



The Energy Efficiency Riddle – Why Australian Industry Won't Play the Game

Industry accounts for around 67% of all energy used in Australia. It is now widely accepted that the burning of fossil fuels to generate this energy is a major cause of the significantly increased risk of socially and economically disruptive climate change. Growing community and political concern is leading to mounting pressure on industry to act to reduce greenhouse gas emissions.

Of the suite of actions that industry can take to reduce its emissions, improving energy end-use efficiency (i.e., providing more desired service per unit of delivered energy consumed) is the largest, least expensive, most benign, most quickly deployable, least visible, least understood, and most neglected.

For example, the American Council for an Energy Efficient Economy posits that optimising the operation of industrial fans and pumps (which alone account for 25% of industrial electricity consumption in the U.S.), could achieve savings of between 20% and 50% without breaching typical investment return hurdles. Importantly, these savings would come as a result of increasing the efficiency of the *application* of the equipment, rather than increasing the efficiency of the equipment itself (i.e., replacing existing equipment). In addition, the Carbon Trust, a UK government funded body created to help industrial companies identify and implement carbon reduction opportunities, has seen energy savings of between 20% and 30% achieved.

In Australia, a recent Government *Energy White Paper* estimated that savings of between 10% and 30% can be achieved by industrial companies in the short term without damaging productivity or profitability. A mere 5% improvement in energy efficiency would generate annual savings of more than \$1.5 billion.

Yet examples of Australian companies making a significant and sustained commitment to improving their energy efficiency are few and far between. Why?

The answer is “incentives”. Neither external (regulatory) nor internal company incentives are in place to influence managers to seek optimal levels of energy efficiency. Whilst some





might argue that a moral incentive exists in the sense of preserving the environment for succeeding generations, moral incentives have never in the past, nor are they likely now, to significantly influence managers' actions.

Most commentators will agree that the introduction of an external regulatory incentive for energy efficiency is imminent – in the form of a carbon trading regime which sets a cap on the emissions allowed by each company and which in turn will impose a cost on emissions.

But the introduction of internal incentives is something that requires the type of strong leadership that most Australian companies have yet to exhibit. Even in many companies which have publicly committed to emissions and energy efficiency targets, there is almost universally a disconnect between those public commitments and the incentives in place for operating managers (i.e., those who need to drive energy efficiency initiatives). Rather, their incentives are typically linked to measures around cost, quality, quantity, profit and safety.

In fact, it is interesting to juxtapose the incentives typically in place around Safety against the lack of incentives around Energy Efficiency. For Safety, strong external incentives exist in the form of the threat of significant monetary and legal consequences where comprehensive workplace safety legislation is breached. In addition, insurance levies which vary substantially dependent upon safety records, also provide a strong external incentive. As far internal incentives for Safety go, it is rare to find a company where the remuneration of employees at all levels of the organisation is not linked to the achievement of Safety targets. Spend time with almost any company in Australia today and you will see ample evidence of the effect on Safety of the existence of these external and internal incentives - a strong focus on Safety from the Board of Directors all the way down to front-line operators.

Until both external and internal incentives are in place, it is unlikely that we will see much improvement in the Energy Efficiency of Australian industry. Both government and corporate leadership have critical roles to play in ensuring that the appropriate incentives are put in place.