

Residential Efficiency Scorecard (RES)



Paul Murfitt Director Energy Efficiency

**Energy, Environment and Climate Change Department
of Environment, Land, Water and Planning**



Environment,
Land, Water
and Planning



Key Drivers



There is no accepted method of evaluating, rating, and comparing the energy performance of existing homes in Victoria.



Little incentive to invest in energy-efficiency infrastructure upgrades, as the value of investment can not be easily explained.



Assessment services are difficult to identify and may not be trusted by the consumer.



Strong interest in having access to information on the energy performance of existing homes, including during hot weather.



Strong interest in having such information to support renovations, purchases



- The 5-star new home standard uses about 50% less gas.
- The building shell and fixed assets major driver of energy consumption.
- Improving the building shell and fixed assets have positive health impacts.
- Barriers to businesses claiming product or service generate gains.
- 64% of re

Proposed Benefits

Help Victorians save money on their power bills, while improving energy literacy.

Improve the value of renovations in reducing energy costs, increasing comfort and the health of a home.

Support householders to invest in more energy-efficient fixed appliances, by providing relevant and reputable advice.

Improve householder understanding and awareness of what elements of the home drive energy costs.

Support the development and expansion of the energy efficiency sector, particularly the employment of accredited assessors

Stakeholder engagement	Ongoing opportunities provided to stakeholders for input.
Trusted Source	Government supported rollout provides a level of assurance for stakeholders and the community, as it is independent and seen as reliable.
Voluntary	Demand-driven approach by home owners, buyers, investors, renovators, builders, renters, sellers.
Coordinated	Collaboration and coordination between jurisdictions.
Consistent	Delivered by trained and accredited assessors with consistent rating outcomes regardless of the provider.
Efficient	Web-based tool for evaluating, rating and comparing the energy efficiency performance of existing homes.
Simple	User friendly for the assessor and engaging for the recipient. Mobile, tablet-friendly interface and easy-to-understand ratings.

Our Approach (cont.)

Quality Assurance	Supported by training and governance arrangements.
Cost Minimised	Refined to minimise costs of data entry. Exact fee to be market driven. Estimated assessment fee \$150 to \$250.
Government Supported	Initial rollout will be free of charge (i.e. no payment for assessors to access the tool).
Staged Rollout	Consider the best way to rollout the RES to develop trust, market confidence and awareness.
Continuous Improvement	Testing, review and the development of the features and processes are continuous, and will be driven by the users, stakeholders and material/ product innovation.
Technical Validity	Based on well-tested algorithms, strong thermal-performance approach validated against CSIRO's <i>Accurate</i> . Technical approach developed by Tony Isaacs, Alan Pears, Robert Foster and others.

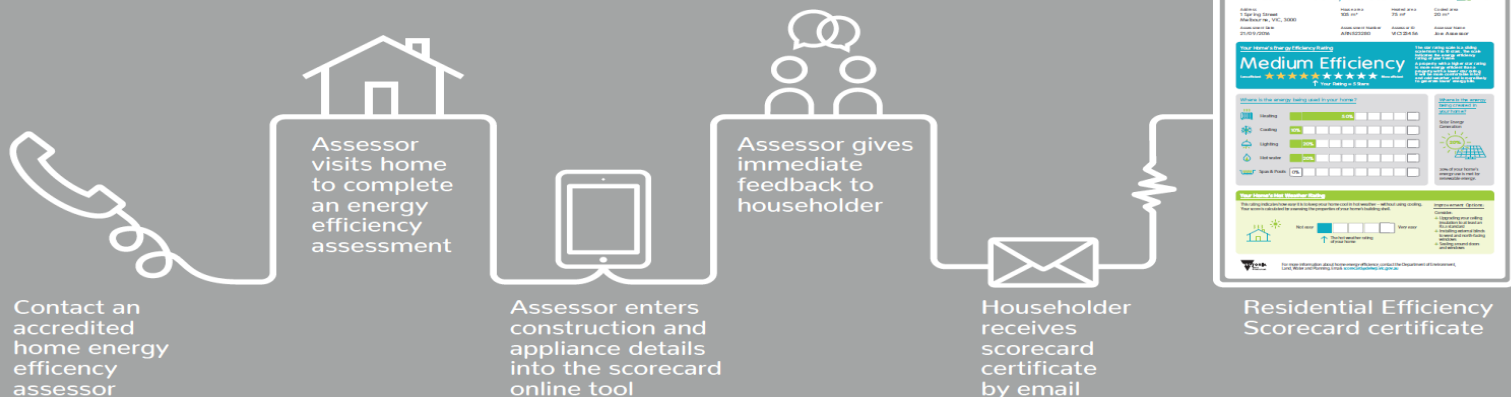


- Analysis of international approaches
- Analysis of alternative tools
- Substantial technical development
- Focus group testing
- Programed into iPad application
- Tested in the field
- Review of training requirements



Four field tests so far ...

How does an assessment work?



House	✓	ZONE							
Assessment	✓	<div>BED 1 ▼</div> <div>BED 2 ▼</div> <div>HALL ▼</div> <div>DINING ▼</div> <div>KITCHEN ▼</div>							
Heating	1	<div>LOWER STAIRS/BATHROOM ▼</div> <div>LOUNGE ▼</div> <div>BED 3 ▼</div> <div>BED 4 ▼</div>							
Cooling	1	<div>UPSTAIRS LANDING/BATHROOM ▼</div> <div>+</div>							
Hot Water System	1								
Zone	10								
Water	3								
Pools & Spas									
Renewable Energy	1								
Additional Items									

Roof Ceiling

Floor

1

Windows

Walls

Zone Heating

Zone Cooling

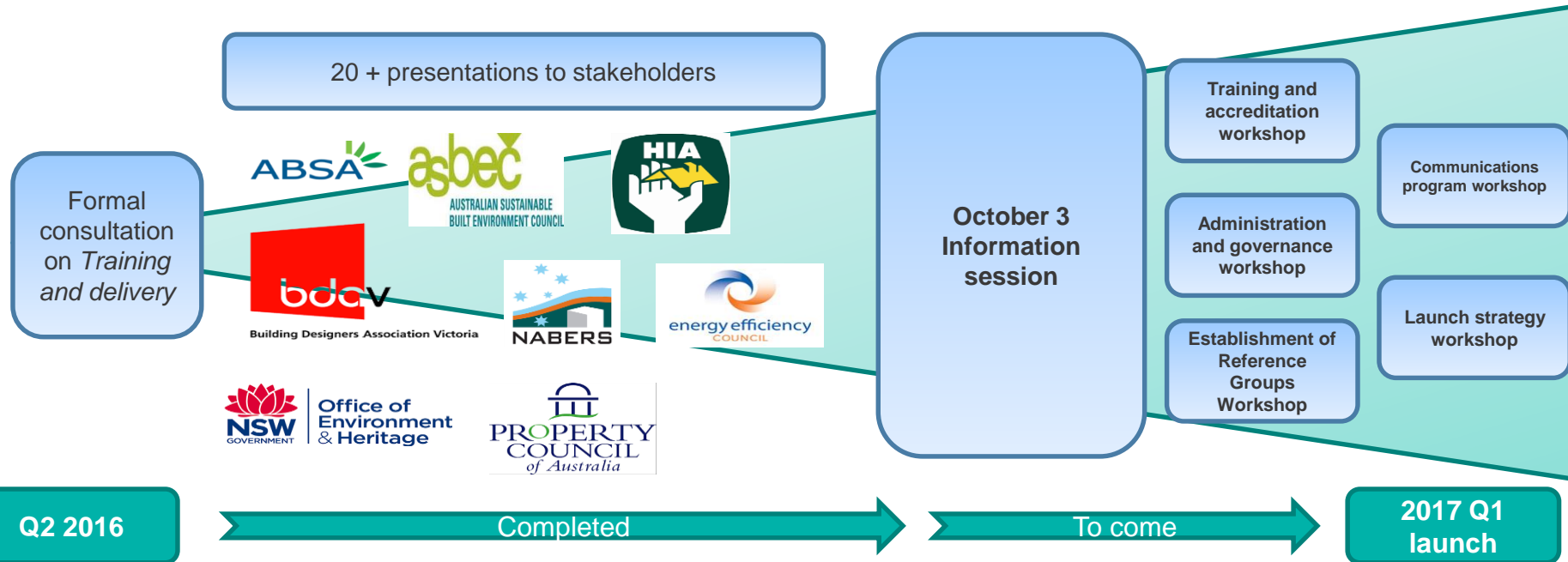
Downlights

Air Leakage

This indicates the performance of the home without mechanical cooling

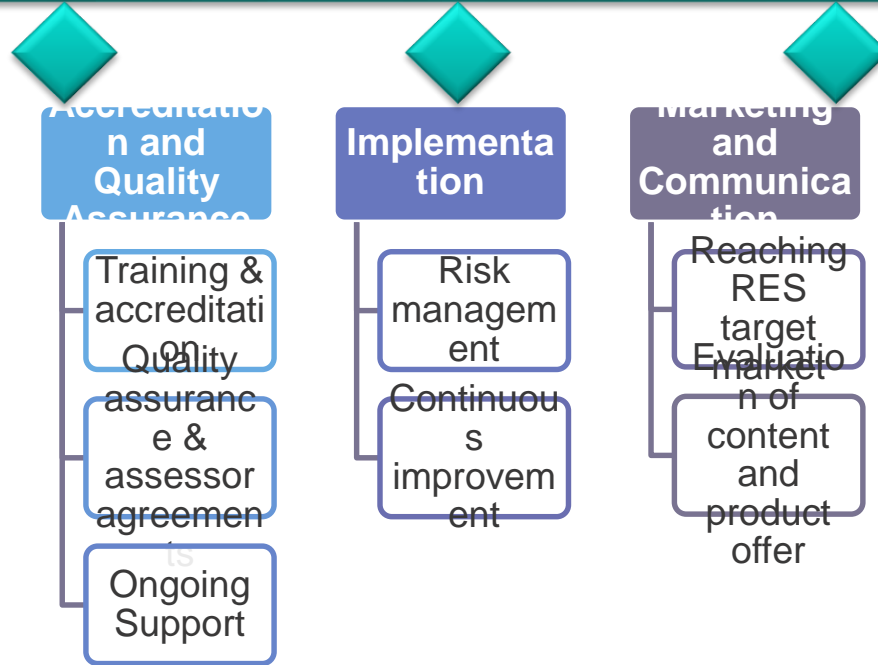
- Important to deal with heatwaves
- Protect health, especially for the vulnerable
- Provides recommended upgrades to improve hot weather rating

Consultation with industry has been building through 2016





The Scorecard Tool



Cross-jurisdictional coordination and collaboration

Design & Development

Product development and testing
Analysis and consultations
Building awareness

Controlled release

Targeted rollout
System improvements
Ongoing consultations

Current

Early 2017



Contact email address:
scorecard@delwp.vic.gov.au