



Translating Theories into Interventions

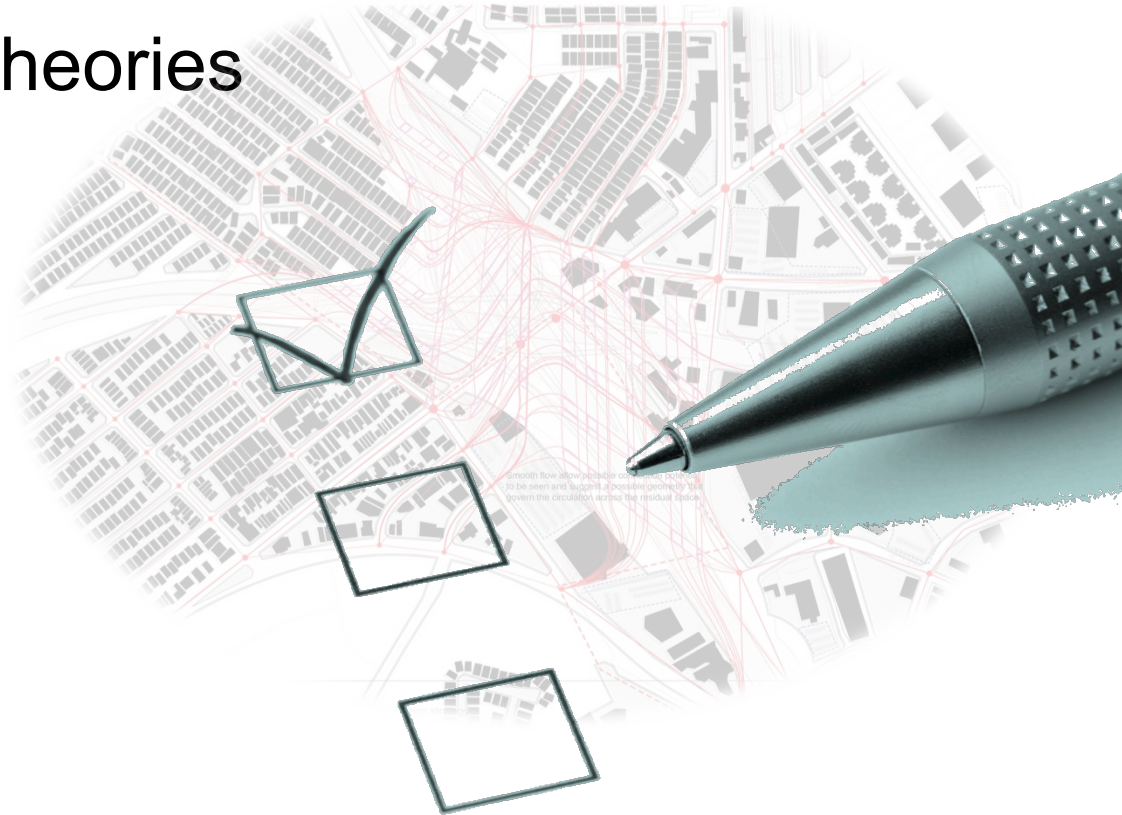
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Introduction & Overview

The paper: “*Paving the Way to a Richer Mix of Residential Behavior Programs*”

- Discuss behavior theories
- Discuss promising interventions
- Applications



Acknowledgements

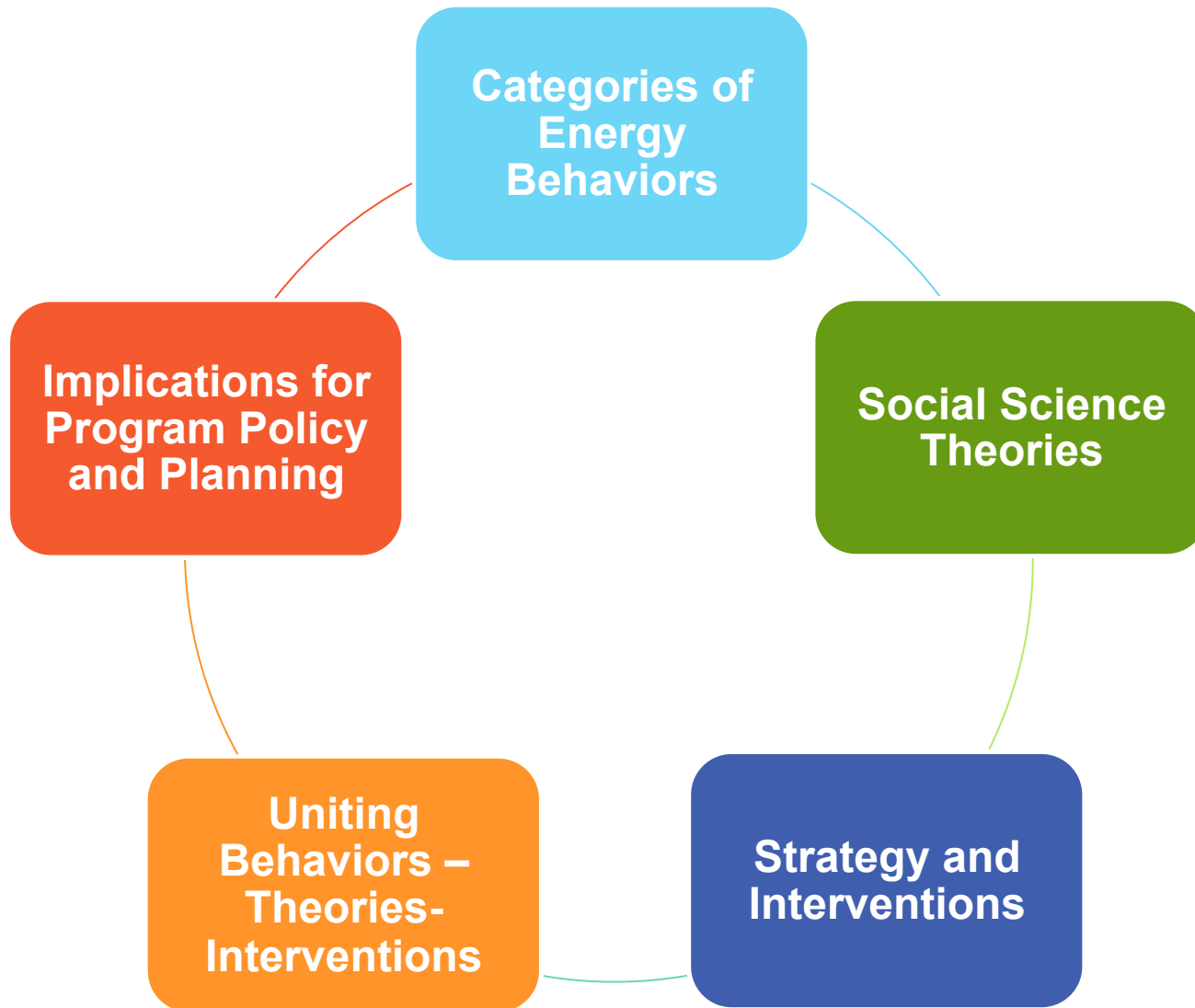
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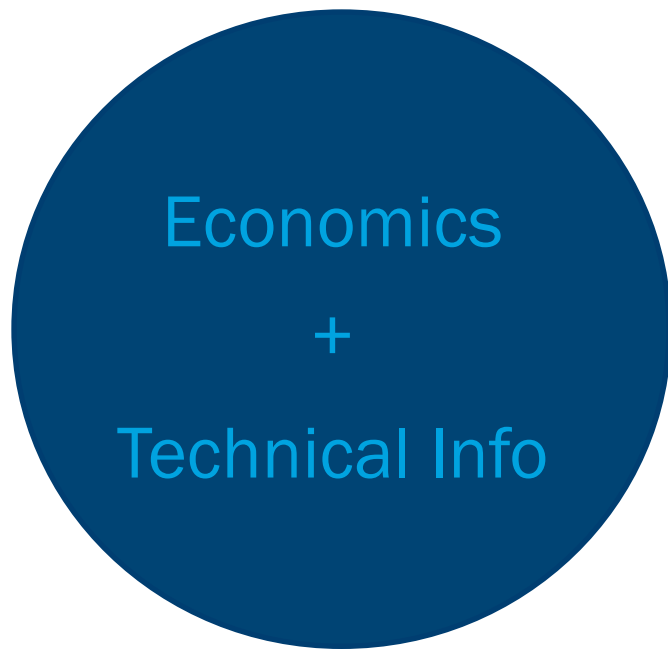
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Paving the Way.....



History: Traditional Approach to Energy Programs



In past

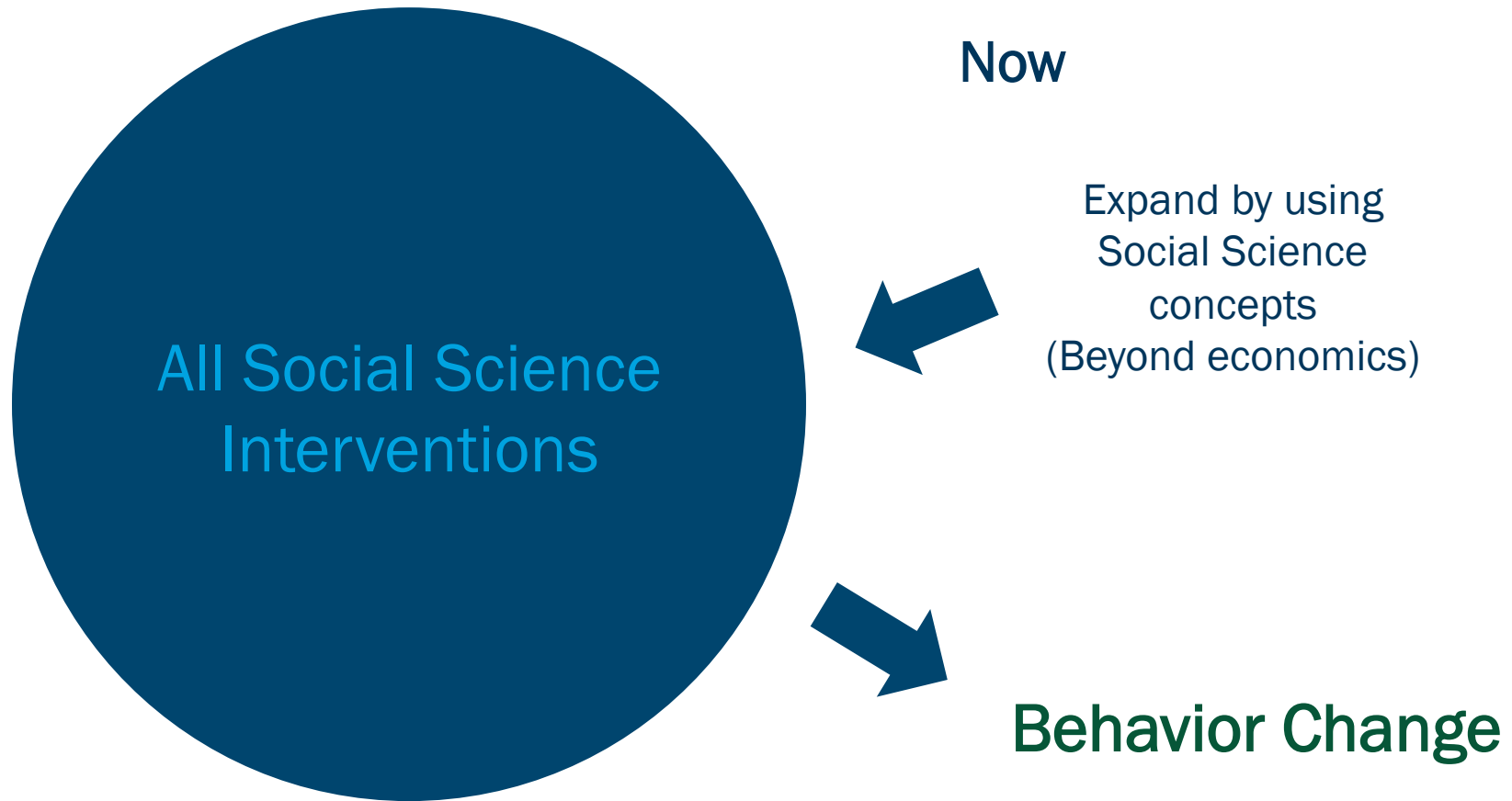
Programs focused on
one Social Science
discipline
(neo-classical
economics)



Behavior Change



Now: Expansion of Traditional Approach



Psychology/Cognitive Science and decision making

- The decisions we make are tied strongly to aspects of the decision situation as well as situations or phenomena that immediately precede the decision in ways that we are barely conscious of, if at all.
- Almost any subject or behavior (including energy-related) involves many more options than a person can hold in their mind.
 - We all use **‘decision heuristics’** to limit options & marketers can offer ways to help us limit them, funneling us to the “right” decision



Psychology/Cognitive Science and decision making

- The decision “frame” consists of all the alternative options, outcomes, probabilities and attributes that can be known to the decision-maker
- Marketers can also “frame” the options to guide the decision maker to desirable options (from the marketer’s perspective)

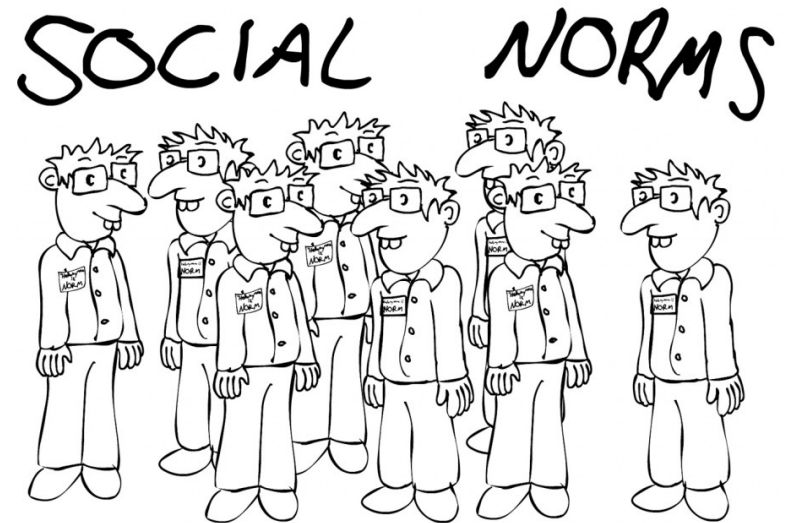
A Well-Known Frame



Sociology & Social Psychology

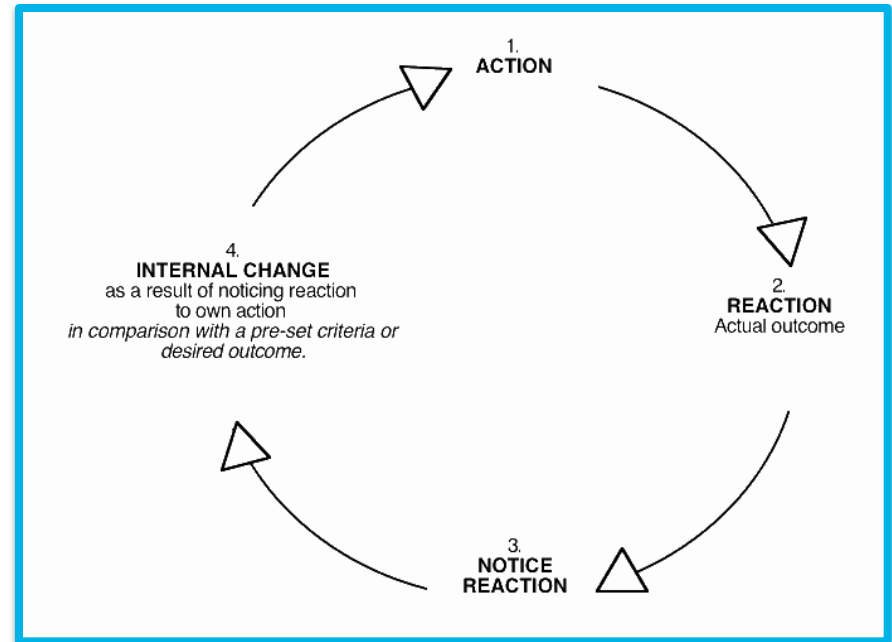
- Our behavior choices are highly connected to our social relationships
- This fact can be used to influence energy behavior choices
- Several theoretical perspectives help us do this
 - Sociology/reference groups/social exchange/cognitive dissonance/social learning to name a few

We judge our behavior by relevant **Reference Groups** & Social Norms



Learning Theory & Cybernetics

- **Information and Feedback Loops** are described by learning theory and cybernetics.
- As information and feedback from behavior are increased, new behavior is reinforced, sustained, & maybe augmented

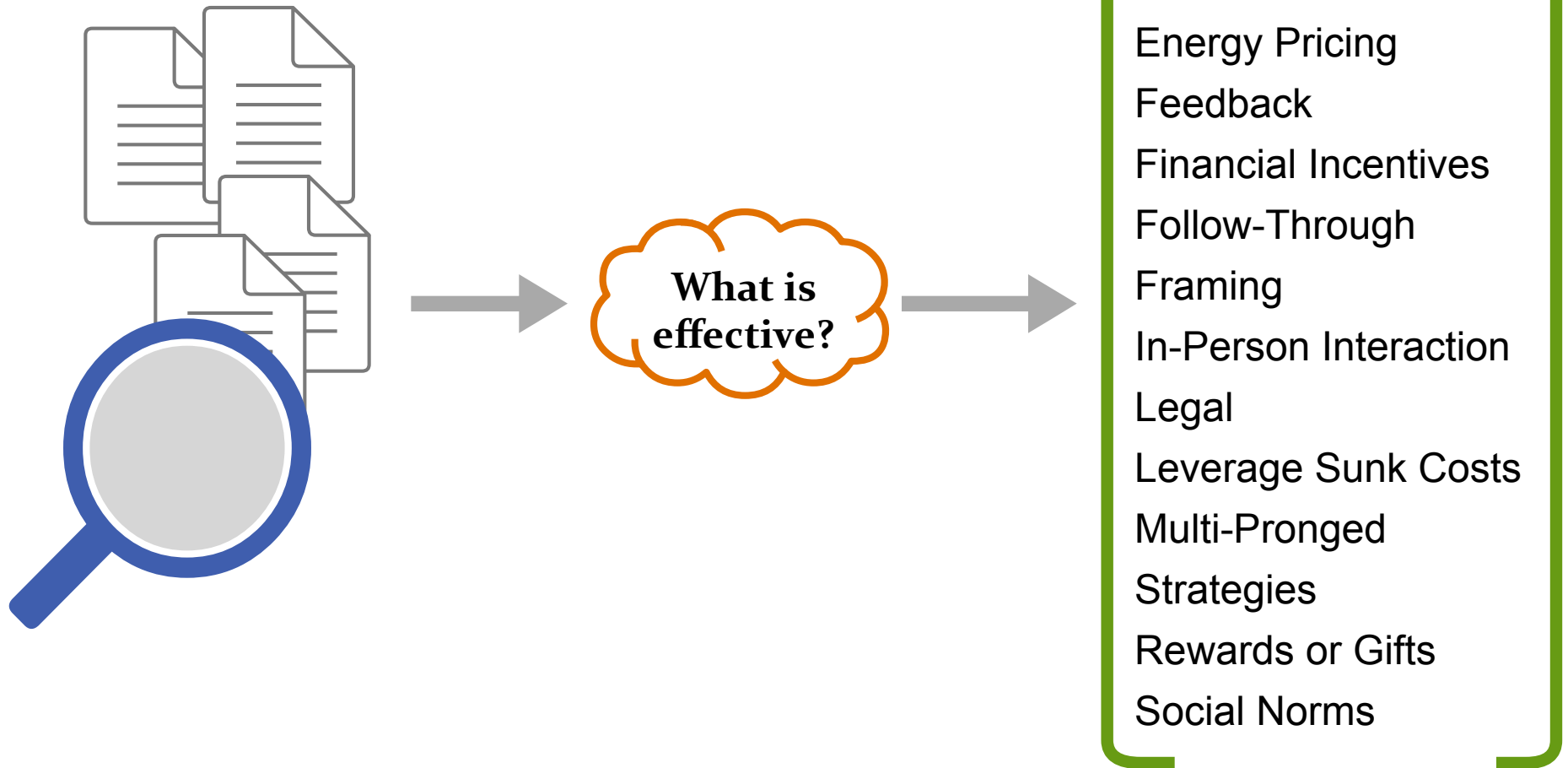


Commitment

- Multiple theories/disciplines address commitment and provide support for its efficacy in fostering behavior change
- Cognitive science, social exchange theory, clinical psychology, cybernetics



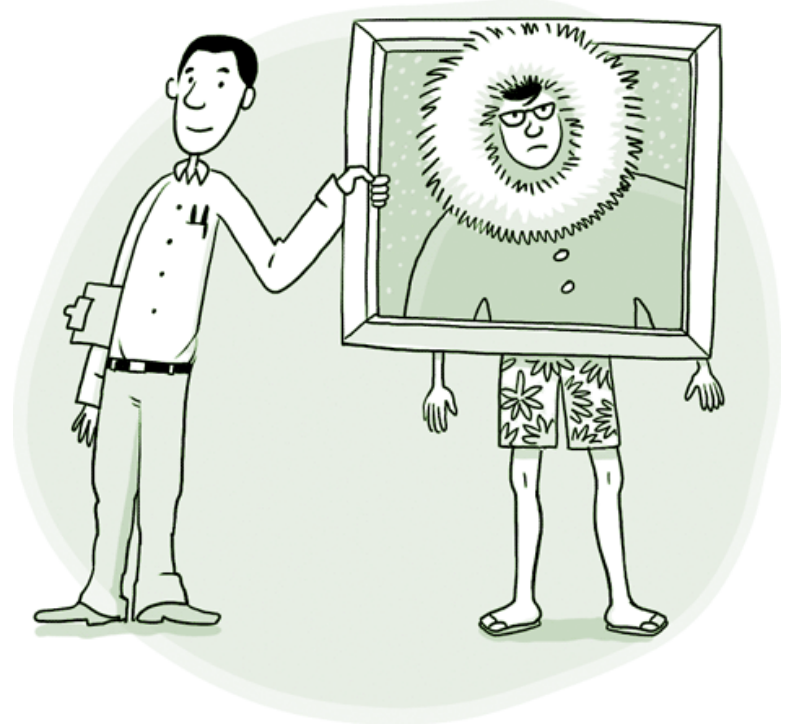
Review & Identify Effective Interventions



Top Interventions to Consider

Framing

- Has the most range of options
 - Emphasize benefits of EE
 - Minimize choices to EE
 - Frame EE
 - Costs or payback as reasonable
 - Behavior as moderate or recognizable
 - Behavior as gaining status or enhancing self-image
 - Action as preventing loss rather than incurring gain
 - Switch a program from opt-in to opt-out
 - Facilitate use of EE default option on products



Top Interventions to Consider

Activating Social Norms

- Provide comparison to a group using
 - Messaging or storytelling
 - Visual cues or modeling



ILLUSTRATION BY ALLAN SANDERS

More Top Interventions

Feedback

- Create learning loop
 - Frequency is important
 - Saliency is important
 - Can link to framing and activation of social norms



Feedback Actions

– Actions

- Monthly bills better than bi-monthly or quarterly
- Promote displays with real-time data
- ENERGY STAR Portfolio Manager



Commitment and Follow-Through

- Set goals/action plan
- Gain commitment to goals
 - *Ask to check yes or no to install lights provided in a kit*
 - *Provide prompts*
 - Based on action plan
 - To support activity (games/displays)



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Definition of Behavior Intervention

- Targets one or more specific behaviors that affect end users' energy use
 - Is rooted in social science research
 - Consciously considers which behavior(s) it will affect
 - Yields evaluable effects
 - Note that this is not a definition of a behavior *program*
 - It is the recommended definition of a behavior *intervention*
-
- Why?

