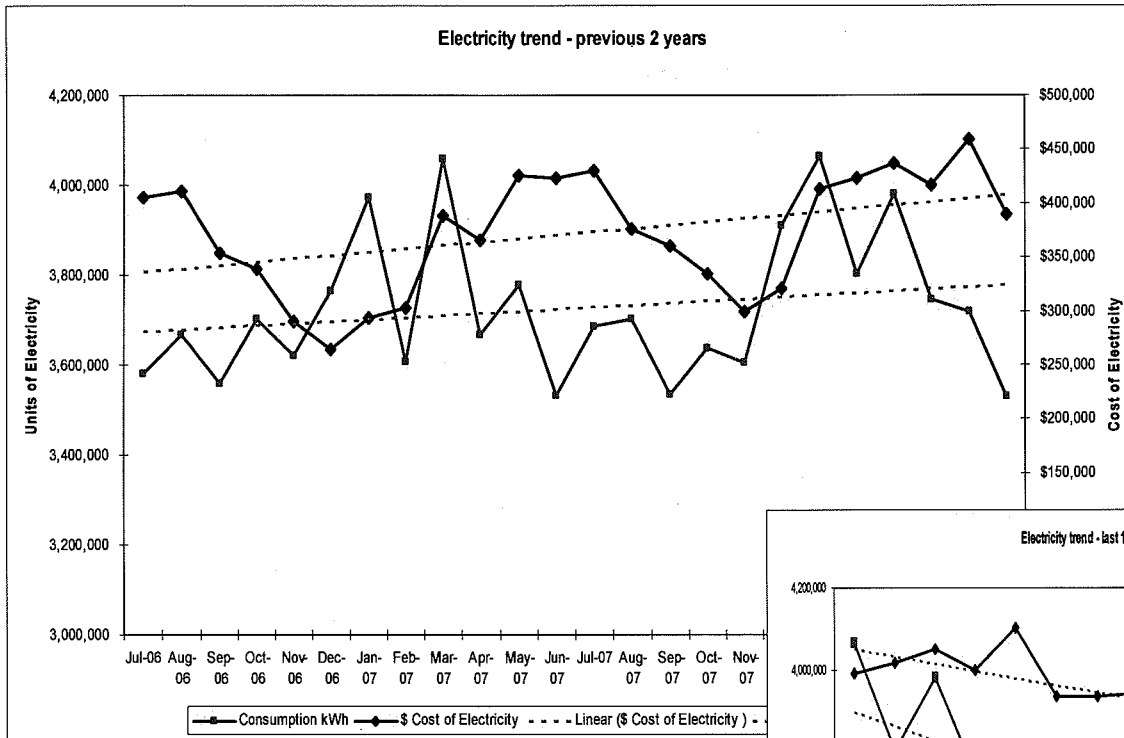


March 2009: Report on SKYCITY's ENERGY STRATEGY

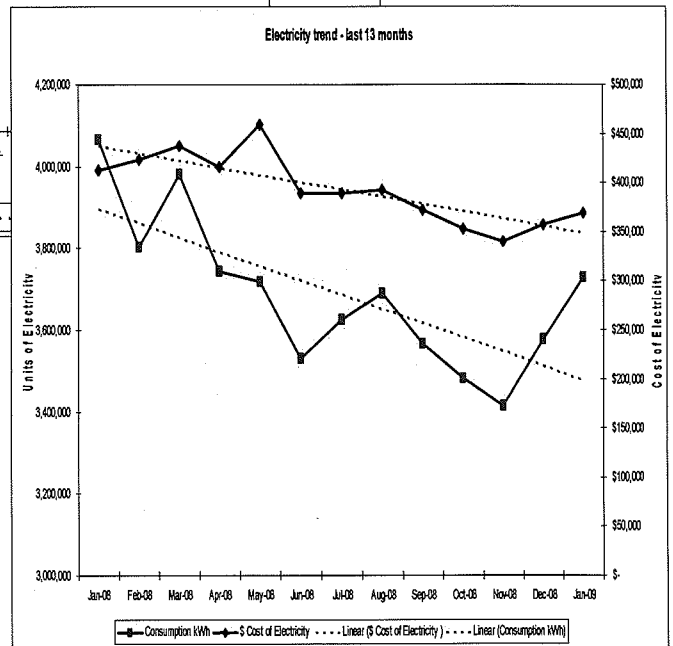
SKYCITY Auckland engaged a full time environmental engineer as Energy and Environment Coordinator in late August 2007, as part of the Environment Strategy pursuant to the Environment Policy of February 2005.

Previously these responsibilities had been ad hoc and secondary to the roles of the assorted supervisors and so results had been a little uncoordinated although much of the low hanging fruit was harvested on Steve Donaghy's watch.



This graphical explanation of the impact of our Energy Strategy is unedited data from our electricity retailers for the period since mid 2006 to end January 2008.

The top graph is FY07 and FY08 and the lower graph is the last 13 months overlapping which largely removes the seasonality.



The appointment of Jonathan Woodbridge Buys with responsibility for environmental engineering saw a project-based technical focus to find and optimise all areas of mechanical and electrical inefficiencies in the built environment serving SKYCITY Auckland.

The first Capital funding was granted in June 2008 although a number of initiatives had been undertaken in Opex by this point already. A major \$1.3M Capex Energy Efficient Lighting project was undertaken to upgrade hotel corridor, car parks and the Sky Tower flood lighting. The major works of this Capex have only under way since November 2008 so their impact is not yet fully apparent, and will have an even greater impact on our environmental measure than is indicated in this short report.

Electricity Commission funding enabled the extra energy engineering that optimised these projects and is gratefully acknowledged. Electricity Commission and EECA funding for Energy Intensive Business have indicated their support remains available to achieve even more energy savings, and this will shape the Energy Strategy for 2009/2010.

Pay back from Energy Projects is an essential part of the Energy Strategy. The energy savings schedule is built upon the premise of sufficient timely investment. Opportunities have been identified for permanent substantial reductions in energy use by upgrading to newer technology that will future-proof this business.

In our FY10 Capex planning we have identified the next big saving is in the lighting of egress routes and back of house, and in re-engineering our cooling plant to reduce our energy costs and our environmental impact at SKYCITY.

All aspects of our successes at SKYCITY Auckland are replicable in similar instances, both within the group and beyond. SKYCITY has always been a business leader, and once again is a leader in environmental sustainability and energy management in the large business sector.

SKYCITY Auckland's Energy Strategy

Our Energy Strategy is broadly described as finding and doing every thing cost effectively and practicably possible to reduce the energy consumption while fully supporting the primary business and improving the operability wherever cost effectively possible.

Our broader Energy and Environment Strategy recognised the greatest impact on the environment will come from reducing our electricity consumption, and upgrading our lighting. The fastest gains possible will be from upgrading from 1997 technology to modern lighting systems and more efficient technology in machinery, motors, gaming machines, lifts, computers, fans and cooling machinery.

While predominantly focusing on electrical energy, natural gas, water and waste are also carefully considered in a holistic approach to the combined annual utilities bill of \$6,500,000 of which electricity accounted around \$4,350,000.

Specifically, lighting technology has improved so radically that we are able to consider upgrading installations that are still within regular write down periods.

The Energy Strategy adopted in November 2007 was a strategy aiming to achieve a quantifiable return on investment –

- by investigating affordable appropriate technology,
- reviewing existing facilities,
- develop projects to turn the good ideas into actions
- with the outcome of improving the Companies sustainability
- and succession of the built environment.
- Side issues identified were:
 - Environmental education,
 - Winning Awards,
 - Engineering planning and design for least whole long term cost of operation,
 - Succession planning of capital plant for business sustainability and
 - Networking to find the best solutions.
- The long run would see Policy developed for Sustainable Procurement and a robust Energy & Environment Policy

The methodology is to:

- Initially investigate all aspects of the Facilities under our care for particular aspects of inefficiency in use of resources which would either carry a large cost penalty or an exaggerated environmental cost.
- Once investigations identified particular opportunities, the solutions would be sought for general and specific upgrades for these.
- Once solutions are identified, some research into similar solutions would be undertaken to try to learn from other engineers,
- together with consultation with the relevant colleagues in the Engineering and Property Service teams,
- thereafter a brief would be developed to achieve the most economical cost effective solution
- that would fulfil the requirements of the client within SKYCITY and all appropriate compliances.
- Once fully researched and clearly cost effective, Capital funding would be sought to proceed.

Considerations always include these imperatives:

- Wherever possible energy and operating cost reductions would be used to achieve paybacks on projects.
- Where the upgrade is clearly unavoidable, the differential cost of the more cost effective whole life solution would be used for the pay back calculation,
- While pay back on non-essential upgrades would have to carry not only the opportunity cost but the write off if applicable; and still be sensible economically.
- All energy projects will be conservatively priced for payback and only hard savings are reported although soft savings will occur simultaneously from improved labour utilisation elsewhere.
- All energy projects will be carried out with an underlying consideration for the environmental impact of the total works: considering the disposal, the embodied energies, the installation implication and especially the disruption costs to company ahead of the start of the project.
- Wherever possible grant funding to improve the desirability of these projects based upon the reduced electrical load will be sought from the appropriate Crown agency.
- All appropriate grant programmes will be reviewed and applications made if applicable.
- Wherever possible all avenues for increasing the good 'green' exposure of the Company will be used and nominations for all suitable significant awards will be filed.
- Internal communication should be pushed to enable broad recognition of the Strategy within the established avenues, including development of the induction courses, skill based training and the company news sheet and the intranet.
- A savings target should be set as a function of the Capital expenditure requested in each financial year.
- Not all savings are from the utilities lines, although all savings reported would be bottom line savings.
- All savings would be measured accumulatively from the base line measurement of the FY07 utilities budget, and for the duration of the life of the technology installed in the project.
- Diminishing returns will eventually morph the Strategy into a care-taking role, but there is a lot to be done before we reach that stage.