

Exploring New Ideas for Energy Use Reduction

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Background

Problems:

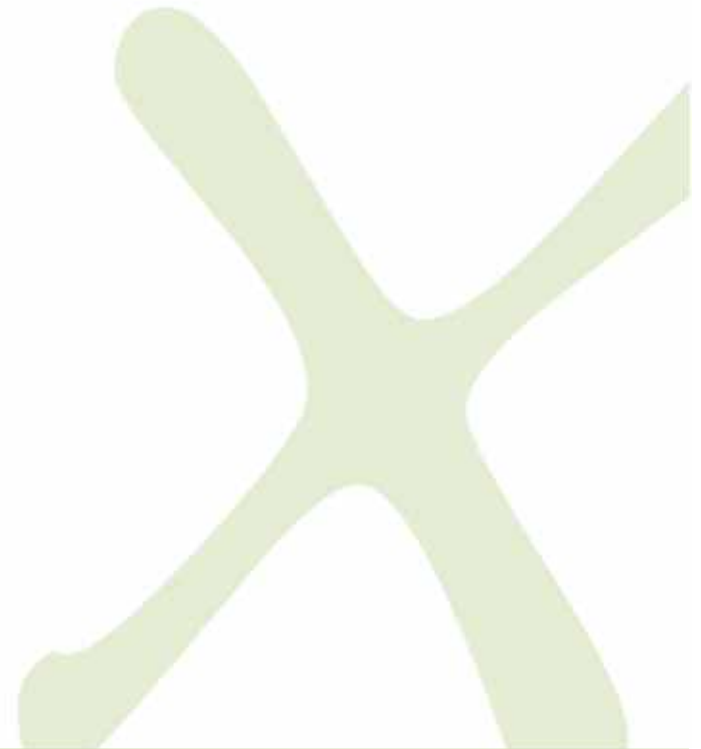
- Programs recommend actions – some are infeasible or low impact
- No centralized list or easy way of determining best target actions



Project Overview

4 Studies:

- 1: GATHER existing actions
- 2: DISCOVER new ideas
- 3: TEST for feasibility
- 4: DEVELOP for marketplace



1: Energy Action Taxonomy

Type of Behavior:	End use	Impact (kWh, GHG)	Malleability (feasibility, barriers, incentives)	Diffusibility	Current penetration in population
Repeat or Habitual					
Settings, Controls	Heating – turn off thermostat when no one home				
Maintenance					
Purchase or replacement					
Excess or waste	Large appliance – Eliminate extra fridge				

2: Innovations

Goals:

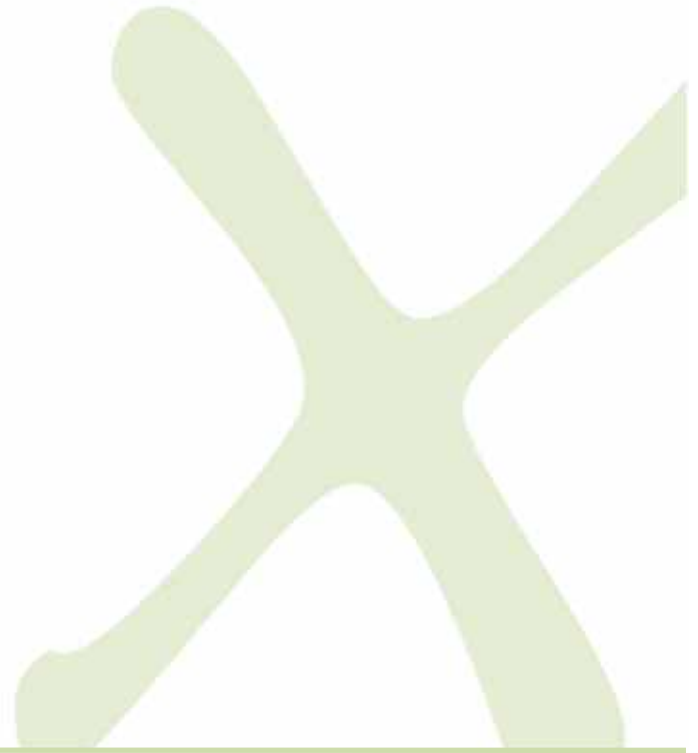
- Inform ARPA-E and other interventions
- Come up with a list of feasible **NEW** low-energy actions, products, or home adaptations
- Identify barriers
- Identify design opportunities



3: Feasibility Assessment

Goals:

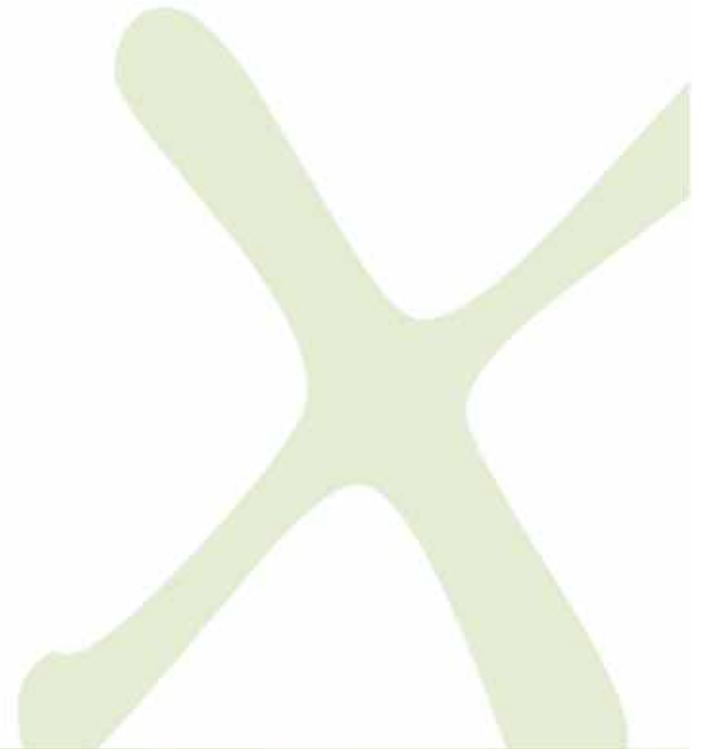
- Identify most promising ideas based on Study 2 outcomes
- Test for feasibility and diffusibility



4: Implementation

Goal:

- Through design, develop ideas for the marketplace



Project Summary

4 Studies:

- 1: GATHER existing actions – taxonomy
- 2: DISCOVER new ideas – experts
- 3: TEST for feasibility – non-experts
- 4: DEVELOP for marketplace – design



Questions?

