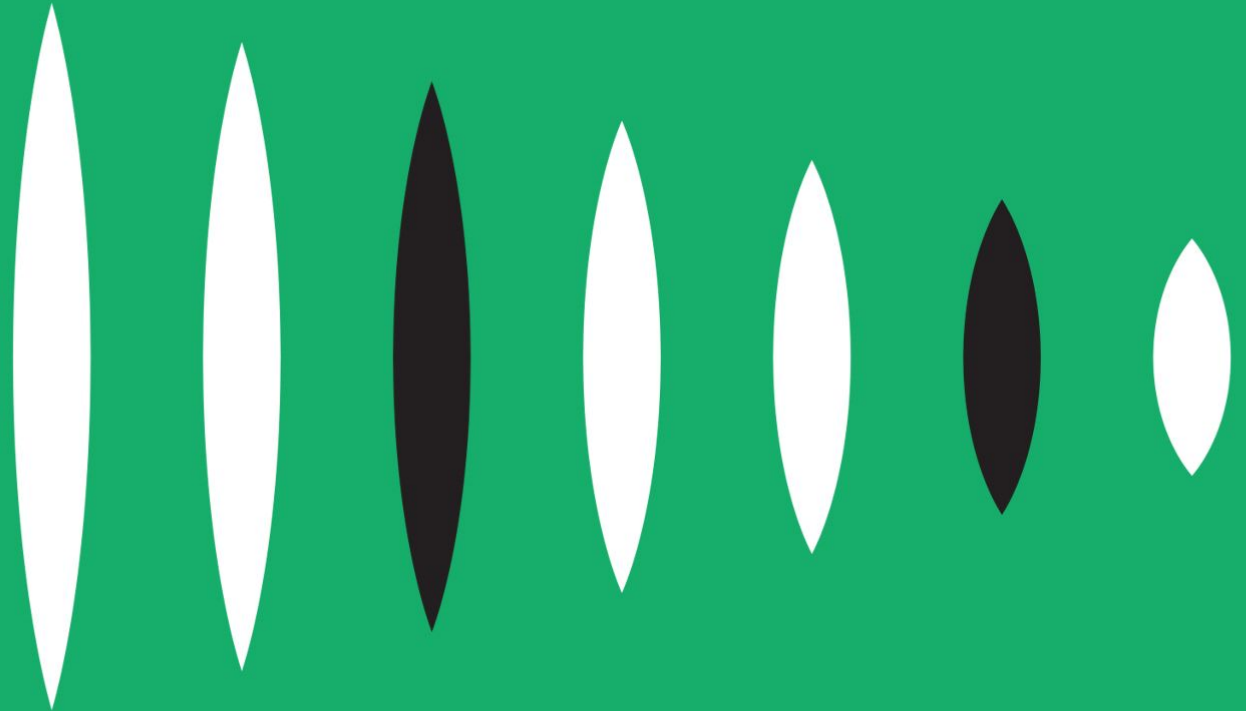


Multiple Impacts of Energy Efficiency

Launch

Canberra

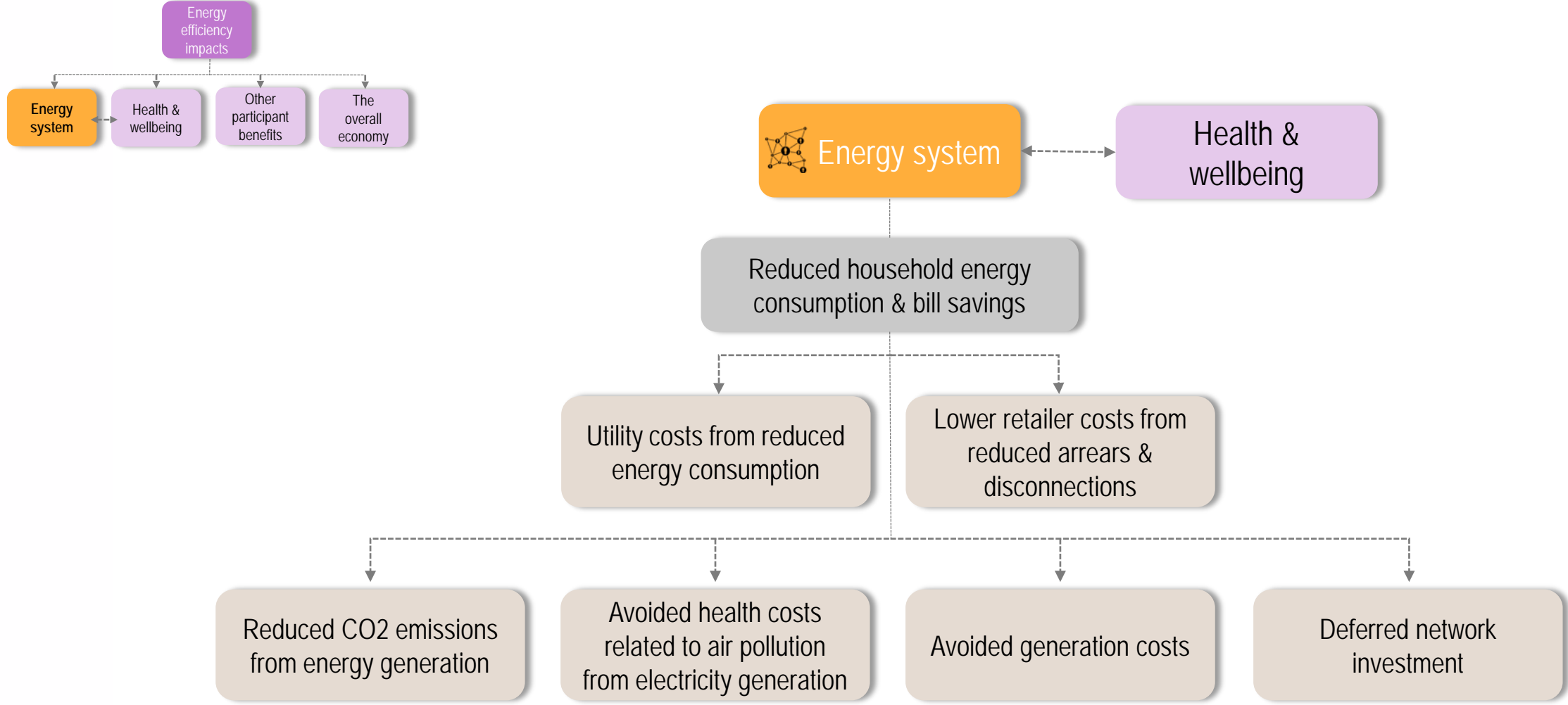
October 2017



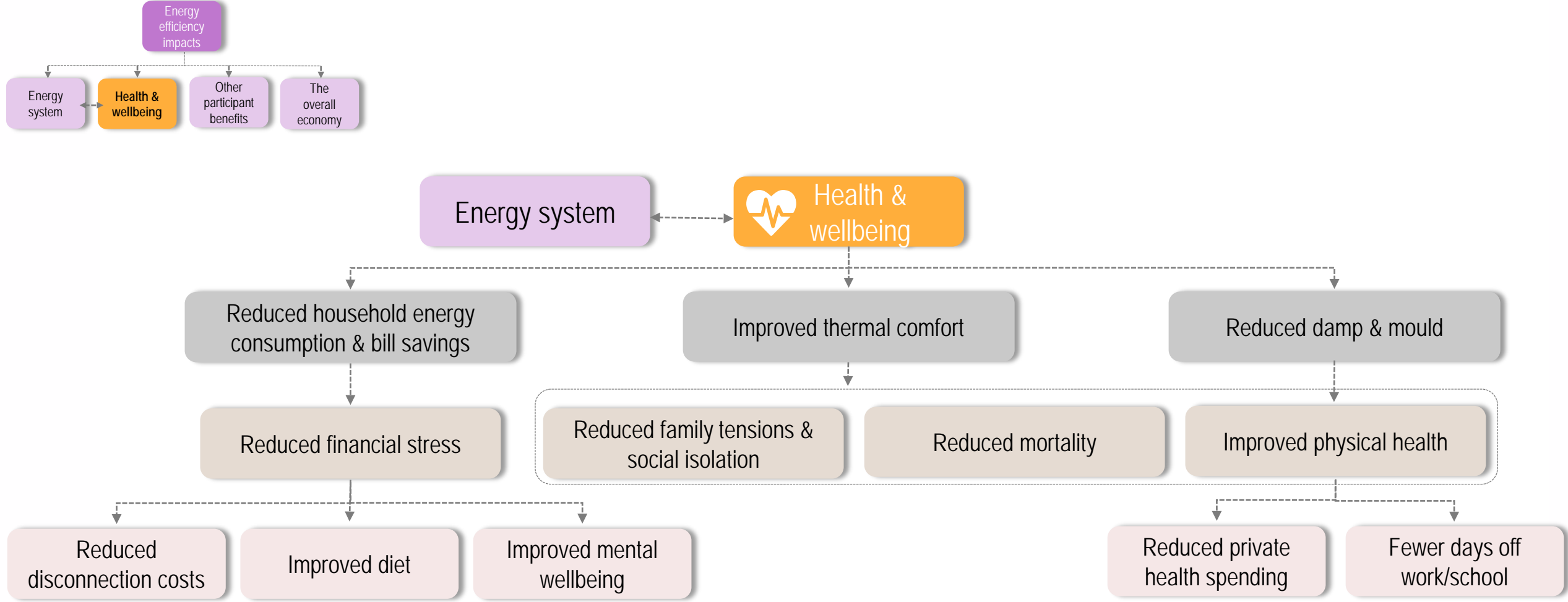
THE MULTIPLE IMPACTS OF ENERGY EFFICIENCY

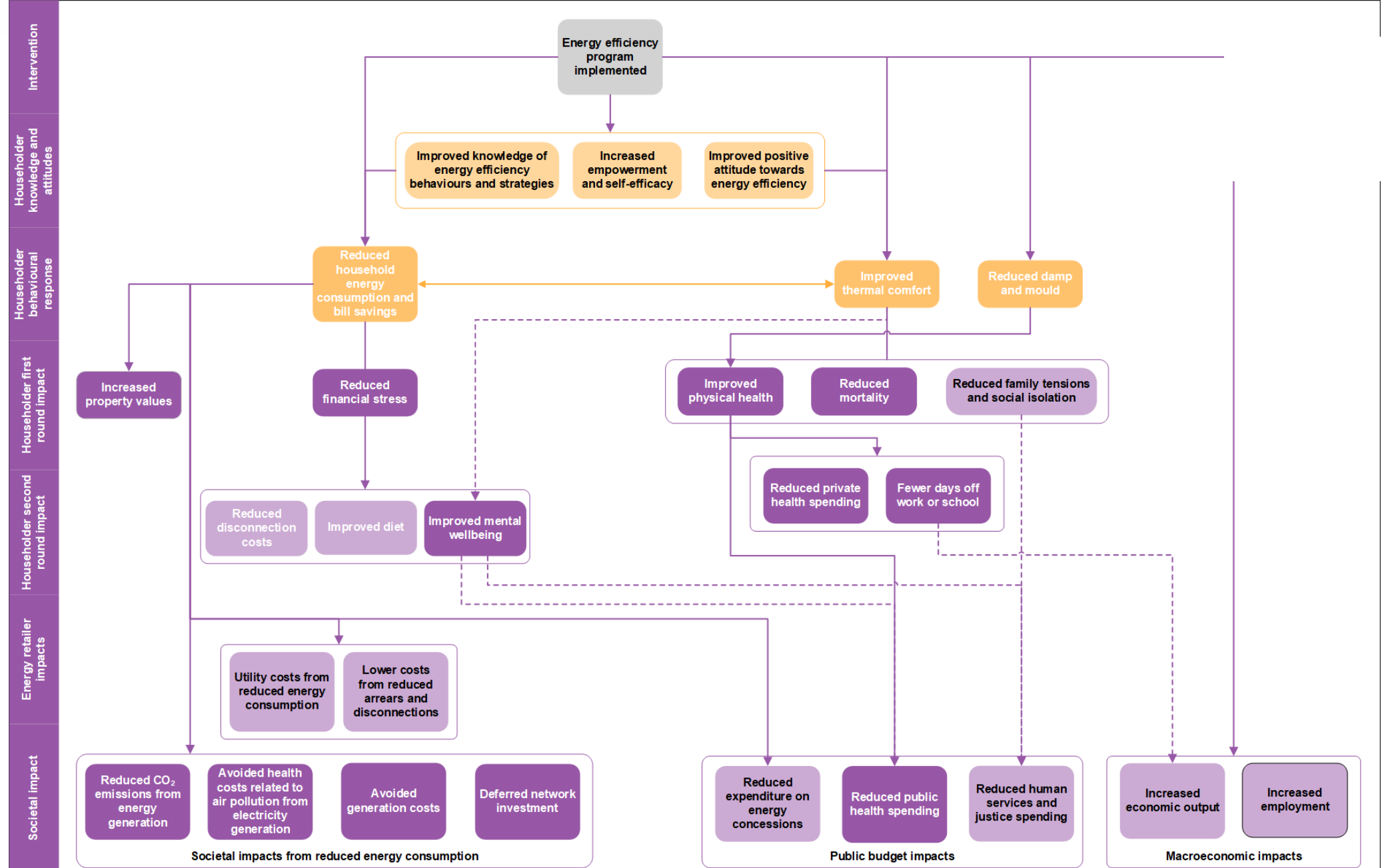


ENERGY SYSTEM IMPACTS



HEALTH AND WELLBEING IMPACTS





PRINCIPLES FOR ASSESSING THE MULTIPLE IMPACTS OF ENERGY EFFICIENCY



Best practice assessment principles

Evidence of causal link

Materiality of impact

Consistency with public and corporate objectives

Comprehensiveness

Consistency with existing framework

Quantification

Principles for quantification of impacts

Robust methodology

- Individual treatment
- Fit for purpose
- Transparency


Robust estimates

- Symmetry
- Avoid double counting
- Consider the rebound effect
- Measure marginal, not average, impacts
- Consider the incidence of impacts

Transferability of estimates

ENERGY SYSTEM IMPACTS

	Evidence of causal link	Materiality of impact	Robust methodology	Robust estimates	Transferability of estimates
1. Reduced energy consumption & bill savings	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓!
2. Utility costs from reduced energy consumption	✓✓✓	✓	✓✓✓	✓✓✓	✓!
3. Lower retailer costs from arrears & disconnections	✓✓	✓✓	✓	✓	✗
4. Societal impacts:					
• Reduced CO2 emissions	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓!
• Avoided generation costs					
• Deferred network investment					
• Avoided health costs from air pollution	✓✓	✓✓	✓✓	✓✓	✓!

 Caution: refer to the report before applying this information

 Care should be taken to only transfer estimates from comparable programs/contexts.

ADDITIONAL AREAS OF RESEARCH



Householder knowledge, attitudes & behaviour

- Establish common framework & survey instrument to measure change
- Explore linkages to other impacts

Improved thermal comfort

- Develop harmonised indicators & validated survey instruments to measure change
- Investigate nature & extent of problem in Australia (both warmer & colder climate zones)

Reduced damp & mould

- Develop harmonised indicators & validated survey instruments to measure presence & severity of damp & mould and impact of energy efficiency interventions
- Investigate nature & extent of problem in Australia

Increased property values

- Further research in Australian context using existing methodologies