The Bottom Line

The household impacts of delaying improved energy requirements in the Building Code

Energy Consumers Australia – Housing Summit

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Low Carbon, High Performance

How buildings can make a major contribution to Australia's emissions and productivity goals

Summary Report May 2016 BUILDING CODE ENERGY PERFORMANCE TRAJECTORY PROJECT

February 2018

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A suite of policy measures is required



- Mandatory minimum standards with forward trajectory to provide a regulatory signal
- Targeted programs and incentives to stimulate the market
- Energy market reform to provide a level playing field
 - Data, research, information, education and training to enable effective action



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Equivalent increase in

The Bottom Line - Where are the savings?

NatHERS Star ratings*

Detached house

- Require ceiling fans for climate zones 2 and 5
- \$50-\$80 yearly energy bill savings per household
- Increased roof insulation for all climate zones

\$45-\$80 yearly energy bill savings per household

- Improved air tightness for all climate zones
- \$50-\$150 yearly energy bill savings per household

| 8.5 | 8.3 | 7.5 | |
|-------|-------|-------|--|
| Stars | Stars | Stars | |
| +2.5 | +2.3 | +1.5 | |
| Stars | Stars | Stars | |
| | 00 | | |

Single Apartment#



Note: These results are relevant for climate zones 2, 5 and 6. We are currently seeking further funding to extend analysis to northern Australian climate zones.

- * Equivalent NatHERS Star ratings assume that NatHERS is updated to enable higher air tightness to be credited, and assume a common 6 Star baseline across different jurisdictions.
- ^ Assumes limited technology cost/performance improvements, and no adoption of best practice building design for energy effciency. More opportunity above 6 Star is likely to exist if these factors are considered.
- # A single, mid-level apartment was assessed in order to apply results to different sized towers. Results were averaged across four orientations. This does not account for whole-building opportunities, or insulation in ceilings or above basement car parks.

Key Recommendations

- 1. Commit to establishing a target and trajectories
- 2. Strengthen residential energy requirements as soon as possible
- 3. Introduce measures to reduce costs for key technologies (e.g. windows) and support best practice design
- 4. Investigate renewable energy requirements
- 5. Support improved Code compliance, including:
 - NatHERS upgrades
 - Improving compliance options in the Code
 - Improved monitoring and enforcement

