Using behavioral science to promote the adoption of green technologies

David G. Rand
Erwin H. Schell Professor
Sloan School and Brain & Cognitive Sciences
Massachusetts Institute of Technology
<3% of new car sales

<11% of energy consumption
Behavior change is a central challenge for new innovations
ACT’s Mission

**Apply** behavioral science to **promote** contributions to **public goods**

**Distill** and **communicate** behavioral science so that others can do the same
Three core principles

✓ Increase observability
✓ Eliminate plausible deniability
✓ Communicate expectations
Sustainability

Philanthropy & Volunteering

Health

Digital Economy
Sustainability

Philanthropy & Volunteering

Health

Digital Economy
Dear [Name],

We have teamed up with your building’s management to offer Pacific Gas and Electric Company’s SmartAC™ program to you and your neighbors. Please take a moment to read about the program and let us know whether you’d like to participate.

**The power is in your hands.**

It has been said that one small action can cause a ripple effect that results in a dynamic change, like the idea that a butterfly flapping its wings can set off the winds that change the weather on the other side of the planet.

A ripple effect happens in California when temperatures rise and thousands of individual air conditioners start operating at the same time. This can strain California’s energy resources and can create peak conditions that result in summer heat power interruptions.

Just like the idea that a butterfly’s wings have the power to change the weather, you too have

N=1408 CA residents
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<tr>
<th>Sign Me Up!</th>
<th>Personal Code (From your letter)</th>
<th>Date (MM/DD)</th>
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Public good frame

You have the power to make a difference.
And make $25 with SmartAC.

It’s free
It’s easy
It’s good for California
You have the power

Non-public good frame

You have the power to make a difference.
And make $25 with SmartAC.

It’s free
It’s easy
It’s good for California
You have the power

Make $25 with SmartAC.

It’s free
It’s easy
What makes ambassadors effective?

Charismatic
Popular
Respected
Attractive
Knowledgeable
Passionate

Did they install through the program themselves?
Number of towns: 18  40

63% more installations!

Instrumental variables regression suggests a causal effect
Further experiments

Survey experiments of homeowners from across the US

Demonstrate causal effect of ambassador adoption on installation intentions

Illuminate mechanism:
• Dislike of hypocrites? NO
• Simple imitation of non-installation? NO
• People think that the ambassadors who don’t install themselves don’t actually believe the program is a good idea
Home Water Reports along with…

PUBLIC

Tree It’s Our Environment

Excess water use harms our waterways. Find customized tips on how you can save water and benefit Connecticut’s environment.

PRIVATE

Dollar It’s your money

Excess water use wastes your hard earned money. Look below for customized tips on how you can save water and benefit your wallet!

10,500 households from wealthy suburban areas in Connecticut
Change in water use relative to Control (gallons/day)

2.8% decrease
Behavior change is a central challenge for new innovations. Behavioral science can deliver large returns at essentially zero cost. Want to try it out?