

AMEREN ILLINOIS COMPANY (AIC) 2025 HEAT PUMP INCENTIVE AND PROGRAM DESIGN STUDY

PRELIMINARY FINDINGS

LARGE GROUP SAG MEETING
NOVEMBER 12, 2025



Agenda

- Overview of 2025 Evaluation Research Efforts
- Heat Pump Incentive & Program Design Study
 - Background and Research Objectives
 - Methods Overview
 - Preliminary Findings
- Q&A

RESEARCH OBJECTIVES



How can AIC residential offerings optimize incentive levels for heat pump technology to increase adoption while maximizing program influence?



What purchase considerations and program design elements most influence customers' choice of HVAC and water heating equipment (e.g., upfront cost, equipment efficiency, previous equipment type, incentive availability/format, contractor involvement)?



To what degree are AIC residential customers familiar with and open to adopting heat pump technology? What do customers see as the primary benefits and drawbacks of heat pump technology?



How do customers typically approach the installation of new heat pump technology, and how do these tendencies vary across different types of equipment or when fuel switching is involved?

METHODS OVERVIEW



Web survey (n=1,469 respondents)



AIC market rate residential customers responsible for home's HVAC and water heating equipment



Traditional self-report questions: heat pump and heat pump water heater familiarity, perceived benefits/barriers, and installation experience



Choice-based conjoint: modeling-based analysis of responses to specialized survey questions

CONJOINT METHODS

- Modeling-based analysis of responses to specialized survey questions
- Four distinct conjoint scenarios, one scenario per respondent
 - Central HVAC
 - Ductless HVAC
 - Gas Water Heating
 - Electric Water Heating
- Predetermined attributes and levels
- Eight randomized choice sets, plus two holdouts for testing internal validity

CONJOINT METHODS: EXAMPLE CHOICE SET – CENTRAL HVAC

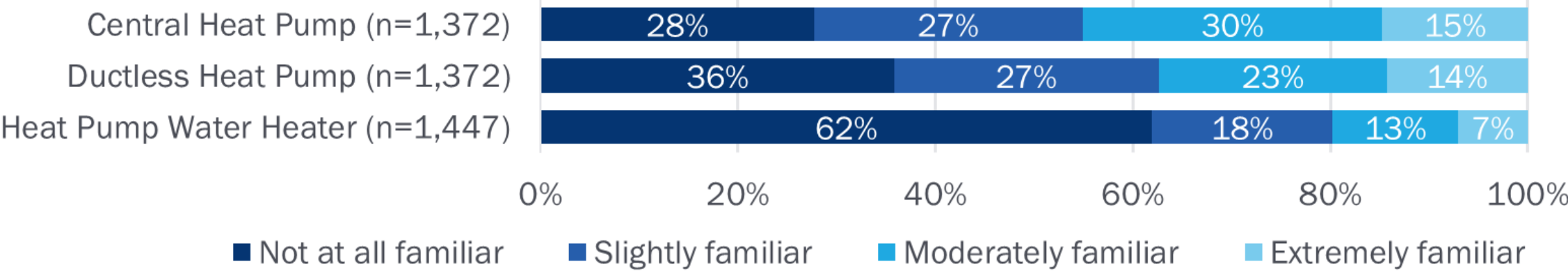
	Option 1	Option 2	Option 3	Option 4	None
Equipment Type	High-Efficiency Heat Pump ~\$1,130 Annual Energy Cost	High-Efficiency Central AC ~\$1,720 Annual Energy Cost	Standard Central AC ~\$1,760 Annual Energy Cost	Standard Central AC ~\$1,760 Annual Energy Cost	I wouldn't choose any of these options
Installed Price Before Incentive	\$6,000	\$6,000	\$6,000	\$9,000	
Incentive Amount	\$750	No Incentive	\$750	\$750	
Incentive Type	Rebate with Proof of Purchase	N/A	Discount Applied at Purchase	Discount Applied at Purchase	
Warranty	15 years	20 years	15 years	10 years	
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CONJOINT METHODS: EXAMPLE CHOICE SET – ELECTRIC WATER HEATING

	Option 1	Option 2	Option 3	Option 4	None
Equipment Type	Traditional Electric ~\$370 Annual Energy Cost	Heat Pump Water Heater ~\$100 Annual Energy Cost	Heat Pump Water Heater ~\$100 Annual Energy Cost	Heat Pump Water Heater ~\$100 Annual Energy Cost	I wouldn't choose any of these options
Installed Price Before Incentive	\$2,750	\$5,250	\$5,250	\$5,250	
Incentive Amount	No Incentive	\$1,200	\$800	\$800	
Incentive Type	N/A	Discount Applied at Purchase	Rebate with Proof of Purchase	Discount Applied at Purchase	
Warranty	10 years	10 years	10 years	10 years	
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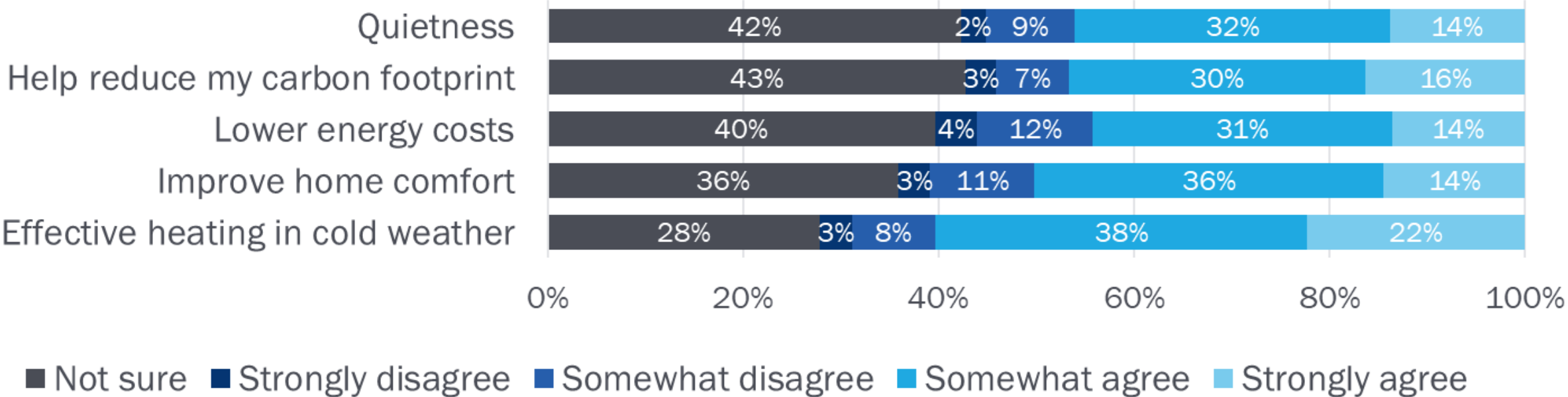
INITIAL FINDINGS: HEAT PUMP FAMILIARITY

- Most customers say they are at least slightly familiar with heat pump HVAC systems
 - 72% report some degree of familiarity with central heat pumps
 - 64% report some degree of familiarity with ductless heat pumps
- Only 38% of customers are at least slightly familiar with heat pump water heaters



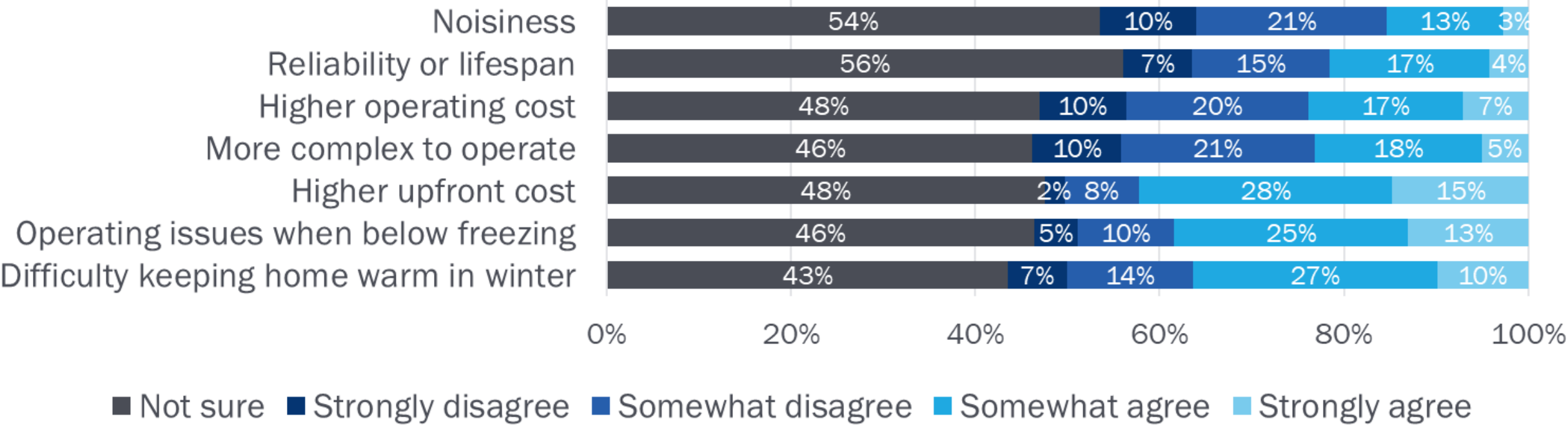
INITIAL FINDINGS: HEAT PUMP BENEFITS

Perceived Benefits of HVAC Heat Pumps (n=1,214)



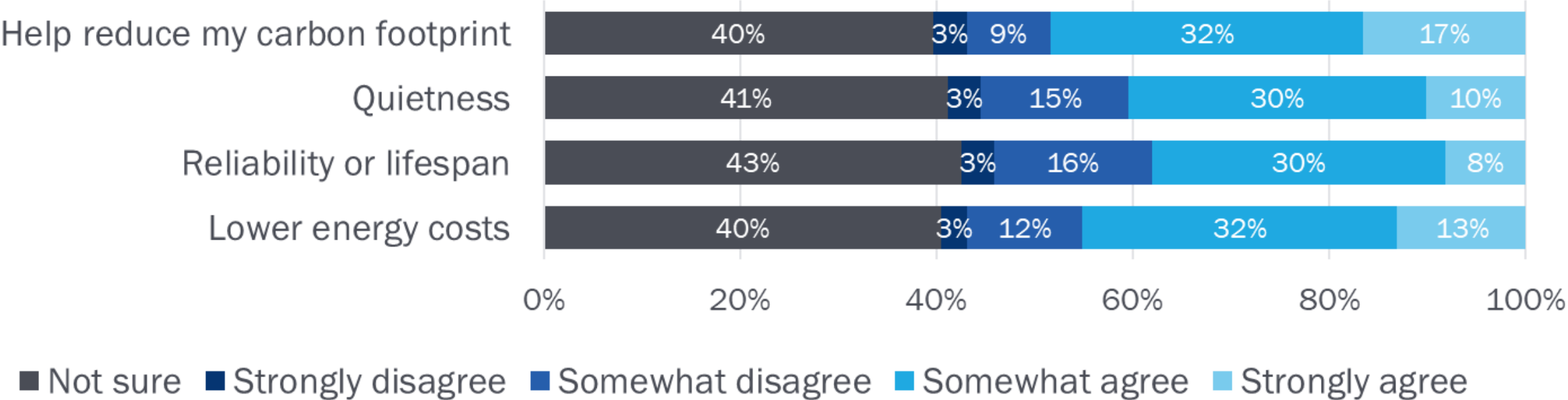
INITIAL FINDINGS: HEAT PUMP BARRIERS

Perceived Challenges with HVAC Heat Pumps (n=1,214)



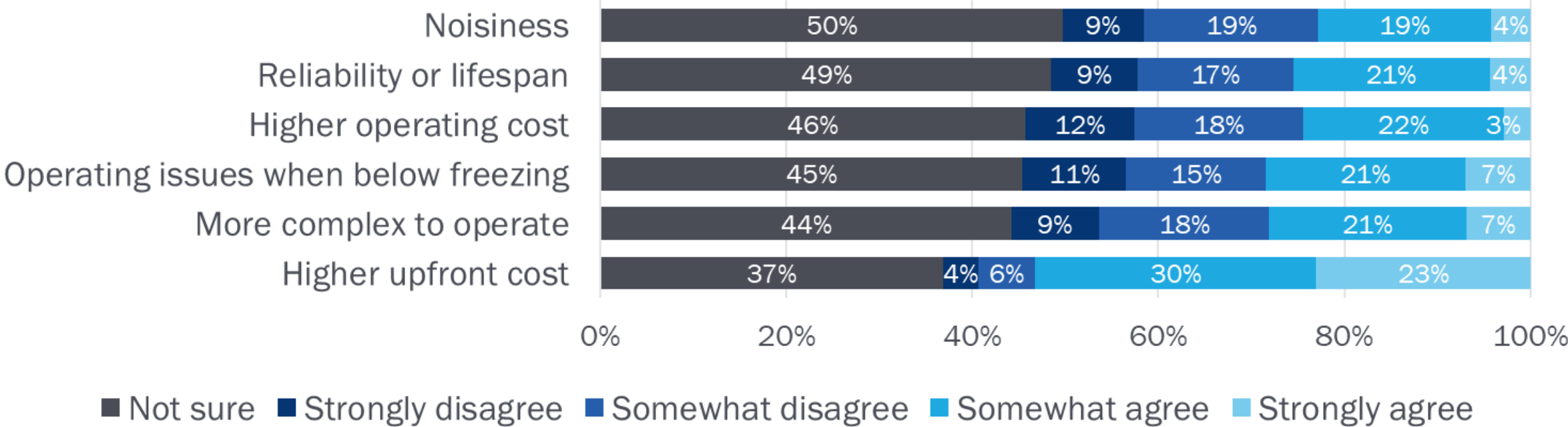
INITIAL FINDINGS: HPWH BENEFITS

Perceived Benefits of Heat Pump Water Heaters (n=573)



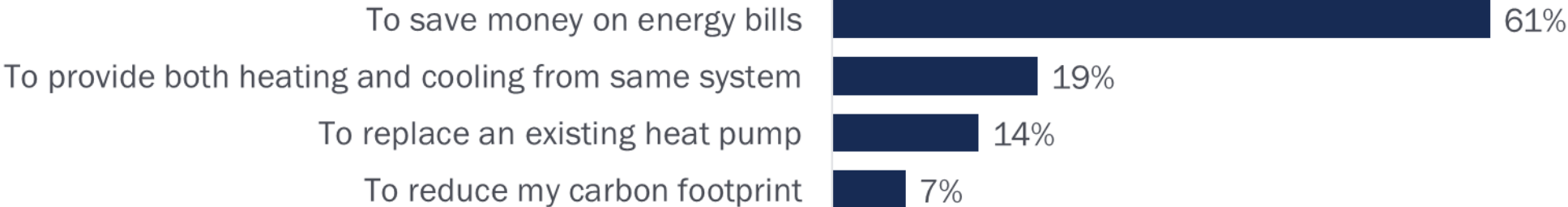
INITIAL FINDINGS: HPWH BARRIERS

Perceived Challenges with Heat Pump Water Heaters (n=573)

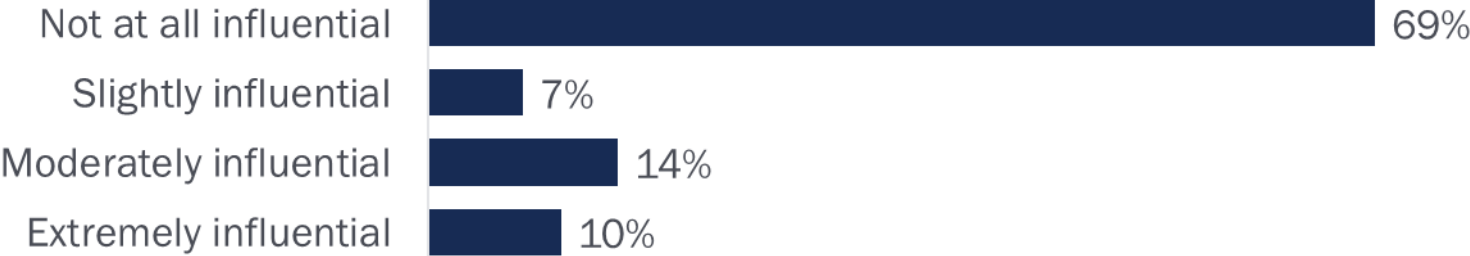


INITIAL FINDINGS: HEAT PUMP INSTALLATION EXPERIENCE

Primary Rationale for Choosing a Heat Pump (n=74)



Influence of Contractor Recommendation on HP Install Decision (n=72)



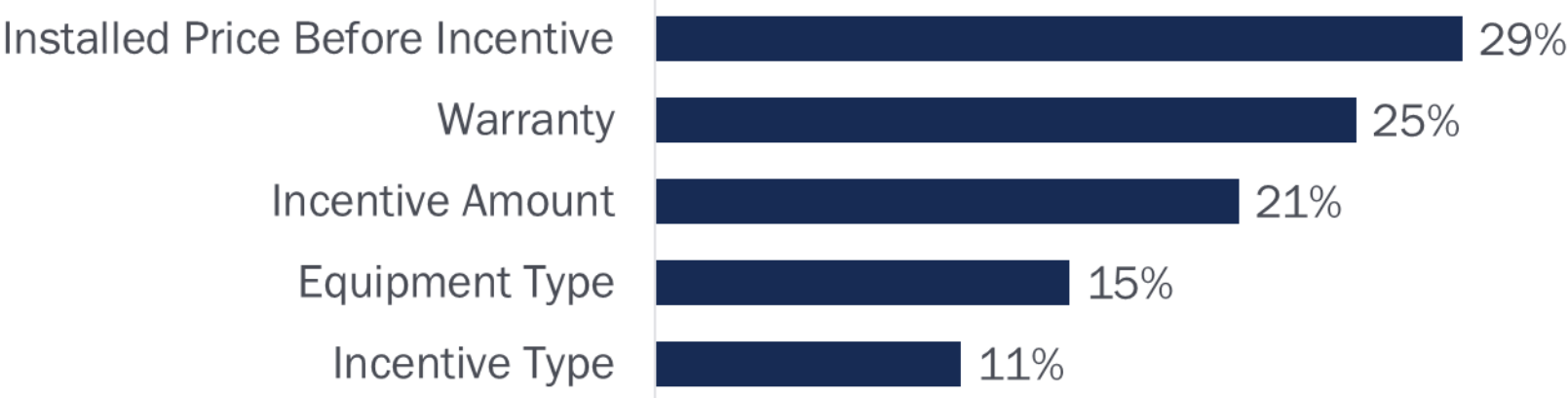
INITIAL FINDINGS: ADOPTION DRIVERS (CENTRAL HVAC)

Central HVAC Relative Importance Scores (n=333)



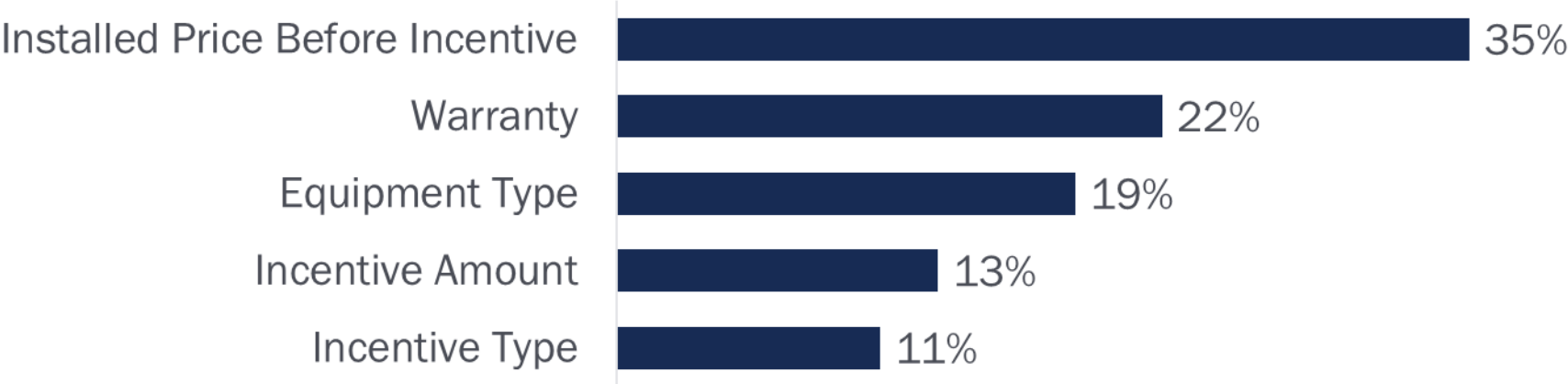
INITIAL FINDINGS: ADOPTION DRIVERS (DUCTLESS HVAC)

Ductless HVAC Relative Importance Scores (n=179)



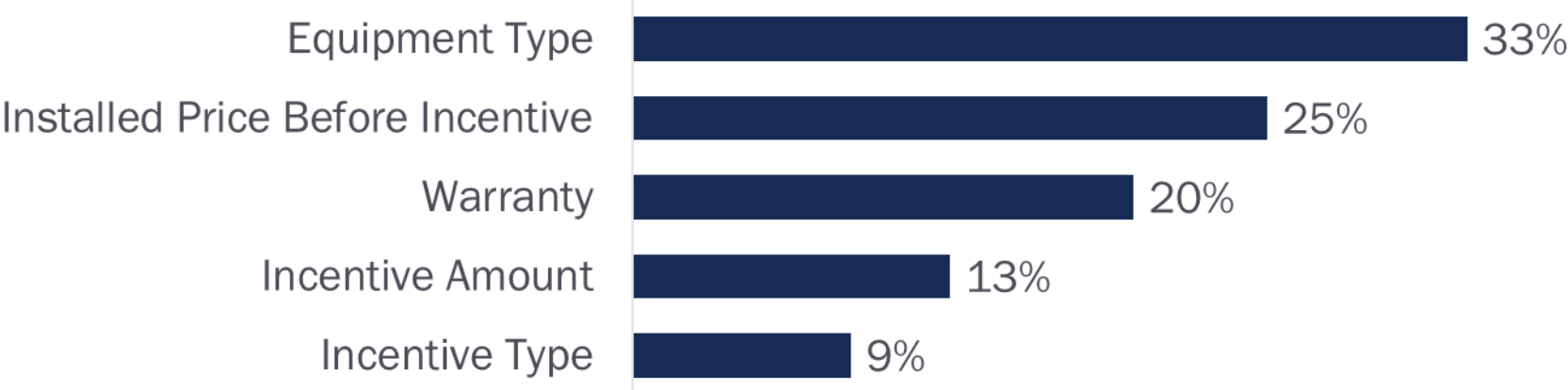
INITIAL FINDINGS: ADOPTION DRIVERS (ELECTRIC WATER HEATING)

Electric Water Heating Relative Importance Scores (n=316)



INITIAL FINDINGS: ADOPTION DRIVERS (GAS WATER HEATING)

Gas Water Heating Relative Importance Scores (n=326)



NEXT STEPS: MORE TO COME!

- Detailed reporting to be delivered later this year
 - Additional conjoint analysis
 - Price sensitivity and implications incentive optimization
 - Customer preferences to inform future program design and marketing/outreach
 - Additional insights from traditional self-report questions
 - Installation tendencies, contractor influence, and stated preferences
 - Exploration of demographic differences



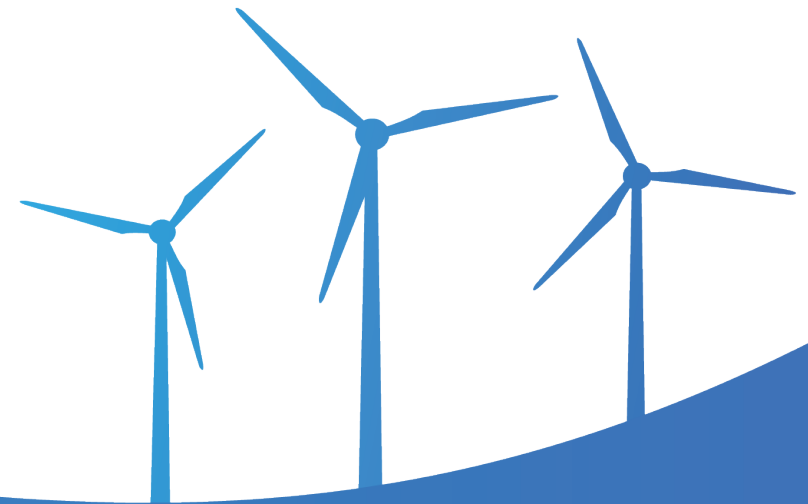
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Q&A / DISCUSSION

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APPENDIX

CENTRAL HVAC CONJOINT DESIGN SUMMARY

Central AC Conjoint Design (All Possible Values Shown)

Attribute	Level 1	Level 2	Level 3	Level 4
Equipment Type	Standard Heat Pump <i>~\$1,570 Annual Energy Cost</i>	High-Efficiency Heat Pump <i>~\$1,130 Annual Energy Cost</i>	Standard Central AC <i>~\$1,760 Annual Energy Cost</i>	High-Efficiency Central AC <i>~\$1,720 Annual Energy Cost</i>
Installed Price Before Incentive	\$3,000	\$6,000	\$9,000	\$12,000
Incentive Amount	No Incentive	\$750	\$1,500	\$2,250
Incentive Type	Rebate	POS Discount		
Warranty	5 years	10 years	15 years	20 years

DUCTLESS HVAC CONJOINT DESIGN SUMMARY

Ductless HVAC Conjoint Design (All Possible Values Shown)

Attribute	Level 1	Level 2	Level 3	Level 4
Equipment Type	Standard Ductless Heat Pump <i>~\$950 Annual Energy Cost</i>	High Efficiency Ductless Heat Pump <i>~\$530 Annual Energy Cost</i>		
Installed Price Before Incentive	\$2,500	\$5,000	\$7,500	\$10,000
Incentive Amount	\$0	\$750	\$1,500	\$2,250
Incentive Type	Rebate	POS Discount		
Warranty	5 years	10 years	15 years	20 years

ELECTRIC WATER HEATING CONJOINT DESIGN SUMMARY

Electric Water Heating Conjoint Design (All Possible Values Shown)

Attribute	Level 1	Level 2	Level 3	Level 4
Equipment Type	Traditional Electric <i>~\$370 Annual Energy Cost</i>	HPWH <i>~\$100 Annual Energy Cost</i>		
Installed Price Before Incentive	\$1,500	\$2,750	\$4,000	\$5,250
Incentive Amount	\$0	\$400	\$800	\$1,200
Incentive Type	Rebate	POS Discount		
Warranty	5 years	10 years	15 years	20 years

GAS WATER HEATING CONJOINT DESIGN SUMMARY

Gas Water Heating Conjoint Design (All Possible Values Shown)

Attribute	Level 1	Level 2	Level 3	Level 4
Equipment Type	Natural Gas <i>~\$170 Annual Energy Cost</i>	Traditional Electric <i>~\$370 Annual Energy Cost</i>	HPWH <i>~\$100 Annual Energy Cost</i>	
Installed Price Before Incentive	\$1,500	\$2,750	\$4,000	\$5,250
Incentive Amount	\$0	\$400	\$800	\$1,200
Incentive Type	Rebate	POS Discount		
Warranty	5 years	10 years	15 years	20 years