

**PRODUCTIVITY COMMISSION INQUIRY INTO ENERGY EFFICIENCY  
SUBMISSION**

NOVEMBER 2004

BY: JEFF THONG, LINCOLNE SCOTT AUSTRALIA PTY LTD

Further to my presentation at the public hearing in Brisbane, I make the following suggestions to increase the take-up of energy efficiency in commercial building applications.

[1]

Users/Energy Customers in hot spots should receive further benefit for auditing their facilities and implementing savings. These benefits could be through reduced network charges to the Customer, which are normally on-charged from the energy retailer. Audits and implementation from a recognized third-party would verify the course of action taken and be used as credits to claim from the network provider who is the co-beneficiary of the energy efficiency initiatives (audit being one level of credits, implementation a second level of credits). These are financial over and above the rating of an operating building. Eg. ABGR.

Implementation would include items such as better efficiency equipment capex and specifically chilled water storage to allay peak demands as the major component in a commercial building typically located in hot-spots.

[2]

Developers of new facilities could be further incentivised to install energy efficient building features and equipment through

- (i) the plan approval process and
- (ii) reduced head-end charges incurred in connection with energy (and water (in relation to water efficiencies) for that matter).

Seattle, US has a master Architect appointed by the City that reviews buildings during the planning process and part of the approval is his check/meeting with Developer/Designers/Builder.

I'm going back a few years though and that was then Mr Tony Gale, whose presentation I attended.

<http://www.ci.seattle.wa.us/environment/Documents/10-28%20SI%20wrkshp%20notes.DOC>

These milestones would be verified through an existing environmental rating mechanism. Eg. Greenstar.

[3]

De-mystify tariff structures. The tariff structure is actually very transparent but at the same time, the options available are rather confusing to the average Customer. Energy suppliers can spend hours of explaining and documenting the options to a Customer. That time is money and productivity of those personnel.

Singapore has a simple three tier system (LT, HT, EHT).

A medium sized customer typically pays 9 to 13 cents per kWh on average.

This is higher than the 6.4 cents per kWh researched for larger customers placing Australia at the low end internationally. This gives the impression that rates here are cheap but for smaller customers, they are not necessarily so once all charges are factored in. (see chart below)

Singapore Tariffs: <http://www.singaporepower.com.sg/index.html>

Qld Retail Tariffs: [http://www.energy.qld.gov.au/pdf/extra\\_jun30.pdf](http://www.energy.qld.gov.au/pdf/extra_jun30.pdf)

The magnitude of options leads to misunderstanding and apathy towards actual costs and knowing what actual costs are.

### ***Figure***

Simplifying the number of tariff options will highlight true costs without increasing the costs.

# **ENERGY EFFICIENCY**

**PRESENTED TO: THE PRODUCTIVITY COMMISSION**

**PRESENTED BY: JEFF THONG**

**DATE: 17 NOV 04**

**Consulting Engineers**

# Agenda

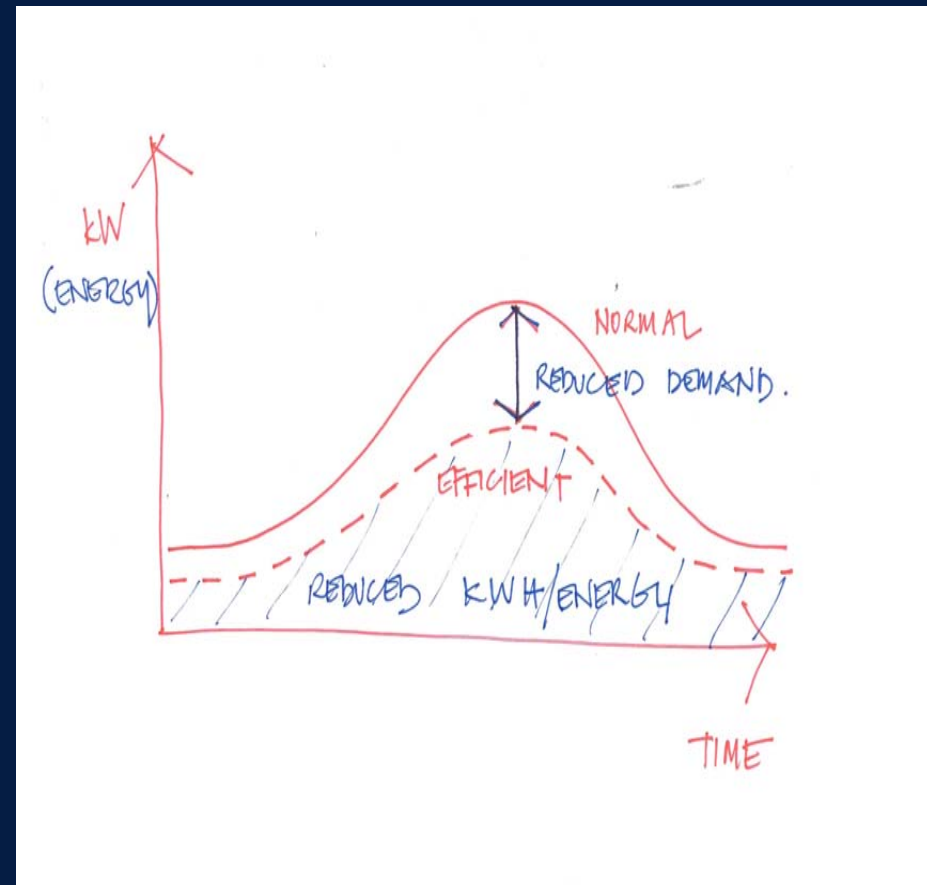
- What does EE do?
- Where does EE apply?
- Parties involved in the purchase of EE
- Barriers
- Incentives
- Targets
- Conclusion

# What does Energy Efficiency do?

- Reduces Operating Costs
- Reduces Maximum Demands
- Reduces Facility Energy Consumption
- Reduces demands on Energy Infrastructure
- Not compromising acceptable conditions

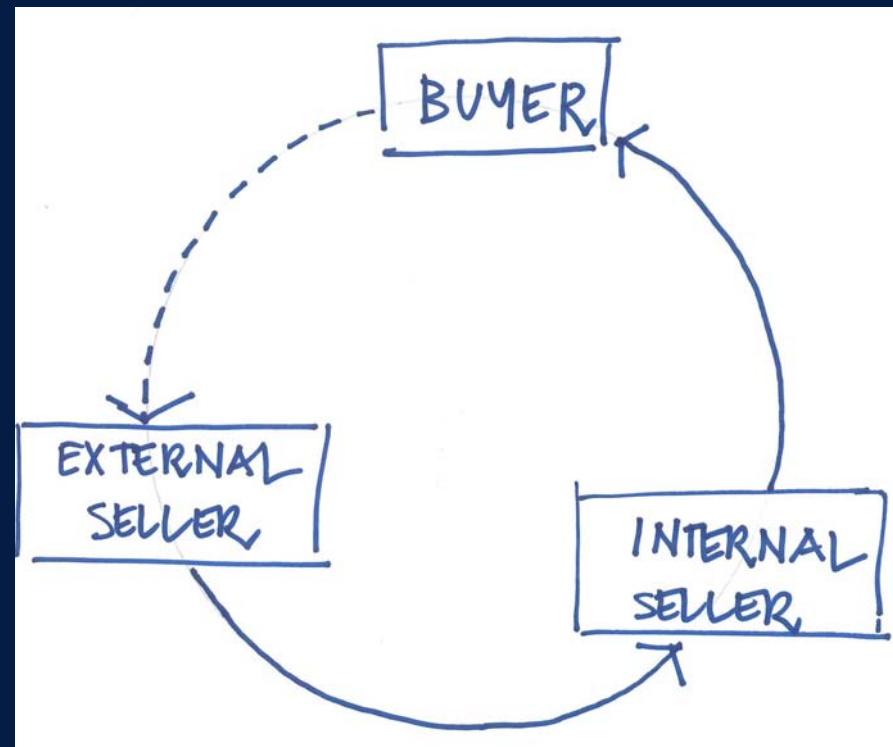
# Where does Energy Efficiency apply?

- Manufacturing
- Regional facilities
- Urban facilities
- Transport
- Energy Production
  
- Most needed in high energy density areas



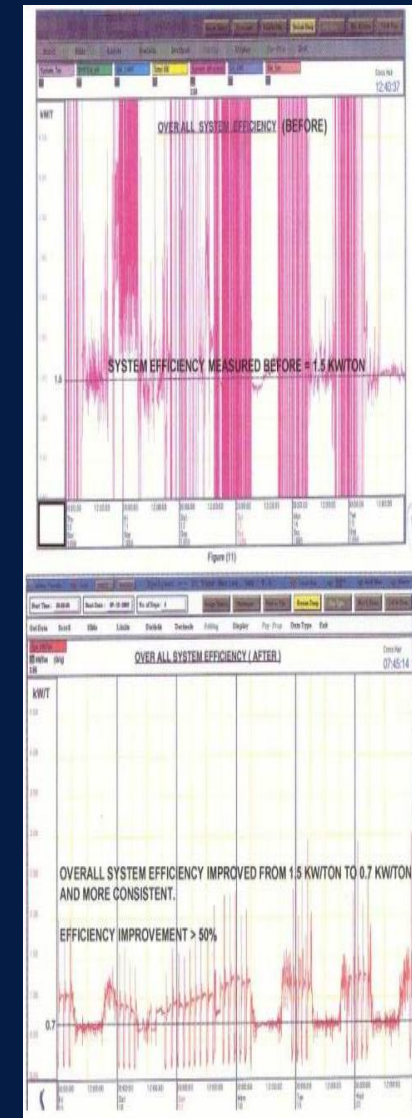
# Parties Involved

- The External Seller
- The Internal Seller
- The Buyer

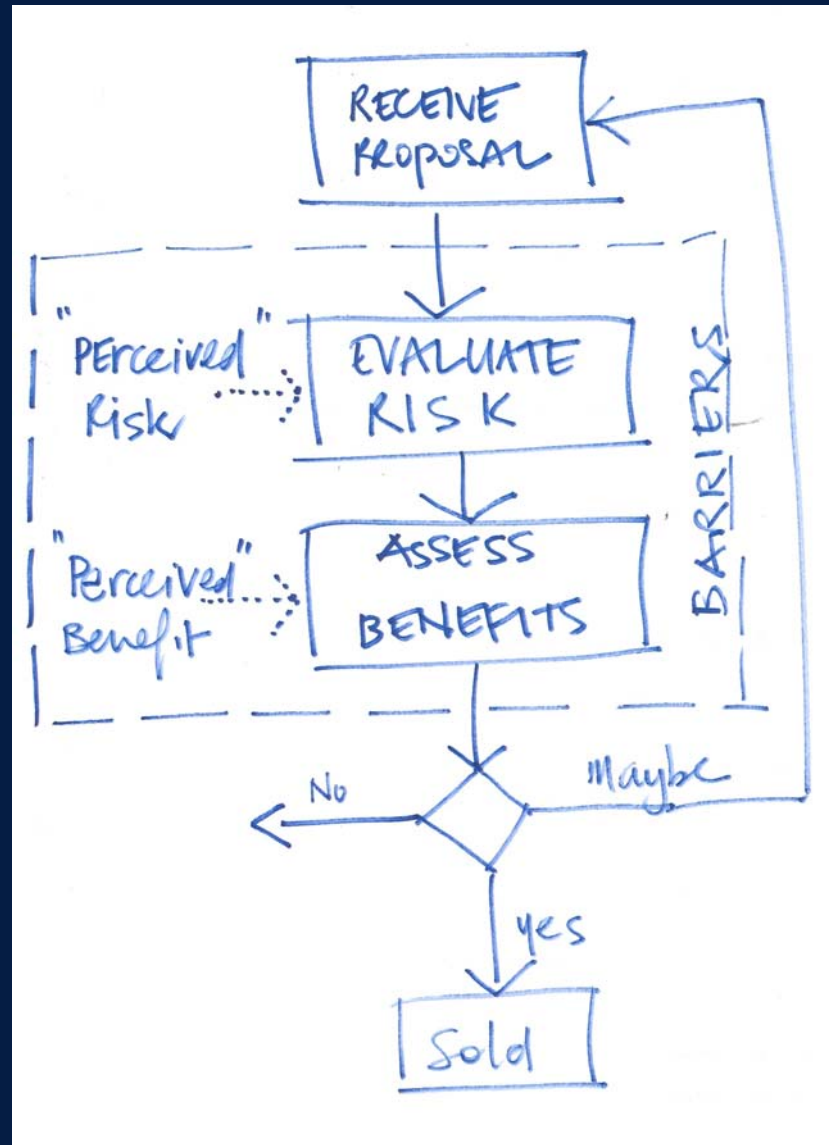




- Who is the buyer?
  - The person signing the cheque
- What does the buyer need?
  - A service or product (VALUE)
- What makes us buy?
  - Perceived Value
- What makes us keep buying?
  - Perceived Performance



# Barriers for the Buyer

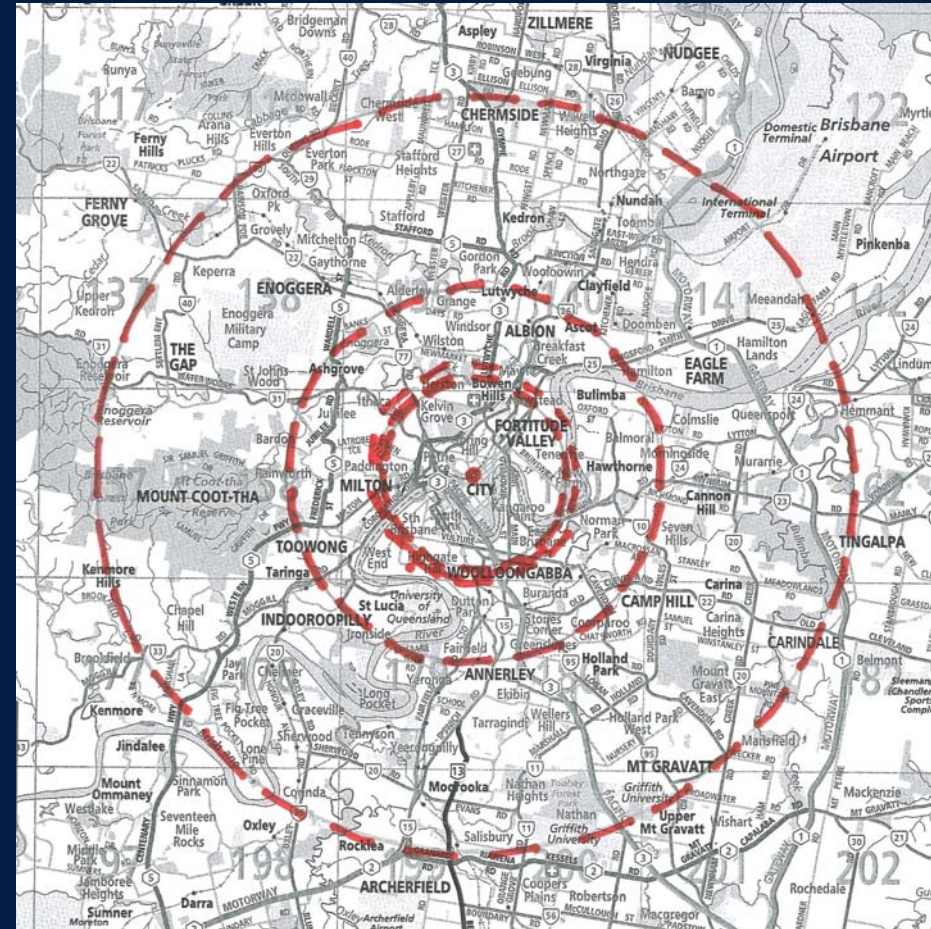


# Incentives?

- Grants – short term
- Ratings Schemes – Greenstar, ABGR, Greenhouse Challenge (Voluntary, corporate citizens)
- Handouts to drive demand??
- What are the market drivers??

# Targets?

- Need to understand the BUYER and high energy density areas and the energy supplies available there
- Hotel, Large Commercial, Groups, Manufacturing?
- Which market sector stands to gain the most? Drives the demand. Do they know they stand to gain the most?



# Conclusion

- Reduce (perceived) Risk by Case Studies/Education (*already well-progressed*)
- Establish the most favourable targets in view of infrastructure benefit and buyer benefit and their situation – Existing/new facilities/location
- Incentives must be market-driven to make a program sustainable (Handouts are short-term)
- Areas of high intensity energy demand need efficiency as part of the jurisdiction's 'VISION' for current and future
- Administer NEET through an existing scheme rather than a new one

**Thank you**