

# Industrial energy efficiency policies and programs – What works?

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# What works?



Insights from industry



Insights from policy  
and programs



Insights from analysis of  
future needs and trends



Beer



# Peas



Gold

# Insights from industry

- We need to better 'value' the contribution that energy efficiency delivers
- Change takes time
- People drive change
- Businesses in the industrial sector are diverse
- What works ...



Measurable energy savings and other business benefits through the successful implementation of cost effective projects

Energy efficiency project life cycle

Project idea

Initial  
cost/benefit  
analysis

Technical  
engineering  
design/specs  
(Feasibility)

Funding

Business case  
development  
& approvals

Procurement

Implementation

Project  
measurement  
& verification

Energy management system at the facility and organisational level

Clear  
business case  
for energy  
management

Policy &  
Strategy

Senior  
management  
support

Staff and  
stakeholder  
engagement  
& skills

Information  
system –  
monitoring,  
feedback and  
KPI's

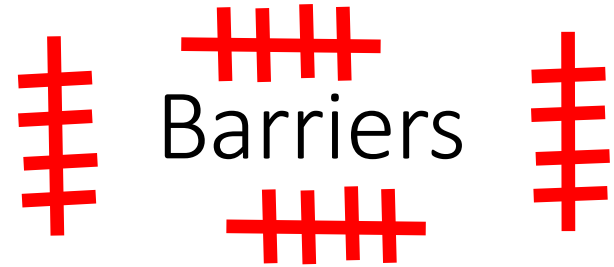
Public  
reporting &  
Recognition

Budget and  
planning  
integration

Management  
system  
monitoring &  
compliance



Imperfect information



Split incentives

Perception of risk

Bounded rationality

Limited skills

Competing business priorities

Lack of funds





# Voluntary commitments and recognition

- Greenhouse challenge



- Proposed 2xEP Challenge Australian Alliance for Energy Productivity



# Information



**The bottom line on energy efficiency**

A joint initiative of Australian, State and Territory Governments

## **Energy Efficiency Information Grants Program**



# Information - Energy audit programs

- NSW Energy Savings Action Plans (ESAP) 2005 – 2012
- Queensland's Smart Energy Savings Program (SESP) 2009 – 2013
- Victorian Environment Protection Authority Environment and Efficiency Resource Plans (EREP) 2008 – 2013



# Energy Management Programs

## **Energy Efficiency** *Opportunities*

2006-14

- Senior leadership and management endorsement
- Involvement of experts and company staff with an influence on energy use
- The collection and analysis of energy-use data to underpin an assessment
- A systematic process to identify and evaluate opportunities to improve energy productivity
- The presentation of outcomes to decision-makers and the board
- Public reporting of assessment outcomes



# Capacity building programs

- Energy Efficiency Best Practice
- Long term training strategy for the development of energy efficiency assessment skills
- OEH Energy Efficiency Training Program



# Funding programs

- Energy Savings Scheme NSW
- Victorian Energy Efficiency Target Scheme
- Clean Energy Finance Corporation
- Clean Technology Investment Program (CTIP)



# Hybrid programs


- Energy Efficient Business, Office of Environment and Heritage NSW





# International programs and capacity building

Promoting Energy Efficiency in Small and Medium  
Sized Enterprises (SMEs) and  
Waste Heat Recovery Measures in India



6<sup>th</sup> workshop for  
Energy Management Action  
Network (EMAK)

ip ee March 2015

IEE  
JAPAN

Source:  
[www.climatechangestrategy.com/emak-ee-india-wshop](http://www.climatechangestrategy.com/emak-ee-india-wshop)

# International programs and capacity building



*Policy  
Pathway*

**Accelerating Energy  
Efficiency in Small and  
Medium-sized Enterprises**

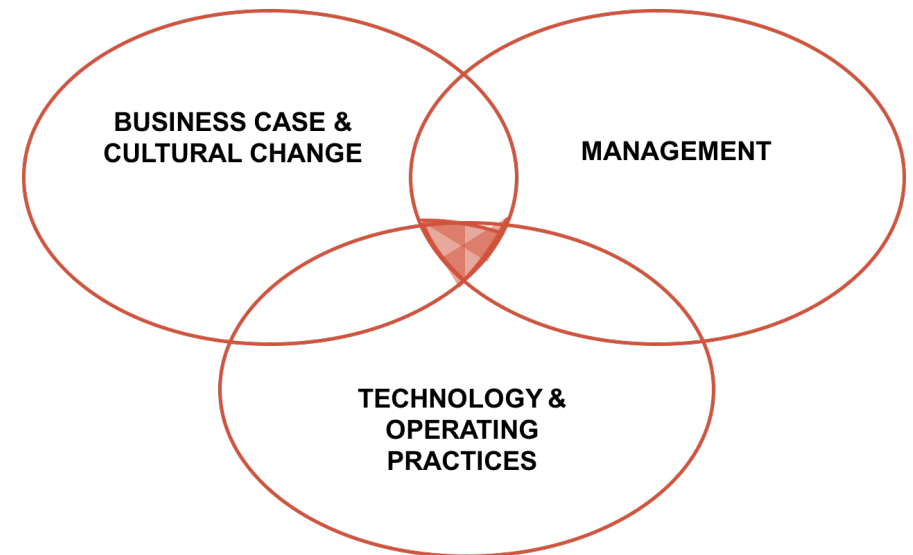


Source: [www.iea.org/workshops/energy-management-action-network-emak-workshop-6.html](http://www.iea.org/workshops/energy-management-action-network-emak-workshop-6.html)



## ENERGY MANAGEMENT IN MINING

*Leading Practice Sustainable Development*



Source: [www.industry.gov.au/resource/Documents/LPSDP/LPSDP-Energy-Management-in-Mining-Handbook.pdf](http://www.industry.gov.au/resource/Documents/LPSDP/LPSDP-Energy-Management-in-Mining-Handbook.pdf)

# Insights from policy and programs

- We have much experience – lets use it
- Industries and the businesses in the industrial sector are diverse – programs require flexibility to drive change where it is needed most
- The way in which policies and programs are developed and implemented can have a significant influence on the outcomes achieved



Insights from analysis of future needs and trends

Supply chain  
energy efficiency



Renewable  
alternatives to gas



Capacity building  
and training



# Insights from analysis of future needs and trends

- Businesses won't necessarily tell us about these (although there may be early movers)
- There *may* be indications from past and current policies and programs
- Financial support may be justified for early movers
- Demonstrating value and how risk can be managed is critical



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