UC Berkeley

UC Berkeley Previously Published Works

Title

Guide to Effective Messaging Strategies For Greenhouse Gas Reduction Competitions

Permalink

https://escholarship.org/uc/item/3770w8h5

Author

Jones, Christopher M

Publication Date

2015-11-01

Guide to Effective Messaging Strategies For Greenhouse Gas Reduction Competitions

Version 1 – November 2015

Report prepared for

CoolCalifornia Challenge, Energy Upgrade California™ University of California Cool Campus Challenge





Cool Campus Challenge

Citation: Christopher M. Jones, 2015. Guide to Effective Messaging Strategies For Greenhouse Gas Reduction Competitions. Report prepared for Energy Upgrade California and the University of California. November 15, 2015. Contact: cmjones@berkeley.edu

Introduction

Let's start with a bit of realism. People lead busy lives with many competing priorities. Saving energy and carbon is often a combination of boring, time-consuming, and complex. The actions people do take are largely out of public view and, consequently, people receive very little positive feedback on their accomplishments. Then, after all their efforts, many are left wondering if their actions really add up to make a difference.

Energy reduction competitions do much to improve this situation by making saving energy more fun, providing clear information on what to do, and engaging with others to make low carbon behaviors visible. What's more, by joining with hundreds or thousands of others in your community and across communities, participants feel confident that their collective efforts add up to make a big difference. And they do!

The key to success of any community or campus program is the active involvement of local program managers. This guide is intended to help local program implementers of the CoolCalifornia Challenge and the Cool Campus Challenge to increase the number of enthusiastic, motivated and dedicated participants in each local program. The 20 strategies outlined in this guide are grounded in scientific research and have been been repeatedly demonstrated to motivate more sustainable behavior. The strategies are:

- 1. Make it Fun, Simple & Social
- 2. Use Data to Understand Your Audience
- 3. Set Meaningful and Achievable Goals
- 4. Emphasize Collaboration Over Competition
- 5. Give Plenty of Positive Feedback
- 6. Use Comparative Feedback to Your Advantage
- 7. Get Local Participants Are Your Best Messengers
- 8. Use Social Norms Effectively
- 9. Create Buzz Through Social Diffusion
- 10. Use Powerful Imagery
- 11. Reduce Barriers & Highlight Benefits
- 12. Encourage Public Commitments
- 13. Use Rewards and Incentives Wisely
- 14. Use Prompts to Create Enabling Environments
- 15. Remember the Golden Rule
- 16. Deadlines Work
- 17. Level Up & Other Gamification Tips
- 18. Frames That Work
- 19. Mix It Up & Test It Out
- 20. Move from Personal to Culture Change

While it is certainly not realistic to implement all of these strategies, it is worthwhile to take some time to understand them and carefully choose which ones you will try.

1. Keep it Fun, Simple and Social

Keeping in mind that saving energy and carbon is usually boring, difficult and solitary, a good rule of thumb to motivate participants is to make your program <u>fun</u>, <u>simple</u> and <u>social</u>. Your participants already want to do the right thing. Your job is to make it as enjoyable and motivating as possible. Try to evaluate everything you do based on these criteria. Ask yourself, is my intervention fun, simple and social? If not, how can I make it more so?

_			
п	n	c	
	u	3	

s:		
	Make i	t Fun
	V	Give participants lots of positive feedback when they complete actions
		Share stories participants submit
	V	Don't be afraid to be a little goofy in your messaging
	Make i	t Simple
	V	Tell participants exactly what to do to earn the most points
	¥	Get their foot in the door with the easy tasks and work up to more complex ones
	Make i	t Social
	V	Share stories participants submit
	V	Share photos of participants completing actions

Things that are not particularly fun, simple or social

- Lists of tips or information
- Links to external websites where they can get more information

Offer small fun incentives or awards for top performing teams

Telling participants how much money they can save (it's usually not much, and that is not why they are doing this anyway)

2. Use Data to Understand Your Audience

Behavioral programs frequently attempt to tailor intervention strategies to population segments with shared demographic characteristics and attitudes. There is strong evidence that highly tailored interventions are more effective; however, when resources are limited and programs intend to have broad reach, it is useful to identify important characteristics that are shared across population segments. Two key areas to focus attention are motivations and abilities. Use data to find this out early on. In relation to Strategy 1, making your program simple will increase the ability of participants to take action. Making your program fun and social will increase motivation. But to understand where to focus your efforts, it is important to

know existing levels of motivation and ability in order to design the most effective intervention and messaging strategies to trigger the desired behaviors.²

Motivations: It is essential to highlight and reinforce the primary motivations of participants in messaging, both in recruitment and once they are in the program. Use surveys or personal communications to ask participants why they have joined. What do they seek to accomplish? Why is the program meaningful to them and how could it be more meaningful? You may be surprised.

The figure below shows the motivations of participants in the Cool California Challenge based on survey results. Participants have highly altruistic motivations to participate, including improving where they live, helping the environment and supporting organizations they care about. Importantly, receiving recognition for their city and early prizes rank last on the list, with some (the true altruists) reacting negatively to these concepts. **Keep in mind that active** participants on your program care primarily about helping others, so keep the messaging positive and focused on what we can accomplish together. This builds motivation and makes their actions more meaningful. Participants do not like to be told they should participate (or imply that they are participating) for personal gain or simply to beat others; this is apposed to their values and primary motivations.

	KEY
Very important	4.0
Important	3.0
Somewhat important	2.0
Not very important	1.0
Not important at all	(A)

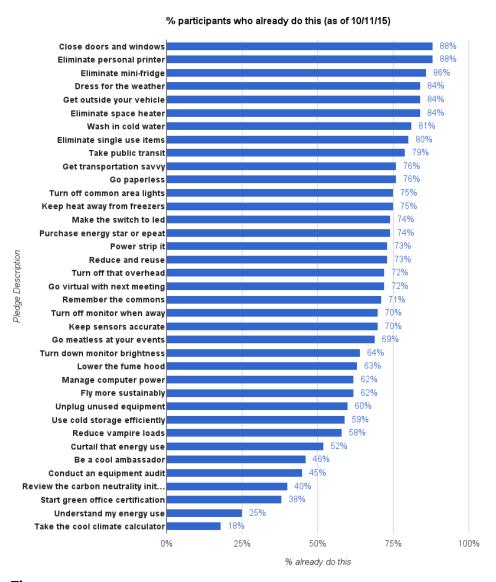
The following is a list of reasons why people are interested in joining the CoolCalifornia Challenge. How important is the following to you?

Motivation	All participants	Under 35 years old	Over 35 years	Women	Men	Under \$70k household income	Over \$70k household income
Improving where you live	3.4	3.7	3.4	3.5	3.3	3.4	3.5
Making an environmental statement	3.2	3.0	3.3	3,3	3.1	3.2	3.2
Supporting organizations you care about	3.2	3.3	3.2	3,3	3.0	3.2	3,2
Learning how to save money	3.2	3.4	3.1	3.3	3.1	3.3	3.1
Learning about new technologies	3.1	3.0	3.1	3.1	3.1	3.1	3.0
Being part of something important	3.0	3.2	3.0	3.1	2.8	3.0	3.0
Receiving discounts for green products	2.9	3.1	2.8	2.9	2.8	2.9	2.7
Having fun	2.8	3.1	2.7	2.8	2.8	3.0	2.7
Living in a "Cool California City"	2.8	2.7	2.7	2.9	2.6	2.9	2.7
Getting to know your neighbors	2.6	2.6	2.6	2.7	2.3	2.7	2.6
Making a political statement	2.4	2.4	2.4	2.5	2.3	2.4	2.5
Meeting like-minded people	2.4	2.5	2.3	2.5	2.2	2,5	2.4
Receiving recognition for your city	2.4	2.6	2.3	2.5	2.1	2.5	2.4
Winning prizes	2.1	2.5	2.0	2.1	2.0	2.3	1.9
N	318	47	259	195	106	110	137

- Thank participants for helping create a culture of sustainability in our community
- ☐ Highlight how many pounds of CO₂ have been saved by participants to-date
- If you use raffle prizes, do not tell them this is why they should participate. Use it rather as a fun "thank you" surprise gift to increase enjoyment in the program.

Abilities: Participants will have varying ability and interest to carry about the behaviors the program seeks to encourage. Focusing on actions that are too difficult or unpopular will be demotivating...people need to feel confident in their ability to complete actions (personal self-efficacy). At the same time, focusing on actions that are too simple that most people have already done will also decrease participants belief that the program is creating meaningful change (low outcome self-efficacy), which is a key motivation.

The Cool Campus Challenge collects data on which behaviors at work participants already do and which actions they pledge to do. The program includes actions with a range of adoption rates, allowing participants to earn points for things they are already doing and plenty of opportunities to do new actions. See figure below.



- For popular actions participants already do, point out the percentage of people who already do this (positive descriptive norm).
- For actions that are less popular, try to reduce barriers to action by collecting and disseminating stories from people who have completed the action saying how the did it.
- Employ a mix of easy action that most people do and more difficult actions that fewer people tend to do.

3. Set Meaningful and Achievable Goals

Participants need to know what they are working towards. Having clear goals for participation will help them understand what they are seeking to accomplish and what benefits they will receive if they get there. Being on the winning city or campus should not be your only goal, or even the primary goal...there will only be one winner after all. It is important to set local goals for participation in the program. The best local programs set several clear goals as well as fun incentives for accomplishing them.

Goal setting is tricky: set them too low and participants will achieve too little; set them too high and you risk not achieving the goal. It is sometimes OK to wait to set goals until midway through a program, when you have a better sense of what is possible. Set the goal high enough to make participants work hard, and be prepared for your response whether or not your program achieves the goal.

Tips:

- Example goal: If the campus or city enrolls 10% of staff by December 15, all participating staff will receive time off for a celebration event in honor of participants
- Offer recognition in mailings to all participants and teams that have reached the top level.

4. Emphasize Collaboration Over Competition

While scoreboards typically rank participants, teams and communities in online competitions, doing well should be emphasized as the goal, not winning. The goal is collective greenhouse gas reductions and this will only happen if every community does well. All communities, teams and participants that do well (whatever the criteria) should be recognized.

Think of the Challenge as a sports league. Teams are motivated to do their best and improve their abilities, even if they are not in contention for the winning spot. An organized league

encourages more commitment and is more enjoyable to play and to watch than practice games. We want people to play for the love of the game. If winning is emphasized as the goal then competition will be demotivating for those who are not in contention. Encourage people to work hard for the team. Competition helps raise everybody's game. While there may be only one winner, all teams, and the sport overall (i.e., reducing CO₂), greatly benefit from the active participation of players.

Tips:

- Provide recognition for any team or participant that reaches a particular level
- Point out that every action completed by participants moves our community another step toward our collective goal
- ☑ Keep it friendly share experiences with other cities or campuses of what works best
- ☑ Emphasize the collective results of all communities, teams and participants

5. Give Plenty of Positive Feedback

Every teacher knows that little praises, like encouraging words, stickers and smiley faces, go along way to motivate students. People like to receive positive feedback, often immediately, after taking actions. The CoolCalifornia and Cool Campus Challenges offers points every time participants take action, but there is much more that local program managers can do to provide positive feedback for participation. If participants do not receive sufficient positive feedback for their efforts, their interest will wane.

Tips:

- Try sending emails to all participants who have reached different levels in the program thanking them for their active participation. Just thanking them is enough. You do not need to ask them to do more (although "keep up the great work!" can't hurt).
- Try including as much detail as possible about participants in emails. For example, "We would like to thank you for taking 6 actions and earning 2,300 points so far in the Challenge. Good job!"

6. Use Comparative Feedback to Your Advantage

Competitions use comparative feedback as a primary intervention strategy. Participants, teams and communities earn points for completing actions and are ranked based on their performance. Comparative feedback lets people know how well they are doing compared to peers, which has

been repeatedly demonstrated to be a powerful motivator of behavior.

Tips:

- Take screenshots of the scoreboard of teams and communities and include this in messaging
- Regularly let participants know how many points your community needs to move up to the next level.
- Thank and praise participants for increasing their level in the program.

7. Get Local - Participants Are Your Best Messengers

People respond best when approached by a peer that they trust and comprehend. Usually, the trusted messenger is someone who lives in the local community. If people see a peer taking an action, this serves as a model for their own behavior. They think, "if my friend can do it, so can I." Peers usually know the best language to motivate participants. When peer-to-peer contact is limited, messages from local organizations (e.g., your city or campus) are always much more motivating than messages from the program overall.

Tips:

- Once a week use your program's mailing list to send personalized messages to participants in your community. Use tips in this document and your own creativity to tell them why their efforts matter.
- Local program managers should have a support team of volunteers assigned to different tasks.
- Each week have someone on your team dedicated to answering questions from local participants. Building person-to-person contact with participants is critical.

8: Use Social Norms Effectively

Individuals are greatly influenced by the behavior and expectations of peers. Descriptive social norms indicate how others, particularly peers, tend to behave. Injunctive norms indicate social approval or disapproval of behavior. Both of these types of normative messaging are powerful tools in behavior change programs.

- Identify which actions are most popular and target participants who have not taken the action. For example, "60% of participants have already taken this action. Have you?"
- Share quotes from participants stating that certain behaviors are expected in their community and why.

9. Create Buzz Through Social Diffusion

Energy and carbon footprint reduction competitions encourage by enhancing social interaction among participants. For example, enrollment relies largely on word of mouth, and promotion of programs occurs through social networks such as groups of friends, colleagues, dorms, schools, churches, community-based organizations and other opportunities for peer-to-peer exchanges (e.g., through social media such as Facebook, Twitter, Instagram, etc.). In the most successful communities (with the most points) participants are likely to hear about the program from multiple sources. When individuals receive multiple messages from multiple sources this "buzz" sends a signal that the program is popular and expected by peers.

In general, more messaging is better than less messaging. Many program managers tend to be overly sensitive to participants who complain and drop out of the program because they receive too much messaging. There will always be participants who drop out of any program. While it is true that sending more messages will generally lead to more drop outs, each message also has a positive upside. From the perspective of program outcomes, as long as participation and enrollments are increasing (on net) with more information, this is a benefit to the goals of the program. It is impossible to please everyone, and you can expect to hear from people who complain or have problems much more than people who are happily enjoying participating in the program.

Tips:

- Try to send at least one personalized message per week to participants
- Experiment with different messengers. Participants should hear about the program from multiple sources
- As a rule of thumb, try to send no more than one message a day to participants from all sources, except during deadlines, at which time people expect to receive a barrage of messages.

10. Use Powerful Imagery

Imagery uses figurative language to represent objects, actions and ideas (e.g., saving energy) in such a way that it appeals to our physical senses and emotions. Imagery makes use of particular words,

and word imagery is associated with mental pictures. In competitions, imagery can be a powerful tool to help communicate programs to diverse geographic, demographic and psychographic population segments.

Tips:

- Use images submitted by participants in your local program as much as possible in local communications. These are typically the most powerful and motivating images. Participants will think "if she can do it so can I."
- Don't have images yet? Search for Google images (images.google.com) that are free of copyright or free for educational purposes and include appropriate images in communications.
- ☑ Stories convey mental images too.



Riverside Mayor Baily riding his bike to work



" Awesome job!" Image used in thank you email

11. Reduce Barriers & Highlight Benefits

The central component of Community-Based Social Marketing (CBSM) is to reduce the barriers and highlight the benefits of particular behaviors. Barriers prevent people from taking action and many times these barriers can be eliminated or reduced through conscious effort of program designers. Similarly, the benefits of taking action may not be well know or available to all.

Use stories submitted by participants to uncover why they take particular actions and how they have overcome barriers. Add the most powerful quotes from participants in email communications with participants.

12. Encourage Public Commitments

People are more likely to follow through with an action if they have made a commitment to do it, especially a public commitment. Public pledges activate social norms because people want to live up to others' expectations and follow through on their commitments. A review of numerous commitment studies have found: (1) commitments are most likely to be effective when an individual is motivated to act but has not engaged in the action; (2) written commitments appear to be more effective than verbal commitments; and (3) public commitments appear more effective than private commitments. As described in this report, campus conservation competitions often use this behavior change strategy, for example, where participants could see all the commitments that were made by residents on a particular dormitory floor.

Tips:

- Where possible show public commitments in public space, e.g., post profile pages of participants in public spaces
- Encourage public figures to make commitments to take particular actions.

13. Use Rewards and Incentives Wisely

Local program implementers are often tempted to use raffle prizes and other incentives as primary mechanisms to motivate participants, yet earning prizes ranks last on a list of motivations. Prizes are an extrinsic reward. We do not want people engaging in sustainable practices because they expect to win a prize. We want them to do it because it is the right thing to do to help their communities and the environment. Indeed, that is why active participants are doing this in the first place.

The goal of your program should be to <u>the increase intrinsic motivation</u> of participants to save energy and reduce carbon footprints. We want participants to sustain the behaviors long after the competition is gone. This requires building strong habits. Statements like "I compost" "I ride my bike to work" reflect strong personal norms of behavior that lead to continued participation. Even one-time actions, like purchasing energy efficient equipment or adjusting computer settings must eventually be repeated.

v v	raffle prize is fine motivation for one-time actions (like a donation to a charity), but it is not a motivation for continued participation. Those who enroll just for the chance of winning a raffle prize will likely not be actively engaged in the program Use raffle prizes as a surprise "thank you" gift for top performers.
	14. Use Prompts to Create Enabling Environments
to ove to a ta	tting is a common barrier to individuals engaging in sustainable behaviors, and prompts help ercome forgetting. Prompts are visual or auditory memory aids that are used in close proximity argeted behavior: e.g., turning off the lights, or adjusting the thermostat. When used, prompts d target positive behaviors rather than encouraging the avoidance of negative behaviors.
Tips:	
V V	Include links to the program software in messages to participants Print stickers
	15. Remember the Golden Rule
gift of 2010).	25. Remember the Golden Rule eciprocity rule explains people's strong tendency to reciprocate favors or gifts with a favor or equal or greater value, regardless of whether the initial favor was solicited or not (Ashby For example, a utility providing a gift or other reward in advance of a customer changing behavior may be particularly effective in encouraging the desired action.
gift of 2010).	eciprocity rule explains people's strong tendency to reciprocate favors or gifts with a favor or equal or greater value, regardless of whether the initial favor was solicited or not (Ashby . For example, a utility providing a gift or other reward <i>in advance</i> of a customer changing

16. Deadlines Work

During the first two CoolCalifornia Challenge competitions about 30% of all points were earned just one week before the final deadline. An early enrollment deadline also resulted in large spikes in participation.

is an important resource. Knowing that there is a deadline to receive a benefit, incentive, earn points, or complete certain tasks, is motivating to participants.

17. Level Up & Other Gamification Tips

Gamification refers to the incorporation of game design elements or strategies into real world applications. Competitions are often considered games, or a subset of games (Mazur-Stommen and Farley 2013)2. Competition itself is a game element, but there are also other important common elements of games, such as completion of small tasks, passing through levels, reward and punishment, and rules that define how the game is played and what strategies may be most effective. While the purpose of playing games is typically enjoyment, gamified energy reduction competitions incorporate the core elements of games with the goal of achieving a pro-social or pro-environmental purpose. Gamified energy efficiency solutions have the following traits: clear goals and rules of play, a compelling storyline, short-term challenging but achievable tasks, and quick feedback (Grossberg et al. 2015).

Tips:

- Use levels in your program to offer particular rewards or benefits to participants. For example, all "Gurus" will
- Set deadlines for completing particular tasks. For example, anyone who completes a certain action by a particular day will be
- Send PDF versions of badges to participants with a "thank you" message for achieving the next level.

18. Frames that Work

Loss Aversion

People are more sensitive to losses than to gains, and hence more concerned with what they may lose from a decision (e.g., up front cost) than by what they may gain (e.g., future reductions in energy bills) (Stern 1986; Kahneman and Tversky 1981). As described in this report, many competitions emphasized how much money was lost due to energy waste, as well as highlighting how much energy was saved.

Scarcity

People are more likely to want something that is scarce. Mentioning that something desirable is running out sends a signal that something is in high demand and creates a sense of urgency.

19. Mix It Up & Test It Out

Different messages will resonate with different work for different audiences.

Tips:

In each message you send out, try using different strategies from Checklist. Try different strategies each week and see which ones work best.

20. Move from Personal to Culture Change

The goal of any program should be to increase people's belief in their ability to create meaningful, positive change. Energy reduction competitions do this but providing encouragement for taking individual actions, and helping build strong collective action with benefits that extend far beyond personal gain. Remember that participants are in this for the collective good. Be sure to highlight the collective benefits of your program and what you hope to achieve by their participation. Thank them for their help. Encourage them to play for the team. Ultimately, the program seek to create a culture of sustainability in communities that will persist over time. Focus on those benefits and longer term goals in your communications. It will make everyone feel more committed.

Cited References

- (1) McKenzie-Mohr, D. Fostering sustainable behavior: An introduction to community-based social marketing; New society publishers, 2013.
- (2) Fogg, B. J. A behavior model for persuasive design; ACM, 2009; p 40.