# NSW Greenhouse Gas Abatement Scheme

The Promise of Emissions Reductions

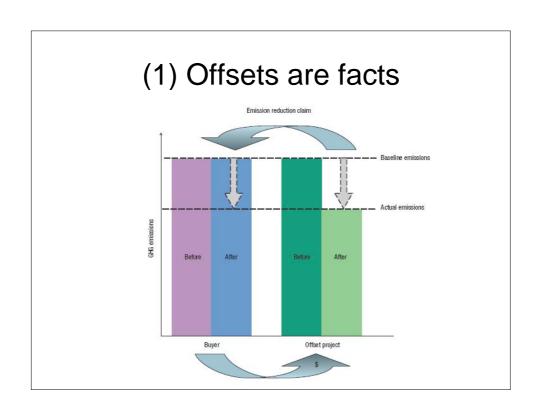
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#### **Regulation Matters**

- 1. Measurement is always partial
  - Regulation always requires judgements
- 2. A socially 'disembedded' market is impossible (Polanyi)
  - Freer Markets, More Rules

# Two interpretations of 'carbon offsetting'

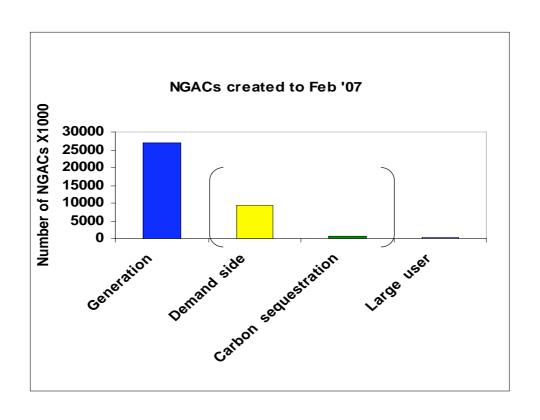


# (2) Offsetting is moral



#### Background: NSW Greenhouse Gas Abatement Scheme 1995-2000

- 1991: 'National' (East Coast) Electricity Market decision
- 1995: Carr elected implements competition agenda, but needs Greens/Conservative support → Voluntary Benchmarks on Retailers
- 2000: EPA Audit of Voluntary Benchmarks: Not working because:
  - Only had to formulate a plan with the minister didn't matter if it missed the benchmark!
    - Non-binding
  - Confusion about eligible activities: what kind of efficiency measures?
  - Complexity of the accounting methodologies: eg. "Electricity Sales Forgone"
  - No Trading between those above and below targets
  - Extreme price pressure upon retailers to sell lots of power, so not many resources devoted to emissions reduction strategies
- 2003: Mandatory Scheme, added trading, reset 'baseline', still lots of problems (See MacGill, Passey, Outhred, 2008)
  - NGAC 'making things the same': forests and lightbulbs





# End-use Efficiency 2006



#### 'Light bulb' Rule

Number of Credits = No. Installations or Activities x Default Emissions Abatement Factor x **Installation Discount Factor** 

- If given away, assumed that 4 of 5
   Compact Fluorescent Light Bulbs would be installed (no empirical basis?)
  - → Pack of lightbulb + showerhead per household = ~\$100 in NGACs at 2006 prices

# 'Light bulb' Newspoll Audit

#### **New "Installation Discount Factor" = 0.4**

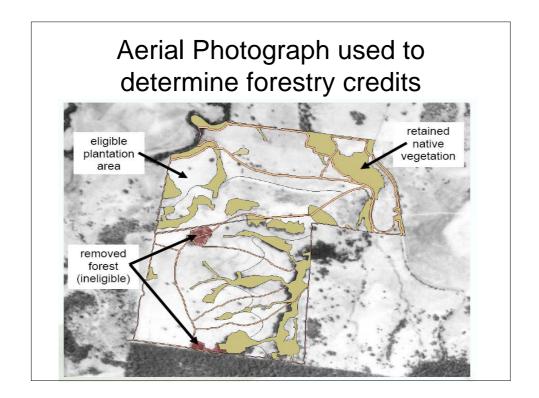
ie. Oops! only 2 in 5 bulbs actually installed.

- =0.46 -Error rate +/-0.07
- -95% confidence

Taking the lower bound and rounding to one decimal place:

-0.46 - 0.07 = 0.39

(source: IPART, 2006)



#### **Regulatory Institutions**

(Mechanism to Standardize Errors)

Physical/Biological Science → Metrology

Normal science (testing, peer review)

+

Market Economies → Central Banking

\*Arbitrage\*

+

National Electricity Market → NEMMCO

Spot Price // Derivatives Markets

=

Carbon Markets!

#### The Promise of Carbon Markets

"More than its rivals, liberalism is grounded upon man's capacity to promise ... any moment of disbelief, any lack of faith in another's promise is a moment that liberalism can contain – indeed, that it invites – but it is also the most fearful moment of the liberal machinery..." (Bell, 1996)