



Could a Plastic Crab Make You Turn Off Your Light? The Answer Might Surprise You!

An Assessment of “Community-based Social Marketing” as a Behavior Change Tool

A team from Mecklenburg County’s Land Use and Environmental Services Agency (LUESA) put Doug McKenzie-Mohr’s behavior modification theory to the test by developing a “lights out” campaign for County employees. McKenzie-Mohr’s “Community Based Social Marketing” (CSBM) is considered an attractive alternative to information-based campaigns. Rather than simply giving employees information about a desired behavior and expecting them to change their habits, LUESA’s team redefined the social norm at the Hal Marshall Center (HMC). The goal of the project was to determine if CBSM is an effective behavior change strategy. Pilot project steps included:

- Completing a literature review to identify benefits and barriers to turning off lights;
- Surveying HMC employees concerning their attitudes about lighting;
- Conducting two building-wide audits to capture a pre-project baseline;
- Organizing two focus groups to pre-test the project design;

After 8 months of research and planning, the team rolled out a 6 week campaign consisting of: 1) a “Crab You’re It” game where employees had some fun by catching co-workers who left their lights on and 2) an adopt-a-light program which targeted lights in common areas that no one felt a responsibility for turning off. After the campaign, follow-up audits were performed to determine if the campaign was effective at changing behavior.

Education vs. Social Marketing

Information-based Campaigns:

- Expect that subject will use information to make a decision or adopt a behavior
- Give information by print, radio or other media
- Effective for persuading audiences to choose a certain brand or product
- Ineffective at altering behavior

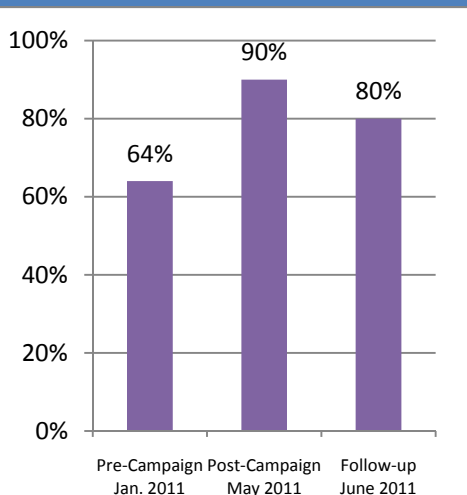
Community-based Social Marketing:

- Considers barriers and benefits to specific behaviors
- Goes beyond “education” to action
- Focuses on altering social norms

Results and Conclusions

Before the campaign, only 64% of HMC lights were being turned off building-wide while 90% of lights were being turned off at the end of the campaign. A follow-up audit, conducted a month after the campaign ended, showed that the percentage of lights being turned off had decreased to 80%, which is still 25% better than before the campaign. The following “lessons learned” will be useful in future CBSM projects:

Audit Results, % of Lights Off



Make campaigns as personal or grass-roots as possible: The “Crab, You’re it!” game changed the source of the “turn-off your light” message from a third-party to co-workers.

Focus group feedback is essential: The focus group provided valuable information about campaign design that could not have been obtained through survey techniques. The feedback dramatically changed how the campaign was introduced.

Management support promotes participation: The campaign received greater recognition and/or acceptance because Director-level support was expressed explicitly at the beginning of the campaign.

Target audience survey refined the literature review: The survey results identified the specific benefits and barriers influencing HMC employee behavior.

Process is effective, but lengthy: Future projects should weigh the potential benefits of a CBSM campaign with the investment of staff time and resources.

Community-base Social Marketing Pilot Project

Community-based Social Marketing:

Developed by Dr. Doug McKenzie-Mohr, Community-based Social Marketing (CBSM) is a behavior modification strategy based on research in the social sciences. This research demonstrates that behavior change is most effectively achieved by removing barriers to an activity while simultaneously enhancing the activities benefits. To be effective, programs must be carried out at the community-level and involve direct contact with people.

Community-based social marketing involves four steps:

1. Identify the barriers and benefits to a sustainable behavior,
2. Develop a strategy that utilizes proven behavior change "tools,"
3. Piloting the strategy with a small segment of the community, and
4. Evaluating the strategy once it has been implemented.

Pilot Project Guidelines:

- This is a “Proof of Concept” project.
The goal was to follow the steps of the CBSM process to determine if they could successfully change behavior, not necessarily to achieve the greatest energy reduction.
- Keep the project simple enough that it has a reasonable chance of success.
- Must be able to independently verify results (i.e. observation not self-reporting).
- Focus on workplace energy conservation behavior at Hal Marshall (HMC).

Pilot Project Workgroup

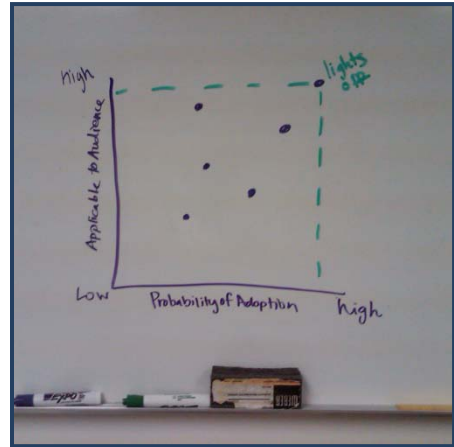
- Thomas Crow – Real Estate Services
- Stewart Espy – Solid Waste
- Megan Green – Air Quality
- Shelley Lanham – Air Quality
- Ryan Johnson – Solid Waste
- Erin Oliverio – Water Quality
- Heidi Pruess – LUESA



CBSM Campaign Design Process

Identify Target Behavior: By using a plotting exercise, shown to the right, the pilot project workgroup selected “turning off the lights” as the target behavior for the CBSM pilot project. This behavior was selected for several reasons: it applies to most employees in the building; it has a high likelihood of adoption; and it is easy to verify if the behavior is taking place.

Complete a Literature Review: Using a variety of academic and popular sources, the workgroup identified several variables that influence an individual’s decision about turning off lights. A full bibliography is available in Appendix A.



Benefits of energy efficiency (turning off the lights) include:

- Social norm conformity (*Simon, WSJ, 10/18/2010*)
- Personal norms/identity (*Scherbaum et al. 2008, Bucolo & Buys, 2007*)
- Managerial expectation compliance (*Bucolo & Buys, 2007*)

Barriers to energy efficiency (turning off the lights) include:

- Invisible, intangible results (*Brown, 2008*)
- Belief that others will turn off light (maintenance staff/last to leave) (*Bucolo & Buys, 2007*)
- Appearances (including professionalism, security) (*Bucolo & Buys, 2007*)
- Habit, social norm (*Bucolo & Buys, 2007*)
- Building design (*Bucolo & Buys, 2007*)
- Knowledge gap (*Bucolo & Buys, 2007*)
- Convenience (*Bucolo & Buys, 2007*)

To test which variables identified in the literature impact the choices of HMC employees (the project’s target audience) a survey was constructed, with each question of the survey addressing one of the variable listed above.

Survey Target Audience: HMC An electronic survey was sent to all HMC employees to determine their attitudes toward lighting, specifically why they leave lights on and why they turn lights off. The questions were designed to test which, if any, of the variables identified by the literature review drive behavior in our target audience. In total, 204 employees completed the survey giving the results strong validity. A copy of the survey and aggregate survey results are available in Appendix B.

Employees identified “norms,” both personal and social, as impacting whether respondents choose to turn off lights. Individuals who felt personally responsible for turning off the lights, or who said they were in the habit of turning off the lights, were more likely to turn off the lights at work. Interestingly, those who never turn off their lights did not think it was common office practice to turn off lights at the

end of the day, despite that fact that we observed over 90% of employee turn off their lights when they leave for the day.

Survey results also confirmed that potential cost savings for the County does not motivate employees to turn off lights. Likewise, issues associated with building design and infrastructure (i.e. location of light switches, misconceptions about fixture operation) or concerns about safety do not appear to have a big impact on employee choices about turning lights off or leaving lights on.

The data collected from the survey helps narrow down the information in the literature review to the variables most likely to impact HMC employees' decisions about turning off the lights: Social Norms, and Personal norms or habits. In order to be an effective behavior change tool, CBSM dictates that the campaign be designed to address these audience-specific benefits and barriers.

Complete Baseline Audits: To capture a pre-campaign baseline, two building-wide audits were conducted. The first audit was conducted after businesses hours (7 PM-9 PM). This audit revealed that lights were being left on in 33% of HMC common areas. The second audit was conducted during businesses hours. The audit showed that building-wide, lights were being left on in 65% of unoccupied offices.

The Baseline Audits identified two nuances about HMC employee's current behavior, which would be addressed in the final campaign.

1. Employees are not consistently turning off common area lights at the end of the day. This audit finding is correlated to employee survey results showing that employees don't turn off lights when they don't feel responsibility for turning off light. Common area lights likely represent an area where a responsible party is not clearly defined.
2. Employees are not turning off their workspace lights during business hours, even when they will be away from their desk for longer than 15 minutes. This audit finding is correlated to employee survey data showing that employees don't turn off lights because a dark workspace sends other the message that they are not working.



Taken together, the survey data and audit results suggested some important cause-effect relationships that informed the campaign design.

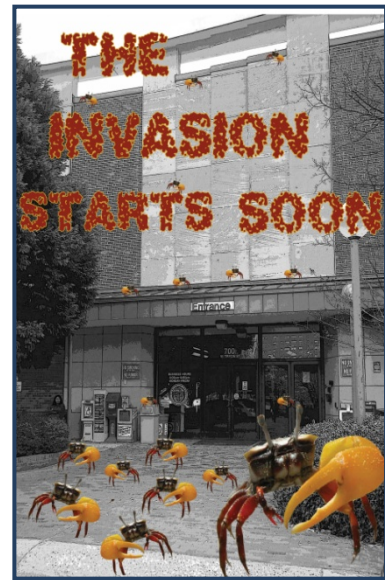
Design Behavior Change Campaign: The design process considered findings in literature review, survey data, and audit results so the campaign would address HMC employee's specific benefits and barriers to turning off the lights. The design process also incorporated CBSM strategies that have proven successful in the past, including commitment, prompts, and social norms.

The audit revealed two distinct problems: unoccupied workspace lights being left on during business hours and common area light being left on after-hours. The survey suggested that there are different reasons for why employees leave lights on in each of these situations. For this reason, it was

determined that two different approaches should be used so that each problem is addressed separately. Each approach is outlined in detail in the next section.

Test Campaign with Focus Groups: Two focus groups, comprised of randomly selected HMC employees, were convened to pre-test the project design. The “roll-out” or progression of each campaign was presented to the focus groups who were asked to describe what the campaign was communicating.

The focus group responses identified parts of the campaign, like the poster to shown to the right, that did not effectively communicate the campaign’s message. This ineffective communication caused focus group members to respond to campaign materials with skepticism and annoyance, or to simply dismiss the campaign outright. Revisions, like scrapping this “invasion” poster, were made to the campaign based on focus group reactions and feedback and a follow-up focus group responded much more positively to the amended approach.



Facilitate Campaign Rollout: This two-phased turn-off-the-lights campaign was launched to 350 HMC employees in the first week of April, continuing through mid-May. A few days before campaign roll-out, and introductory email was sent to HMC employees by the LUESA Director. This introductory email outlined campaign background and encouraged all employees to participate, giving *de facto* management support to the initiative.

At the conclusion of the campaign, a follow-up audit was conducted to see if, in the short-term, lights were being turned off more frequently. A second follow-up audit was conducted one month later to determine if the campaign has created sustained behavior change. Detailed audit results are available in Appendix E. A discussion of the results and project findings is included in this document.

Campaign Phase One: CRAB, You’re it!

Goal: Increase the number of lights being turned off in unoccupied workspaces during business hours.

Design: Phase one of the CBSM pilot project is a game called “Crab, You’re It!” designed to help remind people to turn off their lights. The Fiddler Crab is attracted to light, so buckets full of these (plastic) light-loving, energy-wasting sea creatures were placed around HMC. If an HMC employee forgets to turn off his/her light off, one of their coworkers can “CRAB” them (with a plastic crab from the bucket) for wasting energy! If an HMC employee returns to find a crab on their desk, they are “it.” Their goal is to get rid of the crab by finding another coworker who needs a reminder not to be “crabby” about turning off the lights.



This unique take on “tag, you’re it” was developed to help reshape the way HMC employees think about turning off the lights. The game seeks to do three things:

- Present a building-wide expectation about lighting behavior;
- Make coworkers accountable to each other, in a light hearted way; and
- Reshape the social norm of our building.

The game was supported by collateral materials including an e-poster pointing out that turning off the lights is a FREE way to conserve energy, as well as signs stating “I’m here today, my light of off to save energy.” Copies of these support materials, and all communications used during phase one of the pilot project can be found in Appendix C.

CBSM Strategies Used: The following CBSM strategies were incorporated into phase one of the pilot project to create a campaign that is likely to change behavior:

- Make the source of your message close to your audience
- Actively involve the target audience in achieving the goal
- Use noticeable prompts
- Promote positive behavior
- Make “Social Norms” visible

Campaign Phase Two: Common Area-focused

Goal: Increase the number common area lights being turned off at the end of the day (like over cubicle bays, break rooms, and meeting rooms).

Design: Phase two of the CBSM pilot project, coined “Adopt-a-Light,” was fashioned after existing stewardship programs where a person or a group takes responsibility for a specific area or resource. In this case, HMC employees were given the opportunity “adopt” common area light switches throughout the building (like meeting rooms, hallways and storage areas, etc.). Volunteers committed to making sure the lights were turned off when the area was not in use. All 69 employees who participated were entered into a drawing for a vacation day. Appendix D contains details about phase two employee communications.

As a follow-up, Hal Marshall employees were challenged to have over 90% of lights turned off in unoccupied areas of the building (both workspaces and common areas). Through a series of three day-time and evening audits, it was verified that each floor reached the target (having 90% of lights turned off when not in use), so the whole building earned an Ice Cream Social, provided by Mecklenburg County Air Quality and served by members of LUESA management!

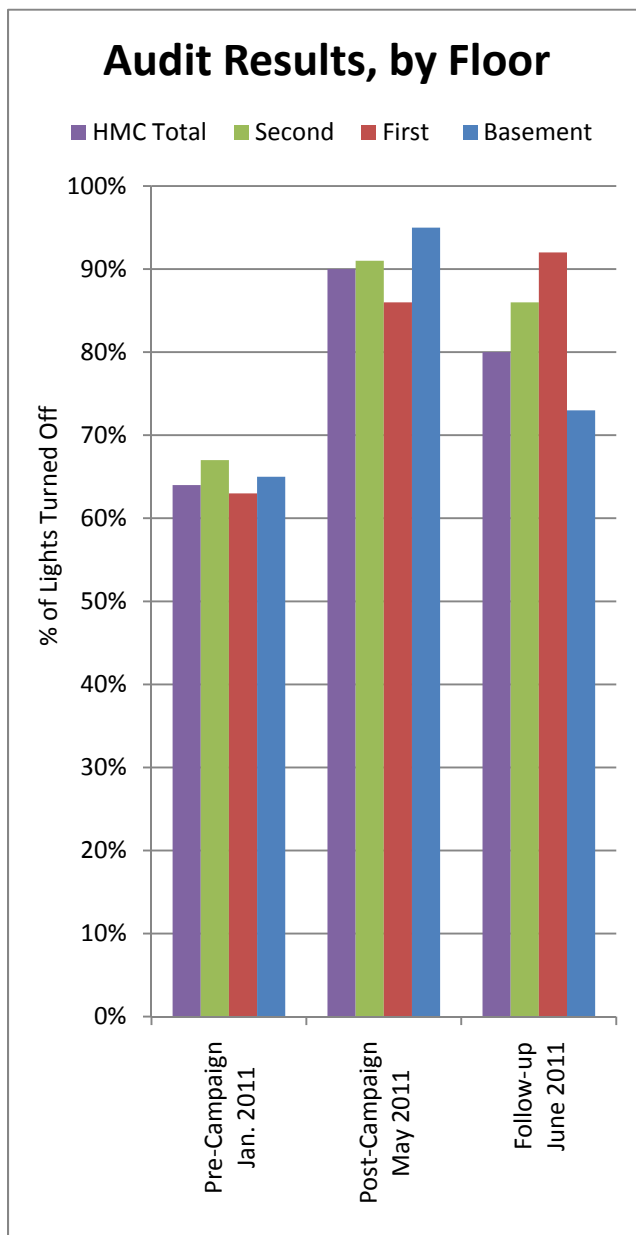


CBSM Strategies Used: The following CBSM strategies were incorporated into phase two of the pilot project to create a campaign that is likely to change behavior:

- Seek public, written commitments
- Use noticeable prompts
- Promote positive behavior
- Use a memorable, goal-oriented message
- Actively involve the target audience in achieving the goal
- Provide incentives



Results



To measure the impact of the pilot project, two sets of post campaign audits were conducted (one set of daytime and nighttime audits immediately following the campaign and another set four weeks after the end of the campaign) and compared to a pre-campaign base-line. Before the campaign, only 64% of HMC lights were being turned off when not in use. At the end of the campaign, 90% of lights were being turned off building wide. A follow-up audit, conducted a month after the campaign ended, showed that the percentage of light being turned off had decreased to 80%, which is still 25% better than before the campaign.

The degree of employee behavior change varied by floor. The basement improved the most during the campaign improving from only 65% of lights being turned off before the campaign to having 95% of lights turned at the end of the official campaign. Unfortunately, the basement also saw the steepest decline, from 95% down to 73% one month after that campaign ended.

By contrast, participation continued to improve on the first floor even after the official end of the campaign. Overall, they had the biggest improvement of any floor with 46% more lights being turned off one month after the campaign than before the campaign.

Conclusions

- **Make campaigns as personal or grass-roots as possible:** The pilot project's "Crab, You're it!" game was a way to change the source of the "turn-off your light" message from a third-party unknown to co-workers, who are more personally-relevant or familiar. By designing a campaign that promoted peer-to-peer interaction, the target behavior was developed into a social norm, leading to long-term, continued behavior change. Whenever possible, behavior change campaigns should involve the target audience in delivering the message to create or reinforce new social norms.
- **Focus group feedback is essential:** The focus groups conducted before the campaign roll-out made the difference between a successful campaign launch and a flop. Conducting a focus group allows organizers to get in-depth information from participants and eliminates many hurdles associated with a survey, like lack of interest/response or inability to ask follow-up questions. Focus group feedback about the framing and language used to communicate the project's central concepts identified several instances where the campaign was introduced ineffectively. By identifying these obstacles before the campaign was rolled-out to the entire audience, the campaign had a greater chance of being acceptable by HMC employees. Soliciting feedback from focus groups should be a part of any future behavior change project.
- **Management support is important in a business setting:** While it is impossible to determine the total effect management-level support had on adoption of the target behavior, there is anecdotal evidence to support the conclusion that the campaign received greater recognition and/or acceptance because Director-level support was expressed explicitly at the beginning of the campaign. Except in very unique circumstances, having management-level participation and/or support for a CBSM project should increase the likelihood of campaign acceptance and behavior adoption.
- **Target audience survey refined the literature review:** The survey of HMC employees gave very specific information about which perceived benefits and barriers impacted the target audience's decisions about turning off lights. This HMC specific information guided the campaign development process by narrowing down the list of variables identified by the literature review to the benefits and barriers influencing HMC employee behavior. That being said, the survey supported conclusions in the literature review, so campaign planners may be able to confidently rely upon a literature review to identify most benefits and barriers when a target audience survey is not feasible. Future campaigns may be able to save time or money by doing either a target audience survey or a thorough literature review of the target behavior, rather than both.

The goal of the pilot project was to follow the steps of the CBSM process to determine if they produce a campaign that successfully changes behavior. The results suggest that the CBSM process produced an effective campaign and that future behavior change campaigns could use this process as a tool. However, it should be noted that the process was very lengthy, spanning almost 9 months, and required a lot of staff time during both the design and implementation phases of the project. Future projects should weigh the potential benefit of a CBSM campaign with the investment of staff time and resources before deciding whether to use CBSM methodology to create behavior change campaigns.

Appendix A: Bibliography

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APPENDIX B: HMC EMPLOYEE SURVEY AND SURVEY RESULTS

HAL MARSHALL ENERGY EFFICIENCY SURVEY

LUESA is interested in improving energy efficiency at Hal Marshall Center. An energy efficiency pilot project has been incorporated into LUESA's annual goals accordingly. A planning team, made up of your peers, has opted to focus on lighting. By completing the survey below, you are providing the information that will guide how the pilot project is designed and implemented.

When completing this survey, keep in mind that:

- Work space refers to the place where you perform your work when you are in Hal Marshall.
- Common areas refer to any area that is used by county employees, such as break rooms, meeting rooms, copy rooms, bathrooms, etc.

Use the scale provided to answer the following questions.

1. How often do you think Hal Marshall employees in each of the following categories turn off their work space lights before they leave for the day? (select your best estimate)

	Never	Sometimes	Always	Don't Know
Yourself	1	2	3	0
Your coworkers	1	2	3	0
Your supervisor	1	2	3	0

2. How often do you think Hal Marshall employees turn off lights in following empty common areas? (select your best estimate)

	Never	Sometimes	Always	Don't Know
Break Rooms	1	2	3	0
Bath Rooms	1	2	3	0
Copy Rooms	1	2	3	0
Meeting/Conference Rooms	1	2	3	0

For the following questions, please check all that apply.

3. At work, why do you leave lights on?

- I feel safer with more lights on.
- Someone else (maintenance staff or last one to leave) will turn off the light after hours.
- When my workspace is dark during the work day, it sends the message that I am not working.
- Turning lights on and off frequently can damage light fixtures.
- It would be rude to turn off lights in frequently used common spaces (break room, bathroom, and copy room).
- I don't know where the light switch is for my workspace.
- I don't know where the light switch is for common areas (bathrooms, break rooms, copy rooms).
- Other: _____

4. At work, why do you turn lights off?

- Energy conservation is good for the environment.
- Energy conservation at Hal Marshall helps reduce expenses and balance the County budget.
- It is common office practice to turn off lights at the end of the day.
- It is a personal habit.
- Other: _____

5. How would you describe the space where most of your work is performed?

- Personal office
- Shared office
- Common workspace (cubicle)
- Field-based
- Other: _____

HAL MARSHALL ENERGY EFFICIENCY SURVEY RESULTS

1. How often do you think Hal Marshall employees in each of the following categories turn off their work space lights before they leave for the day? *(select your best estimate)*

	Never	Sometimes	Always	Don't Know
Yourself	4%	11 %	84%	1%
Your coworkers	4%	48%	38%	10%
Your supervisor	4%	14%	66%	16%

2. How often do you think Hal Marshall employees turn off lights in following empty common areas? *(select your best estimate)*

	Never	Sometimes	Always	Don't Know
Break Rooms	31%	44%	5%	20%
Bath Rooms	64%	17%	2%	15%
Copy Rooms	41%	26%	4%	27%
Meeting/Conference Rooms	4%	56%	24%	14%

3. At work, why do you leave lights on?

Someone else (maintenance staff or last one to leave) will turn off the light after hours.	31%
When my workspace is dark during the work day, it sends the message that I am not working.	25%
It would be rude to turn off lights in frequently used common spaces (break room, bathroom, and copy room).	22%
I feel safer with more lights on.	15%
I don't know where the light switch is for common areas (bathrooms, break rooms, copy rooms).	12%
Turning lights on and off frequently can damage light fixtures.	6%
I don't know where the light switch is for my workspace.	3%
Other:	37%

4. At work, why do you turn lights off?

It is a personal habit.	75 %
It is common office practice to turn off lights at the end of the day.	62%
Energy conservation is good for the environment.	57%
Energy conservation at Hal Marshall helps reduce expenses and balance the County budget.	44%
Other:	5 %

5. How would you describe the space where most of your work is performed?

Personal office	60%
Common workspace (cubicle)	27%
Shared office	14%
Field-based	10%
Other:	2%

Appendix C: Phase One Communication

From: Saul, Cary
Sent: Friday, April 01, 2011 10:46 AM
To: HAL-ALL
Subject: HMC Energy Pilot Project: Your Participation is Important!

This month, LUESA will roll out an energy conservation pilot project at Hal Marshall Center and I urge ALL HMC employees to participate.

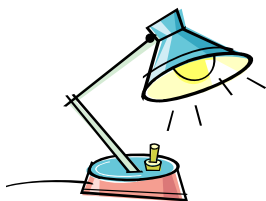
LUESA is interested in reducing energy use at Hal Marshall Center, so this pilot project was incorporated into LUESA's annual goals. Over the past few months a planning team, made up of your peers, has developed this building-wide pilot project to help us all get in the habit of turning off lights in unoccupied areas. The project design is based on:

- Your survey results;
- Two building-wide audits;
- Feedback from two focus groups; and
- Proven behavior change strategies.

Megan Green, of LUESA-Air Quality, will be in touch soon with more details about the first phase of this project. Thank you for your assistance in helping us WORKGREEN!

From: Green, Megan
Sent: Tuesday, April 05, 2011 9:33 AM
To: HAL-ALL
Subject: HMC Energy Pilot Project: CRAB, You're It!

To reduce wasted energy, office and/or desk lights should be turned off any time you will be gone for more than 15 minutes.



A recent audit of Hal Marshall revealed that lights are being left on in over half of empty workspaces during the workday! So, a building-wide game was developed to help us all remember to turn off workspace lights when we leave for more than 15 minutes.

The Game: CRAB; you're it!

The Fiddler Crab is attracted to light. So, if one of your coworkers forgets to turn off their workspace lights when they leave for more than 15 minutes, "CRAB" them for wasting energy! If you return to find a crab on your desk then "you're it;" your goal is to

get rid of the crab by finding another coworker who needs a reminder not to be crabby about turning off the lights.



How to Play:

Avoid being “Crabbed:”

1. Turn your lights off every time you’ll be gone for more than 15 minutes.**

“Crab” a Coworker:

1. If you notice a coworker has been gone for more than 15 minutes, and their office or desk light is on, spring into action!
2. Retrieve a toy crab from one of the “Crab Shacks” located in common areas on each floor.
3. Place the crab on your coworker’s desk as a helpful reminder for next time.

Keep the game going if you’ve been “crabbed” and “you’re it:”

1. Keep your eyes peeled for a friend whose workspace is empty but their desk/office light is on.
2. Place your crab on that coworker’s desk as a helpful reminder to turn off the light in future.
3. Feel good about yourself for being a good sport.
4. If you can’t find anyone to “crab,” return the crab to the Crab Shack.
5. Next time, *don’t be “crabby” about energy efficiency, turn off your light.*



****The Green Guardian team will make a surprise visit to HMC sometime this week to kick-off “CRAB, you’re it!”**

If you have questions visit [LUESA-MeckWeb](#) or contact a member of the planning team:

- Lead: Megan Green, Air Quality
- Stewart Espy, Solid Waste
- Ryan Johnson, Solid Waste
- Shelley Lanham, Air Quality
- Erin Oliverio, Water Quality
- Heidi Pruess, LUESA

From: Green, Megan
Sent: Wednesday, April 06, 2011 12:16 PM
To: HAL-ALL
Subject: Who's Been Crabbed?

Employees all over the building were “crabbed” this morning when the Green Guardian’s team made a surprise trip around HMC. If you were crabbed, be on the look-out for another coworker to “CRAB” this afternoon! Everyone else, remember to turn off your office and/or desk lights every time you will be gone for more than 15 minutes so they can’t “crab” you!

Click [here](#) for a refresher on how to play “CRAB, you’re it!”

Click [here](#) to find answers to Frequently Asked Questions about “CRAB, you’re it!” like:

- Where are the Crab Shacks located?
- Why is the threshold 15 minutes?
- Where did the name “*CRAB, you’re it!*” come from?

Have fun!

From: Green, Megan
Sent: Tuesday, April 12, 2011 10:52 AM
To: HAL-ALL
Subject: My light is off to save energy!

Are you concerned that your dark workspace is sending the wrong message to your coworkers or supervisor?

According to the energy pilot project survey, 25% of HMC employees leave their workspace lights on for the sake of appearances. They are concerned that coworkers will assume they are not doing work if their light is off. Rather than leaving your workspace lights on when you step away from your desk during the day, consider printing one of the attached signs and posting it as necessary.

Thank you for all your efforts to WorkGreen and save energy.

Appendix D: Phase Two Communication

From: Green, Megan
Sent: Monday, April 25, 2011 10:02 AM
To: HAL-ALL
Subject: Adopt-a-light for a chance to win a vacation day!

Thanks to everyone who has been participating in “CRAB, you’re it!” You and your coworkers have done a great job helping each other remember to turn off your lights when you leave your desk. Some of you may have wondered why the focus on has been on workspace lights. *Shouldn’t common area lights be turned off too?*

Of course! and here’s your chance to help ‘Adopt-a-Light’ and WIN!!! For each common area light you adopt by this Thursday (4/28) you will receive a raffle entry into a drawing for a vacation day! There are over 110 common area light switches in HMC, so adopt one close to you!

Having trouble deciding which light to adopt? Consider this:

0. If you normally leave before 5:00 PM: Adopt-a-light you can keep an eye on throughout the day, like a storage area or meeting room.
1. If you normally leave after 5:00 PM: Adopt one of the hallways or other lights you pass on the way out of the building. (Don’t worry, you won’t be leaving your coworkers in the dark. For emergency reasons, some of the hallway light fixtures will stay on, even when the switch is turned off.)
2. Make it a team effort: get your workgroup together and adopt a break room light. More than one person can adopt each light!



Thanks for your support of HMC’s energy pilot project,
Megan

From: Green, Megan
Sent: Monday, May 02, 2011 3:19 PM
To: HAL-ALL
Subject: Turn Off The Lights, Win Ice Cream

Vacation Day Winner:

Congratulation to **Veronica Trice** from the Business Tax Office, who won the Adopt-a-Light Vacation Day raffle!

In addition, **Lois Brandon, Scott Commander, Missy Hunter, Kimberly Jones-Williams, Calvin Laton, Renee Robbins,** and **Mike Swaenepoel** all won prizes ranging from a USB drive to a multi-tool.

Win an Ice Cream Social:

LUESA's Air Quality department is challenging Hal Marshall employees to have over 90% of lights turned off in unoccupied areas of the building (both workspaces and common areas). Air Quality will provide an **ice cream social, with members of management serving the ice cream**, for *each* floor that contributes to reaching the building-wide target! Four randomly-scheduled audits will be performed over the next two weeks to assess progress towards our 90% goal.



Even if you didn't adopt-a-light, you can still help your floor win an ice cream social:

- Turn off your light!
- Adopt- a-coworker and turn off their light if they forget.
- Participate in "CRAB; You're it" and post a crab by light switches that are frequently left on.

Thanks to everyone who has participated in the HMC energy pilot project so far. Keep up the good work so we will ALL have a reason to celebrate (over ice cream)!!

From: Green, Megan

Sent: Friday, May 13, 2011 12:47 PM

To: HAL-ALL

Subject: I scream, you scream, we all scream for ICE CREAM!

Congratulations! Hal Marshall has completed the Adopt-a-light challenge and each floor reached the target (having 90% of light turned off when not in use) at least once! That means the whole building has earned an Ice Cream Social, provided by Mecklenburg County Air Quality. All HMC employees are invited to attend:

HMC Ice Cream Social
Wednesday, May 25
3:00 p.m. – 4:00 p.m.
HMC Kitchen

Also, check out these preliminary before and after results from your participation in the energy pilot project:

Floor	Lights off BEFORE the project	Lights off AFTER the project
Basement	59%	95%
First	58%	86%
Second	66%	91%
HMC Total	61%	90%

Results are averages from multiple daytime and nighttime audits.

Thanks for your continued efforts to WORKGREEN,
Megan

Appendix E: Pre and Post Campaign Results

HMC Building-wide Results: Nighttime

Space type	% Off Before Campaign	% Off After Campaign	% Change
Office	94%	99%	4%
Individual Cubical	91%	98%	8%
Workspaces Total	93%	98%	6%
Overhead lighting for Cubicles	57%	100%	75%
Meeting & Conference Rooms	100%	100%	0%
Bathroom	60%	50%	-17%
Break room	100%	100%	0%
Other	53%	75%	40%
Common Area Total	69%	88%	28%
Total	81%	93%	15%

HMC Building-wide Results: Daytime

Space type	% Off Before Campaign	% Off After Campaign	% Change
Office	38%	62%	65%
Individual Cubical	63%	76%	22%
Workspaces Total	47%	66%	40%
Overhead lighting for Cubicles	N/A	N/A	N/A
Meeting & Conference Rooms	73%	85%	15%
Bathroom	N/A	N/A	N/A
Break room	25%	17%	-33%
Other	0%	70%	Infinite Increase
Common Area Total	48%	65%	35%
Total	48%	66%	38%

DETAILED RESULTS BREAKDOWN, BY FLOOR AND AUDIT

Space Type	Pre-Campaign Audit				Post-Campaign Audit				Follow-up Audit			
	December 2010 (Night)				May 2011 (Night)				June 2011 (Night)			
	Basement	1st Floor	2nd Floor	Total	Basement	1st Floor	2nd Floor	Total	Basement	1st Floor	2nd Floor	Total
	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off
Workspace - Total	89%	93%	96%	93%	98%	98%	99%	98%	98%	98%	98%	98%
Common Area - Total	81%	56%	68%	69%	88%	80%	91%	86%	100%	84%	84%	88%
Workspace and Common Area Average				81%				92%				93%

Space Type	Pre-Campaign Audit				Post-Campaign Audit				Follow-up Audit			
	December 2010 (Day)				May 2011 (Day)				June 2011 (Day)			
	Basement	1st Floor	2nd Floor	Total	Basement	1st Floor	2nd Floor	Total	Basement	1st Floor	2nd Floor	Total
	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off	% Off
Workspace - Total	51%	45%	45%	47%	94%	59%	86%	82%	48%	85%	87%	66%
Common - Total	38%	57%	57%	48%	100%	100%	89%	92%	44%	100%	76%	65%
Workspace and Common Area Average				48%				87%				66%