Finance and barriers to
Energy productivity
Energy productivity benefits
Why drive investment?

- Energy market & affordability
- Greenhouse gas reduction
- Consumer Protection
- Health
- Productivity and economy
- Jobs and investment
Getting what you paid for
In Australia more people die from cold than heat

6.5 per cent of deaths vs 3.9 per cent in Sweden

1,200 avoidable deaths p.a.

Gasparrini et al 2015 “Mortality risk attributable to high and low ambient temperature: a multicountry observational study” The Lancet Vol 386 No 9991
Productivity

Staff - AUD$168 million

Resource efficiency

Multi-factoral

EE up 1% >> GDP up 0.1%
Global market size for energy efficiency products ($ / billion)

Source: HSBC & Ecofys, 2014

IEA - $310-$360 billion

320,000 jobs in California
Barriers to energy efficiency
Multiple markets

Energy Supply

Building design and construction

Advisory & Services

Appliances
Optimising Investment

Supply-side

Demand-side
Market Failures

- Supply
  - Information Asymmetry
  - Imperfect Information
  - Bounded Rationality
  - Transaction Costs
  - Access to capital

- Demand
Supply-Side Bias

Supply

Mandated suppliers act for consumers & spread costs

Imperfect Information
Bounded Rationality
Transaction Costs
Access to capital
Imperfect Pricing
Misaligned incentives

Demand
Aggregation
Fix price & regs

Energy Efficiency Council
Finance as a solution?
Barriers to finance?

Fix the other barriers!

Government efficiency programs

CEFC / educate finance sector

Standardise - ICP

Align incentives (e.g. EUAs)

Who should invest in better energy management?
Finance and barriers to
c
Energy productivity