

HVAC MARKET UPDATE

Market trends facing the Pacific Northwest

April 2018

Bonneville
POWER ADMINISTRATION





HVAC MARKET TRENDS

TWO RESEARCH ACTIVITIES





HVAC MARKET TRENDS

GOALS OF OUR STUDY

Identify New
Market Trends



Confirm Market
Structure

Understand
Purchasing
Decisions



Observe
Growth/Decline of
Technologies



RESEARCH ACTIVITIES

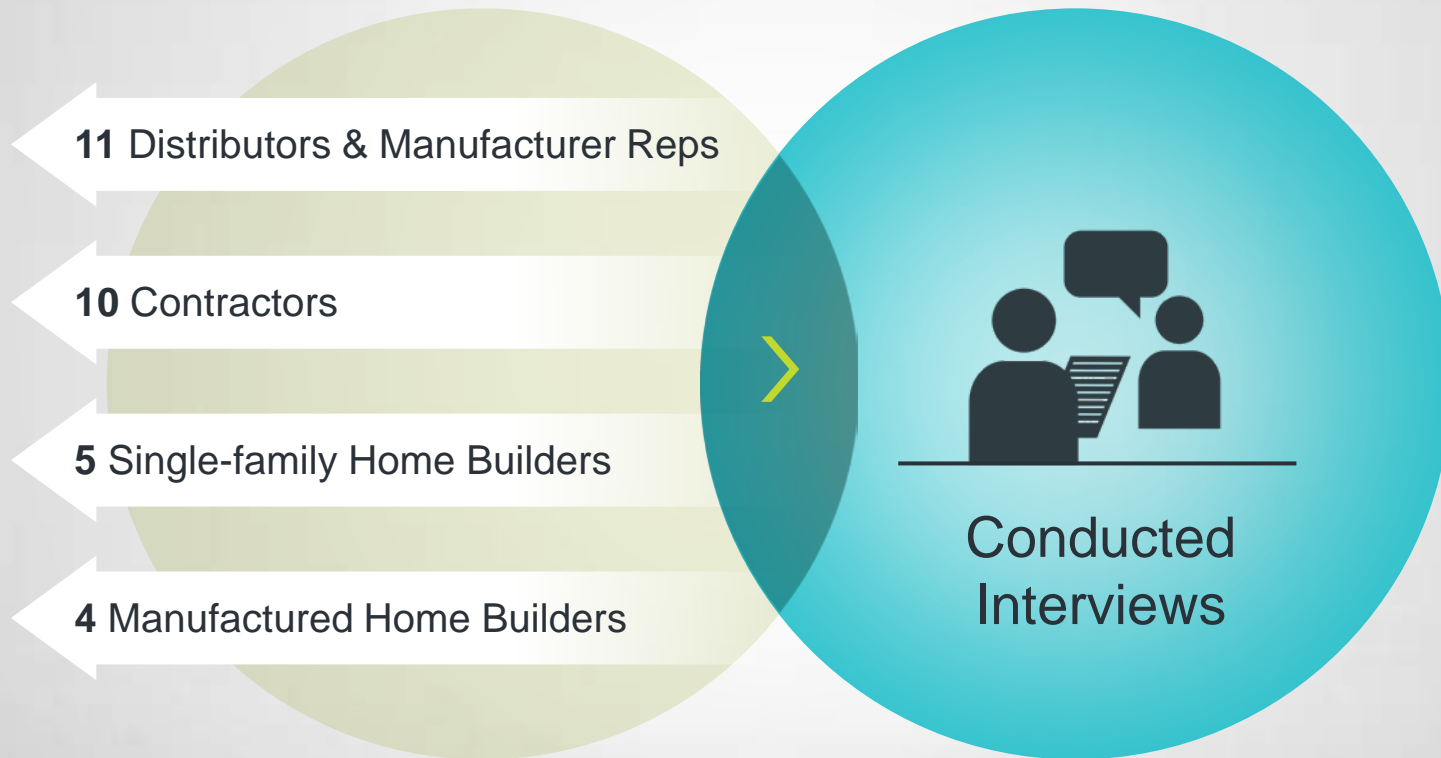
AHR EXPO 2018





RESEARCH ACTIVITIES

MARKET ACTOR INTERVIEWS

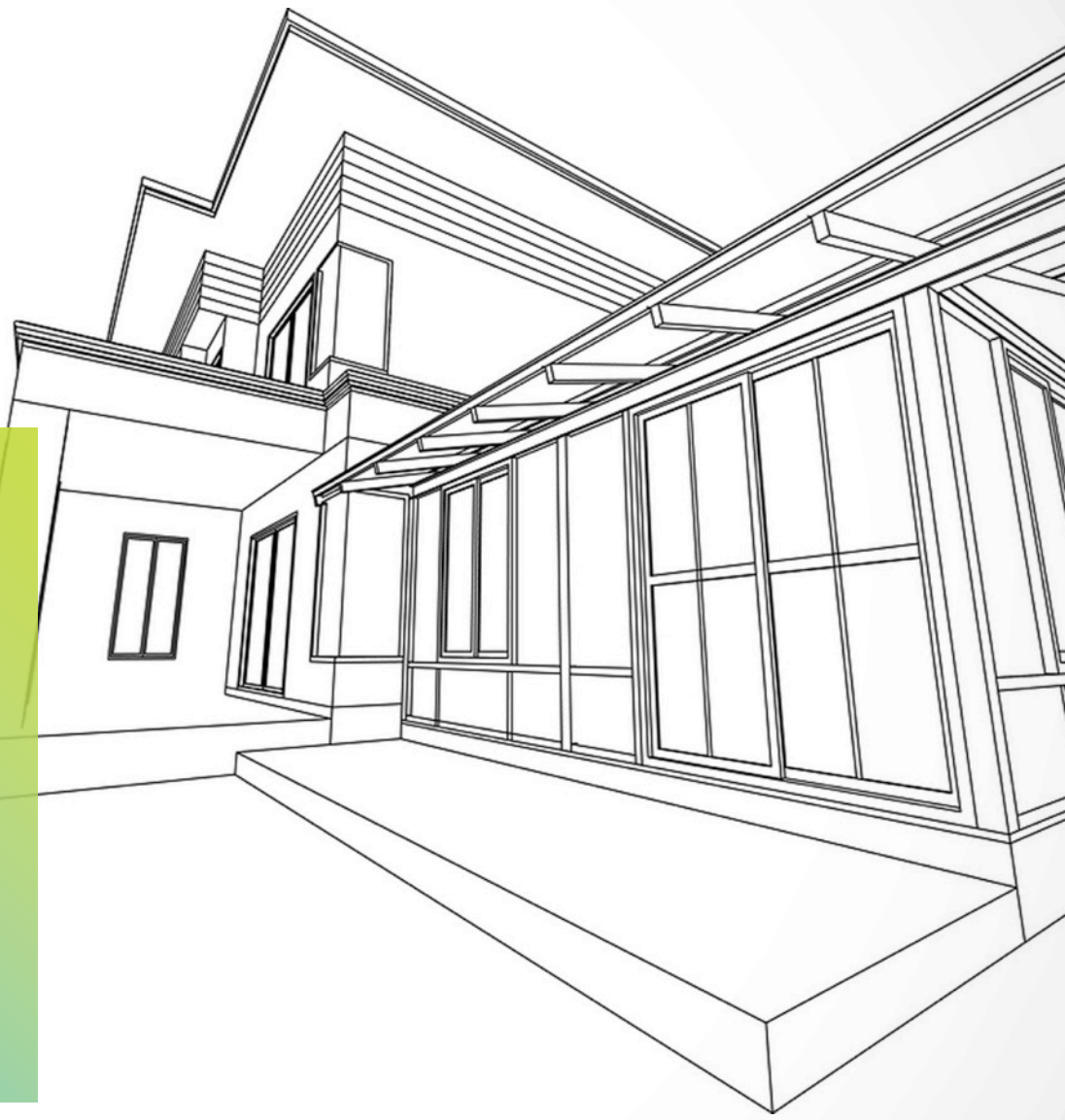


30 TOTAL



HVAC MARKET MOVING TOWARD EFFICIENCY

A BALANCING ACT



FINDING #

1

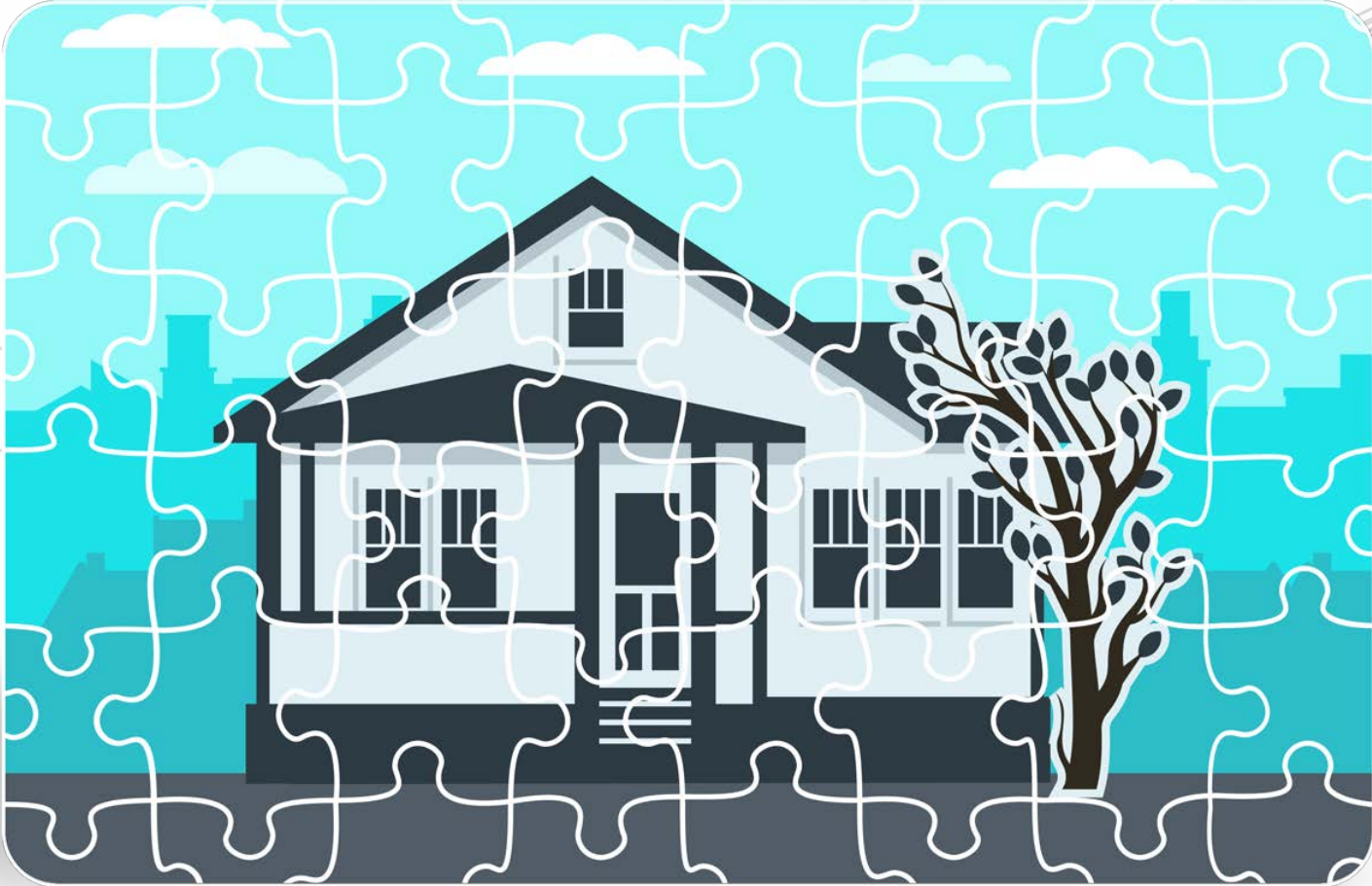
GETTING SMART

Total System Approach
and Controls Innovations



MARKET ACTORS TAKING A TOTAL SYSTEM VIEW

TOTAL SYSTEM
& SMART
CONTROLS





SMART CONTROLS ARE STILL GROWING...

TOTAL SYSTEM
& SMART
CONTROLS



...BUT IT'S STILL A
FRAGMENTED MARKET

TOTAL SYSTEM
& SMART
CONTROLS





DISTRIBUTORS ARE NOW KEY PLAYERS IN REGION'S SMART THERMOSTAT GROWTH

TOTAL SYSTEM & SMART CONTROLS





CONTRACTORS ACTIVELY PUSH SMART THERMOSTATS

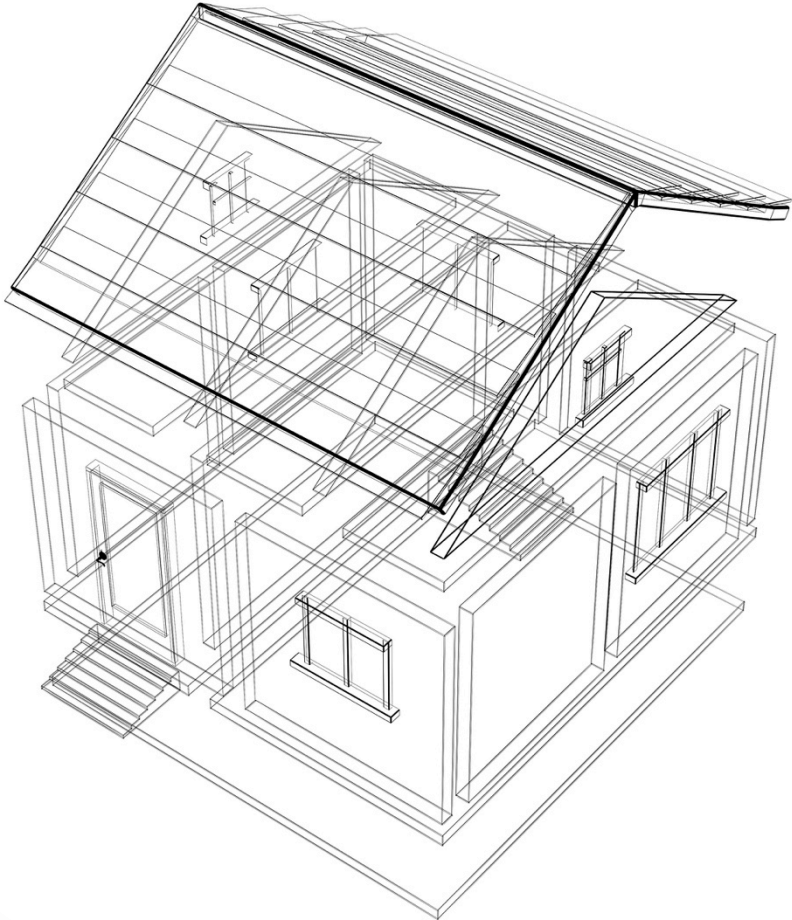
TOTAL SYSTEM
& SMART
CONTROLS





STRONG SMART THERMOSTAT GROWTH IN SINGLE FAMILY NEW CONSTRUCTION

TOTAL SYSTEM
& SMART
CONTROLS





FINDING #

2

INNOVATIONS IN EFFICIENCY



MANUFACTURERS CONTINUE TO INNOVATE ON EFFICIENCY AND SUSTAINABILITY

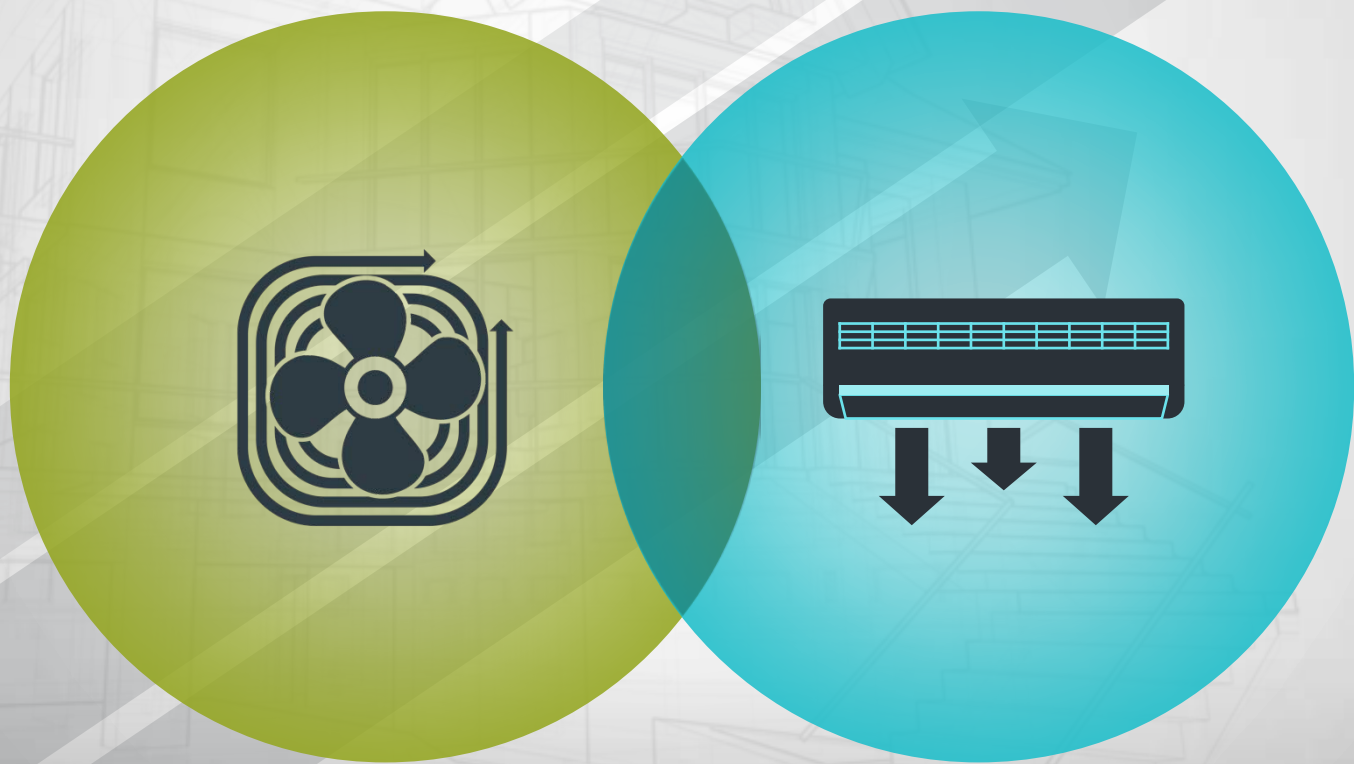
INNOVATIONS
IN EFFICIENCY





INNOVATIONS
IN EFFICIENCY

DUCTLESS TECHNOLOGY STILL GROWING ACROSS THE BOARD





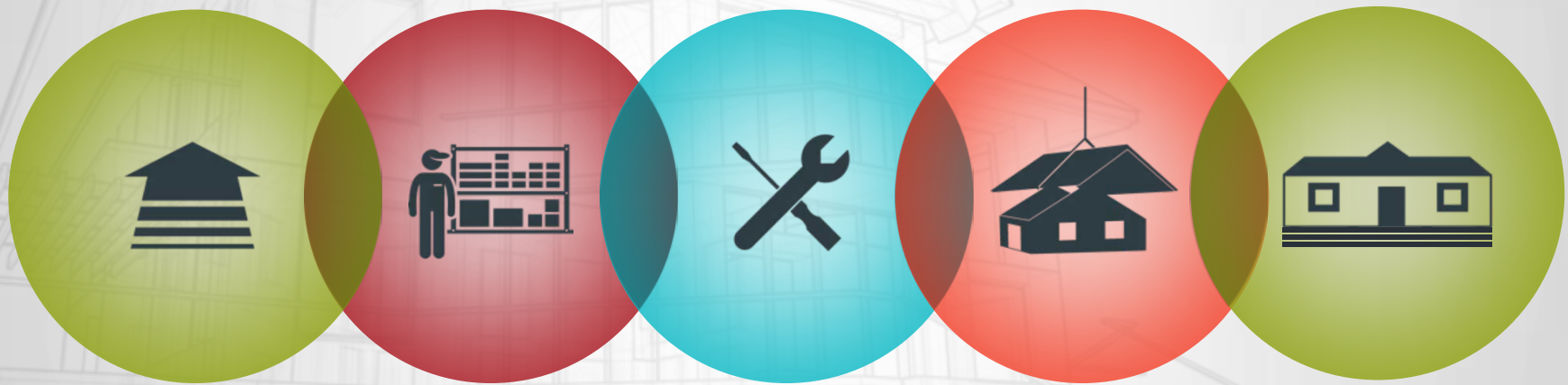
DUCTLESS HEAT PUMPS CONTINUE TO RISE IN POPULARITY IN THE NW

INNOVATIONS
IN EFFICIENCY





ALMOST EVERYONE IS OFFERING DHPS — NO LONGER A NICHE PRODUCT



Manufacturers
Advance the
Technology

Distributors
Well-Stocked

Installers
Actively Selling

Common in New
Single Family
Homes

Rarely Installed
at Manufactured
Home Factory



MORE TECHNOLOGY OPTIONS REINFORCE NEED FOR A SYSTEMS APPROACH

INNOVATIONS
IN EFFICIENCY





FINDING #

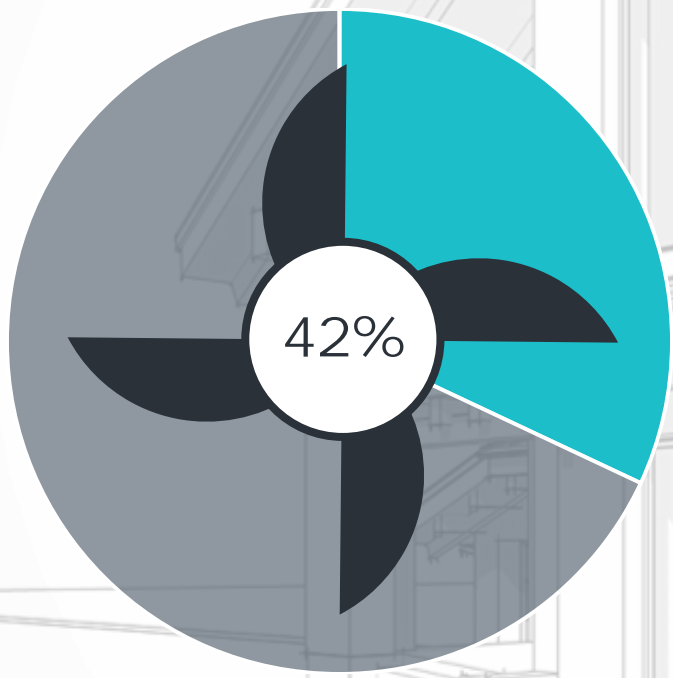
3

NORTHWEST
MARKET
EVOLUTION

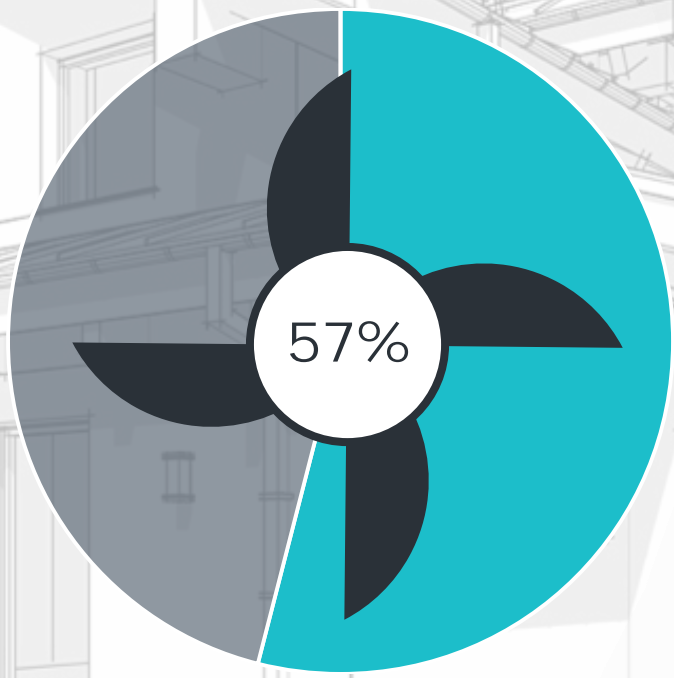




WILL AIR CONDITIONING BECOME THE NORM?



RBSA I*

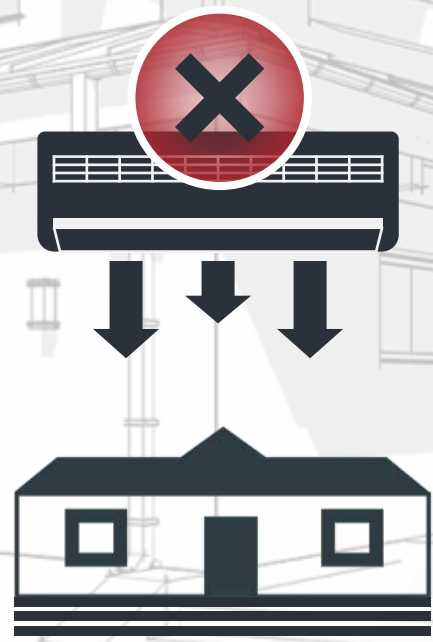
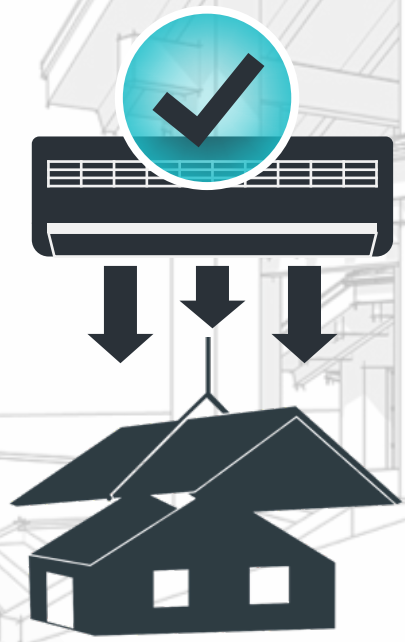


RBSA II*

* RBSA figures reflect single family homes only.



AC BECOMING CONSTRUCTION STANDARD FOR SINGLE FAMILY, BUT NOT AT MANUFACTURED HOMES FACTORIES





HOME OWNERS ADDING COOLING TO PREVIOUSLY UN-COOLED HOMES

NORTHWEST MARKET EVOLUTION





RECAP



Whole system
approach



Innovations
in efficiency



Northwest
market evolution

Read more: www.bpa.gov/goto/HVAC



NEXT STEPS



KEY TAKEAWAYS FOR OUR TEAM

Verify model inputs and results

Gather more information on key areas identified through interviews:

1. Growth in AC Penetration

2. Thermostat Savings

3. Manufactured Home Equipment





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