

# Using social science to improve demand-response programs

Case studies from the utility sector and beyond

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POWERING WHAT'S **NEXT**



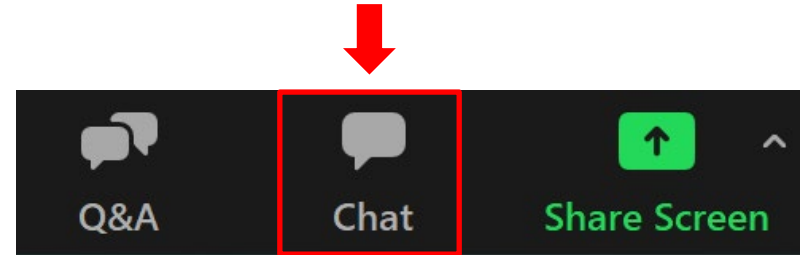
# This is a virtual roundtable discussion

- Participation is essential
- Use Zoom's **chat** feature to pose questions and share comments
- Unmute your line when you're ready to speak (\*6)
- Turn your video on



# Logistics for our discussion

- Select Chat on the bottom toolbar
- Enter your question for Beth, Amy, or the discussion group
- We'll queue up your questions and work through as many as we can



An illustration of a diverse crowd of people with their hands raised, set against a teal background. Numerous speech bubbles of various colors (white, light green, orange) are scattered throughout the scene. A prominent orange speech bubble in the center contains the word "Hello!".

Hello!

# Today's agenda

- WattTime DR program enrollment strategies
- Postevent feedback and implications for ongoing participation and performance
- Using social science to improve program enrollment and participation
- Discussion—throughout!



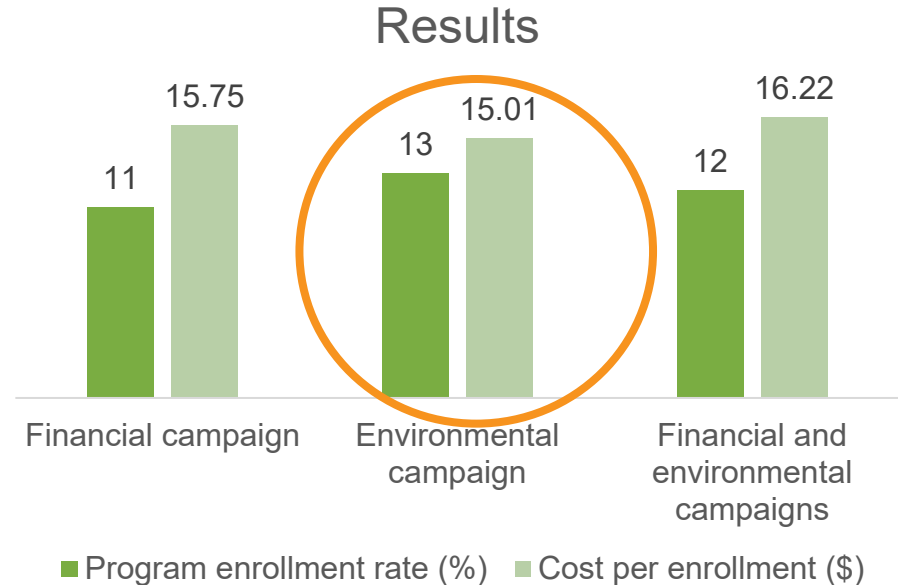
# Effectiveness of marketing and incentives



## WattTime and Great Lakes Protection Fund enrollment experiment

### Specific goal: Avoid running coal peaker plants

- Program type: Residential demand response
- Experiment
  - Group 1: financial campaign only
  - Group 2: environmental campaign only
  - Group 3: financial and environmental campaigns



Source: [Customer Response to Demand Response](#) (PDF), WattTime

# Case study on communication



## SDG&E residential peak-time rebates

- Customers who enrolled in both email and text alerts outperformed those with only one communication channel.
- Consider having both email and phone alerts as the default option.

Communication channel	Reduction in kilowatt demand per customer per event (%)
Email only	2.9
Text only	4.2
Email and text	9.1

Over 2x better!

Source: [2017 Impact Evaluations of San Diego Gas & Electric's Residential Peak Time Rebate and Small Customer Technology Deployment Programs](#), SDG&E



Let's discuss!

Speak up or "chat" your response







# Insights from behavioral science

- Commitment (including goal setting)
- Feedback
- Follow-through
- Framing (e.g., choice architecture)
- In-person interactions
- Rewards or gifts
- Social norms
- [Efficiency beyond widgets](#)





Let's discuss!

Speak up or "chat" your response



# Related E Source research

[Behavioral DSM programs resource center](#)  
(a collection of reports)

[From direct load control to flexible grid management: The evolution of demand response](#)  
(report)

[Increasing demand-response program performance](#)  
(data science case study)

[PowerTalking episode 2: The past, present, and future of demand response](#)  
(podcast)

# Demand-side management

## Upcoming research

**Designing a  
centralized data  
strategy for DSM  
programs**

**Understanding  
behavioral  
persistence of  
savings**

**Driving load  
flexibility with  
commercial and  
industrial  
automated DR**

**Residential DR  
programs and  
incentives  
comparison**

*From the E Source 2022  
Residential DR Programs and  
Incentives Comparison study*



# Energy equity: An E Source framework

# Thank you! Questions?



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