

Applying Behavioral Science to Building Decarbonization

Reuven Sussman, PhD

Director of Behavior, Health and Human Dimensions Program

Buildings Don't Decarbonize Themselves

July 21, 2026



Which Items Use the Most Energy? (Baird & Brier, 1981)

?



Perceived
Order



Correct
Order



Plan for Today

- Behavior matters
- Some theories
- Using the EAST Framework



Behavior (and Behavioral Science) Matters

ACEEE::



Net Zero by 2050

A Roadmap for the Global Energy Sector

International
Energy Agency

iea

Actions that Reduce Energy

- Reducing excessive or wasteful energy use
- Transportation mode switching
- Materials efficiency gains

Key Points

Efficiency > Curtailment

Important behaviors require programs and policies

What Influences Behavior Change: Theories

ACEEE::



What Drives Behavior? Common Assumptions

- People don't know
- Money is everything
- Technology will save us
- Policies and laws are all we need to change behavior
- People make rational decisions

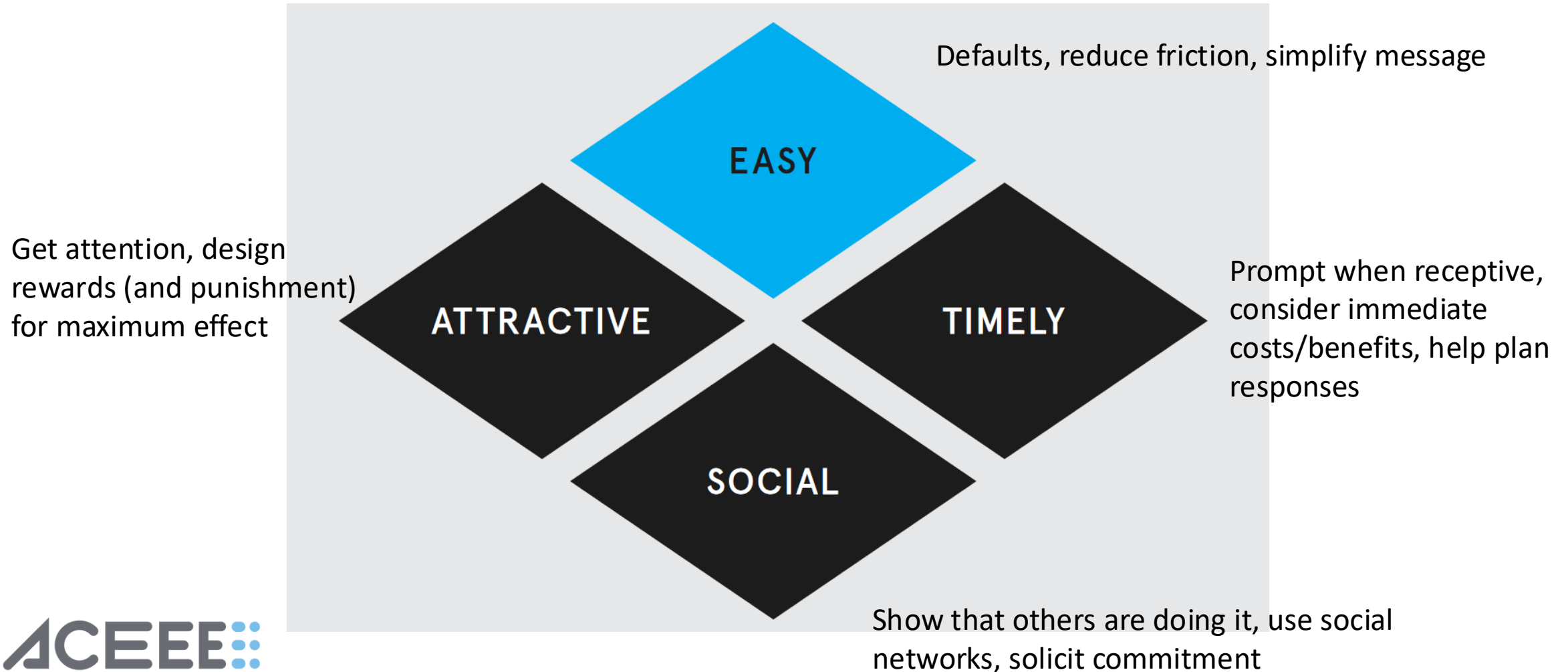


Theories You Can Use!

ACEEE::



Implementing a Solution: EAST Framework



Attractive

Make the desired behavior more appealing

ACEEE::



Attractiveness Varies by Audience: Home Upgrade Packages (Sussman, Lewallen & Conrad, 2024)

Which of the following energy upgrade packages would you prefer?

Package A

Package B

Insulation and Air Sealing



Window and Door Upgrades



Heating and Cooling System



Water Heater



Major Appliances



Solar Panels



Electric Vehicle (EV) Charger



Cost to Homeowner
(financed at 0% interest over 5 years)

Savings on Energy Bill
(Bill = \$250 / mo. before upgrades)

No one package to rule them all...

Five classes of preferences:

Key Takeaways

ACEEE



To Sum Up

- Behavior matters
- Theories can be useful
- Make it EAST to get people to act
 - Easy
 - Attractive
 - Social
 - Timely



HE SPECIALIZES IN DRAWING CONCLUSIONS

BEARhub

BEHAVIOR | ENERGY | ACTION | RESEARCH

We help increase participation and save energy!

Behavioral Science Assistance for Government, Non-Profits, and Business

BEARhub.net

Thank you!