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# **Find and Flip: Motivating High Energy Users to Save Energy**

## **Final Report**

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## TABLE OF CONTENTS

Executive Summary .....	1
Introduction.....	2
Cool Choices Approach .....	3
Typical Game Dynamics.....	3
Game Theory .....	5
Savings Estimates .....	5
Variations for EERD Pilots.....	7
Pilot Specifics .....	8
Fond du Lac City/County.....	8
Inpro Corporation.....	10
Outagamie County and the Town of Grand Chute.....	13
Unitarian Universalist Church West .....	16
Pilot Outcomes.....	19
Results and Lessons Learned .....	21
Could we accurately identify high users for targeting? .....	21
Did high users participate?.....	22
Participation trends .....	23
Targeted email encouragement .....	25
Did participating high users take action?.....	26
Impactful measures .....	28
What effect did cool choices have on high users' and players' engagement with Focus on Energy? ....	29
Awareness of Focus on Energy.....	29
Engagement with Focus on Energy .....	30
Effect of targeted messaging.....	31
Participation summary .....	33
Conclusions.....	34
Appendix A: Identifying high users.....	35
Appendix B: Post-Game Findings at Four Pilots.....	38



## **EXECUTIVE SUMMARY**

In 2014, with funding from Focus on Energy's Environmental and Economic Research and Development (EERD) Program, Cool Choices layered an experiment atop four engagement games where Cool Choices used its game mechanics to identify high energy users and then to encourage those high energy users (along with other game participants) to participate in Focus on Energy residential programs.

The aim of this research effort, called "Find and Flip," was to explore whether engagement games could identify high energy users and then drive them to Focus on Energy programs.

The Energy Center of Wisconsin led the effort to create a protocol to identify high energy users via a series of simple questions. Cool Choices integrated these questions into the baseline survey that is implemented as part of its game protocol. As detailed in this report, the protocol was effective in identifying high energy users.

Once the team had identified high energy users program staff encouraged these high users to participate in the Cool Choices game. High energy users participated in the game at rates similar to individuals with lower energy usage.

Then, as part of the four engagement games, program staff encouraged game players to participate in Focus on Energy programs. Again, high energy users responded to these encouragements at levels consistent with individuals with lower usage levels.

Overall this research effort demonstrates how innovative approaches like Cool Choices can increase overall household participation in Focus on Energy programs.

## **INTRODUCTION**

In Cool Choices' 2013 proposal to Focus on Energy for funding on the Focus on Energy Environmental and Economic Research and Development (EERD) Program entitled "Find and Flip: Motivating High Energy Users to Save Energy," Cool Choices proposed to:

...conduct field research experiments with Wisconsin households to help Focus on Energy more cost-effectively identify, aggregate and move to action groups of Wisconsin residential customers with homes having high energy savings potential. The research will demonstrate strategies for identifying high energy users and test market the most effective motivators to move these customers to action. Going beyond theory about what "might" motivate customers (the best classic survey methodologies have to offer), this research provides Focus results—recorded motivation interventions that led to verified high energy user actions.

This report documents the outcome of that research.

This report is organized into two broad sections. The first half, authored by Cool Choices staff, describes Cool Choices approach and the four pilot games including characteristics of each game and the specifics of the experiment applied to that game. The second half, authored by Energy Center of Wisconsin staff, provides an analysis of game results. The report concludes with a brief summary of research conclusions and an appendix that details the protocol for identifying high energy users.

## **COOL CHOICES APPROACH**

This section describes Cool Choices’ game, the theory behind the game and the specifics of the four projects included in the Focus on Energy EERD research.

### **TYPICAL GAME DYNAMICS**

Cool Choices partners with private corporations, public entities (like local government), schools, civic, and faith-based organizations to implement engagement programs that encourage individuals to adopt sustainable practices in their personal and professional lives. As part of the standard game set up, Cool Choices negotiates a Memorandum of Understanding (MOU) and related fees with partners and works with their green teams to finalize logistics and site-specific features.

The MOU is a way for Cool Choices to ensure that the effort has buy-in at the top of the organization; leadership support is critical to successful games. And by working with the organization’s internal green team to finalize game logistics, Cool Choices creates a sense of ownership within the organization—so that it is their game rather than an effort by an outside party.

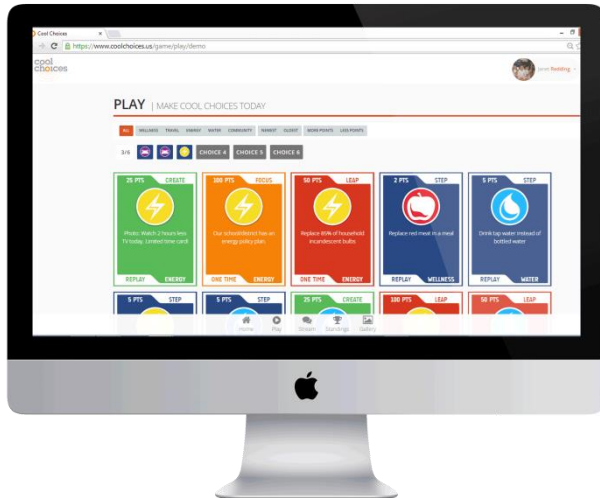
As part of the planning effort the organization identifies a point person who will serve as the game manager. Cool Choices staff provides training and support so that this person can use the administrative tools integrated into the game. Game managers are able to monitor play trends, customize emails and curate the social stream within the game. Typically the game manager is the face of the game for employees within the organization.

Cool Choices also works with the internal green/planning team to finalize some game logistics like team size, promotional strategies and end-of-game prize/celebration plans. Organizations also have the option to add a few organization-specific actions to the game. In a law firm, for example, the organizers added a few actions associated with electronic filing of case files whereas another company added actions that encouraged its employees to learn more about the company’s corporate sustainability goals.

Once the logistics are set, the game manager announces the game to all employees at the organization, inviting them to sign up to play. Typically there is a two-week period in which players sign up and form teams via Cool Choices online platform.

During the sign-up timeframe Cool Choices also launches a baseline survey to all employees in the organization. The survey asks participants about their current habits, their attitudes toward sustainability and their perceptions about the attitudes and habits of others.

Once the game starts participants earn points via the online system by reporting their daily “Cool Choices”—actions like turning off lights. Within the game platform participants can see how their team compares to others on a leaderboard. Players are also encouraged to share insights and experiences with others using game-integrated social media tools. The game includes a variety of actions appropriate for both homeowners and renters—everyone can play Cool Choices.



**Participants log actions via the online system, which is accessible via smart phones, tablets and computers.**

During the game each participant receives a daily email from Cool Choices reminding them to play and highlighting a specific savings opportunity.

Cool Choices players report their actions on a daily basis for eight weeks. Eight weeks is sufficient to inculcate new habits while being short enough to maintain a high level of participant interest.

Within the game some actions are one-time efforts (like calibrating the brightness on a television) while other efforts are habitual (like reducing vehicle idling). Some actions solicit information from players while others give players an opportunity to submit photos or ideas, which are then shared via the social stream within the game.

The first time a player reports a specific action the player is asked whether this is something that they were doing prior to the game or if it is a new action. There is no game penalty for players reporting existing habits; if a player always turns off lights when leaving the room they can claim points for that (and would report that they were doing this prior to the game). Cool Choices uses player information about which actions are new to estimate the incremental impact of games including estimate energy savings.

While participants interact with Cool Choices game platform daily, the platform is not necessarily the heart of the program. At its core, the program is about social interactions. By engaging people in a game Cool Choices provides participants with a reason to talk about sustainable practices with their colleagues, an excuse for sharing stories and photos, and permission to coach one another on ways to save energy. The game creates a community around conservation habits and prompts stories told through text and photos that become part of the community's social capital.



**Fond du Lac County team encouraged others to turn off lights.**



At the end of the game Cool Choices invites all players to participate in an end-of-game survey. Like the baseline, this survey includes questions on attitudes and behaviors. The post-game survey also solicits feedback on players' experiences during the game.

Cool Choices works with the Energy Center of Wisconsin to analyze the baseline and post-game surveys along with actions reported as part of the game. The Center delivers a memo to Cool Choices summarizing findings, which Cool Choices posts on its website. The memos associated with the four pilots are attached as appendices to this report.

## Game Theory

Cool Choices' model is to deliver residential savings via workplace-based engagement games. They partner with workplaces because these communities feature strong peer relationships, clear lines of authority and ubiquitous communication infrastructures (like work email and staff meetings). Cool Choices argues that workplaces offer a more effective path to community-scale implementation than approaches focused on geographic communities where there is less social cohesion, weaker communication systems and more fragmented leadership.

Within these communities Cool Choices influences behaviors via a game. Their approach is grounded in multiple behavioral theories that they have tested in a variety of commercial and industrial workplaces. Drawing upon social marketing (including community-based social marketing), behavioral economics and change theory with insights from anthropology, sociology and psychology, Cool Choices uses game dynamics to make energy efficient behaviors simple, social and meaningful.<sup>1</sup> They simplify saving energy by assigning scaled points to actions—rather than referencing btus, kWh, and other “geek speak.” Cool Choices' proprietary point system gives players clear signals about which actions have the largest impact and provide a simple path forward. The game format enables Cool Choices to make individual actions visible and celebrated, which builds a foundation for new social norms while reinforcing current practices. Finally, by showing results in aggregate the game overcomes the individual's sense of powerlessness, demonstrating that their actions matter and that individual actions add up, thereby creating a sense of efficacy at both the individual and group level.

## Savings Estimates

Cool Choices calculates energy savings estimates in a way that is comparable to other technology-based energy efficiency programs—at the specific action level where the records detail the participant, the date, the action and estimated savings associated with the action. During the game participants report their actions on a daily basis and Cool Choices estimates aggregate savings based on those real-time user reports.

Cool Choices delineates four kinds of behaviors:

- *Step* behaviors: habitual actions like turning off a light when leaving the room
- *Leap* behaviors: one-time actions that yield ongoing savings—like calibrating the brightness of the television
- *Create* behaviors: opportunities for players to share a story, a photo or an idea with other players and their employers
- *Focus* behaviors: opportunities for players to investigate their own usage and report their findings

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<sup>1</sup>For more detail on the theories leveraged, see the 2012 ACEEE Summer Study in Buildings paper, *How Many Points for That? A Game-Based Approach to Environmental Sustainability*, by Kathy Kuntz, Ingo Bensch and Raj Shukla.

The bulk of actions within the game are Step and Leap behaviors; these are the actions that generate savings. The Create behaviors provide opportunities for social interaction and idea generation. Focus behaviors are an opportunity to gather information and facilitate player learning.

Cool Choices estimates savings at the specific behavioral level, using insights from research conducted by the Energy Center of Wisconsin relative to both actual participant practices and the persistence of specific behaviors one year after the end of a game.

Savings estimates associated with Leap behaviors are based on existing research relative to the specific technology and any game-related findings. For example, a key Leap behavior in Wisconsin is getting a participant to set their furnace fan to auto rather than operating it in continuous mode. Some Wisconsin heating contractors encourage customers to operate the fan continuously, especially in homes with high efficiency furnaces. This issue was first documented in Focus on Energy evaluation work in 2009 and Cool Choices continues to get reports from participants who assert that their HVAC contractor told them that they would save energy if they left the fan on the continuous setting.<sup>2</sup> In the game, Cool Choices offers participants points for setting their furnace fan on auto rather than continuous. Cool Choices estimates savings for this specific measure using the data in the 2009 evaluation report, coupled with Energy Center findings from interviews with Cool Choices participants about the ways they operated their furnace fans and the players' interpretations of the Cool Choices action. Specifically:

- The 2009 Focus on Energy evaluation found that households would save an average of 3,686 kWh/year by switching their furnace fan from continuous to auto mode
- The Energy Center's interviews with Cool Choices' players found that only 30% of participants who claimed this card operated their furnace fan consistently throughout-the-year in the always-on mode; the other 80% used always-on seasonally, which yielded smaller savings. The Center recommended an adjustment to Cool Choices' assumed savings based on those findings.
- The Center also found that almost all participants maintained the 'auto' setting a year after the game had ended.
- The Energy Center recommended Cool Choices use 1,336 kWh/year for this measure.
- Cool Choices continues to assume that if a participant reports that they have changed their furnace fan setting as part of the game (that is, that this was a new action they took during the game), that the savings will be 1,336 kWh/year.

Cool Choices uses a similar protocol for other Leap behaviors including:

- Setting the water heater temperature to 120 from the typical 140 default temperature
- Adjusting refrigerator and freezer temperatures
- Calibrating the brightness on a television
- Setting up the stand-by mode on game consoles
- Programming a set-back thermostat to save energy when the household is sleeping or not at home

Cool Choices' protocol for estimating the energy savings associated with Step behaviors is a two-fold process. Cool Choices begins by estimating annual savings associated with the habitual behavior, using a protocol similar to the one outlined above and then Cool Choices couples the savings estimate with a fractional multiplier, based on participant data. A participant can report the habitual Step behaviors multiple times within a game and Cool Choices estimates savings based on both the behavior and the number of times the behavior is reported. If a participant reports a behavior just once during the game, Cool Choices estimates savings at a small fraction of the annual savings associated with that behavior

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<sup>2</sup> For initial discussion of issue see *ECM Furnace Impact Assessment Report, Final Report January 12, 2009*, PA Consulting Group, prepared by Tom Talerico and Rich Winch, Glacier Consulting Group, LLC.

because Cool Choices assumes that the participant is unlikely to be doing the behavior consistently. Cool Choices increases the proportion of savings allocated each time the participant reports the behavior until the participant receives full credit for their actions.

There are no savings associated with the Create or Focus behaviors.

In all games Cool Choices tracks two sets of savings estimates: the total savings associated with all actions reported by players and the new savings—savings associated with the actions that players said they did not do prior to the game. A participant can earn points in the game for actions they were doing prior to the game as well as new actions. The first time a participant reports any action the game prompts the player to report whether or not this is a new action, with no point penalty. Cool Choices asserts that after testing multiple approaches to self-reported actions, this protocol creates the greatest likelihood that players will report their actions—whether new or not—honestly because there is no incentive for doing otherwise.

Relative to player actions Cool Choices also estimates persistence at the specific action level. In their interviews with players the Energy Center found that most Leap behaviors persisted for the life of the equipment. Once a player adjusts the brightness on their television, for example, there is no cause to re-adjust it so the savings are likely to persist for the life of the television. Relative to the habitual Step actions, though, the Center found that persistence varied based on the action with players reporting the most difficulty in maintaining the eco-driving habits that they initiated during the game. Accordingly, Cool Choices has set a persistence assumption for each of its Leap and Step behaviors so that it is possible to calculate lifetime savings. For this report, however, Cool Choices reports just first year savings.

## **VARIATIONS FOR EERD PILOTS**

Cool Choices integrated the EERD research into four games during 2014. As part of the research, Cool Choices:

- Offered enhanced incentives for completing baseline and post-game surveys, to increase participation rates
- Added questions to the baseline survey to identify suspected high energy users
- Worked with the Energy Center to develop a protocol for identifying suspected high-energy users based on the survey responses
- Added Focus-specific actions to the game, thereby encouraging game participants to participate in Focus on Energy programs
- Sent additional emails to suspected high-energy users, encouraging them to join the game and, later, to take specific actions within the game

Relative to the Focus-specific actions, Cool Choices sought to reduce the potential for double-counting savings so Cool Choices did not assign any savings to the Focus-specific actions added to the games.

Two existing Cool Choices actions, recycling second refrigerators and installing CFL or LED lighting in at least 85 percent of household fixtures, overlapped with Focus on Energy programs. As a result, Cool Choices adjusted its savings estimates reported here to eliminate this potential overlap.

The next section describes each pilot program in some detail and provides a summary of estimated impacts. The subsequent section summarizes Cool Choices estimated savings and discusses Cool Choices' attempt to verify some actions by comparing Cool Choices participant data to Focus on Energy data.

## PILOT SPECIFICS

Cool Choices implemented EERD efforts in four games during 2014 with the aim of exploring outcomes across different kinds of workplace communities. Cool Choices selected games in different geographic areas with different types of workforces.

Cool Choices implemented EERD games with two sets of public agencies (Fond du Lac County and the City of Fond du Lac and Outagamie County and the Town of Grand Chute) and one private corporation, Inpro Corporation. With the approval of Public Service Commission staff, Cool Choices decided to implement the fourth game with a faith-based community—the Unitarian Universalist Church West—when there were delays in securing a fourth Wisconsin business site.

The following sections provide specifics about each of the four EERD games.

### Fond du Lac City/County

Initiated by the Fond du Lac County Green Team, this game targeted the employees of both Fond du Lac County and the City of Fond du Lac. The County invited the City to be part of the game because the two entities share administrative space in the city-owned Government Office building.

The team that organized this game included Fond du Lac County's Green Team plus representatives from the City of Fond du Lac. The group was diverse—it included facilities personnel as well as representatives from various other city and county agencies, including health and human services agencies. Especially helpful in launching the game were Fond du Lac County Information Technology staff who ensured that employees could access the game via agency computers.

A UW-Extension agent in Fond du Lac County was the game manager, assisted by an intern. The intern worked hard to encourage players to participate in Focus on Energy programs during the game, even including information about programs in the daily emails to all players.

The game launched on January 27, 2014 and concluded eight weeks later on March 14, 2014. Together Fond du Lac County and the City of Fond du Lac have approximately 1,000 employees. A total of 198 players signed up with 176 of those players claiming at least one Cool Choice over the duration of the game, resulting in a 18 percent overall participation rate. During the game, 84 percent of registered players made a Cool Choice every week. The highest participation rate of 87 percent of registered players making a Cool Choice occurred during the second week of play.

Using the Energy Center's protocol, Cool Choices identified 83 suspected high-energy users from the baseline survey. Cool Choices had unique email addresses for 77 of these players.

Of the identifiable 77 baseline participants with suspected high usage, 26 signed up to play without any targeted messaging. Cool Choices sent three separate email communications to the 51 other suspected



**Fond du Lac teams included one made up of county highway department staff.**

high energy users encouraging them to join the game. Cool Choices sent these communications between the launch of the game and the midpoint of the game, resulting in participation by four additional players.

Relative to the suspected high energy users, the emphasis in this first game was on increasing game participation; Cool Choices did not send suspected high energy users emails nudging them toward specific Focus on Energy programs. As noted above, the local game manager encouraged all players to participate in Focus on Energy as part of regular game communications.

During the fourth week of play Cool Choices issued a special game card encouraging players to look up and report their annual electric and gas usage from their utility website. In total 50 players claimed this card and the Energy Center used this data to verify high energy user status (see next section for details). From this data Cool Choices identified an additional nine game participants with high usage.

Some key actions from the game were:

- 118 participants went around their home and counted the number of items plugged in
- 58 participants reported recycling a refrigerator or freezer
- 50 participants went to their utility website and researched their average monthly electric usage
- 30 participants reported that they participated in Focus's Express Energy Efficiency Program

Additionally, as part of the game participants suggested more than 150 ways the City and County could reduce their energy usage.

The Fond du Lac planning team created a traveling trophy, made completely out of recycled materials which got passed around from team to team.

Within the game players reported that the game increased their awareness of energy use and changed their practices. Specific player quotes included:

- "... I always thought that it took more energy to turn lights on and off than to keep them on. I am now turning off as many lights as I can."
- "Cool Choices has made me more aware of how my family is using energy and where we can make improvements."

Players also reported increased awareness of Focus on Energy and the services Focus provides.

Fond du Lac's estimated annual savings are provided below. These estimates presume players will maintain the actions adopted during the game for at least one year. **New** savings are those compiled from Cool Choices that players self-reported as new actions through the game. **Total** savings include all Cool Choices recorded through the course of the game.

New Dollars	New Electricity (kWh)	New Natural Gas (therms)	New Water (gallons)	New Gas (gallons)	New CO2 (pounds)
\$24,592	67,112	2,630	78,821	4,321	236,267

Total Dollars	Total Electricity (KWh)	Total Natural Gas (therms)	Total Water (gallons)	Total Gas (gallons)	Total CO2 (pounds)
\$124,810	414,616	14,602	640,573	17,261	1,256,399

Of the new electric savings, 4,788 kWh/year were associated with removing refrigerators and freezers and 8,400 kWh/year with installing CFL or LED lighting; those are savings that Focus on Energy would

presumably have claimed through its existing Appliance Recycling and Lighting programs. Cool Choices did not assume any savings associated with players reporting participation in other Focus programs. Cool Choices estimated incremental savings not claimed through existing Focus on Energy programs is as follows:

	New Dollars	New Electricity (kWh)	New Natural Gas (therms)	New Water (gallons)	New Gas (gallons)	New CO2 (pounds)
Estimated Savings	\$24,592	67,112	2,630	78,821	4,321	236,267
Appliance Recycling	\$575	4,788				8,140
Lighting	\$1,008	8,400				14,280
Add'l Annual Savings from Cool Choices	\$23,009	53,924	2,630	78,821	4,321	213,847

### **Inpro Corporation**

Based in Muskego, Wisconsin, Inpro is a global manufacturer of door and wall protection, washroom systems, expansion joint systems, privacy systems and architectural signage. Inpro was established in 1979 and has been pursuing environmental sustainability since 1995. Inpro has 500 employees in Muskego.

Inpro's internal Sustainable Business Committee coordinated their game. Inpro's sustainability manager leads the Sustainable Business Committee which included the CEO and representatives from information technology, sales, supply chain, and new product development.

When Inpro's sustainability manager approached Cool Choices she had been in her role less than six months and hers was a new position at the company. She shared that other Inpro staff had questions about the role and how it would fit with other functions. The manager reported that Cool Choices created a way for her to connect with colleagues and co-workers on a personal level, and it helped employees better understand both her role as a change catalyst and Inpro's commitment to sustainability more broadly.

The Inpro game launched on February 17, 2014 and concluded eight weeks later on April 11, 2014. Of the 500 Muskego-area employees, a total of 260 players signed up with 254 of those players claiming at least one Cool Choice over the duration of the game, resulting in a 51 percent overall participation rate. Within the game play, the weekly average participation rate among players was 90 percent, with the highest participation rate of 95 percent occurring during the second week of play.

At Inpro 255 employees completed the baseline survey. Cool Choices identified 56 respondents as suspected high energy users based on the survey responses. Of the 56 identified respondents, 49 initially registered to play the game. Cool Choices had email addresses for the remaining seven suspected high energy users who did not register to play. Five days after the game started Cool Choices sent the seven non-participating suspected high energy users an individualized email encouraging them to sign up and play. The email encouraged the suspected high users to join the game, emphasizing the money they were losing by not participating, and it resulted in one additional player joining the game.

During the first week of play Cool Choices issued a special game card encouraging all players to go to their utility website, look up their annual usage and report the electric and gas usage through the game. In total 69 players completed this action and based on player responses, Cool Choices identified an additional ten players with high energy usage.

In total, then, 60 suspected high energy users participated in the game and six suspected high energy users with emails did not. Cool Choices randomly assigned the participating 60 suspected high energy users to a test (n=29) and control (n=31) group. During the game each time Cool Choices released a Focus on Energy-specific card, Cool Choices sent customized emails to the test group encouraging them to play the Focus on Energy card. Results of these targeted communications are summarized in the next section.

Some key actions taken by Inpro participants included:

- 168 participants went around their home and counted the number of items plugged in
- 128 participants reported recycling a refrigerator or freezer
- 69 participants went to their utility website and researched their average monthly electric usage
- 44 participants reported participating in Focus on Energy's Express Energy Efficiency Program
- 32 participants estimated the savings they could achieve by participating in Focus' Lighting & Appliances Discount Program

Within the game players reported that the game increased their awareness of energy use and changed their practices. Specific player quotes included:

- "I've really pushed my kids at home. I found kids' books on recycling and 'saving mother earth' at goodwill and purchased them for my children to learn more rather than only hearing mom say 'hey, that's recyclable' or 'turn off that light' and 'make sure you set the washer to medium load if it's a half load'. I think my children are finally starting to understand that it's not just mom."
- "Cool Choices has made me think more about the day to day things I can do around my house that make an impact on the environment. I'm more conscious about turning lights off, the appliances I buy and how my every day actions make a difference."

As part of the game participants suggested 185 ways Inpro could reduce their energy usage.



**Inpro players demonstrated a lot of creativity when participating in the team photo challenge.**

Employees told the sustainability manager that they had been doing some of the actions in the game previously but that they did not realize the big picture. Some employees also reported having had ‘aha’ moments during the game.

Players at Inpro had a lot of fun with Cool Choices’ team photo challenge. Teams were very competitive; a lot of smack talk occurred at Inpro during the game in general. Due to the competitive nature of the organization and its employees, the tenor around sustainable actions shifted from “you have to do this” to these practices being the “cool” things to do.

Estimated annual savings are provided below. These presume players will maintain the actions adopted during the game. **New** savings are those compiled from Cool Choices that players self-reported as new actions in the game. **Total** savings include all Cool Choices recorded through the course of the game.

New Dollars	New Electricity (kWh)	New Natural Gas (therms)	New Water (gallons)	New Gas (gallons)	New CO2 (pounds)
\$31,120	96,201	3,416	173,139	4,672	303,185

Total Dollars	Total Electricity (KWh)	Total Natural Gas (therms)	Total Water (gallons)	Total Gas (gallons)	Total CO2 (pounds)
\$198,042	669,078	21,892	1,215,787	26,594	1,967,331

Of the new electric savings, 12,768 kWh/year were from removing refrigerators and freezers and 10,920 kWh/year from installing CFL or LED lighting; those are savings that Focus on Energy likely claimed through its existing programs. Cool Choices did not assume any savings associated with players reporting participation in other Focus programs. Cool Choices estimated incremental savings not claimed through existing Focus on Energy programs is as follows:

	New Dollars	New Electricity (kWh)	New Natural Gas (therms)	New Water (gallons)	New Gas (gallons)	New CO2 (pounds)
Estimated Savings	\$31,120	96,201	3,416	173,139	4,672	303,185
Appliance Recycling	\$1,532	12,768				21,706
Lighting	\$1,310	10,920				18,564
Add'l Annual Savings from Cool Choices	\$28,278	72,513	3,416	173,139	4,672	262,915



## **Outagamie County and the Town of Grand Chute**

Initiated by the Outagamie County Green Team, this game targeted employees of both Outagamie County and the Town of Grand Chute. As part of their planning process, Outagamie County invited cities and towns located in the county to participate in their game and Grand Chute stepped forward; the Grand Chute Information Technology coordinator had been an early advocate for the game at Outagamie County.

The team who organized this game included Outagamie County's Green Team plus representatives from the Town of Grand Chute. The group was diverse—it included facilities personnel as well as representatives from various other town and county agencies. Especially helpful in launching the game were the Outagamie Information Technology staff whom ensured that employees could access the game via agency computers.

A facilities employee at Outagamie County and the special projects coordinator at the Town of Grand Chute were co-game managers, as each had prize and email responsibilities within their own organization. Each had assistance from a few other employees from a variety of departments in sending emails and uploading photos. Halfway through the game, the Town of Grand Chute's game manager accepted a new job, so the information technology coordinator took over for the remainder of the game.

As part of the game launch the Outagamie County Executive and Town of Grand Chute Council Chair held a press conference with representatives from two local corporations that had previously participated in Cool Choices (Miron Construction and Menasha Corporation). The County Executive talked about how this was a case where government was following the lead of private business in engaging employees around sustainability.

The game launched on April 14, 2014 and concluded eight weeks later on June 6, 2014. Combined, Outagamie County and the Town of Grand Chute have 1,351 employees. A total of 320 players signed up with 279 of those players claiming at least one Cool Choice over the duration of the game, resulting in a 21 percent overall participation rate. Each week, an average of 77 percent of registered players participated.

After discussion with the Energy Center of Wisconsin staff, Cool Choices decided to modify the experimental design for the last two games. Instead of just sending emails to a random sample of suspected high energy users, Cool Choices identified a random sample of non-high energy users who also received targeted emails. This change meant that there were four random groups in the last two games:

- Suspected high energy users who received targeted emails
- Suspected high energy users who did not receive targeted emails (control group)
- Non-suspected high energy users who received targeted emails
- Non-suspected high energy users who did not receive targeted emails (control group)

The updated design enabled the Energy Center to conduct more advanced analysis on these game participants. (Please see discussion in the next section of the report.)

A total of 526 Outagamie County and Town of Grand Chute employees completed the baseline survey. Cool Choices identified 104 respondents as suspected high energy users based on the survey responses. Of the 104 identified respondents, only four had registered to play a week before the game start date. (Typically Cool Choices has a two-week sign up period so, halfway through that period, only four of 104 suspected high energy users were signed up to play.) Due to the high number of unregistered suspected high users, Cool Choices began pushing high energy users to register during the second week of the sign-up period. Cool Choices sent three separate email communications to unregistered high energy users,

beginning a week before the game started through the first week of play. The emails leveraged loss aversion—the human desire to avoid loss—by emphasizing the money that these individuals were losing by not playing the game.

During the pre-game to first-week-of-play timeframe, 72 of the 100 the unregistered suspected high energy users signed up to play the game, yielding just 28 unregistered suspected high energy users. While it is possible that some of these late joiners had intended to join the game before receiving the additional reminder emails, it seems likely that the emails influenced at least some of these players.

In total, then, 76 of the baseline respondents suspected of high use joined the game.

During the first week of play Cool Choices issued a special game card encouraging players to report their annual electric and gas usage from their utility website. Based on player responses to that action Cool Choices identified an additional six players with high energy usage.

Ultimately, then, 82 suspected high energy users participated in the game and 28 suspected high energy users with emails did not participate. Cool Choices randomly assigned all 110 suspected high energy users to a test (n=56) and control (n=54) group.<sup>3</sup> Cool Choices also randomly assigned the remaining players (non-suspected high users) into a test (n=124) and control (n=127) group.

Approximately one week after each Focus on Energy card was released in the game Cool Choices sent customized emails to the test group (n=180, made up of 56 suspected high energy users and 124 regular players), encouraging them to play the Focus on Energy card. The Energy Center reports the results of these targeted email pushes in the next section of this report.

Within the game some key actions were...

- 175 participants went around their home and counted the number of items plugged in
- 117 participants reported recycling a refrigerator or freezer
- 69 participants went to their utility website and researched their average monthly electric usage
- 58 participants estimated the savings they would achieve by participating in the Lighting & Appliances Discount Program
- 51 participants reported that they participated in the Express Energy Efficiency Program

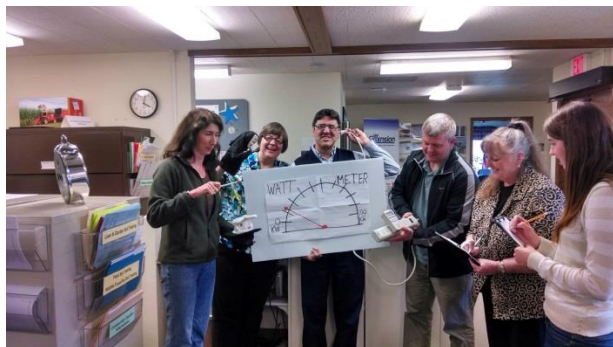
Within the game players reported that the game increased their awareness of energy use and changed their practices. Specific player quotes included:

- “We are more aware of our use of energy and water, we use the phrase ‘that’s not a Cool Choice’ when we catch ourselves wasting.”
- “More focused on turning out the lights, unplugging things not in use and watching our water use.”
- “Cool Choices has made me more aware of how my family is using energy and where we can make improvements.”

At both organizations, employees volunteered to ‘captain’ teams so that they had at least one team in every department. The game managers at Outagamie County used their Facebook page to share photos and funny quotes; they directed players to it throughout the game.

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<sup>3</sup> In this case the 28 non-playing suspected high energy users were included in the hopes that these targeted emails might encourage those players to join the game late or, at a minimum, participate in Focus on Energy programs.



Estimated annual savings are provided below. These presume players will maintain the actions adopted during the game. **New** savings are those compiled from Cool Choices that players self-reported as new actions through the game. **Total** savings include all Cool Choices recorded through the course of the game.

New Dollars	New Electricity (kWh)	New Natural Gas (Therms)	New Water (Gal)	New Gas (Gal)	New CO2 (lbs)
\$16,475	52,569	1,189	111,135	2,546	155,790

Total Dollars	Total Electricity (kWh)	Total Natural Gas (Therms)	Total Water (Gal)	Total Gas (Gal)	Total CO2 (lbs)
\$170,694	664,620	10,427	1,106,698	22,147	1,729,655

Of the new electric savings, 7,980 kWh/year were from removing refrigerators and freezers and 6,720 kWh/year was associated with installing CFL or LED lighting; those are savings that Focus on Energy likely claimed through its existing programs. Cool Choices did not assume any savings associated with players reported participation in other Focus programs. Cool Choices estimated incremental savings not claimed through existing Focus on Energy programs is as follows:

	New Dollars	New Electricity (kWh)	New Natural Gas (Therms)	New Water (Gal)	New Gas (Gal)	New CO2 (lbs)
Estimated Savings	\$16,475	52,569	1,189	111,135	2,546	155,790
Appliance Recycling	\$958	7,980				13,566
Lighting	\$806	6,720				11,424
Add'l Annual Savings from Cool Choices	\$14,711	37,869	1,189	111,135	2,546	130,800

## Unitarian Universalist Church West

Initiated by the Earth Ministry Team at Unitarian Universalist Church West (UUCW) in Brookfield, Wisconsin, this game targeted members of the UUCW congregation which included adults and children. Specifically the middle school youth group was encouraged to join and participate for the duration of the game. A UW-Extension agent who is a church member was the game manager, assisted by various Earth Ministry Team members throughout the game.

UUCW has a history of sustainable initiatives including solar panels on the roof of the church, low-flush toilets and a water cistern. They do a lot of outreach and education to their members throughout the year on a variety of sustainable topics. UUCW is a certified *Green Sanctuary*, defined as “a congregation that lives out its commitment to the Earth by creating sustainable lifestyles for its members as individuals and as a faith community. Green Sanctuary congregations are committed towards creating a religious community that has a fundamental, bottom-line, commitment to living in harmony with the Earth.”<sup>4</sup>

The game launched on September 28, 2014 and concluded eight weeks later on November 20, 2014. UUCW has a congregation of approximately 500 members. A total of 137 players signed up with 105 of those players claiming at least one Cool Choice over the duration of the game; the 27 percent registration rate surpassed the Earth Ministry Team’s 20 percent registration goal. Of those registered, 77 percent reported at least one action.

At UUCW 66 members completed the baseline survey. Cool Choices identified 14 respondents as suspected high energy users based on the survey responses. Of the 14 identified respondents, 11 initially registered to play the game. Cool Choices sent the three non-participating suspected high energy users an individualized email encouraging them to sign up and play two days after the game started. The email encouraged the suspected high users to join the game, emphasizing the money they were losing by not participating, resulting in participation of two additional players. In this instance 13 of the 14 suspected high energy users participated, which was a very high response. It is likely this was due in part to the strong community ethic within the UUCW community; these players were very responsive to email communications.<sup>5</sup>

During the first week of play Cool Choices issued a special game card encouraging players to report their annual electric and gas usage from their utility website. Based on player responses to that action, Cool Choices identified one additional player with high energy usage.

Ultimately 14 suspected high energy users participated in the game and one suspected high energy user with an email did not. Cool Choices randomly assigned all 15 suspected high energy users to a test (n=8) and control (n=7) group. Cool Choices randomly assigned the remaining players (non-suspected high users) into a test (n=56) and control (n=57) group. Again, Cool Choices combined the two sets of control and test groups.

Approximately one week after each Focus on Energy card was released in the game, Cool Choices sent customized emails to the test group (n=64) encouraging them to play the Focus on Energy card. The Energy Center reports the results of these targeted email pushes in the next section of this report.

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<sup>4</sup> UUCW website - <http://www.uucw.org/living-our-values/earth-ministry-sustainability>, accessed February 16, 2015.

<sup>5</sup> In the UUCW game there were several instances where participants replied to the automated game emails, often to explain politely why they could not take a particular action. Cool Choices had not seen this before in any game and speculated that perhaps the sense of community accountability was particularly high in this faith-based community.

Some key game-inspired actions were...

- 38 participants went around their home and counted the number of items plugged in
- 22 participants reported recycling a refrigerator or freezer
- 19 participants went to their utility website and researched their average monthly electric usage
- 14 participants reported participating in the Express Energy Efficiency Program
- 9 participants estimated the savings they could achieve by participating in the Lighting & Appliances Discount Program

Again, players reported an increased commitment to sustainability due to the game. Specific player quotes included:

- “I’m much more aware of all the great information available to us to make good choices to reduce our personal dependence on energy.”
- “There are extra positive outcomes from the game besides sustainability - creating new friends, meeting new people, fostering community, providing an intergenerational opportunity for our members...Thanks for all you do!!”

When asked about their most memorable experience or conversation of Cool Choices, players reported:

- “The young man from Focus on Energy was very knowledgeable--a pleasure to learn from as he was giving us free stuff to make our home greener!”
- “Another person told me how much her kids were enjoying it and that they were weighing their garbage together.”
- “Adjusting our household energy and water use, and modifying my driving habits. I really appreciated how the game kept those in mind day-by-day.”
- “Talking with my daughter about our energy choices, and running around the house with her counting plugged-in devices and deciding what we could unplug.”
- “Affirmation that I’m doing the right thing.”
- “Adding LED and CFL lighting throughout the house.”

Several players also shared their experiences with Focus on Energy via the game stream; one noted:

*We had our Focus on Energy home visit--it was fabulous! Nick installed lots of light bulbs, water savers in the kitchen and bathrooms faucets, new low use water shower heads, checked the temperature of the water heater and was a wealth of information, all for free. It was an hour well spent!*

Another player reported that while Focus on Energy was not available in his area, he did set up an energy audit appointment anyway.



Estimated annual savings are provided below. These presume players will maintain the actions adopted during the game. **New** savings are those compiled from Cool Choices that players self-reported as new actions in the game. **Total** savings include all Cool Choices recorded through the course of the game.

New Dollars	New Electricity (kWh)	New Natural Gas (therms)	New Water (gallons)	New Gas (gallons)	New CO2 (pounds)
\$10,318	27,284	1,397	121,842	1,526	98,599

Total Dollars	Total Electricity (KWh)	Total Natural Gas (therms)	Total Water (gallons)	Total Gas (gallons)	Total CO2 (pounds)
\$48,215	174,989	6,049	439,663	5,486	531,885

Of the new electric savings, 2,660 kWh/year were from removing refrigerators and freezers and 3,360 kWh/year from installing CFL or LED lighting; those are savings that Focus on Energy likely claimed through its existing programs. Cool Choices did not assume any savings associated with players reported participation in other Focus programs. Cool Choices estimated incremental savings not claimed through existing Focus on Energy programs is as follows:

	New Dollars	New Electricity (kWh)	New Natural Gas (therms)	New Water (gallons)	New Gas (gallons)	New CO2 (pounds)
Estimated Savings	\$10,318	27,284	1,397	121,842	1,526	98,599
Appliance Recycling	\$319	2,660				4,522
Lighting	\$403	3,360				5,712
Add'l Annual Savings from Cool Choices	\$9,596	21,264	1,397	121,842	1,526	88,365

## PILOT OUTCOMES

This section summarizes some of the outcomes from the four games, including the level of participation in Focus on Energy programs and Cool Choices' findings when comparing Cool Choices data to Focus on Energy data.

**Table 1: Summary of Outcomes Across the Four Pilot Games**

	Fond du Lac	Inpro	Outagamie	UUCW	Average
Total Population	1,000	500	1,351	500	
Total Registrants	198 (20%)	260 (52%)	320 (24%)	137 (27%)	31%
Total Participants	176 (18%)	254 (51%)	279 (21%)	105 (21%)	28%
Total Estimated kWh Savings	67,112	96,201	52,569	27,284	
Total kWh/Population	67	192	39	55	88
Total kWh/Registrant	339	370	164	199	268
Total kWh/Participant	381	379	188	260	302
Estimated kWh Savings Incremental to Focus on Energy	53,924	72,513	37,869	21,264	
kWh/population	54	145	28	43	68
kWh/registrant	272	279	118	155	206
kWh/participant	306	285	136	203	233
Total Estimated Therm Savings ( <i>No Overlap with Focus</i> )	2,630	3,416	1,189	1,397	
Therms/Population	3	7	1	3	4
Therms/Registrant	13	13	4	10	10
Therms/Participant	15	13	4	13	11
<b>Of the game participants...</b>					
Reported E3 Participation	30 (17%)	44 (17%)	51 (18%)	14 (13%)	16%
Reported Appliance Recycling	58 (33%)	128 (50%)	117 (42%)	22 (21%)	37%
Explored Lighting & Appliances Discounts	58 (33%)	32 (13%)	58 (21%)	9 (9%)	14%
Reported analyzing plug load	118 (67%)	168 (66%)	175 (63%)	38 (36%)	58%
Reported going to utility website to see average monthly usage	50 (28%)	69 (27%)	69 (25%)	19 (18%)	25%

These participation rates are encouraging. A key question relative to this data, of course, is whether the reported actions are real and whether or not the reported Focus on Energy actions occurred during or after the game, which would support attributing savings to Cool Choices. As part of this analysis Cool Choices was able to investigate whether their participants actually participated in Focus on Energy programs and whether that Focus participation occurred during or after the Cool Choices game.

In early March 2015 Cool Choices staff received read-only access to the Focus on Energy SPECTRUM database. SPECTRUM (the State Program for Energy Customer Tracking, Resource Utilization and



data Management) is the database where all Focus on Energy activities are recorded. Using that access Cool Choices staff searched SPECTRUM for the names of specific Cool Choices players who reported participation in specific Focus on Energy programs.

Matching participants across the two systems presented significant challenges. Cool Choices captures the name of the game participant, but does not capture the name of their spouse or partner; if the Focus on Energy record was in the partner's name it was impossible to verify a match, especially in cases where there were 30 or more matches to a particular last name. The primary identifier in Cool Choices' system is a participant's email, which is typically a workplace email whereas Focus on Energy's system is based on home addresses and may capture phone numbers and in rarer cases personal emails. All of this complicated the matching process.

Cool Choices identified 312 participants—across the four pilot games—who took at least one action that was relevant to Focus on Energy and thus might generate Focus participant data. Staff did a search in SPECTRUM for each of the 312 names and found 56 definite matches, representing about 18% of the relevant participants. For those 56 matches Cool Choices compared the data reported in the game to the SPECTRUM records to determine if the player participated in Focus on Energy during or after the game, if they had participated earlier, or if there were other likely outcomes. In this analysis two programs were key: the Energy Efficiency Express Audit and the Appliance Recycling Program because in those two instances Cool Choices players received points for participating in the program rather than just learning about the program. The following table summarizes Cool Choices' findings.

**Table 2: Summary of Findings from Effort to Match Cool Choices Players to Focus on Energy Data**

Program	Total Participants	# Matches Across the Two Systems	Game Influenced: Action Occurred During/After Cool Choices	No Game Influence: Action Occurred Before Cool Choices	Other
Express Energy Efficiency Audit	139	38	23	10	4 – reported they were on a waiting list; 1 – misreported
Appliance Recycling	325	40	14	5	10 no record of participation; 8 reported recycling before 2011); 3 misreported

Because Cool Choices set up the Focus on Energy actions as Create behaviors (which enabled Cool Choices to collect more data from participants), the players were not asked if these actions were new or not. As a result, confirmed participation—either prompted by the game or before the game—constitutes an accurate player response. Relative to the Express Efficiency Audit, then, 87 percent of matched respondents reported their actions accurately. The accuracy of responses for the Appliance Recycling program are more difficult to assess since some players reported actions that took place prior to 2011 and are not captured in SPECTRUM.

It is difficult to draw definitive conclusions from this small sample; more experimentation would be useful, particularly if Focus on Energy and Cool Choices could establish a real-time process for data sharing to minimize the challenges of finding participant matches.



## RESULTS AND LESSONS LEARNED

The Energy Center of Wisconsin analyzed player information to answer the following researchable questions, each of which has important implications for the design of energy efficiency programs that target residential high energy users:

- Can one identify high users through a simple screening process?
- Will high users participate in Cool Choices?
  - Can participation in Cool Choices be converted to Focus on Energy awareness and participation?
  - What did we learn about supplemental ways to encourage participation?

We examined these questions by analyzing responses to baseline surveys fielded among all members of the four communities that offered the games, game playing data, and responses to a post-game survey in each community.

### COULD WE ACCURATELY IDENTIFY HIGH USERS FOR TARGETING?

As noted, one of the first steps in our process was to attempt to identify high users through a simple screening process that was built into the pre-game baseline survey. Cool Choices requests all members of the organizations and communities it serves to complete a baseline survey during the game sign-up period in an effort to gain an understanding of the population being served. This survey provided us with an opportunity to identify potential players whom we considered to be suspected high users based on their responses to questions we crafted around the characteristics of their homes, appliances, and households. We were then able to track the response of most of these “suspected high users” to the game, via email addresses, and compare them to respondents whose energy usage appeared to be low or average. We describe the process of identifying suspected high users in Appendix A: Identifying High Users. Our target range was to designate anyone we considered to fall in the top quartile of home energy usage (electric or natural gas) as a suspected high user.

By necessity, any targeted encouragement to play needed to focus on those potential players who were *suspected* to be high users based on baseline responses, but these people may or may not be actual high users. Using energy consumption data that players were encouraged to look up on their energy bills or obtain from their utility providers and report during the game, we were able to compare our predictions of who is likely to be a high energy user and whose households actually qualified as one. We conducted this comparison for the subset of players from the four games for whom we had the requisite data. We found that the screening process worked fairly well, filtering high users from non-high users with an accuracy rate of 77 percent. As shown in Table 3, we were able to identify 61 percent of self-reported high users and filter out 82 percent of self-reported non-high users.

In the context of player engagement, the rate of false negatives (39 percent self-reported high users) in the screening process is more worrisome than the rate of false positives (18 percent of self-reported non-high users) because casting a wide enough net to reach most high users has more benefit than the cost of including some percentage of non-high users. In the context of the following analysis, which compares game activity among suspected high users and their non-high user counterparts, it is important to note that the distinction between the two groups is somewhat muddled by our imperfect screening process. We had both baseline survey completions and self-reported actual energy consumption from 110 players across the four games. Among these players, roughly half of those identified as high users were not actually high users.

**Table 3: Comparison of predicted and actual high users**

		Actual high users status based on in-game self-reports of energy consumption		
		high user	not high user	total
Prediction based on baseline responses	high user	14	16	30
	not high user	9	71	80
	Total	23	87	110

Legend:

predicted correctly (61% of high users, 82% of non-high users)

not predicted

As a result of this reality check, we feel comfortable that the majority of suspected high users who were targeted with additional encouragement actually were high users. At the same time, the screening process could be adjusted in the future to more fully identify others who are actual high users, but are not identified as such for targeting. For now, the screening appears to be conservative.

Pre-game and in-game targeting of high users was based on the best information at the time of the communications to potential and actual players. Mostly, the targeting relied on players identified as suspected high users based on the baseline responses, and it is this group that constitutes the high user group discussed in following section on game participation rates. However, Cool Choices did supplement that list of high users with modest numbers of additional players who self-identified as high users after providing energy consumption data during the game for subsequent targeting. For the remaining sections discussing game activity and Focus on Energy program participation, we combine the group of high users identified from survey responses and those self-identified during the game to round out the group of “high users.”<sup>6</sup>

### DID HIGH USERS PARTICIPATE?

The first key to achieving energy efficiency improvements among high users is to engage these households around efficiency. We sought to explore this topic by determining whether high users engaged in the Cool Choices game, either on their own or with targeted outreach to prompt their participation.

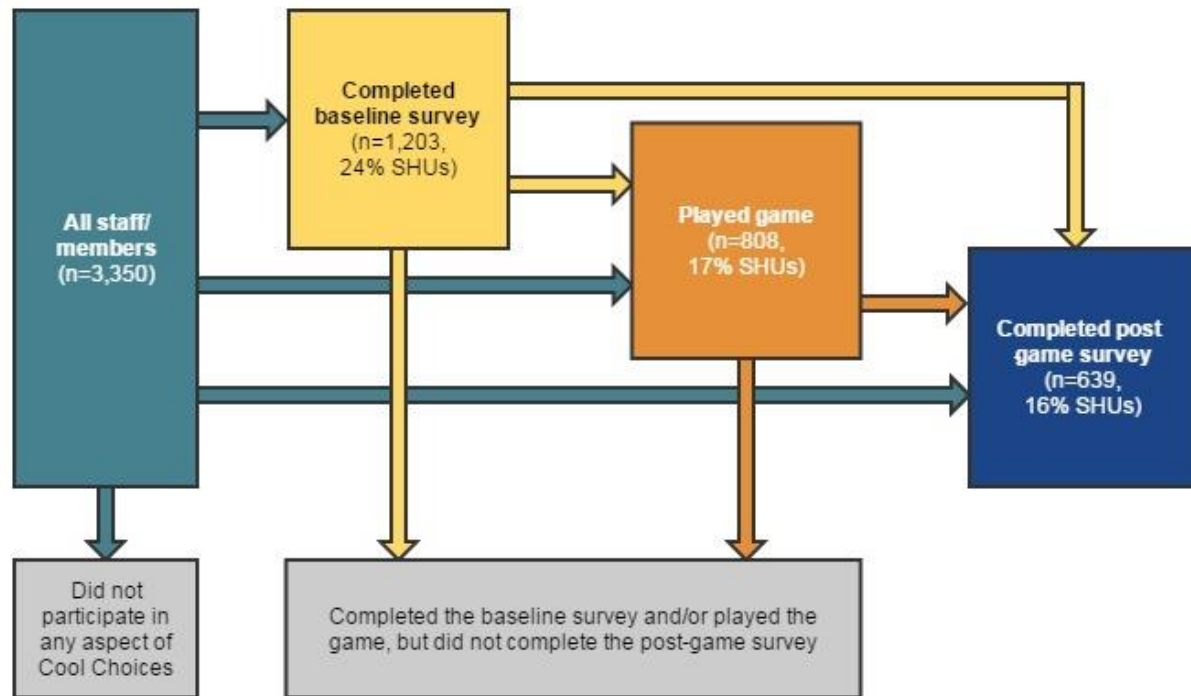
Approximately three-fourths of baseline survey respondents supplied a unique email address and were thus able to be linked to their game activity, if in fact they played Cool Choices. It is this group (n=889) that forms the basis of our analysis of high users’ participation in the game. We should note here that given this rate of tractability (75 percent), it is likely that there were additional respondents (both high users and non-high users) who also played the game but were not able to be connected to their game activity. Those individuals are excluded from our high user analysis.

Figure 1 below illustrates the various ways people can interact with—and participate in—Cool Choices and how those interactions are linked. There are two important things to note from this figure:

<sup>6</sup> The pool of baseline respondents who also played Cool Choices and provided self-reported energy consumption information was too small (only 110 people) for any descriptive analysis. For this reason, we did not use self-reported consumption data to adjust the resulting pool of high users.

1. Participation is not uniform within an organization. (For example, one person may take the baseline survey only, while another could play the game and complete the post-game survey, but not the baseline survey.)
2. Using e-mail addresses as the common link, we can identify the large majority of linkages between baseline survey respondents, players and post-game survey respondents, but not all.

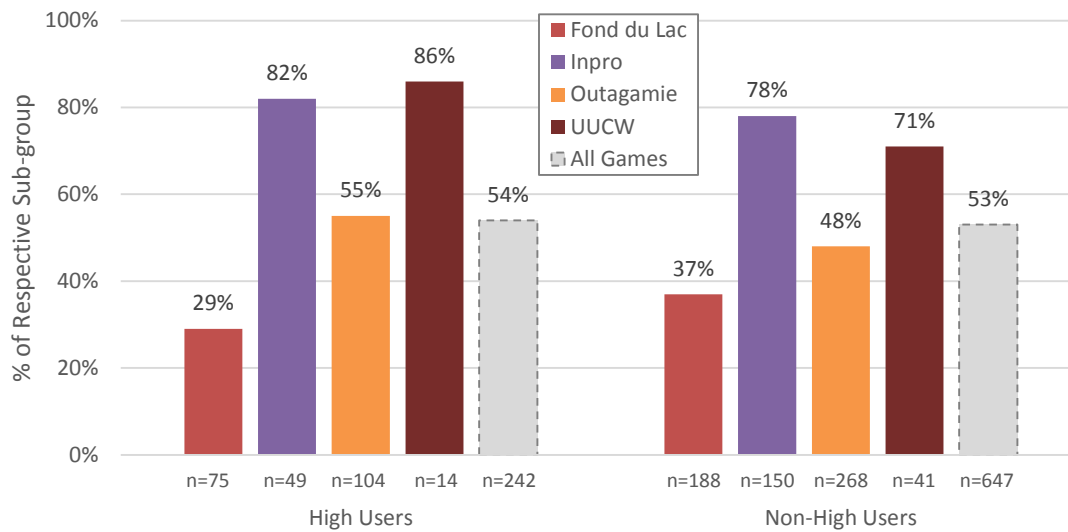
**Figure 1. Range of opportunities in which people can participate in Cool Choices**



### Participation trends

Across the four games, we found that high users played the Cool Choices game at roughly the same rate as households whose energy usage is low or typical. On average, 54 percent of high users and 53 percent of non-high users who provided tractable email addresses in the baseline survey participated in the game. Figure 2 shows these rates by game. Interestingly, while overall participation varies by game, the shares of high users and non-high users who played were fairly similar within each game.

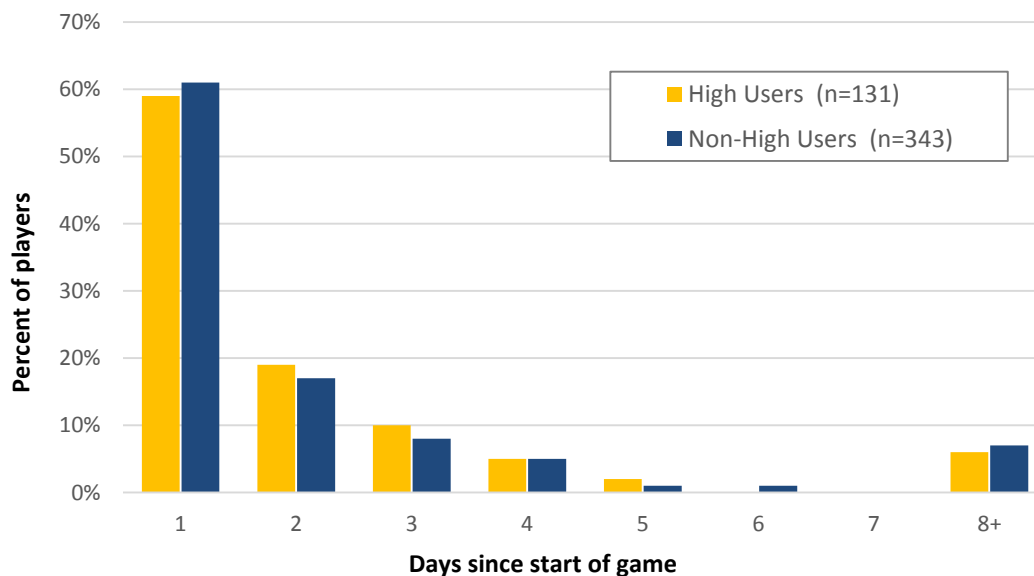
**Figure 2. Participation rates, high users versus non-high users**



We note that the natural variability across workplace communities may well be a substantial factor in the differences we saw from game to game, thus helping to explain the patterns shown in the figure above. Hence, it may not be possible to extrapolate the quantitative results we present here to the general population or to any specific workplace community, but we suspect that the general, qualitative findings do apply. If four different workplace communities all reacted in the same way – just at different levels – one could anticipate that the general population (and its high users) would react similarly.

Just as participation rates were similar, high users and non-high users tended to join the game by playing their first card in similar time horizons. Nearly nine in ten players, regardless of high user status, played their first Cool Choices card within the first three days of overall game play. These early players represent 49 percent of high users and 47 percent of non-high users identified from the baseline survey.

**Figure 3. When players started to play, high users versus non-high users**



## Targeted email encouragement

For high users who did not initially start playing, we tested whether additional e-mail encouragement to play would bring them into the game. Generally, we found that the messages were not widely opened, however, leading to modest levels of increased participation by those who did not immediately engage in the game.

The lag time between the start of the game and the first targeted message ranged between two and seven days across the four games. Among high users who received targeted encouragement to play, 10 percent ultimately participated. This compares to 11 percent of non-high users, who did not receive targeted encouragement, but who joined the game after the first few days (more specifically, after the start of targeted encouragement for high users). To reiterate, targeted encouragement is defined as email messages from Cool Choices staff encouraging game participation. We cannot, however, isolate the impact of this type of encouragement from more informal efforts by company leadership or colleagues. As noted, the Cool Choices game leverages social interactions in workplace communities, and every community in which it is played is different.

At first glance, it appears that the targeted encouragement effort was not particularly fruitful (10 percent of those targeted played Cool Choices); however, a strong selection bias is in effect. The only high users to receive targeted encouragement are those who were not motivated to sign up on their own in the early days of the game and were less likely to play at all, as demonstrated by the sign up trend of non-high users in Figure 3.<sup>7</sup>

While there is variation across games, there is a common trend of similar, within-game early participation rates among high user and non-high user players. For example, at Inpro, early participants accounted for 93 percent of high user players and 96 percent of non-high user players. At UUCW, early participants accounted for 58 percent of high user players and 62 percent of non-high user players. Table 4 details rates of early versus delayed participation among baseline respondents. Early participants registered for the game before any targeted messaging was sent. Delayed participants, regardless of high user status, registered on or after targeted messaging was sent to high users.

**Table 4. Early and delayed players, high users versus non-high users**

		High Users		Non-High Users	
	Players*	% Early Participants	% Delayed Participants	% Early Participants	% Delayed Participants
Fond du Lac	91	86%	14%	84%	16%
Inpro	157	93%	8%	96%	4%
Outagamie	185	96%	4%	91%	9%
UUCW	41	58%	42%	62%	38%
All Games	474	90%	10%	89%	11%

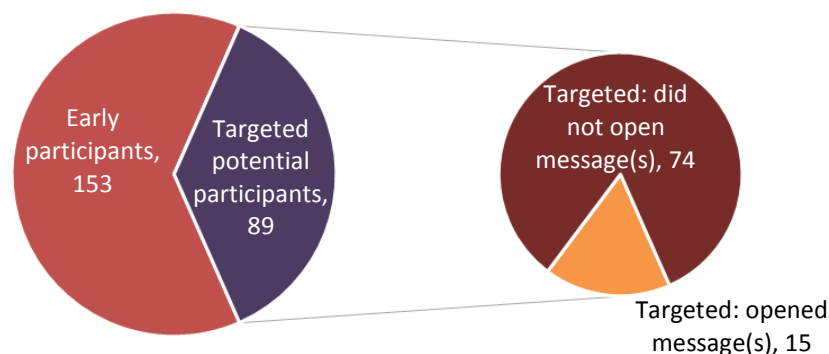
\* Includes only players who completed the baseline survey and supplied a unique email address in the survey.

Ultimately, large shares of potential participants never opened the messages. Cool Choices tracked whether a person opened an individual email, and whether he or she clicked on the link within the email message to get additional information. Across all four games, about one-fifth of the targeted high users opened at least one message sent to them encouraging them to play, while the remaining four-fifths either

<sup>7</sup> Only high users received targeted encouragement to play the game if they had not already signed up, so non-high users who had also not signed up serve as a comparison group by which the effectiveness of the targeted encouragement could be assessed.

did not receive the messages, ignored them, or viewed only the subject line(s) (see Figure 4). This result points to the modest effectiveness of unsolicited e-mail. Interestingly, though, rates at which the messages were opened varied dramatically across the four games.

**Figure 4. Breakdown of high users**



Not surprisingly, people who opened at least one targeted message were more likely to join the game than those who did not open any messages. We are unable to determine from the data whether this is because the type of person who is likely to open a Cool Choices message is also the type of person to eventually join the game, or whether the messages themselves reminded or swayed the recipient to participate, as was the intention. Nevertheless, 20 percent of recipients who opened a message ultimately played the game, versus 8 percent of people who did not open any messages. These nested groupings—the number of targeted high users, the percentage that opened a message and the percentage that played—all varied from game to game as shown in Table 5 below.

**Table 5. High users with targeted encouragement to participate**

	Targeted High Users	Opened Message(s) (# Played)	Did Not Open Message(s) (# Played)
Fond du Lac	51	5 (0)	46 (2)
Inpro	7	2 (0)	5 (1)
Outagamie	28	5 (1)	23 (3)
UUCW	3	3 (2)	0 (0)
<b>All Games</b>	<b>160</b>	<b>15 (3)</b>	<b>74 (6)</b>

## DID PARTICIPATING HIGH USERS TAKE ACTION?

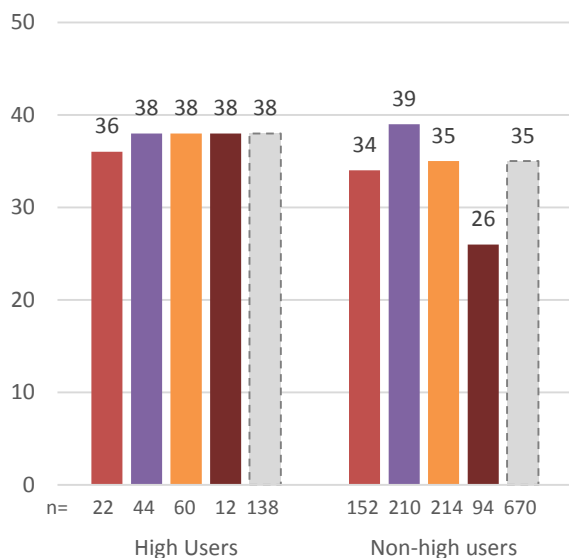
Getting high users to participate in the game is only the first step toward energy savings or sustainability-related impact. The actual impact comes from engagement with the game and the degree to which players take actions, which can be measured in terms of number of cards played, number of points earned, and whether the actions taken and points earned were for new and impactful activities. Again, we found that high users engaged in the game similarly to non-high users across the board, as well as on the activities in the game that produce some of the greatest energy impacts. As such, given high users' greater energy savings potential, one could reasonably expect that their resulting energy impact is greater.

On average, high users played 38 unique actions per game, totaling about 1,100 points, both of which are on par with their non-high user counterparts. New actions accounted for roughly one-half of these unique actions and more than one-half of total points, reflecting the effect Cool Choices can have on players'

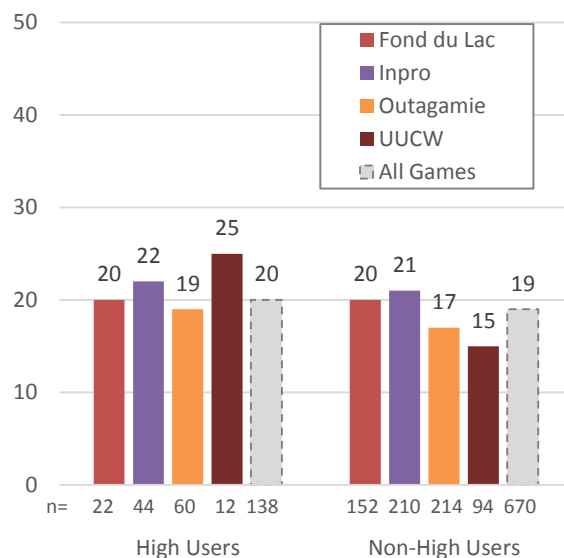
increased sustainability efforts. Figure 5 through Figure 8 show game-by-game and overall comparisons between high users and non-high users for four game activity metrics: number of unique actions, unique new actions, total points and points associated with new actions. As shown, high users and non-high users tend to operate similarly in any given game.

Without utility billing data, we could not assess, the impact of player actions on actual energy consumption, however, using new points as a proxy for overall energy savings, it appears that high users save at about the same rate as non-high users. High-impact actions are examined more closely in the next section.

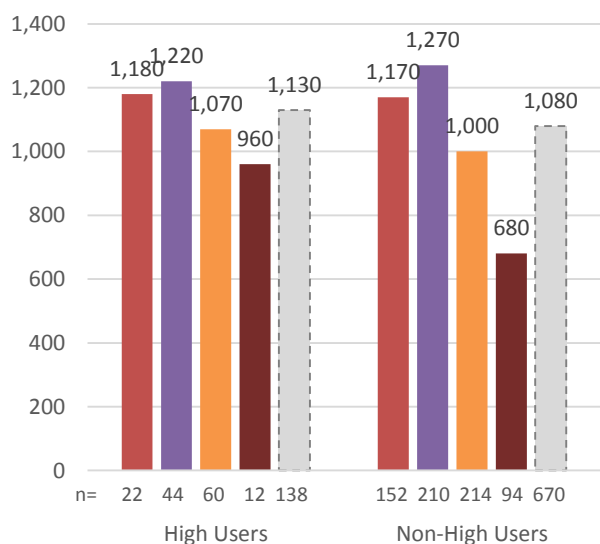
**Figure 5. Number of unique actions, high users versus non-high users**



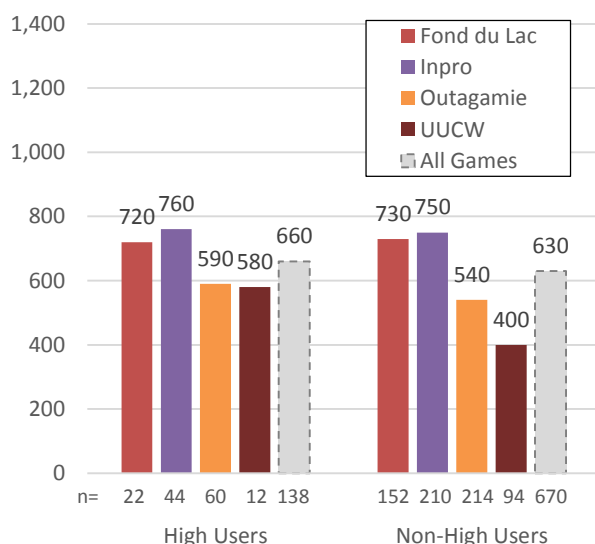
**Figure 6. Number of unique new actions, high users versus non-high users**



**Figure 7. Number of points, high users versus non-high users**



**Figure 8. Number of new points, high users versus non-high users**



## Impactful measures

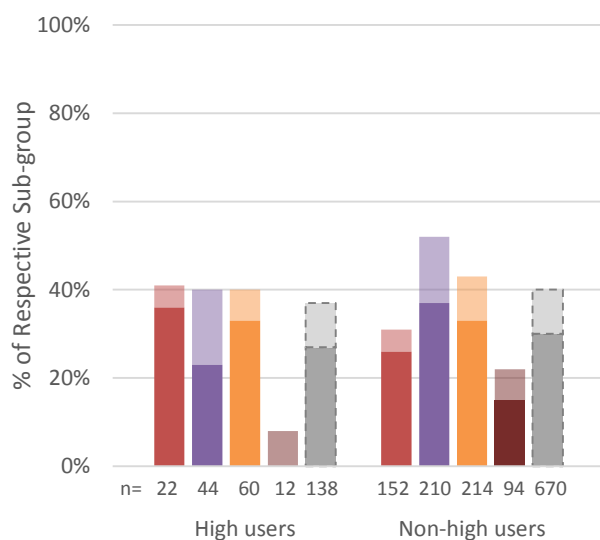
The specifics of what actions players take matter greatly, of course, because some sustainable actions produce greater impact than others. With this in mind, we analyzed high impact energy-related actions included in the game and found that high users do claim to take these actions at similar rates as non-high users. Given the greater energy-saving potential among high users, that could well mean that the impact of their activity is higher, although more precise research, such as billing analyses, would be needed to truly quantify the relative impact of high users compared to non-high users.

For this analysis, we focused on four actions that have been among the most impactful energy-saving measures Cool Choices participants perform. Three of the cards represented one-time behavior modifications; the other required an ongoing change in habit:

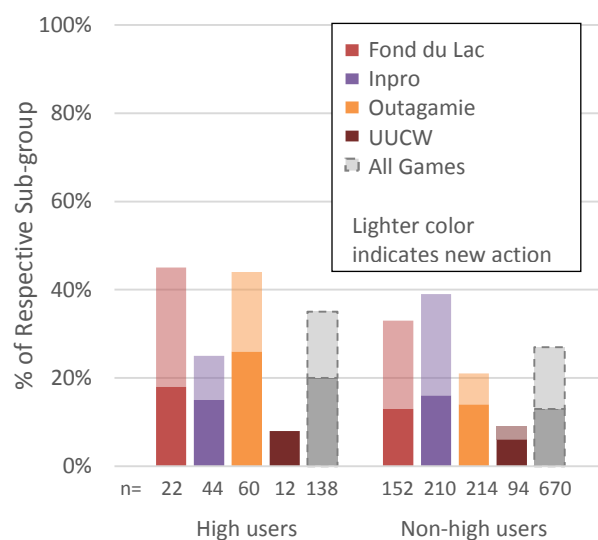
- Remove and recycle your 2nd refrigerator or freezer.
- Turn the game console off if not in use.
- Switch your furnace fan setting from continuous to auto.
- Adjust your thermostat from 68° to 60° when no one is home or while the household is sleeping.

Like other game activity metrics discussed above, high users played “high impact” cards at about the same rate as their non-high user counterparts, but with somewhat more variability. High users were as likely as non-high users to recycle or unplug second refrigerators and freezers, and more likely to turn off game consoles that weren’t in use or reduce their use of furnace fans that had been in the on setting continuously. They were somewhat less likely to adjust their thermostats. For all four high impact cards, high users were as likely as non-high users to report the action as “new,” another indicator that high users are motivated to make meaningful changes via the game.

**Figure 9. Recycle 2<sup>nd</sup> refrigerator/freezer, high users versus non-high users**

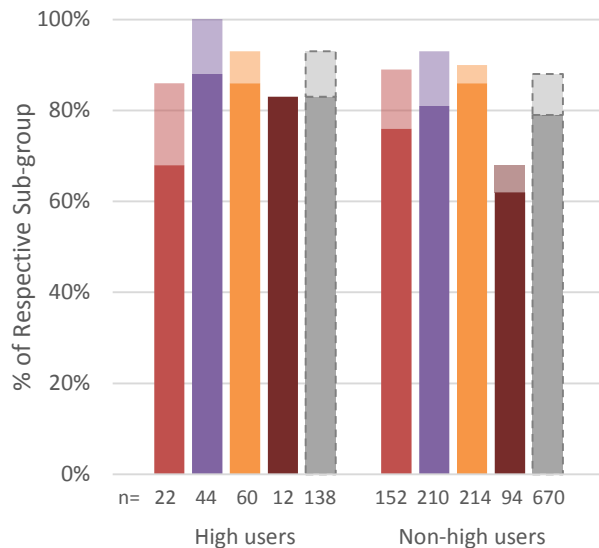


**Figure 10. Turn game console off if not in use, high users versus non-high users**

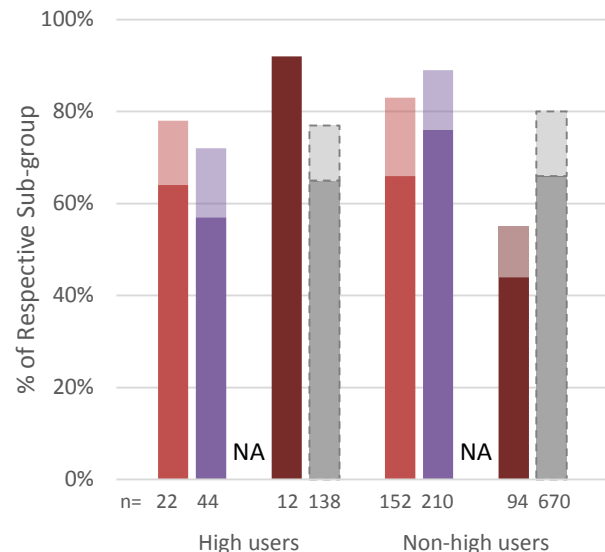




**Figure 11. Switch furnace fan setting to auto, high users versus non-high users**



**Figure 12. Adjust your thermostat settings, high users versus non-high users**



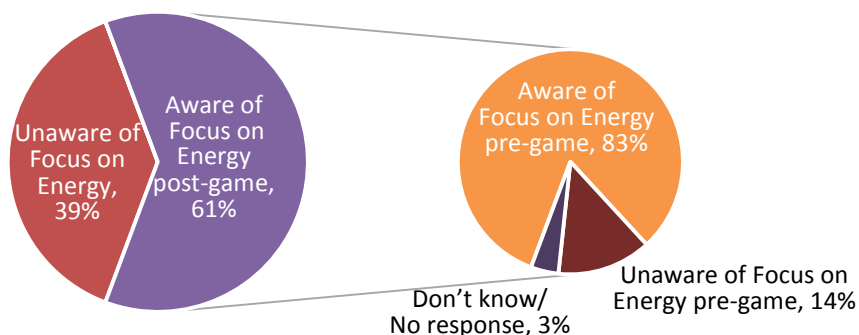
## WHAT EFFECT DID COOL CHOICES HAVE ON HIGH USERS' AND PLAYERS' ENGAGEMENT WITH FOCUS ON ENERGY?

One way Cool Choices seeks to drive sustainable behavior is by promoting players' use of Focus on Energy services. We found that game-related messaging and action cards that promote participation in selected Focus on Energy programs appeared to increase awareness of the program for both high users and players overall and prompted players in both groups to engage with Focus on Energy programs featured in the game. Supplemental targeted messaging to players who did not play featured cards initially had modest supplemental effects, however.

### Awareness of Focus on Energy

Responses to post-game surveys suggest that players were more aware of Focus on Energy after the game than before. Sixty-one percent of players who responded to the post-game surveys said they were aware of Focus on Energy. While the majority of these players reported that they were aware of the program prior to Cool Choices, 14 percent claimed to have not known about the program before the game. These results are based on retroactive self-reports.

**Figure 13. Adjust your thermostat settings, high users versus non-high users**



Differences in awareness between players and non-players would be a more robust indicator of increases in awareness of Focus on Energy resulting from the Cool Choices game. We were not able to reliably assess these differences, as the number of non-participants completing the post-game survey was too small. It is interesting to note that the non-players who completed the post-game survey did also show a modest increase in Focus on Energy awareness, signaling either spillover effects from in-firm social interactions related to the game or a measurement effect tied to the fact that we obtained only retroactive self-reports of pre-game awareness.

### **Engagement with Focus on Energy**

Players engaged with Focus on Energy services promoted as part of the game, and high users were somewhat more likely to report that they had used Focus on Energy. Overall, 71 percent of high user players indicated on the post-game survey that they had used Focus on Energy services compared with 59 of non-high user players. Additionally, of the seven high user post-game respondents who reported using Focus services while playing Cool Choices, four stated this was the first time they had used Focus services.

In-game efforts to engage players with Focus on Energy concentrated on four game cards that were included in the game to spur action, as well as some targeted messaging (described in the next section). The four action cards encouraged players to:

- Participate in the (Focus on Energy) Express Energy Efficiency Program
- Participate in the Lighting & Appliances Discount Program
- Participate in the Appliance Recycling Program and get paid to get rid of your old fridge/freezer
- Research your home energy usage

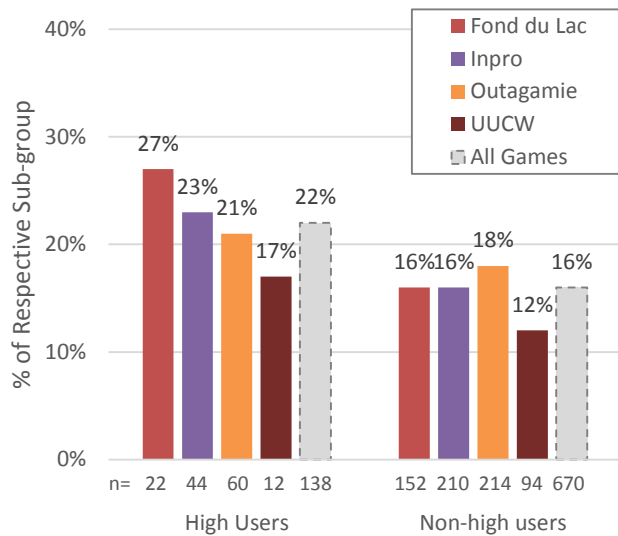
Overall, high users were as engaged in these actions as non-high users, and in some instances, more so. High users tended to play cards related to the Express Energy Efficiency Program and researching their homes' energy usage at a higher rate than their non-high user counterparts. The figures below show the percentage of players who played each of the four program-related cards, a reflection on players' engagement with Focus on Energy.

Players were not asked whether or not individual actions associated with these cards were new or not<sup>8</sup>; however, roughly one-third of the 32 postgame survey respondents (regardless of high user status) who reported that they used Focus on Energy services during the game, also reported that this was the first time they had ever participated in a Focus program. Furthermore, findings from the SPECTRUM database analysis in the Pilot Outcomes section (Table 2), suggest that players who participated in Focus on Energy programs at any point were more likely to have participated during or after the game period rather than prior to the game. This is a strong indication that Cool Choices drives players to Focus on Energy's program offerings.

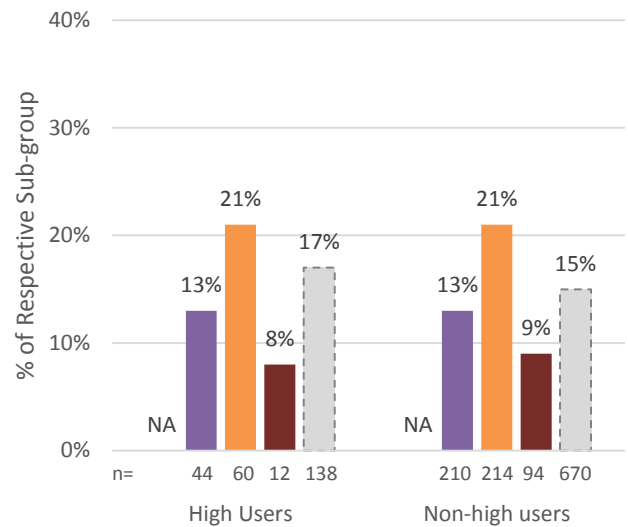
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<sup>8</sup> Postgame survey respondents who reported using Focus on Energy services during the game were asked whether or not it was the first time they have ever used Focus services, but the question did not ask respondents to specify the particular program.

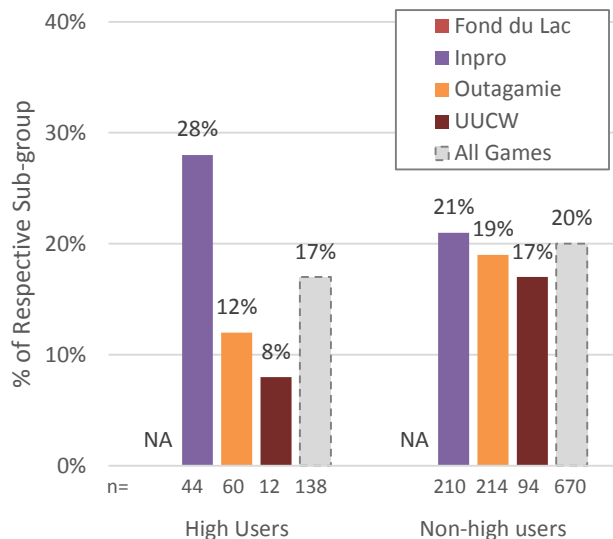
**Figure 14. Express actions, high users versus non-high users**



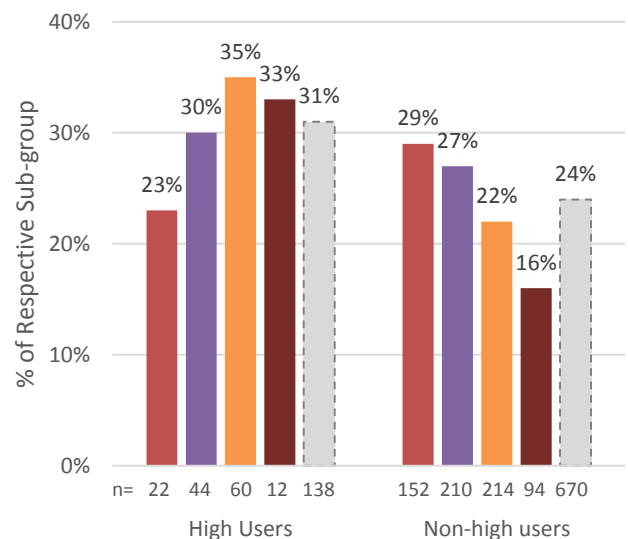
**Figure 15. Lighting actions, high users versus non-high users**



**Figure 16. Appliance actions, high users versus non-high users**



**Figure 17. Research actions, high users versus non-high users**



### Effect of targeted messaging

Just as Cool Choices targeted subsets of high users with additional encouragement to play, the implementation team also added enhanced messaging to targeted players to promote use of Focus on Energy services as part of the game. The enhanced messaging consisted of emails directly to the targeted players to promote the particular cards and Focus on Energy offerings. Cool Choices added the messaging in order to test whether the targeted outreach further increased use of the Focus on Energy services, particularly among high users. It appears that, generally speaking, the targeted messaging did not have meaningful effects on use of the Focus on Energy services beyond the effect Cool Choices was already having by simply including cards that promoted the services and provided points for self-reports of their

use. As mentioned in the previous section, players were not asked whether or not the actions associated with these cards were new or not, so we cannot extract the rates of new versus prior actions.

The Focus on Energy programs that the targeted messaging promoted were the:

- Express Energy Efficiency Program
- Lighting & Appliances Discount Program
- Appliance Recycling Program

In three of the four games, half of the high users were randomly selected for additional (targeted) encouragement to take Focus on Energy-related actions while the other half were held back as a comparison group. In two of these games, an additional subset of non-high users were randomly selected for targeted encouragement as well to provide another type of comparison group.

**Table 6. Targeted messaging approach, per game**

Fond du Lac	No targeted messaging to promote the limited Focus on Energy programs incorporated into the game
Inpro	Half of high users received targeted emails
Outagamie	Half of high users and half of non-high users received targeted emails
UUCW	Half of high users and half of non-high users received targeted emails

The analysis below is based only on the two games in which a subset of both high users and non-high users were targeted (Outagamie and UUCW) and compares the differences between targeted and non-targeted players among high users versus non-high user—a difference-in-difference approach.

For all three Focus on Energy programs, a majority of players who played the respective card that self-reported having participated in the program did so before any targeted messaging was sent. Among the remaining players who played the respective card, the impact of targeted messaging was more evident among non-high users than high users, in a statistical sense, likely because non-high users comprised a larger group. However, overall, the added boost from the targeted messaging was fairly modest.

**EXPRESS ENERGY EFFICIENCY PROGRAM**—Among players who did not self-report participation in the Focus on Energy Express Energy Efficiency Program before the start of targeted messaging, those who received a targeted message highlighting the program were more likely to play the action card (24 percent versus 8 percent). While the impact of messaging held for non-high users (24 percent of targeted players played the action versus 7 percent of non-targeted players), it was substantially diminished among high users (22 percent versus 16 percent, a statistically insignificant difference).

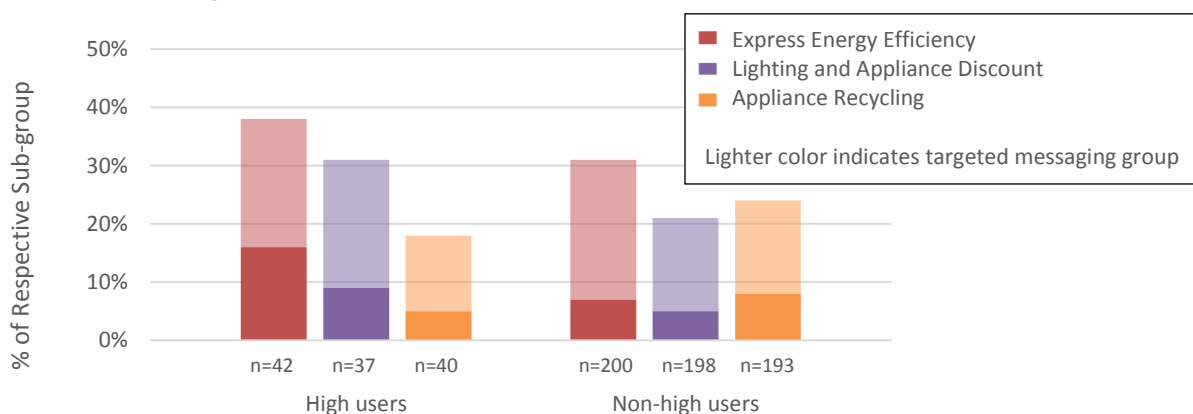
**LIGHTING & APPLIANCES DISCOUNT PROGRAM**—Here, too, the boost from the added messaging appeared to be modest, resulting in an overall rate of participation of 18 percent by those who received targeted messaging compared to 6 percent by those who did not receive any supplemental communications after not initially claiming the card. Among non-high users, the difference between the increased uptake by those who received the targeted messaging (16 percent) compared to those who did not (5 percent) was statistically significant. Among high users, the numerical boost was greater (22 percent versus 9 percent), but was not statistically significant because of the smaller overall numbers of players being analyzed.

**APPLIANCE RECYCLING PROGRAM**—The increased self-reported program participation from the targeted messaging for the Appliance Recycling Program appeared to be less than for the other two Focus on Energy offerings. Overall, 15 percent of those who received targeted messaging participated compared to 8 percent of those who did not receive any additional messaging after not initially claiming the card. The

increased uptake among high users and non-high users was about the same (13 percent versus 5 percent and 16 percent versus 8 percent, respectively), but the differences were statistically significant only for non-high users at the population sizes available for the analysis.

Figure 18 below shows the relative participation rates of targeted and non-targeted players, among high users and normal-to-low users. As a reminder, players who participated in the highlighted Focus on Energy programs upon the initial offering in each game are not included in this part of the analysis.

**Figure 18. Participation rates in Focus on Energy programs during the targeted messaging period, high users versus non-high users**



## PARTICIPATION SUMMARY

Thus, we found that **high users engage in sustainability activities—or, at least Cool Choices—at rates equal to that of their lower-using counterparts.** That is, they do not appear to be out-of-reach or just plain not interested in sustainable use of energy, natural gas, gasoline, and water (the resources on which the Cool Choices game concentrates).

**Added encouragement for high users to play did not seem to result in substantial additional benefit,** at least not from the types of e-mail encouragement offered by the game. Most of the encouragement entailed e-mails promoting the game anew to people who had not yet participated and other e-mails encouraging participants to play particular game cards if they had not already done so. Reaching this audience is difficult, as noted by the low “open rates” of the e-mails and, when engaged, these late participants in the game tended to be less active. It appears that the motivated participants tend to answer the call the first time, so reaching out to the non-participants with additional e-mails has a marginally modest effect.

**Once in the game, high users play with similar intensity as non-high users.** This is reflected in the total number of cards they play, the number of unique actions and the number of actions reflecting energy-saving behavior that is new to the individual lifestyle. Additionally, high users take actions associated with substantial savings as frequently as their lower-using counterparts.

**Focus on Energy appears to benefit when Cool Choices includes action cards that provide encouragement and points for participation in selected statewide programs.** We saw evidence of both increased awareness and program participation among players overall and high users specifically.

## CONCLUSIONS

This pilot demonstrated that Cool Choices is an effective strategy for identifying high energy users and for encouraging participation in Focus on Energy programs. When Cool Choices promotes Focus on Energy program opportunities, a substantial number of game participants learn more about the program and participate, including households that have not participated in Focus previously.

More experimentation is needed to fully understand the potential for Cool Choices to increase participation on Focus on Energy programs. Increased coordination around data sharing—so that it is easier to identify households participating in both efforts—will be a critical piece of that effort.

Key findings from the post-game participation analysis are:

- 1) High users are engaged in the sustainability game and seem to play in similar numbers as people whose usage is lower.
- 2) The in-game actions of high users seem to be at least as frequent and impactful as those of lower users, which is consistent with findings from other impact evaluations that have differentiated households based on consumption. Generally, high users achieve greater impact with the same effort as their lower-using counterparts, so there is reason to think that their impact from participation in Cool Choices is greater as well.
- 3) The additional messaging in the game did not seem to result in meaningful levels of additional engagement.
- 4) Focus on Energy seems to benefit when Cool Choices includes action cards that provide encouragement and points for participation in specific Focus on Energy programs.

## APPENDIX A: IDENTIFYING HIGH USERS

To facilitate targeted messaging to high users—both at the outset of the game and during game play—we needed a way to easily identify people whose households use large amounts of energy in their homes. We chose to develop and test an approach that relies on responses from potential players during the baseline survey that Cool Choices implements during the sign-up period of every game. This appendix details the data we collected and our algorithm for separating baseline respondents into high users and non high users.

Our approach entailed three steps:

- Collect self-reported data about household characteristics in the baseline survey
- Assign points to relevant survey responses in relative proportion with each response’s general impact on household energy consumption
- Identify the “highest-scoring” quartile of respondents as suspected high users

The table below lists the data elements that were added to the baseline survey and used for identifying high users, the response categories offered, the scores we assigned, and notes. Cool Choices tallied points for all players, identified the score that divided the highest scoring 25 percent of respondents from the rest, and marked those baseline respondents who scored above this cut-off as suspected high users. Each game was assessed separately, so high users were those thought to be the highest using quartile from each community that played the game.

The scoring scheme was developed by the Energy Center of Wisconsin based on the relative contribution of the various input variables to typical residential household energy consumption.

Topic	Response categories	Scoring rubric	Notes
Housing type	1=Single-family home 2=Duplex 3=3-4 unit apt 4=5-9 unit apt 5=10-19 unit ap 6=20+unit apt 7=other	none	For information only; included in the scoring for some other variables below.
Annual spending	value	For single-family / duplex: 10,000 pts if spending > \$2,600  For all other housing types: 10,000 pts if spending > \$1,600  No points if spending >= \$10,000 (not credible)	The addition of 10,000 points ensures that households that self-reported spending levels at \$2,600 or \$1,600, respectively, are propelled to the top of the list for identifying high users.
Winter temp	value	Add 25 points for every degree above 70; subtract 25 points for every degree below 70  No points if temp is	

		below 55 or above 85 (not credible response)	
AC usage	1=don't have AC 2=use little or not at all 3=use during hot spells only 4=use much of the summer	If 1 or 2, subtract 75 points  If 4, add 75 points	
Refrigerators	number present	For every refrigerator beyond the first, add 75 points  If no refrigerators, subtract 75 points	
Freezers	number present	For every freezer, add 75 points	
TVs	number present	For every TV above 3, add 20 points  For 0, 1, or 2 TVs, subtract 60, 40, or 20 points (respectively)	
Desktops	number present	For every desktop above 1, add 20 points  If no desktops, subtract 20 points	
Lights	1=only incand bulbs 2=mostly incand 3=equal mix 4=mostly CFLs/LED 5=only CFLs/LEDs	If 1, add 25 points  If 3, subtract 40 points  If 4, subtract 60 points	
Home age (year built)	1=before 1950 2=1950-1979 3=1980 or later	None	Collected for possible addition to the scoring rubric later
Home size	square feet	If single-family home and size > 2,000 ft <sup>2</sup> , add 0.1 points for every square foot above 2,000	
Fuels: electricity	0=no 1=yes	If single-family and have only electric fuel, add 200 points	
Fuels: natural gas	0=no 1=yes	See fuels: electricity	
Fuels: propane	0=no 1=yes	See fuels: electricity	
Fuels: heating oil	0=no 1=yes	See fuels: electricity	
Fuels: wood stove	0=no 1=yes	See fuels: electricity	
People: adult	number of adults	If total people (regardless of age) > 2,	



		add 30 points for every person above 2	
People: school	number of school-age children	See people: adult	
People: preschool	number of pre-school age children	See people: adult	
Respondent age	1=under 25 years of age 2=25-34 3=35-44 4=45-54 5=55-64 6=65+	None	Collected for possible addition to the scoring rubric later

## **APPENDIX B: POST-GAME FINDINGS AT FOUR PILOTS**

After the Fond du Lac, Inpro and Outagamie games the Energy Center compiled data from the baseline survey, the game actions and the post-game survey. They delivered a memo to Cool Choices based on their findings; Cool Choices posts these memos on its website. Following the UUCW game a Cool Choices intern compiled the data and created the memo.

Copies of the four memos for the games included in this pilot are attached here.



# MEMO

**DATE**           **May 22, 2014**

**TO**             **Kathy Kuntz and Raj Shukla, Cool Choices**

**FROM**          **Ingo Bensch and Karen Koski**

**SUBJECT**       *Cool Choices game for the city and county of Fond du Lac – post-game survey results*

Employees of the city and county of Fond du Lac played the Cool Choices game from January 27 through March 21, 2014. One hundred and seventy-six of about 1,000 employees participated by reporting at least one action. Players organized into 22 different teams.

One hundred and fifty-five Fond du Lac city and county employees responded to the post-game survey, representing most of the players. The Energy Center of Wisconsin fielded the online survey during the last week of gameplay and the week following the completion of the game in March 2014. This memo reports the results of that post-game survey.

We have organized the results along the following topics:

- factors that influenced play and social dynamics
- changes in practices and learning
- communications
- miscellaneous reactions and perceptions
- alumni engagement
- feedback from non-players

Full frequency tables by question are attached.

## **Factors that influenced play and social dynamics**

We examined the factors that influenced play in two ways: by examining self-reports on what players said motivated them and by looking for correlations between social dynamics and player activity.

## **Self-reported motivators**

When Cool Choices asked what factors were influential in players' decisions to participate in the game, respondents rated an extrinsic reward (saving money by taking the actions) and an intrinsic reward (liking the lifestyle changes that come from taking the game's actions) as the two most influential factors. Encouragement from peers, the opportunity to win a prize, wanting to win, and the prospect of fun

comprised the next most highly rated factors. The appeal of the game and a sense of obligation were lower on the list.

Table 2 lists these factors in rank order with the average score (based on a five-point scale) given to each factor.

**Table 2: Self-reported influencing factors for playing the game (n=142-145)**

<b>Question: How influential were each of the following factors in your decision to play the Cool Choices game?</b>	<b>mean</b>
could save money by taking the actions (n=145)	3.77
liked the lifestyle changes that could come from doing the actions (n=144)	3.44
was encouraged by my colleagues (n=145)	3.32
might win a gift card (n=143)	3.27
wanted to win (n=143)	3.23
it was fun (n=143)	3.22
Cool Choices made it seem appealing (n=142)	3.06
felt obligated as part of my job (n=143)	2.55

Once people were playing the game, they reported that their choices of what cards to play were motivated mostly by ease of playing the card (for pre-existing actions), saving money, environmental benefit, and the ease of taking the action (for new actions). Doing well in the competition and fun were somewhat less important in players' self-reports, while peer influence ranked last, as shown in Table 3.

**Table 3: Self-reported influencing factors for which cards to play (n=143-144)**

<b>Question: Please rate the influence each of the following factors had on your choosing the actions you took.</b>	<b>mean</b>
was already doing the action (n=143)	4.08
save money (n=144)	4.06
good for the environment (n=143)	3.92
easy to do (n=143)	3.88
earn a lot of points (n=143)	3.48
fun to do (n=143)	3.08
co-workers were doing them (n=143)	2.61

## **Social dynamics and motivators**

We know from past research that people are not fully aware of the degree to which social dynamics and social norms influence them. To facilitate analysis concerning the connection between social norms and player behavior, Cool Choices asked several questions about the degree to which participants felt encouraged to play the game by peers and what importance the players thought others in their social environment placed on sustainability.

### **Encouragement to play and conversations about sustainability**

As shown in Table 4, most respondents reported that someone else had encouraged them to play. The encouragement came from all across the city and county of Fond du Lac – both within the respondent's team and outside it.

**Table 4: Encouragement to play by peers (n=154)**

<b>Question: Who encouraged you to play the Cool Choices game? (multi-response)</b>	<b>% of respondents</b>
other team members	40
team leader	34
Fond du Lac City/County management	18
other Fond du Lac City/County colleagues	16
someone else / other	4
no one	20

Similarly, the vast majority of participants (88 percent) talked about sustainability at work at least once while the game was active and just under half (42 percent) of them talked about it on at least a weekly basis. Participants talked about sustainability at home at the similar rates, at 86 percent. Not surprisingly, the people with whom participants talk about sustainability tend to be those closest to them (co-workers, immediate family), but some do report extending those conversations out to friends, neighbors, and extended family members.

We explored whether players who perceived encouragement from others to participate or self-reported conversations about sustainability were engaged in the game more actively. As shown in Table 5, players who reported more activity in these parameters also claimed somewhat greater numbers of actions during the game.

**Table 5: Player activity by whether player recalled being encouraged to participate (n=125)**

	number of respondents	mean number of		
		total cards played	unique actions taken	new actions taken
Players who felt / did not feel encouraged to play				
not encouraged to play	27	81	35	10
encouraged to play	93	92	37	13
Players who reported talking about sustainability (at home or work) ...				
infrequently (never or "once or twice")	43	80	33	11
weekly	36	98	39	14
regularly (several times per week or daily)	41	92	39	13

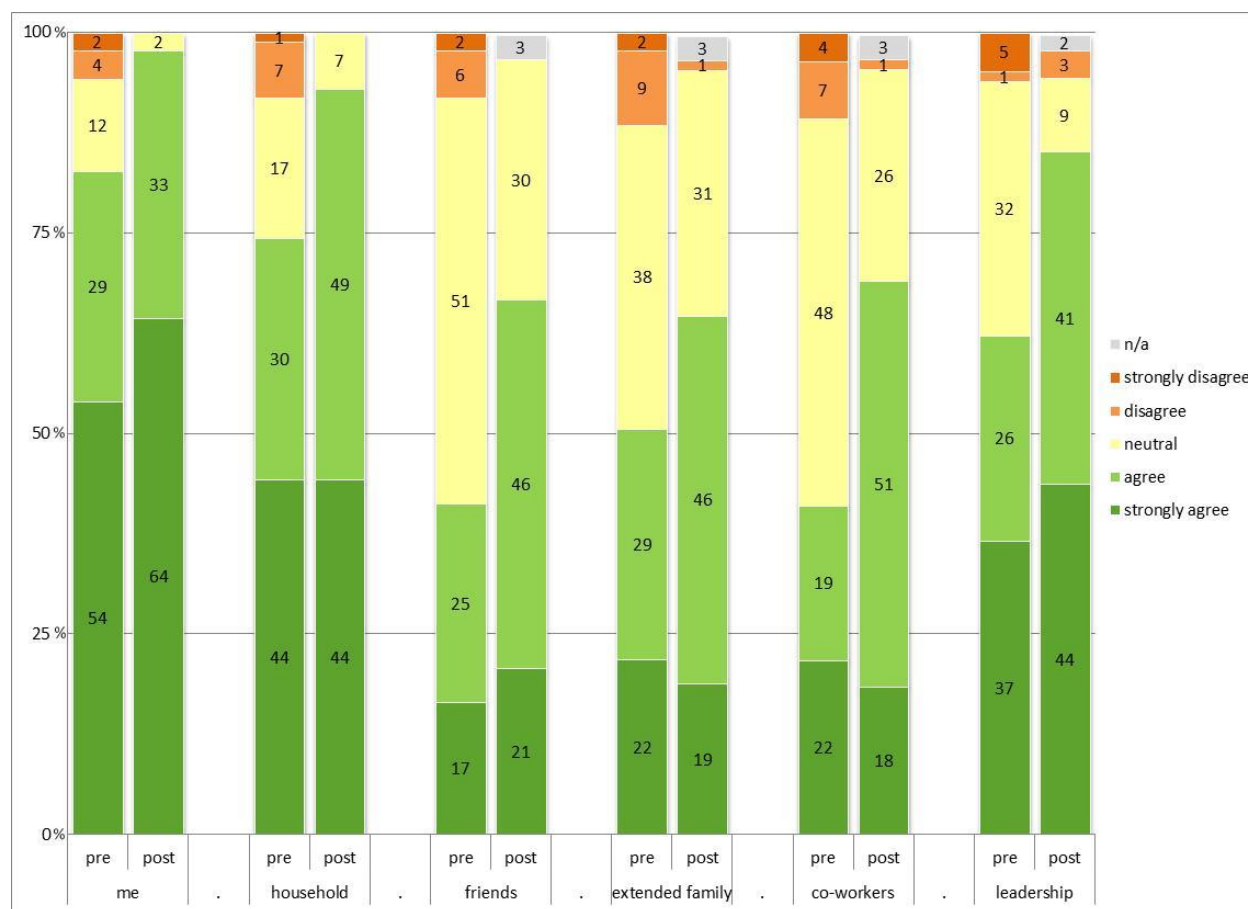
This analysis is limited to players who completed the post-game survey, however, and thus does not include people who chose not to play the game. It is possible people who weren't encouraged were less likely to play the game.

### **Perceived importance of sustainability**

One key metric for Cool Choices is the degree to which players in the game gain a sense that their peers value sustainability. The pre-game baseline included a set of questions about the degree to which respondents value sustainability themselves and how important they think sustainability is to various groups of peers. Those questions were repeated in the post-game survey, and we then compared responses for the pre-game and post-game surveys.

We did see increases across-the-board in the importance people ascribed to sustainability themselves and their perception of the importance others place on sustainability. Figure 19 shows pre- and post-game responses by peer group for respondents who answered the questions in both the pre- and post-game surveys.

**Figure 19: Importance of sustainability pre/post game, shown in percentages (n ranged from 82 to 87)**



## Change in practices and learning

The Cool Choices game cards, in-game competition, and social dynamics during the game are intended to spur sustainable actions. While the scoring data collected by Cool Choices offer a good indicator of player activity, the post-game survey explored several other measures of player engagement and practices. These measures included self-reported changes in players' pre- and post-game efforts to save in-home energy, water, and gasoline; the degree to which they learned something new about sustainability; and the actual steps they took when they played one of four actions with potentially high impacts on energy use.

### Self-reported degree of sustainable activity

Respondents reported increased levels of sustainable activity in all three facets of sustainability that were included in the survey. Leaps in self-reported conservation activity were greater in in-home energy use—where the share of respondents who said they were doing “a lot” (responding with either a 4 or 5)

increased significantly from 44 to 87 percent, water consumption from 50 to 77 percent and gasoline consumption from 54 to 80 percent.

Figure 20: Self-reported pre- and post-game effort to reduce in-home energy use

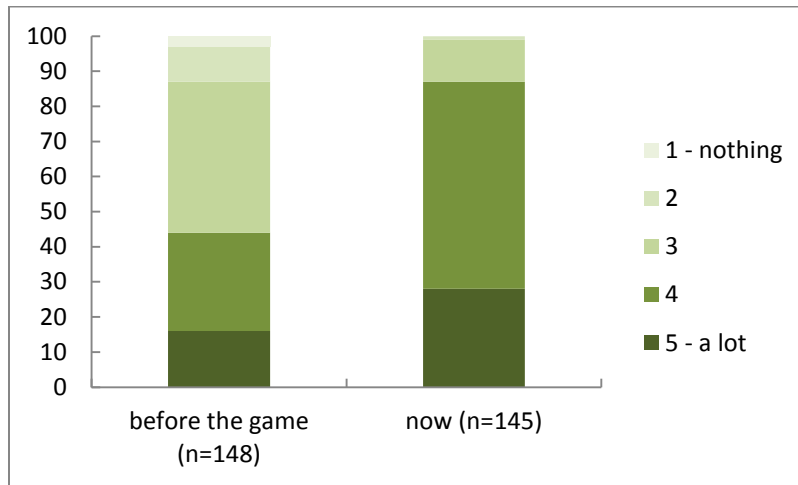


Figure 21: Self-reported pre- and post-game effort to reduce water use

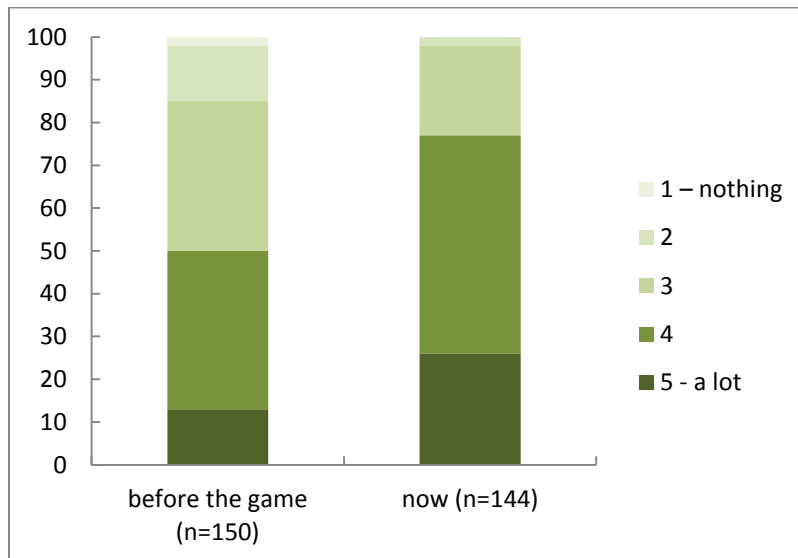
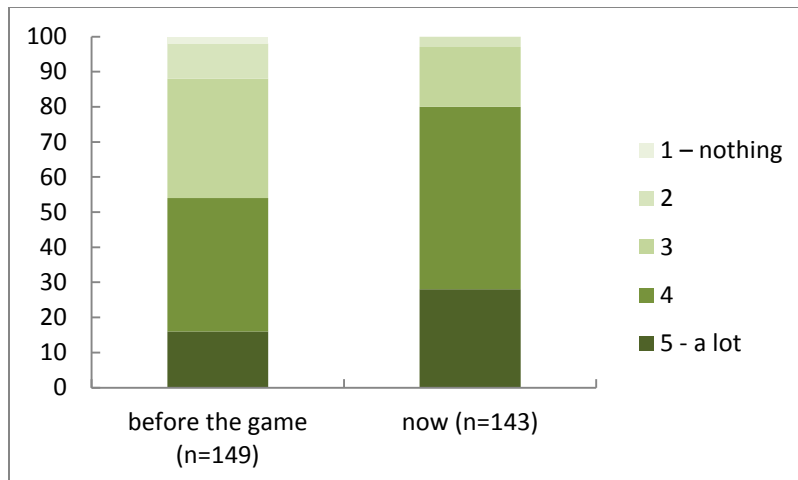


Figure 22: Self-reported pre- and post-game effort to reduce gasoline use



### Most meaningful action

When we asked players to indicate the most meaningful new action they took as part of the game, respondents listed many of the actions included in the game cards, as well as a few new insights they picked up. Most of the respondents cited modest, everyday actions, but some respondents also mentioned bigger efforts, including getting an energy audit, switching fuel type from furnace to a pellet stove, insulating a home, and purchasing a more fuel efficient car.

### Learning

One intent of the Cool Choices cards is to educate players about actions they can take that they may not have known about or for which they didn't have enough information to make informed judgments. Respondents told us that the cards presented new ideas to them occasionally (77 percent of respondents) or often (17 percent), suggesting that the game did educate its players at the Fond du Lac city/county.

### Selected high-impact actions

Cool Choices asked respondents whether they played any of the following four high-impact actions and then inquired about some details about their pre- and post-game practices:

- changing the furnace fan setting from continuous to auto
- lowering the thermostat setting at night or when no one is home
- unplugged or removed second refrigerator/freezer
- unplugged or turned off gaming system

Table 6 lists the frequency with which respondents reported having played these cards.

**Table 6: High-impact actions reported by the post-game survey respondents (n=102)**

Action	percent
changed your furnace fan setting from continuous (or on) to auto (n=58)	57
lowered your thermostat setting at night or when no one is home (n=78)	77
unplugged or removed second refrigerator/freezer (n=32)	31
unplugged or turned off gaming system (Playstation, Xbox, etc.) (n=61)	60



As a cross-check, we compared self-reports from the survey with actual card playing from Cool Choices’ scoring system for the first of these cards – changing furnace fan settings from continuous to auto. We found nuanced results in how respondents answered the question about whether they had changed their furnace fan settings. Those who did not play the card associated with this action uniformly reported that they had not changed their furnace fan setting. Only about half of those who played the card indicated that they had changed their furnace fan settings, but it is possible that they were interpreting the time frame for the post-game question differently. Table 7 shows these the full results of this comparison.

**Table 7: Comparison of game actions and post-game responses to furnace fan question (n=120)<sup>9</sup>**

Player action during the Cool Choices game	Claimed to have changed furnace fan setting in post-game survey		
	yes	no	total
did not play furnace fan card	0%	10%	10%
played furnace fan card as a pre-existing sustainable action	36%	41%	77%
played furnace fan card as a newly taken action	7%	7%	13%

(Percentages shown for 120 respondents for whom we could match post-game survey responses with scoring data. Individual numbers may not sum to total due to rounding error.)

### Changing furnace fan setting

Additional details were asked about changes in furnace fan settings from post-game respondents. We restricted our analysis of these data to respondents who had actually played that card according to the scoring system. Of the sixteen respondents who had played the furnace fan card as a new action during the game and answered the post-game survey, ten claimed not to have taken any such action during a post-game survey.<sup>10</sup> The other six respondents split evenly between having made a wholesale switch from running the furnace fan all the time to keeping it on auto all the time (2 respondents), having run it continuously during parts of the year previously (2 respondents), and having run it continuously in response to situational needs (2 respondents).

Interestingly, several of the 92 respondents who played the furnace fan card as a pre-existing sustainable action indicated in the post-game survey that they ran the furnace fan continuously at least some of the time prior to the game. Eight such respondents said they had been running the furnace fan continuously all the time, eight said they ran it continuously during parts of the year, and another eight ran it situationally.

See Table 8 for full results in percentage terms.

<sup>9</sup> Cells in the table are color-coded for consistency between player action during the game and self-report in the post-game survey. Green signifies an accurate response in the post-game survey (i.e., one that is consistent with the player’s action during the game). Red signifies an inaccurate response. Gray cells are ambiguous as respondents who claimed points during the game for having switched their furnace fan to “auto” prior to the game could have always had the switch in that position (and never actually moved it), changed the position of the switch prior to the game and answered the post-game survey question as if it pertained only to actions taken during the game, or changed the position of the switch prior to the game and answered the post-game question with a more extensive time period in mind than just the game. As a result, either response to the post-game survey could be accurate for these players.

<sup>10</sup> Eight of these respondents failed to indicate that they had taken any actions pertaining to furnace fan settings during a screening question in the post-game survey. The other two respondents indicated some activity related to their furnace fan, but then answered that their furnace fan settings were on “auto” in response to a follow-up question.

**Table 8: Pre-game furnace fan settings by those who played the furnace fan card**

<b>Setting</b>	<b>players who reported the action as "new" (n=16)</b>	<b>players who reported the action as pre-existing (n=92)</b>
"auto" year-round	13%	20%
"auto" year-round, but situationally switch to "on" to circulate air	13%	9%
"on" seasonally, "auto" during the rest of the year	13%	9%
"on" year-round	13%	9%
don't know / non-response	0%	1%
respondent skipped based on a screening question	50%	53%

### Changing thermostat settings

Overall the average thermostat temperature settings (among those who adjusted them) decreased when someone was home, sleeping and away (see Table 9).

**Table 9: Temperature setback temperatures reported by the post-game survey respondents**

<b>Action</b>	<b>before (mean)</b>	<b>after (mean)</b>
when someone was home and awake (n=77)	69.3	67.3
when everyone was sleeping (n=76)	66.0	63.7
when no one was home (n=76)	64.7	62.4

Forty-one percent of respondents adjusted their temperature manually, while the other 59 percent used a programmable feature on their thermostat.

### Refrigerator removal

Just over half (56 percent) of the respondents who reported unplugging or removing a refrigerator or freezer said they took a full-size refrigerator offline, 25 percent unplugged or removed a chest or stand-up freezer, and 19 percent unplugged or removed a mini-refrigerator. Over two-thirds of these respondents (72 percent) have not replaced or plugged their refrigerator/freezer back in since the game ended.

### Gaming system use

On average, players who unplugged or turned off their gaming systems during the game greatly reduced the number of hours their systems were plugged in and on by an average of 50 hours per week (from about 60 hours to about 10 hours), largely because 20 players reported having let the gaming system run all the time before they played the Cool Choices game.

### Unclaimed points

Thirty percent of respondents didn't claim points for all of the actions they performed, particularly for day-to-day actions (i.e. turning off lights, turning off unused equipment, recycling, etc.). Part of this may be due to the repetitive nature of these actions. Some respondents mentioned not claiming points for actions they typically do in the summer because the game was played in the winter. There were a couple respondents that took high impact actions (i.e., purchasing a new furnace, air sealing) that they didn't claim points for taking.

## Communications

The post-game survey also inquired about game related communications, as well as general communications preferences and habits.

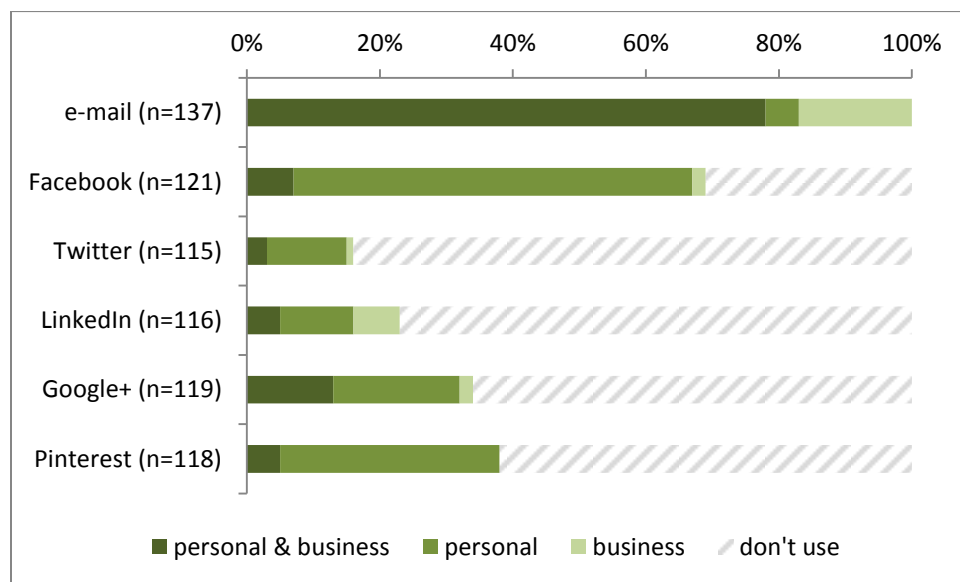
The daily reminder email was the most effective or most preferred method of getting day to day information about the game for 81 percent of the respondents. A smaller group of respondents (13 percent) preferred the Cool Choices news feed in the game. A few respondents preferred to get information from setting reminders for themselves on their calendars or cell phones.

The majority (82 percent) of respondents reported that they got useful tips from the daily reminder at least a few times. The remaining 18 percent of respondent either didn't get useful tips or didn't look at the reminder emails.

Respondents most often played the Cool Choices game on a computer, with 88 percent reporting this method. A much smaller number (4 percent) of respondents played the game most often on their mobile device or tablet. The remaining 8 percent used both equally.

The post-game survey also inquired about whether respondents used various electronic communications and social networking applications. E-mail use is pervasive for both personal and business use. Just under two-thirds of the respondents said they use Facebook (almost exclusively for personal use) and just over a third use Pinterest (mostly for personal use). Use of Google Plus and LinkedIn is lower, and the least used social media tool among this group is Twitter.

**Figure 23: Use of electronic communications and social networking services**



## Miscellaneous reactions and perceptions

In the post-game survey, we asked the respondents how much they agreed or disagreed with a series of statements (see Table 10).

Statements with high agreement were:

- The Cool Choices actions were simple to do. (92% agreement)
- Many of the Cool Choices actions were things I'd already done. (91% agreement)
- All in all, I'm satisfied with my job at Fond du Lac City/County. (87% agreement)
- I am more aware of opportunities to save energy since playing Cool Choices. (82% agreement)

Statements with mid-to-high-level agreement were:

- I learned new things from the Cool Choices cards. (76% agreement)
- Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used. (72% agreement)
- I'm proud of the changes I've made as a result of playing Cool Choices. (71% agreement)
- Cool Choices feels like a meaningful part of the city/county of Fond du Lac's efforts toward sustainability. (71% agreement)
- Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used. (69% agreement)

Statements with low agreement were:

- My family was enthusiastic about taking the Cool Choices actions. (37% agreement)

**Table 10: Level of agreement with various statements**

	n	strongly disagree	disagree	neutral	agree	strongly agree	don't know
The Cool Choices actions were simple to do.	142	1%	1%	6%	50%	42%	0%
My family was enthusiastic about taking the Cool Choices actions.	140	4%	8%	46%	28%	9%	5%
I am more aware of opportunities to save energy since playing Cool Choices.	141	1%	4%	13%	52%	30%	0%
Many of the Cool Choices actions were things I'd already done.	142	0%	2%	6%	45%	46%	1%
I learned new things from the Cool Choices cards.	142	1%	3%	18%	53%	23%	2%
Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used.	142	5%	8%	14%	33%	39%	1%
I'm proud of the changes I've made as a result of playing Cool Choices.	142	1%	1%	24%	42%	29%	2%
Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.	142	3%	7%	18%	44%	25%	3%
Cool Choices feels like a meaningful part of City/County of Fond du Lac's efforts toward sustainability.	142	3%	1%	22%	39%	32%	3%
All in all, I'm satisfied with my job at Fond du Lac City/County.	141	1%	1%	6%	36%	51%	5%

The post-game concluded with open-ended questions that gave respondents an opportunity to provide comments and suggestions to Cool Choices. We have included the full set of responses in the attachment. Some of the themes were:

- The cards should reflect the current season (i.e., not including air conditioner cards for winter games).
- The game was too long.
- Too many reminder emails.

## Alumni engagement

Respondents showed moderate interest in continued engagement with Cool Choices as alumni. Among four different options, interest was highest in participating in future prize opportunities, but low in organizing a Cool Choices game at another social group to which the respondents belong. (See Table 11.)

**Table 11: Interest in selected alumni activities (n=82)**

<b>Activity</b>	<b>percent interested</b>
Participate in sustainability-oriented contests and prize opportunities	60%
Preview and test new Cool Choices cards and game features	45%
Connect with Cool Choices alumni online with a computer, tablet or phone	20%
Organize a Cool Choices game as part of another group (school, faith community, book club)	2%
Other	12%

## Feedback from non-players

Several respondents to the post-game provided feedback to explain why they chose not to play the Cool Choices game. The primary explanation given was that the game would require time away from their work duties that they didn't have available.

\* \* \* \* \*

## Attachment

### Cool Choices post-game survey: frequencies and verbatim responses

**1) How often did you play the Cool Choices game?**

	n	percent
daily	96	61.9
several times a week	49	31.6
once a week	4	2.6
a few times	4	2.6
once or twice	2	1.3
not at all	0	0
Total	155	100

**2) Who encouraged you to play the Cool Choices game? (check all that apply)**

n=154	n	percent
your team leader	52	33.8
other team members	61	39.6
other Fond du Lac City/County colleagues	24	15.6
Fond du Lac City/County management	28	18.2
someone else (please specify)	4	2.6
no one	30	19.5
other	2	1.3

Someone else and comments:

- Email reminders from Cool Choices. (3)
- Our director.

**3) Did you look at the Cool Choices game cards?**

	n	percent
no, not at all	12	7.8
skimmed through them	53	34.4
looked at the cards to get a sense of them	57	37.0
looked at some cards closely	32	20.8
Total	154	100

**4) How much were you doing to save energy in your home...**

	before game		now	
	n	percent	n	percent
1 – nothing	4	2.7	0	0
2	14	9.5	1	0.7
3	64	43.2	18	12.4
4	42	28.4	85	58.6
5 - a lot	24	16.2	41	28.3
Total	148	100	145	100

**5) How much were you doing to save water in your home...**

	before game		now	
	n	percent	n	percent
1 – nothing	3	2.0	0	0
2	20	13.3	3	2.1
3	52	34.7	30	20.8
4	55	36.7	74	51.4
5 - a lot	20	13.3	37	25.7
Total	150	100	144	100

**6) How much were you doing to reduce your gasoline use...**

	before game		now	
	n	percent	n	percent
1 – nothing	3	2.0	0	0
2	15	10.1	4	2.8
3	51	34.2	25	17.5
4	56	37.6	74	51.7
5 - a lot	24	16.1	40	28.0
Total	149	100	143	100

**7) How influential were each of the following factors in your decision to play the Cool Choices game?**

	mean
wanted to win (n=143)	3.23
was encouraged by my colleagues (n=145)	3.32
liked the lifestyle changes that could come from doing the actions (n=144)	3.44
it was fun (n=143)	3.22
could save money by taking the actions (n=145)	3.77
felt obligated as part of my job (n=143)	2.55
might win a gift card (n=143)	3.27
Cool Choices made it seem appealing (n=142)	3.06

**8) If there were other significant motivators that prompted you to play the game, please tell us about them here.**

- Beating my other co-workers.
- Felt an obligation to my teammates/team leader.
- Good for the environment.
- I gathered ideas on things I may not have thought of.
- I have always been conservative and thought I might learn something new by playing the game. I did and was reminded of some things I forgot like all the energy some things use when only plugged in.
- I wanted to see the different ways to save money and cut costs.
- I was nice seeing co-workers doing their part to help the city save money.
- I was under the impression that there would be door prizes and promos given out to all who participate. If this does not happen, I will likely no play. We don't get the opportunity to get promos in my line of work/public svc.
- I'm always open to learning new things and from reliable sources.
- Insulated the basement and pipes in my house.
- Interested in saving money and the environment.
- It's a positive team project that created a bond and some interaction and fun competition.
- Just wanted more ideas on how to save money.
- Prizes.
- Saving water, energy and money. Water is a very precious natural resource that people don't realize how scarce it is in the world.
- Set a good example for my children on how they could save water, energy and gas they both drive.
- Team effort.
- To see if I could make changes to use less energy/water that will help future generations. Lessen my carbon foot prints. Put less in the landfill.
- Wanted to beat other team of colleagues.
- We recently bought different home that did not yet have many of the energy efficiency updates that our previous home had, Cool Choices made me aware of some of the things we had been putting off/planning to get around to, and motivated us to get at them. CFL's and LED aren't cheap when most of your house hasn't been converted yet, and I don't even want to discuss the appliance prices, but I'm glad we got it done.

**9) While the Cool Choices game was active, how often did you talk about sustainability at work?**

	n	percent
--	---	---------



daily	6	4.1
several times a week	29	19.7
weekly	26	17.7
once or twice	68	46.3
never	18	12.2
Total	147	100

**10) While the Cool Choices game was active, how often did you talk about sustainability at home?**

	n	percent
daily	3	2.0
several times a week	26	17.7
weekly	41	27.9
once or twice	57	38.8
never	20	13.6
Total	147	100

**11) Whom did you talk with about sustainability? (check all that apply)**

n=147	n	percent
teammates	92	62.6
other work colleagues	59	40.1
spouse	88	59.9
kids	53	36.1
extended family (parents, brothers or sisters)	19	12.9
friends	22	15.0
neighbors	2	1.4
no one	8	5.4

**12) Who at work talked about *their* Cool Choices experiences with you? (check all that apply)**

n=147	n	percent
teammates	107	72.8
other colleagues	54	36.7
no one	24	16.3

**13) What was the topic of your most memorable conversation at work about sustainability?**

**Water:**

- Changing toilets.
- Conserving water and what teammate was doing to conserve.
- How to conserve water.
- How to save on water usage.
- How to save water by turning off the shower when putting conditioner (suggestion on shampoo bottle).

- How to save water.
- Replacing toilets.
- Save water, shower with a friend.
- That one of my teammates replaced their toilet for this game.
- Water conservation.
- Water usage. (2)
- Talking with my kids about being mindful of water use (shorter showers, turning water down when brushing teeth).
- Several were discussed but I guess ways to save water brought out the most ideas.

#### **Electricity:**

- The amount of energy used to power your WE and Xboxes, which a lot of people use for netflix consume a lot of energy.
- Electric savings.
- Game consoles and computer monitors.
- How electronics were plugged in.
- Shutting off two 40hp electric air compressors and using the force of gravity to pump sludge.
- How many outlets were currently being used. Counting how many things that are plugged in made us aware of just how much we were using without realizing it.
- One team member won an electricity meter that showed her how much her new lightbulbs were saving.
- I had a lot of things plugged in at home that weren't being used.
- I talked with a couple teammates about the number of electronic devices we had plugged in.
- Using the watt meter to measure electricity used by various appliances.
- What appliances are big watt usages and how to avoid large wattage use.
- What we could do at work to cut costs, such as shutting down monitors when we leave for the day or turning off lights in the break room when not in use.

#### **Lighting:**

- CFLs.
- Changing light bulbs.
- Changing light fixtures in office.
- Changing to new style light bulbs.
- Lighting.
- Savings by using CFL bulbs.
- Turning off lights.
- Turning off lights and the TV when not in use.
- Turning off lights at works was the most memorable conversation at work about sustainability.

#### **Home energy audit:**

- The Alliant program that comes to your house to help you save energy.
- The focus on energy program that came to your house to show you simple ways to conserve energy.

#### **Transportation:**

- Car idling in winter.
- Gas savings.
- Not doing Jackrabbit starts with vehicle.
- Talking about the waste of fuel with idling vehicles.
- The most memorable was the jack rabbit starts and stops. We had some really bad weather and we talking about how easy it was to not do the jack rabbit starts and stops because the weather really wouldn't allow it.

#### **Game play:**

- :) We had a memorable conversation about the fact that we are doing many of the things anyway, or that most changes are relatively easy to do - while recruiting to our group so we could move up - which we did. :) Oh, and it was fun to recruit other co-workers by telling them it was easy and fun AND you could win prizes. :)
- About the things people were doing to be more efficient and get points in the game.
- Competition between the two library teams.
- Coworkers reminding to do your cool choices.
- How the cards with the most points needed you to purchase something to get the points.
- Our team photo.
- Some people were doing other things for sustainability that were not reflected in the card choices.
- Taking group picture.
- The topic of sustainability was never brought up in conversation - the main topic was the game.
- To make sure we played daily.

#### **HVAC:**

- Insulate walls.
- Stories about a new furnace.
- Setting the furnace to auto.
- Talked about the temperature settings in the garage and how to regulate them.
- The doors not shutting in the building and change in temperature from room to room.
- The fact that I have a geothermal heating/cooling system and infloor radiant heat (meaning no furnace fan and no thermostat adjusting) in my house so I couldn't get the points for two of the highest point value items. We also talked about the air conditioning cards and how useless they are this time of year.

#### **Multiple:**

- Light bulbs and water usage.
- Saving money by reducing waste i.e. electricity, water.
- Saving water and gas.
- Talking about saving gas and water.
- Our team talked about the new light fixtures at work that has saved the city many dollars. Discussed the use of lights at home. Put in a better faucet in the lunch room to save on water.
- Turning off our office lights and computer. Carpooling to/from work.
- Turning our bathroom light out. We have two garbage cans one for recyclables may discuss if item is recyclable with other coworkers. Double up on rides to appointments. Car pool to other buildings for group meetings.
- Using old water from pets water dishes for watering plants, and really watching the jack-rabbit driving.
- We have two garbage cans one for recyclable team mates would go through the garbage can to see if we could recycle box from frozen meal. We would car pool to other building for meetings.

#### **Other:**

- Appliances.
- Being creative.
- Creative ways we were going to save energy.
- Global warming is not real.
- How much energy could be saved by making some of those choices.
- How we were already doing many of these things.
- I only had one conversation with [person's name].
- It was interesting to see how much I was already doing.
- Just ideas that others were trying at home and work. Some joking around about "off the wall" ideas.
- Less food waste.

- NA.
- None. (3)
- Saving money.
- Small ways I could impact energy saving for the county. I am a tax payer so it benefits me to be responsible about energy saving practices.
- The types of updates that have been done to our homes.
- Various different ways the county might be able to save money and contribute to saving the environment at the same time.
- Ways to save energy by very simple ways.
- We decided that we would use stickers on J storage books like we do on adult storage, which could save us a lot of sticky notes and other little bits of paper.
- What the future has in store for our children.

**14) What was the most memorable experience you had playing the game?**

**Team photo:**

- Taking a group picture.
- Taking our "green" team photo.
- Taking our group picture.
- Taking the pictures and knowing all my team was on board.
- Taking the team photo. (8)
- Coming up with a team picture.
- Group picture.
- The team activities, the picture, that was fun to do.

**Competition:**

- Beating the other DSS team daily!
- Checking out what the other teams were up to.
- Getting everyone excited about the game and making sure they tallied their points.
- How tough the competition was.
- Trying to beat a team.
- The friendly banter and competition it created & causing me to think more on a daily basis of what I am doing and how it affects sustainability.
- Trying to catch up to those in front of us.
- When the glitch in the game allowed our competing team to rack up multiple cards over the weekend.
- Working together as a team.

**Lunch with County Executive:**

- Bag lunch with Mr. Buechel [Fond du Lac County Executive], felt it was a positive experience and he indicated this may be something we could do again in the future to brain storm positive ideas in our work place.
- Eating lunch with Al Buechel.
- Having lunch with Al Buechel was the most memorable experience.
- Letting deputy director and supervisor know they were holding us back they were not playing the game on a daily basis.
- Lunch with Mr. Buechel. :)
- Lunch with Mr. Buechel.
- Lunch with the County Executive.
- Mentioning to deputy director and our supervisor they were holding us back from not participating in the game on a daily basis.
- Winning a free tote and our team winning lunch with the County Executive.

- Winning lunch with Joe Moore [Fond du Lac City Manager].

**Playing specific cards:**

- Being able to take credit for a new TV when we bought our first one in years.
- Borrowing the volt meter was interesting.
- Changing the light bulbs in house to florescent bulbs, but not wanting to throw away the old bulbs because they weren't bad and it seemed wasteful to throw out perfectly good bulbs.
- Choosing the cards that apply.
- Coming up with cool choices for the 'fill in the blank' cards.
- It was nice to count some of the changes that I recently had done this last fall when the energy express program came to my house. I also upgraded a few appliances recently that I could use for plays when they came up.
- Playing a card.
- Unplugging a bunch of unused things at home.
- Unplugging unused electronics.
- Using the watt meter.
- Using the Watt meter. Very interesting.

**Learning new ideas:**

- I enjoyed learning new ways to save energy and money by reading the cards daily and following their suggestions.
- I like the facts of how much energy or water savings were realized after making a cool choice selection.
- Introduction to Focus on Energy and the services they provide homeowners on conserving energy and water.
- Just seeing facts of how money/time/energy that was saved from such simple life changes.
- Just to see some of the things you could do to sustain energy in different ways.
- Learned resources to cut costs at home.
- Learning about what it cost to run various appliances.
- Learning about what money we can save at home by making little changes.
- Learning more about conserving water & using less energy.
- Learning new energy saving tips.
- Learning new things daily.
- Learning some of the energy saving tips regarding fuel, driving and water usage with the shower activity.
- Seeing new ideas on how to save energy etc.

**Other:**

- It just verified I was already making improvements and savings.
- Feeling good that I remembered to play the game every day (even when I was away for the weekend!) and catching myself (very often!) thinking about the choices I made for the day.
- Figuring out mileage in a day and to see what I have saved by combining errands.
- Finishing the office to save energy, and heating/ac costs.
- Having fun and trying to save money.
- If I get something for playing, that would be great.
- It was fun seeing the choices go from 1-2, 2-3, 3-4.
- Just having conversations with teammates about making their choices.
- Listening to co-workers talk about the different new cards on Monday mornings
- Looking forward to new cards and standings.
- Making it a game and part of my morning.

- My husband laughing at me because I wanted to replace the refrigerator downstairs so I could get 100 points. :)
- Personally I thought it was a waste of time.
- Realizing I was already making many cool choices.
- Telling my family that something wasn't a cool choice if they left lights or fans on.
- That trophy sure is something.
- The amount of computer problems encountered while trying to play the game.
- Thinking more about saving energy.
- Trying to remember to do it daily.

**Nothing/don't recall:**

- N/A. (2)
- None. (6)
- Not sure.
- Nothing really stuck out.
- Nothing stood out from the other.
- Nothing was memorable.
- Sorry, I do not have an answer for this.

**15) How frequently were the Cool Choices cards new ideas for you?**

	n	percent
always	0	0
often	25	17.4
occasionally	111	77.1
never	8	5.5
Total	144	100

**16) What was the most effective or your preferred method of getting day to day information about the game?**

	n	percent
Cool Choices newsfeed in the game	18	12.9
daily reminder email	113	80.7
other	9	6.4
Total	140	100

**Comments/other:**

- By playing the game.
- I set a reminder on my work calendar that popped up daily. It was more of a challenge for weekends as I forgot many weekend days.
- My calendar.
- Nothing.
- Reminder on my cell phone.
- Teammates.
- Weekly reminder.

**17) Did you look at the newsfeed while playing the game?**

	n	percent
yes, often	29	20.1
yes, a few times	74	51.4
no	41	28.5
Total	144	100

**18) Did you get useful tips from the daily reminder emails?**

	n	percent
yes, often	19	13.3
yes, a few times	99	69.2
no	14	9.8
did not look at the reminder emails	11	7.7
Total	143	100

**19) Have you heard of the Focus on Energy program?**

	n	percent
yes	98	68.5
no	45	31.5
Total	143	100

**20) Were you aware of the Focus on Energy program before the game? *Question asked only of respondents who indicated awareness of Focus on Energy in question 19.***

	n	percent
yes	81	83.5
no	14	14.4
don't know	2	2.1
Total	97	100

**21) Had you used any of Focus on Energy's services or rebates before playing the game? *Question asked only of respondents who indicated pre-game awareness of Focus on Energy in question 20.***

	n	percent
yes	48	60.0
no	31	38.8
don't know	1	1.2
Total	80	100

**22) Do you recall hearing of any Focus on Energy offerings as part of the game? *Question asked only of respondents who indicated awareness of Focus on Energy in question 19.***

	n	percent
yes	65	66.3
no	33	33.7
Total	98	100

**23) During the game, did you look into Focus on Energy offerings at all? *Question asked only of respondents who recalled hearing of Focus on Energy offerings in question 22.***

	n	percent
yes	33	51.6
no	30	46.9
don't know	1	1.5
Total	64	100

**24) Did you use any Focus on Energy services or rebates while playing the Cool Choices game? *Question asked only of respondents who recalled hearing of Focus on Energy offerings in question 22.***

	n	percent
yes	8	12.3
no	57	87.7
don't know	0	0
Total	65	100

**25) Where did you most often play Cool Choices?**

	n	percent
on a mobile device (smart phone)	5	3.5
on computer	127	88.2
used both equally	11	7.6
other	1	0.7
Total	144	100

**Other:**

- Kindle fire



**26) Please rate the influence each of the following factors had on your choosing the actions you took.**

	mean
was already doing the action (n=143)	4.08
easy to do (n=143)	3.88
fun to do (n=143)	3.08
save money (n=144)	4.06
good for the environment (n=143)	3.92
co-workers were doing them (n=143)	2.61
earn a lot of points (n=143)	3.48

**27) If there were other significant motivators that prompted you to play the cards you did, please tell us about them.**

- Chance to win prizes :)
- Common sense and a frugal household.
- Did not want to let the team down.
- I mostly played cards with high point values. Even though I did many of the other actions, if their point values were low, I did not play the card.
- I tried to play cards that affected me personally in my everyday experiences.
- Ideas to reduce energy consumption at home.
- Just hoping to score well, perhaps get some type of promo or prize.
- Learned some new tips by playing them.
- NA.
- None.
- Set a great example to children regarding energy and water consumption.
- Set a good example for my children when they have their own places.
- Some cards my family could not play because we do not have a furnace. We use wood to heat our home and water. I live 6 miles from work, so I couldn't walk to work. We raise produce and beef to sell locally and consume, so it was easy to eat locally.
- Some I played because I was already making that action but a few others were good moves to make to cut costs.
- Something that was easy to do, like just analyzing energy bills, but that provided a lot of points.
- Sometimes doing something new to save money or the environment just by doing them motivated me.
- Things that would fit in to daily schedule, i.e. driving on highway or being in a building with an elevator.

**28) What was the most meaningful new action you took as part of the game?**

**Electricity:**

- Having my computer go to sleep when I leave my desk & unplugging my spare dorm size refrigerator (although I didn't get points for it).
- To turn off unused game controllers, tower fans, electronics, etc.
- Turn monitor off.
- Turning of computer at home. Making sure the lights are turned and TV are turned off.
- Turning off computer and game consoles when not in use.
- Used watt meter at home.
- Monitor energy consumption.

**Lighting:**

- Changing lights to fluorescent.
- Replaced all light bulbs.
- Replaced every light bulb at home with LED or CFL bulbs.
- Replacing light bulbs.
- Replacing light bulbs with energy efficient bulbs.
- To turn off lights. I always thought that it took more energy to turn lights on and off than to keep them on. I am now turning off as many lights as I can.
- Turning lights off.
- Turning off lights.

#### **Water:**

- Changing my faucet out.
- Install low flow aerator.
- Installing water saving shower heads.
- Replacing a toilet that I have wanted to replace for a while.
- The water usage with the shower time.
- Turn the hot water off on the clothes washer.

#### **Transportation:**

- Automobile/gas related cards.
- Being aware of how I am driving and conserving gasoline by turning off my car, combining errands, and not speeding.
- Being more aware of driving habits and trying to conserve gasoline by combining trips, slowing down, walking instead of driving if possible etc.
- Carpooling to work.
- Drive the speed limit.
- Driving habits.
- Driving style changes.
- I purchased a new vehicle that gets double the gas mileage of my old car while running on exclusively E85.
- I slowed down my highway driving. I usually drove 72mph before.
- Learning that you don't need to warm up a car in the morning even on really cold days.
- Not to idle vehicles for long.
- Not wasting so much gas warming up my car. I thought you always had to do that in the winter.
- Running ac while driving under 40.
- Saving gas by not idling so much in the winter to warm up the car.
- Slowed down driving.
- Slowed down my highway driving.
- Slowing down when driving.
- Slowing driving down.
- Thought about my idling time while waiting in the car. Reduced idling to save gas/money.
- Tried to carpool/combine trips more often.
- Try to combine errands.
- Was more conscious of fuel usage.
- Watching my driving so I don't use as much gas.
- Watching the mileage in vehicle.

#### **Home energy audit/program:**

- An energy consultation of our home.
- Contacting Focus on Energy for the Express Energy Efficiency Program.

#### **HVAC:**

- Adjusted the settings on the thermostat for our sleeping/ away from the house hours.
- Insulating my house.
- Become more aware of different ways to seal up the older home I live in.
- We converted a fireplace to a pellet stove and have completely turned off the furnace. Also, we unplugged several things that were very rarely used, but had a constant draw of energy. That along with the bulb and much needed appliance updates will save us tons on energy costs. Oh, and we LOVE the pellet stove ambiance!!

**Multiple:**

- Combining errands, monitoring starts and stops while driving.....turning off water when brushing my teeth etc.
- Home energy & water usage.
- I would say more aware of the type of garbage our family produces. Lowering our thermostat when we are in bed or not home.
- More observant about water, gas and energy usage.
- My driving habits changed while playing the game. Even grocery shopping changes with reusable bags, pricing local foods.
- Trying to save water and energy by changing light bulbs, turning down my water heater, and installing a more efficient water softener.
- Turning off computer monitor, not wasting water when brushing teeth, checking thermostat.
- Water saving ideas and driving 65mph.

**Other:**

- Continuing to lessen my carbon foot print.
- Didn't find any new actions; was already doing so many of them.
- I really didn't change anything... I grew up being taught that turning off lights, driving efficiently, etc., were just things that you did.
- I was already doing every card that I played.
- Meatless meals.
- Most of them I was practicing prior to the game.
- Purchased and consumed more locally raised products from local farmer's markets.
- Replacing red meat in meal.
- Shop more locally.
- We are very careful at home of our energy use, before the game, but during the game was more aware of the actions, was nice to remember why we do some things.

**None:**

- NA.
- None. (2)
- Not sure.

**29) Did you make any changes in the following settings and routines during the game?** (Please check all that apply.)

n=102	n	percent
changed your furnace fan setting from continuous (or on) to auto	58	56.9
lowered your thermostat setting at night or when no one is home	78	76.5
unplugged or removed second refrigerator/freezer	32	31.4
unplugged or turned off gaming system (Playstation, Xbox, etc.)	61	59.8

**30) Which of the following best describes how often you kept your furnace fan on the “on” (circulating air) setting before the Cool Choices game?** (Note: the “on” setting circulates air whether or not the furnace is heating or the air conditioner is cooling. The “auto” setting only circulates air when you are actively heating or cooling.) *Question asked if respondent checked ‘changed your furnace fan setting from continuous (or on) to auto’ in question 29.*

	n	percent
“auto” all the time year round	23	39.7
“auto” most of the time, but “on” situationally to circulate air	11	19.0
“on” all the time year round	10	17.2
“on” some parts of the year, “auto” during the rest	12	20.7
other	0	0
don’t know	2	3.4
Total	58	100

**31) To lower your home’s temperature at night or when you are away, did you adjust the thermostat manually or use programmable features your thermostat may have?** *Question asked if respondent checked ‘lowered your thermostat setting at night or when no one is home’ in question 29.*

	n	percent
adjusted temperature manually	32	41.0
used programmable features	46	59.0
Total	78	100

**32) At what temperature did you tend to keep your home during this past winter when someone was home and awake...? Question asked if respondent checked 'lowered your thermostat setting at night or when no one is home' in question 29.**

before game		after game	
temp	n	temp	n
62	1	60	1
64	1	62	2
65	5	63	3
66	2	64	2
67	1	65	10
68	25	66	5
69	5	67	4
70	17	68	32
71	4	69	6
72	9	70	11
73	3	72	1
74	2	Total	77
75	1	mean	67.3
76	1		
Total	77		
mean	69.3		

**33) At what temperature did you tend to keep your home during this past winter when everyone was sleeping...? Question asked if respondent checked 'lowered your thermostat setting at night or when no one is home' in question 29.**

before game		after game	
temp	n	temp	n
55	1	55	2
58	1	57	2
60	7	58	2
61	2	59	1
62	10	60	7
64	3	61	4
65	9	62	9
66	7	63	2
67	5	64	8
68	14	65	20
69	1	66	5
70	8	67	3
71	2	68	10
72	2	72	1

73	1	Total	76
74	1	mean	63.7
75	1		
76	1		
Total	76		
mean	66.0		

**34) At what temperature did you tend to keep your home during this past winter when no one was home...? Question asked if respondent checked 'lowered your thermostat setting at night or when no one is home' in question 29.**

before game		after game	
temp	n	temp	n
43	1	43	1
50	1	50	1
55	1	55	4
57	2	57	3
58	2	58	2
59	1	59	1
60	8	60	14
61	1	61	2
62	10	62	9
63	3	63	4
64	2	64	6
65	11	65	14
66	4	66	4
67	1	67	2
68	11	68	7
69	3	69	1
70	9	72	1
72	1	Total	76
73	1	mean	62.4
74	1		
75	1		
76	1		
Total	76		
mean	64.7		

**35) What type of refrigerator or freezer did you unplug or remove from your home? *Question asked if respondent checked ‘unplugged or removed second refrigerator/freezer’ in question 29.***

	n	percent
full size refrigerator	18	56.2
mini-refrigerator	6	18.8
stand-up freezer	2	6.3
chest freezer	5	15.6
other*	1	3.1
Total	32	100

\* Was identified as a chest freezer; see below.

**Other:**

- I have 2 smaller chest freezers when I can fit all the contents into 1 freezer I unplug the 2nd one.

**36) Since playing the Cool Choices game, have you replaced or plugged your refrigerator or freezer back in? *Question asked if respondent checked ‘unplugged or removed second refrigerator/freezer’ in question 29.***

	n	percent
yes	9	28.1
no	23	71.9
Total	32	100

**37) How often was your gaming system plugged in and on (even if you weren’t actively using your system)...? (Please answer in hours per week.) *Question asked if respondent checked ‘unplugged or turned off gaming system (Playstation, Xbox, etc.)’ in question 29.***

before game		after game	
hours	n	hours	n
0	5	0	24
1	2	1	3
2	3	2	3
3	2	3	2
4	2	4	2
5	2	5	2
12	1	8	1
14	2	10	4
16	1	12	1
20	3	14	1
24	1	15	2
25	1	20	1
30	1	36	1

35	1	40	1
40	3	48	1
48	1	72	1
50	1	84	1
56	1	couple times a week	1
84	1	few	1
96	1	off after playing or screen turned off	1
100	2	only when in use	4
168	20	sometimes	1
daily	2	Total	59
Total	59		

**38) While the Cool Choices game was active, did you take any energy saving or sustainability actions that you didn't claim points for?**

	n	percent
yes	42	29.6
no	100	70.4
Total	142	100

**39) What energy saving or sustainability actions did you take that you didn't claim points for?**

- I didn't take points for the team picture, turning the air conditioner on/off, hanging clothes out on the line in the winter?, anything that didn't pertain to the time frame of the game. Some of us do not have all the games to shut down so some things did not apply. Like walking to work - it's 24 miles, etc.
- Began composting, Bought local food, used cellar to refrigerate beverages.
- Changed bulbs, set back temp.
- Changed out lights in the house. Changed water flow levels in the faucets and showers.
- Combining errands daily, not idling daily, turning off lights and TV daily, eating less red meat frequently.
- Cut down on using the high MPG vehicle for routine trips.
- Did not claim raising the air conditioning temp or reducing speed from 75 to 65. I do keep my house in the mid 80's in the summer but it's not air season and I don't want to raise my temp to 90. Also, it's against the law to drive 75, so claiming that one by anyone, is fraudulent.
- Don't know.
- Door sweeps under all doors exterior and screen.
- Double up on errands, recycle plastic bags.
- Figured because we do not have a gaming system we were already doing that choice.
- Got a new furnace.
- Got rid of the garbage can in my office to make me walk to another one and also to save about 20 plastic bags per month.
- I built an energy star home, so I am familiar with energy savings appliances. So Reusing bags, riding to work with co-worker, combining trips, watching water usage, reducing the temp at night, sleeping in the basement in the summer to avoid running the air conditioner and replacing old appliances. I've been doing these things for years.



- I carpool 2-3x/ week and those cards are not available every day.
- I changed a couple more light bulbs to compact fluorescent (which are on sale at the Restore on S. Brooke St. by Ruggles St. 4 packs for \$1). Not 85% of my home has them so I can't claim the points.
- I did shovel snow in place of using a snow blower saving gas but it wasn't a choice.
- I did some air sealing on my house - not influenced by cool choices, but because there was a draft. However, the rest of my house is barely insulated (100+ yrs. old) so I didn't feel that I could claim that card.
- I dry clothes in the house sometimes. Because it is winter, I didn't use the line dry clothes card.
- I have checked further into the focus on energy program and am waiting for some material to be sent via mail to my home. I also am working on scheduling an appt to meet with an area representative to discuss options for my home specifically.
- I have radiant heat, that was not addressed in this game, and waited for more than one meal to run the dishwasher.
- Low flow shower head, closed off vents and areas to the house I didn't use.
- MANY of the lower point valued cards.
- Purchased all LED light bulbs for our lights that are used daily.
- Put blankets at the bottom of my doors to keep the cold air out.
- Put plastic over the windows.
- Recycle.
- Recycle an item, etc.
- Recycling in the home.
- Save the water that runs while waiting for it to warm up for dishes and showering, eat a vegetarian diet 85% of the time, keep all material purchases to a minimum, buy at 2nd hand stores, reuse plastic bags, wash and reuse baggies and plastic containers, take recyclable items from eating-out home to recycle, use re-fillable jugs for water versus bottles, take my own insulated mug when going out for coffee and to events.
- Stopped using bathroom fan/exhaust.
- There are things I do other time of the year, but didn't claim them as they weren't seasonal, e.g. things to do with air conditioning.
- Turn off water while brushing teeth, drink tap water instead of bottled water, use nontoxic cleaner, etc.
- Turned off furnace, turned off water while brushing teeth, recycled.
- Unplugging my mini refrigerator, because it looked like it didn't qualify for the points.
- Use cloth bags for groceries.
- Walked instead of drove places.
- We have electric heat in our house with thermostats in every room so we could not adjust our furnace to auto but what we do is shut the heat off in the rooms we are not using and shut the doors to those rooms and only heat the rooms we are using.
- Well, I ride my bike to work much of the year except winter, and I couldn't take credit for that at all because it was way to cold to do that during the game.

**40) Please rate the following statements:**

	n	strongly disagree	disagree	neutral	agree	strongly agree	don't know
The Cool Choices actions were simple to do.	142	1, 0.7%	1, 0.7%	9, 6.3%	71, 50.0%	60, 42.3%	0, 0%
My family was enthusiastic about taking the Cool Choices actions.	140	5, 3.6%	11, 7.9%	65, 46.4%	39, 27.8%	13, 9.3%	7, 5.0%

I am more aware of opportunities to save energy since playing Cool Choices.	141	2, 1.4%	6, 4.2%	18, 12.8%	73, 51.8%	42, 29.8%	0, 0%
Many of the Cool Choices actions were things I'd already done.	142	0, 0%	3, 2.1%	8, 5.6%	64, 45.1%	65, 45.8%	2, 1.4%
I learned new things from the Cool Choices cards.	142	1, 0.7%	5, 3.5%	25, 17.6%	75, 52.8%	33, 23.2%	3, 2.1%
Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used.	142	8, 5.6%	11, 7.8%	20, 14.1%	47, 33.1%	55, 38.7%	1, 0.7%
I'm proud of the changes I've made as a result of playing Cool Choices.	142	2, 1.4%	2, 1.4%	34, 23.9%	60, 42.3%	41, 28.9%	3, 2.1%
Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.	142	5, 3.5%	10, 7.0%	25, 17.6%	63, 44.4%	35, 24.7%	4, 2.8%
Cool Choices feels like a meaningful part of the City/County of Fond du Lac's efforts toward sustainability.	142	5, 3.5%	1, 0.7%	31, 21.8%	56, 39.5%	45, 31.7%	4, 2.8%
All in all, I'm satisfied with my job at Fond du Lac City/County.	141	1, 0.7%	1, 0.7%	9, 6.4%	51, 36.2%	72, 51.1%	7, 5.0%

#### 41) Sustainability is important...

	n	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	n/a
to me	142	0, 0%	0, 0%	4, 2.8%	55, 38.7%	83, 58.5%	0, 0%
to my household	141	0, 0%	1, 0.7%	9, 6.4%	67, 47.5%	62, 44.0%	2, 1.4%
my friends	140	0, 0%	1, 0.7%	44, 31.4%	64, 45.7%	28, 20.0%	3, 2.2%
to my extended family	138	0, 0%	2, 1.4%	41, 29.7%	65, 47.1%	27, 19.6%	3, 2.2%
to my co-workers	140	0, 0%	2, 1.4%	39, 27.9%	69, 49.3%	27, 19.3%	3, 2.1%
to leadership at Fond du Lac City/County	139	1, 0.7%	4, 2.9%	16, 11.5%	61, 43.9%	55, 39.6%	2, 1.4%

#### 42) Fostering a culture of sustainability is a key part of the City/County of Fond du Lac's standard practices. Was the Cool Choices game a good way for Fond du Lac City/County to help you integrate sustainability into your life? Please explain.

Yes:

- Brought new awareness and reconfirmed some of the choices already being implemented.
- For me it was. The cards gave me ideas on how to sustain energy in ways that I never thought of.

- I think is a good idea, but also, we need as "complete" organizations or departments take actions, for example we have 3 teams at the library, almost everyone was playing, but we did not make a change as a library, like changing how many lights we keep on at night, or check in our policy to make every employee to turn off their computers at night.
- I think it was a good reminder to do things I knew I should be doing. It also reinforced why I was doing many of the things in the game. Many of the items I had to discuss with my husband, so it started conversations at home about what more we could be doing to save money and resources.
- I was doing most of the actions before the game was started but it was a fun way to get coworkers involved in making environmental choices. It was fun to share the cards with my kids when I observed making a "Cool Choice" at home.
- I wouldn't have thought of having to unplug appliances and now I do. I set my thermostat automatically.
- It brought out new ways to save money and the environment.
- It helped, although there were some technical difficulties in the beginning. Some quick & fun interactive activities would've added interest. It may have been a little too long as people seemed to stop participating.
- It is good as long as those who took the time get something i.e. a tangible reward for participation.
- It keeps it the back of your mind.
- It was something different, so from that perspective I'm sure it was.
- It's a good start.
- Made me aware of how much energy can be saved collectively.
- Made me aware of more choices for sustainability.
- The fact that it was for business AND personal benefit got my buy-in right away.
- The game gave me new information that I didn't know before.
- Very easy, made it fun with prizes!
- While I already implement many sustainable-living practices beyond the game the program is a good way to make many people aware of the numerous opportunities we have each day to make changes in how we live and use natural resources.
- While many of the actions I was already taking to conserve the game continued to create awareness.
- Yes. (3)
- Yes - it made me more conscious of ways to save energy - and money.
- Yes it helped me and my family become aware of how we use water, all different types of energy so there will be some for future generations. Plus learn ways to produce less waste that could eventually affect our environment.
- Yes the game provided great suggestions.
- Yes to an extent, a good reminder at times.
- Yes with playing the game I was able to make some changes or continue changes at work and home that I had not been doing but will continue doing as it is good for future generations economy and environment.
- Yes, a tool I can use in the future while teaching my daughter and my clients.
- Yes, as reminders & keeping it at the forefront every day.
- Yes, fostered awareness.
- Yes, I am always open to new ways of saving energy and money.
- Yes, I feel it rose a level of awareness to my coworkers.
- Yes, I think incentives with prizes and competition motivate a lot of people.
- Yes, I think it is a start to creating sustainability in our county/city.
- Yes, it is nice to see that this is important starting from the top down.
- Yes, it kept me thinking about it.

- Yes, it made me stop and think about everyday actions I am taking and how to be more aware of actions I am making and how to make better choices.
- Yes, it made me think about changes I can make on a consistent basis.
- Yes, it reminded me of how much the small actions can help the environment.
- Yes, it was easy to keep making choices during the workday due to the daily emails. Days when I was off, it was harder to remember to make a choice. Being made aware of the impact of choices does make it easier to implement the change, such as how much gas is saved by slowing down or unplugging appliances that aren't in use. If an appliance isn't in use, I didn't think about it still pulling some power.
- Yes, really made me more aware of how I as driving, how I was using energy and water.
- Yes, the game made me more aware of ideas to save and help foster a culture of sustainability.
- Yes, their reminders, tips within the game and websites were very useful and helped me to start pursuing things outside of the game.
- Yes, this program showed that even small changes can make a big impact on the amount of energy that is consumed.
- Yes, when I came home from work I would continue making some of the same cool choices I was doing at work and because of that my wife is more aware of the energy being wasted throughout the day. However, I am VERY DISAPPOINTED that the City of Fond du Lac has only ONE gas station that offers E85 to its customers. Sadly this same gas station has a Mark Up of almost \$0.50/gallon compared to E85 in neighboring communities. The going rate for E85 throughout the area is \$2.69/gallon and the gas station in town is asking \$3.15/gallon. At that price it is cheaper to use gasoline or take a drive up to Oshkosh to refuel. It would be wonderful to see other gas stations offer E85 in Fond du Lac. With a little positive promotion maybe others with flex-fuel vehicles would start using it as well and we could all breathe less polluted air.
- Yes, it was a good reminder and learn new ways to conserve.
- Yes. I especially appreciate how it became a topic of conversation at work. Even if people only continued to do sustainable things that they had already been doing, this gave them a chance to share those ideas with others.
- Yes. It was a daily reminder, that helps the choices to become habit.
- Yes. Made me aware of more things that I could do to save money.
- Yes. It kept the issues of sustainability in the forefront. It brought new issues to light that I didn't think about in the past.
- Yes. Made you aware of all of the ways to save.
- Yes, by reminding me to make a conscious decision.

**No:**

- Awareness if always a benefit, but in my work place I did not feel that changes were made by people responsible for some of the buildings energy saving areas. Although I will turn off lights/computers, unneeded equipment in my area, I see cost saving possible if temperatures are better regulated, dripping faucets are addressed, main areas lighting is turned down, etc. Many things can be improved on if everyone buys into it and leadership can help people buy in.
- Didn't make a significant difference, I was doing these things already.
- I do not think so. It was just a time wasting obligation for me.
- I feel that the purchasing the cards for Cool Choices was not a wise use of money for the County, few of my team-mates used them and now they are no longer of any use. Can we give them back to someone so that others may use them? Or - play the game without the cards. Also, the game is played too long and got to be a chore rather than something fun to do as a team, two months would have been better than three months.

- I have to be honest, I did not pick up any new habits. I have been doing things in my household with the intent of not being wasteful and saving money. I am not sure if that is "sustainable" living but that is what we do and have been doing.
- No - it was not available or accessible to all employees on an equal basis. The limited amount of plays per day was stupid. We should have been able to log all the things we were already doing in one day instead of having to log on seven days a week. That was very inconvenient in the busy workday. And since it is an employer sponsored event I shouldn't have to do it on non-work hours. The initial e-mails and information about the program was not truthful or accurate.
- No, I do not see sustainability as being an integral part of Fond du Lac City/County.
- No. I already like to be environmentally friendly this program did not change that.
- No. I thought it was a waste of time.
- No. The game was a big waste of time and was merely a competition between coworkers to earn the most points. The game is suitable for school-age children and families.
- Not really, I've done this on my own for years.

**Other:**

- As I said, most of these things I was doing already.
- As I've said, I was already integrating it.
- At times it was difficult to fit into schedule but the reminders helped and the ease of playing made it more convenient.
- Constant reminders.
- I was doing most of the little things, but I could not change out to bigger things due to money, so there wasn't a huge change in my homes sustainability or at work.
- It was not tailored to our area. I was very disappointed when the game suggested walking or driving to work on the morning it was -35. Or not turning on air conditioning- our team felt these actions should be ignored while others took points for them. My home has radiant heat-therefore I lost 100 points when I should have been rewarded. Also taking public transit is not possible for most of the people in this building. Somehow this has to be taken into consideration so it does not discredit the game. Our team slowed down in playing because of some of these things. Safety was never mentioned-how about walk to work if its SAFE for you? Hypothermia is no joke. And in a big city maybe it's not safe at all? Also the water saving has to be measured with well owners, a certain amount of use is essential for the health of the well. One size does not fit all here.
- It went on too long. More prizes.

**43) Cool Choices would like to help you and other alumni build on what you have accomplished in the game. Please indicate how interested you would like to stay involved (*choose all that apply*):**

n=82	n	percent
Connect with Cool Choices alumni online with a computer, tablet or phone	16	19.5
Preview and test new Cool Choices cards and game features	37	45.1
Organize a Cool Choices game as part of another group (school, faith community, book club)	2	2.4
Participate in sustainability-oriented contests and prize opportunities	49	59.8
Other	10	12.2

**Other/comments:**

- Any way possible. Just ask.
- Do not wish to participate in the future.
- Have access to or receive tips/updates.
- I would like to turn my time and attentions to other things now.
- Maybe a monthly newsletter with actions and ideas for good choices.
- None. (2)
- Not sure.
- Reminder via email once in a while.

**44) Cool Choices would like to know whether and how its alumni use the following media. Please indicate your use of each one.**

	don't use	business use only	personal use only	both
e-mail (n=137)	0, 0%	23, 16.8%	7, 5.1%	107, 78.1%
Facebook (n=121)	38, 31.4%	2, 1.7%	73, 60.3%	8, 6.6%
Twitter (n=115)	97, 84.3%	1, 0.9%	14, 12.2%	3, 2.6%
LinkedIn (n=116)	89, 76.7%	8, 6.9%	13, 11.2%	6, 5.2%
Google+ (n=119)	78, 65.6%	3, 2.5%	23, 19.3%	15, 12.6%
Pinterest (n=118)	73, 61.9%	0, 0%	39, 33.1%	6, 5.1%

**45) Do you have any comments for Cool Choices regarding its game or offerings to alumni?**

- Don't have enough info to make additional comments.
- Don't put up cards that do not pertain to the season we are in. For example, the card about using the air conditioner in the car. Well, it's winter, so I don't think anybody used their air conditioner at all.
- Great program.
- Having to play every day helps to remember what Choices we have to save money.
- I could never get the remember me feature to work either on my PC or phone so it takes longer to play. Both devices remember every other login and password.
- I feel that the game ran too many days. Two weeks would have been sufficient. It took time away from my work duties to play, and I feel didn't really affect my energy conservation.
- I heard a lot of complaining from the people that chose not to join Cool Choices were still getting the emails.
- I think that the cards given to us to play should reflect the time/season we are in. There were cards to set AC 3 degrees F higher and to use AC only when driving over 40 mph. You can't really do these in the middle of winter. The cards should reflect something you can do of are doing recently instead of 6 months or a year ago. Some people were playing these same cards over and over but others were playing them because it is the middle of winter and we are not adjusting air conditioning at this time of year. I was also disappointing to see the same people winning the weekly prizes week after week by playing these cards over and over.
- I think that there could be better prizes given out even if that meant there weren't weekly winners.

- I thought it was a fun program that engaged the employee's. It got the team members talking about sustainability issues and kept us thinking about the game. The most difficult thing for me was to remember to sign in on the weekends.
- I wish there were other ways to rank teams as it was difficult to stay motivated to play when other teams were so far ahead in actions that there was no possible way to catch up.
- I would take out the one time use cards after they have been used. This would make it easier to see other cards from the beginning that are hidden further down.
- If you have a Flex-fuel vehicle, just try a full tank of E85. I think those who do will be very happy with their vehicles performance. It's a little known fact that cars produce more horsepower with E85 compared to the same car running on gasoline.
- Include a 100 point card for those of us who heat with something other than fossil fuel. I have geothermal with heat pumps and a coworker uses wood which is a renewable resource and they have their own woodlot.
- It was fun and informative but went on for too long and I noticed my team mates losing interest in going out every day to make choices. It got repetitive after a while.
- It would be good to have this introduced at an all staff when there is actually more information or more hands-on activities during the all staff. Most people walked away from the all staff still not knowing much about what the game was. If people knew how easy it was to play, they may have signed up.
- It would be nice to have more options of cards to play, especially when having to make 3 or 4 choices a week. I got sick of playing the same cards.
- It's a good program.
- Keep the door prizes coming.
- Lots of fun, loved the challenge.
- Make it more useful to work environment.
- N/A.
- Nope.
- Overall, I enjoyed the game, but 8 weeks was a bit long, I found myself playing the same 10 point cards over and over, I would suggest 4-5 weeks. Also, many of the resource links on individual cards were duds. They either didn't go anywhere or were non-existent.
- Perhaps a shorter period, as it got tiresome playing the same cards repeatedly. Also, perhaps do the prizes on a weekly basis as once teams settled into their rankings, it became increasingly unlikely that they would change. So perhaps do week 1, start at square zero for week 2, etc. I'm not sure, but I think some people just stopped playing much because they figured it didn't matter anymore for the team competition.
- Received too many Cool Choices emails.
- Some of the cards were simply not feasible to do or did not make sense for the time of the year in which we were playing. The middle of winter in WI, turning up the air conditioning temp or only having the air on in the car when going above 40mph, doesn't apply at this time. YET, those were some of the most played by the participants for the sole purpose of accumulating the higher point values. The point of this game was to truly do some of these actions on a daily basis to conserve energy, not just pick the ones with the highest points to "win the game". I think a lot of people missed the mark on that. I actually quit playing the game with about two weeks left because I realized how others were treating this experience....simply as a game, not honestly doing their part to conserve.
- Thank you for the knowledge and resources to make a change in how I consume all energies and water. Be aware of the carbon foot print I, family and coworkers may leave behind for future generations.
- Thank you for the new game, it was new, refreshing, interesting and helpful!
- The daily emails were a complete waste of time and space. Too much. Didn't read them.

- The game was very confusing to get started on. It was harder for those that do not have a work email address. There needs to be some easier way to register and begin playing.
- Was glad the system worked after week 2 and had fun playing.
- Well done-very creative.





# MEMO

**DATE**           **June 2, 2014**

**TO**             **Kathy Kuntz and Raj Shukla, Cool Choices**

**FROM**          **Ingo Bensch and Karen Koski**

**SUBJECT**       *Cool Choices game for Inpro Corporation – post-game survey results*

Inpro Corporation played the Cool Choices game from February 17 through April 11, 2014. Two hundred and fifty-four of 500 employees participated by reporting at least one action. Players organized into 29 different teams.

One hundred and fifty-two Inpro employees responded to the post-game survey, representing 60 percent of the players. The Energy Center of Wisconsin fielded the online survey during the last week of gameplay and the week following the completion of the game in April 2014. This memo reports the results of that post-game survey.

We have organized the results along the following topics:

- factors that influenced play and social dynamics
- changes in practices and learning
- communications
- miscellaneous reactions and perceptions
- alumni engagement

Full frequency tables by question are attached.

## **Factors that influenced play and social dynamics**

We examined the factors that influenced play in two ways: by examining self-reports on what players said motivated them and by looking for correlations between social dynamics and player activity.

### **Self-reported motivators**

When Cool Choices asked what factors were influential in players' decisions to participate in the game, respondents rated an extrinsic reward (saving money by taking the actions) as the most influential factor, followed by several intrinsic rewards: wanting to win, liking the lifestyle changes associated with the actions, and the fun of playing. Encouragement from peers, the opportunity to win a prize, and the appeal of the game comprised the next most highly rated factors. A sense of obligation was lower on the list.

Table 2 lists these factors in rank order with the average score (based on a five-point scale) given to each factor.

**Table 12: Self-reported influencing factors for playing the game**

<b>Question: How influential were each of the following factors in your decision to play the Cool Choices game?</b>	<b>mean</b>
could save money by taking the actions (n=149)	3.99
wanted to win (n=151)	3.56
liked the lifestyle changes that could come from doing the actions (n=150)	3.55
it was fun (n=150)	3.45
was encouraged by my colleagues (n=150)	3.37
might win a gift card (n=152)	3.37
Cool Choices made it seem appealing (n=150)	3.19
felt obligated as part of my job (n=150)	2.23

Once people were playing the game, they reported that their choices of what cards to play were motivated mostly by saving money and the ability to claim points for actions they were already taking. The ease of taking a new action and the environmental benefit followed. Doing well in the competition and fun were somewhat less important in players' self-reports, while peer influence ranked last, as shown in Table 3.

**Table 13: Self-reported influencing factors for which cards to play**

<b>Question: Please rate the influence each of the following factors had on your choosing the actions you took.</b>	<b>mean</b>
save money (n=145)	4.24
was already doing the action (n=145)	4.21
easy to do (n=145)	4.05
good for the environment (n=145)	4.03
earn a lot of points (n=145)	3.45
fun to do (n=144)	3.27
co-workers were doing them (n=143)	2.35

## **Social dynamics and motivators**

We know from past research that people are not fully aware of the degree to which social dynamics and social norms influence them. To facilitate analysis concerning the connection between social norms and player behavior, Cool Choices asked several questions about the degree to which participants felt encouraged to play the game by peers and what importance the players thought others in their social environment placed on sustainability.

### **Encouragement to play and conversations about sustainability**

As shown in Table 14, most respondents reported that someone else had encouraged them to play. The encouragement came from all across Inpro—both within the respondent's team and outside it.

**Table 14: Encouragement to play by peers (n=151)**

<b>Question: Who encouraged you to play the Cool Choices game? (multi-response)</b>	<b>% of respondents</b>
team leader	34
other team members	33
other Inpro colleagues	21
Inpro management	19
someone else/other	9
no one	17

Similarly, the vast majority of participants (93 percent) talked about sustainability at work at least once while the game was active and just over half (57 percent) of them talked about it on at least a weekly basis. Participants talked about sustainability at home at the similar rates (89 percent). Not surprisingly, the people with whom participants talk about sustainability tend to be those closest to them (co-workers, immediate family), but some do report extending those conversations out to friends, neighbors, and extended family members.

We explored whether players who perceived encouragement from others to participate or self-reported conversations about sustainability were engaged in the game more actively. As shown in Table 15, in contrast to other recent Cool Choices games, the players who recalled being encouraged to play participated at a somewhat lighter level than those who did not recall anyone in particular encouraging them to play. However, players who reported engaging in conversations about sustainability seemed to be more engaged in the game.

**Table 15: Player activity by whether player recalled being encouraged to participate or discussed sustainability<sup>11</sup>**

	number of respondents	mean number of		
		total cards played	unique actions taken	new actions taken
Players who felt / did not feel encouraged to play				
not encouraged to play	25	103	48	15
encouraged to play	105	97	43	15
Players who reported talking about sustainability (at home or work) ...				
infrequently (never or "once or twice")	40	91	41	13
weekly	48	97	42	15
regularly (several times per week or daily)	42	107	48	18

This analysis is limited to respondents who completed the post-game survey and, thus, does not include people who chose not to play the game. It is possible people who weren't encouraged were less likely to play the game.

Open-ended comments provided by a few respondents provided a bit of additional insight about what encouraged people to play with several respondents citing a specific internal champion and cheerleader (AG).

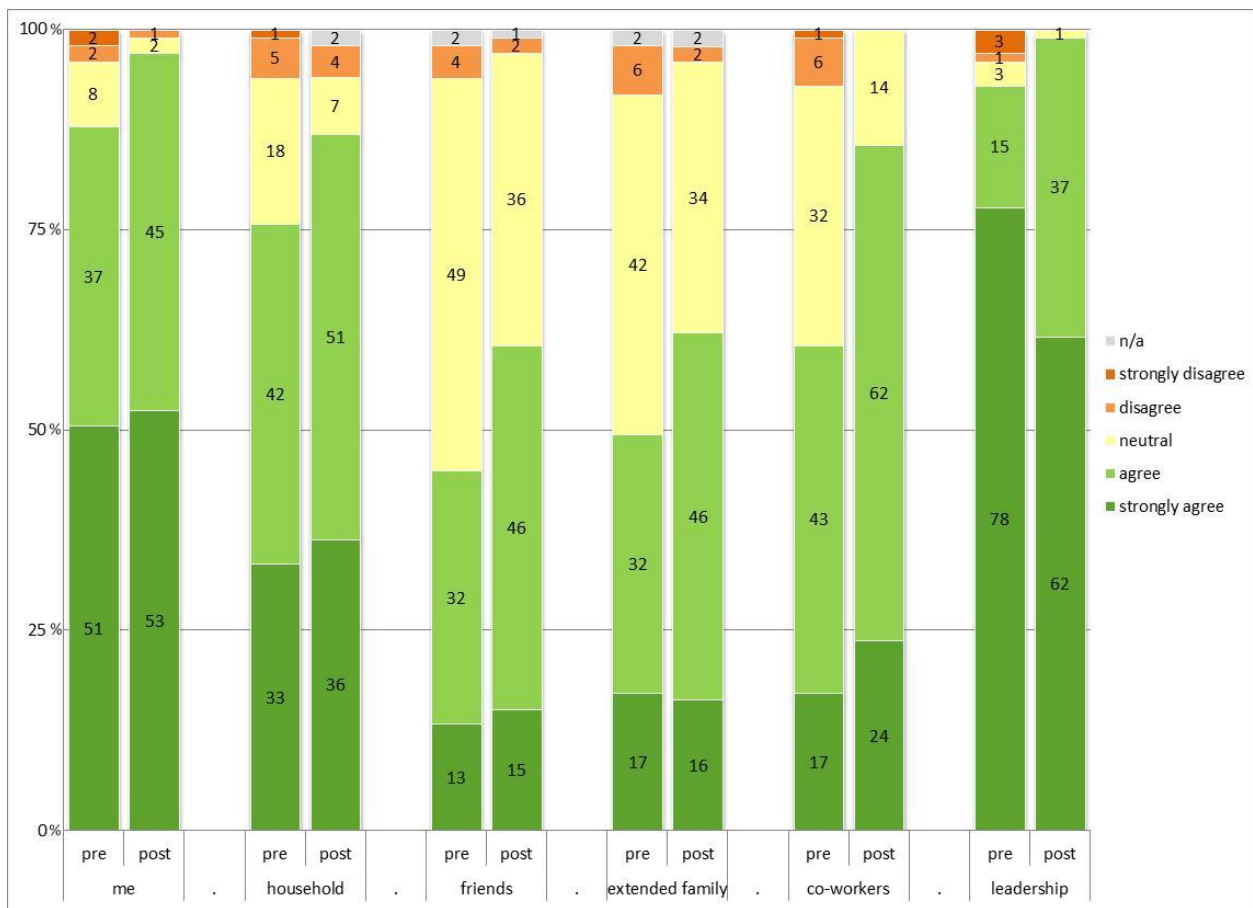
<sup>11</sup> Table includes only post-game respondents for whom we could match responses to scoring data and thus is based on a somewhat smaller number of players than

### Perceived importance of sustainability

One key metric for Cool Choices is the degree to which players in the game gain a sense that their peers value sustainability. The pre-game baseline included a set of questions about the degree to which respondents value sustainability themselves and how important they think sustainability is to various groups of peers. Those questions were repeated in the post-game survey, and we then compared responses for respondents whose answers we could match across the pre- and post-game surveys.

We did see increases across-the-board in the importance people ascribed to sustainability themselves and their perception of the importance others place on sustainability. Figure 19 shows pre- and post-game responses by peer group being asked about.

Figure 24: Importance of sustainability pre/post game, shown in percentages (n ranged from 97 to 99)



### Change in practices and learning

The Cool Choices game cards, in-game competition, and social dynamics during the game are intended to spur sustainable actions. While the scoring data collected by Cool Choices offer a good indicator of player activity, the post-game survey explored several other measures of player engagement and practices in the post-game survey. These measures included self-reported changes in players' pre- and post-game efforts to save in-home energy, water, and gasoline; the degree to which they learned something new

about sustainability; and the actual steps they took when they played one of four actions with potentially high impacts on in-home energy use.

### Self-reported degree of sustainable activity

Respondents reported increased levels of activity in all three facets of sustainability that were included in the survey, as measured by the share of respondents who said they were making substantial effort<sup>12</sup>. Self-reported post-game conservation activity was greater than pre-game activity for in-home energy use (76 percent of respondents vs. 37 percent; see Figure 25), water consumption (67 percent vs. 33 percent; Figure 26), and gasoline consumption (70 percent vs. 40 percent; Figure 27).

Figure 25: Self-reported pre- and post-game effort to reduce in-home energy use

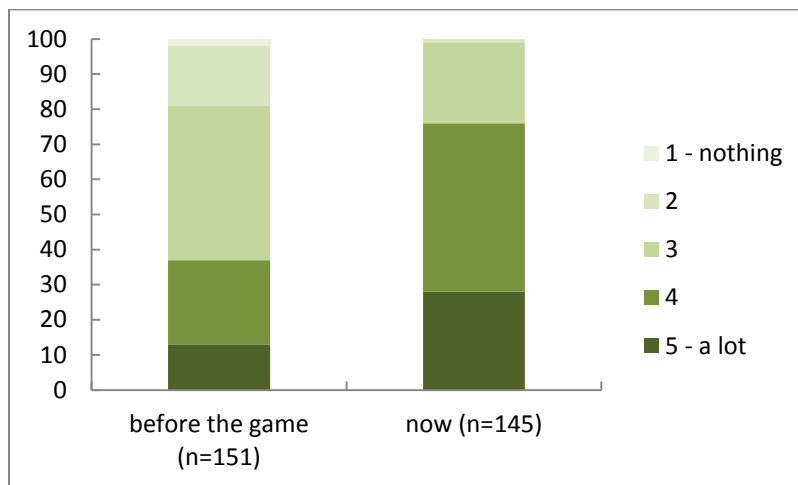
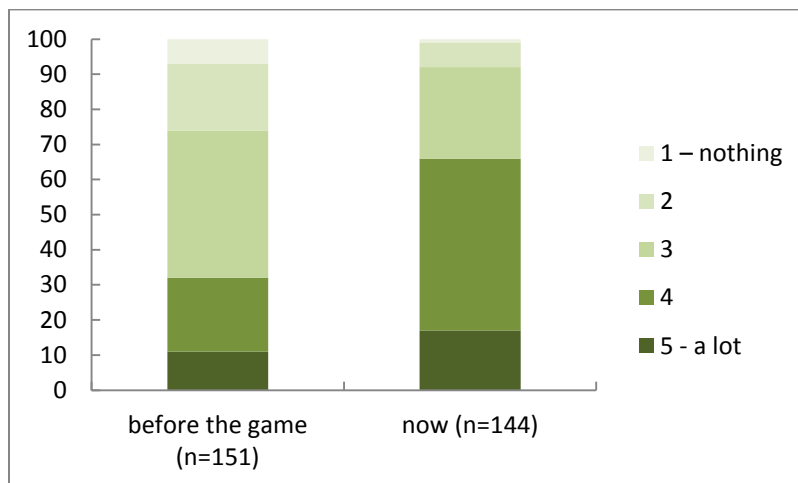
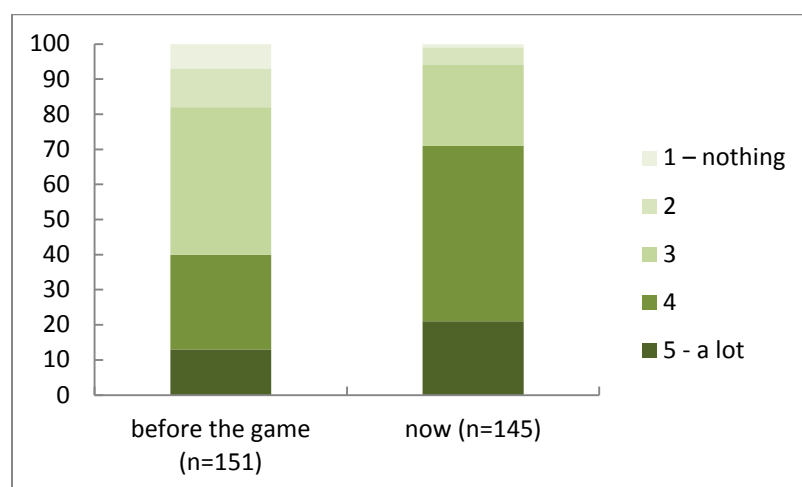


Figure 26: Self-reported pre- and post-game effort to reduce water use



<sup>12</sup> We defined substantial effort as corresponding to a 4 or 5 on a 5-point scale that ranged from 1 (no activity) to 5 (a lot of activity).

Figure 27: Self-reported pre- and post-game effort to reduce gasoline use



### Most meaningful action

When we asked players to indicate the most meaningful new action they took as part of the game, respondents listed many of the actions included in the game cards, as well as a few new insights they picked up. Most of the respondents cited modest, everyday actions, but some respondents also mentioned bigger efforts, including driving a hybrid vehicle, getting a home energy audit, unplugging second refrigerator, and purchasing an energy efficient LED television.

### Learning

One intent of the Cool Choices cards is to educate players about actions they can take that they may not have known about or for which they didn't have enough information to make informed judgments. Respondents told us that the cards presented new ideas to them occasionally (67 percent of respondents), often (25 percent), or always (1 percent), suggesting that the game did educate its players at Inpro.

### Selected high-impact actions

Cool Choices asked respondents if they played any of the following four high-impact actions and then inquired about some details about their pre- and post-game practices:

- changing the furnace fan setting from continuous to auto
- lowering the thermostat setting at night or when no one is home
- unplugging or removing a second refrigerator/freezer
- unplugging or turning off a gaming system.

Table 6 lists the frequency with which respondents reported having played these cards.

Table 16: High-impact actions reported by the post-game survey respondents (n=118)

Action	percent of respondents
changed furnace fan setting from continuous (or on) to auto	59
lowered thermostat setting at night or when no one is home	75
unplugged or removed second refrigerator/freezer	40
unplugged or turned off gaming system (PlayStation, Xbox, etc.)	70

As a cross-check, we compared self-reports from the survey with actual card playing from Cool Choices’ scoring system for the first of these cards—changing furnace fan settings from continuous to auto. We found nuanced results in how respondents answered the question about whether they had changed their furnace fan settings. Those who did not play the card associated with this action uniformly reported that they had not changed their furnace fan setting, and those who played the card as a newly taken action consistently reported the action on the post-game survey. However, players who reported having already set their furnace fan to auto prior to the game gave varied responses in the post-game survey. Table 7 shows the full results of this comparison.

**Table 17: Comparison of game actions and post-game responses to furnace fan question (n=130)<sup>13</sup>**

Player action during the Cool Choices game	Claimed to have changed furnace fan setting in post-game survey		
	yes	no	total
did not play furnace fan card	0%	2%	2%
played furnace fan card as a pre-existing sustainable action	37%	48%	85%
played furnace fan card as a newly taken action	12%	1%	13%
total	49%	51%	100%

(Percentages shown for 130 respondents for whom we could match post-game survey responses with scoring data.)

### Changing furnace fan setting

Additional details were asked of post-game survey respondents about their changes to their furnace fan settings. We restricted our analysis of these data to the 64 respondents who had actually played that card according to the scoring system and indicated having done so in the survey. Of the 16 respondents who had played the furnace fan card as a new action during the game, three players (19%) made a wholesale switch from running the furnace fan all the time to keeping it on auto all the time, seven (44%) had been running it continuously during parts of the year, and four (25%) indicated that it was already on auto previously even though they claimed the action as new when they played the card.

See Table 18 for full results in percentage terms for players who claimed the furnace fan action as new.

<sup>13</sup> Cells in the table are color-coded for consistency between player action during the game and self-report in the post-game survey. Green signifies an accurate response in the post-game survey (i.e., one that is consistent with the player’s action during the game). Red signifies an inaccurate response. Gray cells are ambiguous as respondents who claimed points during the game for having switched their furnace fan to “auto” prior to the game could have always had the switch in that position (and never actually moved it), changed the position of the switch prior to the game and answered the post-game survey question as if it pertained only to actions taken during the game, or changed the position of the switch prior to the game and answered the post-game question with a more extensive time period in mind than just the game. As a result, either response to the post-game survey could be accurate for these players.

**Table 18: Pre-game furnace fan settings by those who played the furnace fan card (n=16)**

<b>Setting</b>	<b>% of players who said the action was new</b>
"on" year-round	19%
"on" seasonally, "auto" during the rest of the year	44%
"auto" year-round, but situationally switch to "on" to circulate air	0%
"auto" year-round	25%
don't know / other	13%

Interestingly, several of the respondents who played the furnace fan card as a pre-existing sustainable action indicated in the post-game survey that they ran the furnace fan continuously at least some of the time prior to the game. Four such respondents said they had been running the furnace fan continuously all the time, five said they ran it continuously during parts of the year, and another twelve ran it situationally.

### Changing thermostat settings

Overall the average self-reported thermostat temperature settings decreased when someone was home, sleeping and away (see Table 19).

**Table 19: Temperature setback temperatures reported by the post-game survey respondents (n=86)**

<b>Action</b>	<b>before (mean)</b>	<b>after (mean)</b>
when someone was home and awake	68.7	66.9
when everyone was sleeping	66.0	63.5
when no one was home	64.8	62.5

Forty-one percent of respondents who adjusted their temperature did so manually, while the other 59 percent used a programmable feature on their thermostat.

### Refrigerator removal

Forty-three percent of respondents who took a second refrigerator or freezer offline reported unplugging or removing a mini-refrigerator, 30 percent unplugged or removed a full-size refrigerator, and 23 percent unplugged or removed a chest or stand-up freezer. One respondent reported removing a refrigerator/freezer combo. For approximately 90 percent of these players, the refrigerator/freezer was still unplugged or removed without replacement at the time of the post-game survey (at the end of the game).

### Gaming system use

Players who unplugged or turned off their gaming systems during the Cool Choices game reduced the number of hours their systems were plugged in and turned on. Judging from player self-reports (some of which were qualitative and vague), hours of operation could have dropped from as much as 70 hours per week before the game to as little as 12 hours per week after the game.

### Unclaimed points

About a quarter of respondents took relevant sustainable actions for which they didn't claim points, particularly for day-to-day actions (i.e. turning off lights, turning off unused equipment, recycling, etc.). Part of this may be due to the repetitive nature of these actions. There were a few respondents who took



high impact actions (i.e., purchasing new appliances, adding insulation/air sealing) for which they didn't claim points.

## Communications

The post-game survey also inquired about game-related communications, as well as general communications preferences and habits.

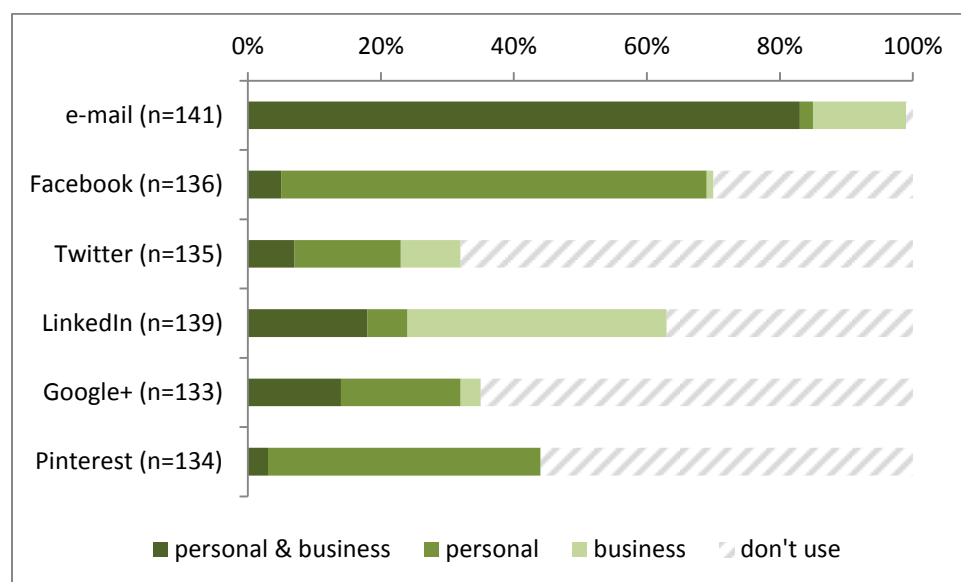
The daily reminder email was the most effective or most preferred method of getting day-to-day information about the game for 87 percent of the respondents. A smaller group of respondents (12 percent) preferred the Cool Choices news feed in the game.

The majority of respondents (83 percent) reported that they got useful tips from the daily reminder at least a few times. The remaining 17 percent of respondent either didn't get useful tips or didn't look at the reminder emails.

Respondents most often played the Cool Choices game on a computer, with 74 percent reporting this method. A much smaller number (8 percent) of respondents played the game most often on their mobile device or tablet. The remaining 19 percent used both equally.

The post-game survey also inquired about whether respondents used various electronic communications and social networking applications. Email use is pervasive for both personal and business use. Just over two-thirds of the respondents said they use Facebook (almost exclusively for personal use) and just under two-thirds use LinkedIn (mostly for business use). Use of Pinterest and Google Plus is lower, and the least used social media tool among this group is Twitter.

Figure 28: Use of electronic communications and social networking services



## Miscellaneous reactions and perceptions

In the post-game survey, we asked the respondents how much they agreed or disagreed with a series of statements (see Table 20).

Statements with high agreement ( $\geq 80\%$ ) were:

- The Cool Choices actions were simple to do.
- All in all, I'm satisfied with my job at Inpro.
- Many of the Cool Choices actions were things I'd already done.
- I learned new things from the Cool Choices cards.
- Cool Choices feels like a meaningful part of Inpro's efforts toward sustainability.
- I am more aware of opportunities to save energy since playing Cool Choices.
- I'm proud of the changes I've made as a result of playing Cool Choices.

Statements with mid-to-high-level agreement (50-79%) were:

- Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used.
- Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.

Statements with low agreement ( $< 50\%$ ) were:

- My family was enthusiastic about taking the Cool Choices actions.

**Table 20: Level of agreement with various statements**

	<b>n</b>	<b>strongly disagree</b>	<b>disagree</b>	<b>neutral</b>	<b>agree</b>	<b>strongly agree</b>	<b>don't know</b>
The Cool Choices actions were simple to do.	144	2%	0%	6%	44%	48%	0%
My family was enthusiastic about taking the Cool Choices actions.	143	1%	6%	50%	30%	10%	4%
I am more aware of opportunities to save energy since playing Cool Choices.	145	1%	2%	13%	43%	41%	0%
Many of the Cool Choices actions were things I'd already done.	145	2%	2%	8%	41%	45%	2%
I learned new things from the Cool Choices cards.	144	1%	4%	10%	55%	30%	0%
Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used.	144	1%	2%	17%	40%	38%	1%
I'm proud of the changes I've made as a result of playing Cool Choices.	144	1%	0%	17%	43%	39%	1%
Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.	144	2%	2%	22%	39%	33%	3%
Cool Choices feels like a meaningful part of Inpro's efforts toward sustainability.	145	1%	1%	12%	34%	51%	1%
All in all, I'm satisfied with my job at Inpro.	142	1%	3%	5%	37%	50%	4%

The post-game survey concluded with open-ended questions that gave respondents an opportunity to provide comments and suggestions to Cool Choices. We have included the full set of responses in the attachment. Some of the themes were:

- Eliminating paper cards.
- Improving game play, including improving functionality/rules, increasing accountability, and reducing game length.

## Alumni engagement

Respondents showed moderate interest in continued engagement with Cool Choices as alumni. Among four different options, interest was highest in participating in future prize opportunities, but low in organizing a Cool Choices game at another social group to which the respondents belong. (See Table 11.)

**Table 21: Interest in selected alumni activities (n=97)**

<b>Activity</b>	<b>percent interested</b>
Participate in sustainability-oriented contests and prize opportunities	68%
Preview and test new Cool Choices cards and game features	39%
Connect with Cool Choices alumni online with a computer, tablet or phone	21%
Organize a Cool Choices game as part of another group (school, faith community, book club)	4%
Other	6%

\* \* \* \* \*

## Attachment

### Cool Choices post-game survey: frequencies and verbatim responses<sup>14</sup>

#### 1) How often did you play the Cool Choices game?

	n	percent
daily	99	65.1
several times a week	50	32.9
once a week	0	0
a few times	2	1.3
once or twice	1	0.7
not at all	0	0
Total	152	100

#### 2) Who encouraged you to play the Cool Choices game? (check all that apply)

n=151	n	percent
your team leader	52	34.4
other team members	49	32.5
other Inpro colleagues	31	20.5
Inpro management	28	18.5
someone else (please specify)	9	6.0
no one	26	17.2
other	5	3.3

Someone else and comments:

- AG. (6)
- JM
- Self-motivated. (3)
- It was the right thing to do. Everyone needs to be more conscious of their decisions and how it relates to the bigger picture. The first time I visited Ireland, I realized just how wasteful, we as Americans, have become.
- I wanted to play once I heard the announcement.

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<sup>14</sup> Note: This attachment shows raw summary data from the post-game survey only. The discussion in the memo is based on these results, but in some instances, presents results that have been analyzed or synthesized further. For example, some results in the memo show only responses from participants whose pre- and post-game responses we could match, while the attachment shows all responses from post-game respondents. In other cases, we presented results from players for whom we could match post-game responses to scoring data. We indicated in the text of the memo when we are presenting results that are based on further analysis.

**3) Did you look at the Cool Choices game cards?**

	n	percent
no, not at all	24	15.8
skimmed through them	72	47.4
looked at the cards to get a sense of them	47	30.9
looked at some cards closely	9	5.9
Total	152	100

**4) How much were you doing to save energy in your home...**

	before game		now	
	n	percent	n	percent
1 – nothing	3	2.0	0	0
2	26	17.2	1	0.7
3	66	43.7	34	23.4
4	37	24.5	70	48.3
5 - a lot	19	12.6	40	27.6
Total	151	100	145	100

**5) How much were you doing to save water in your home...**

	before game		now	
	n	percent	n	percent
1 – nothing	10	6.6	1	0.7
2	29	19.2	10	6.9
3	63	41.7	37	25.7
4	32	21.2	71	49.3
5 - a lot	17	11.3	25	17.4
Total	151	100	144	100

**6) How much were you doing to reduce your gasoline use...**

	before game		now	
	n	percent	n	percent
1 – nothing	11	7.3	2	1.4
2	16	10.6	7	4.8
3	63	41.7	34	23.4
4	41	27.2	72	49.7
5 - a lot	20	13.2	30	20.7
Total	151	100	145	100

**7) How influential were each of the following factors in your decision to play the Cool Choices game?**

	mean
wanted to win (n=151)	3.56
was encouraged by my colleagues (n=150)	3.37
liked the lifestyle changes that could come from doing the actions (n=150)	3.55
it was fun (n=150)	3.45
could save money by taking the actions (n=149)	3.99
felt obligated as part of my job (n=150)	2.23
might win a gift card (n=152)	3.37
Cool Choices made it seem appealing (n=150)	3.19

**8) If there were other significant motivators that prompted you to play the game, please tell us about them here.**

- A one minute escape from day to day task to learn about saving the environment.
- Actually learning of creative ways to save money/energy/resources.
- After attending the meeting re" The Nest" which was very informative, I wanted to learn if there were other ideas on how to help us save some money.
- Competition of others, but it was hard if you had people on your team that weren't "team players" got you down as you were putting in all this time and they weren't.
- Ease in playing, variety of cards and submissions (card, picture, recipe), something other than normal workload...made you feel really good about helping the environment with personal choices.
- Friendly competition w/ other teams.
- I wanted to get new ideas on how to save energy, help the planet, and broaden my knowledge in this topic.
- I wanted to score more points than JM
- I was doing a lot of the choices already but the information was helpful. Also it was great to be able to win prizes.
- I was hoping to get new ideas on how to save on energy costs.
- It was a great team building exercise within my workgroup.
- It was fun to be part of team. Working together to do some good for ourselves and where we work.
- It's interesting!!!
- Knowing this will help future generations (my children) in preservation of our natural resources.
- More choices daily instead of using some of the same choices.
- My children's future.
- Nice to reaffirm that my daily practices are in fact conservationist in nature.
- Support the company initiative and hope that others who aren't very environmentally conscious learn how important it is and how easy it is to integrate into your life.
- The new ways of saving energy that I was unaware of or had forgotten.
- The right thing to do.
- There are some things that I know that I can't do anything about. I use a lot of gas because I go up north to take care of things for my mother. I'm not going to stop doing that. If there are other things that I can do to help the environment and make a better future, that just makes sense. After my first trip overseas it was very apparent how wasteful we are. Overseas, if you want a plastic bag at the grocery store, you pay for it. Instead of using bags in the produce department, you use a basket. These are easy things that we can do; we just have to take the time to think about our actions. This program helps to do just that.
- Wanted to make a point to not miss a day or a card, and cards promoted change in my lifestyle.

**9) While the Cool Choices game was active, how often did you talk about sustainability at work?**

	n	percent
daily	3	2.0
several times a week	35	23.3
weekly	47	31.3
once or twice	54	36.0
never	11	7.3
Total	150	100

**10) While the Cool Choices game was active, how often did you talk about sustainability at home?**

	n	percent
daily	6	4.0
several times a week	26	17.3
weekly	48	32.0
once or twice	54	36.0
never	16	10.7
Total	150	100

**11) Whom did you talk with about sustainability? (check all that apply)**

n=150	n	percent
teammates	96	64.0
other work colleagues	78	52.0
spouse	94	62.7
kids	49	32.7
extended family (parents, brothers or sisters)	40	26.7
friends	29	19.3
neighbors	8	5.3
no one	3	2.0

**12) Who at work talked about *their* Cool Choices experiences with you? (check all that apply)**

n=149	n	percent
teammates	104	69.8
other colleagues	65	43.6
no one	24	16.1

**13) What was the topic of your most memorable conversation at work about sustainability?**

**Water:**

- Dishwashers and showers.
- Grey water systems.



- How to save water.
- Saving water. (2)
- Trying to take shorter showers to conserve water.
- Water conservation.
- Water conservation relative to new 'low flow' toilets. Timing was perfect since I was replacing an old one at home.
- Water conservation...drip irrigation.
- Water usage and conservation at home.
- Water use.
- Water used at home.
- Watering cycles in the yard.
- One of my co-workers replaced their toilet.
- Replacing toilets.

#### **Electricity:**

- Playing dvds through game council uses 4 times the energy. Also, talk of when it's more efficient to turn the lights off when leaving a room.
- Reducing electricity use.
- Replacing a freezer.
- Saving electricity.
- Setting on game consoles and TV's to save energy.
- Watching less TV.
- When we replaced our wash machine w/an eco-friendly, high efficiency machine.

#### **Lighting:**

- Switching all the light bulbs.
- Turning lights off
- Turning off the lights!

#### **Home energy audit/program:**

- Energy assessment.
- Learning about the Express Energy Efficiency Program.

#### **Transportation:**

- Driving and keeping speed limits down to save gas and the crazy people who drive up everyone's bumper like they're getting somewhere that much faster. Old speeding tickets.
- Driving impact.
- Driving no more than 65.
- Fuel savings as gasoline prices continue to rise.
- How much gas you can save while driving.
- I didn't know that 30 seconds was sufficient time to warm up a vehicle.
- We enjoyed the term Jackrabbit driving... didn't know there was a term for it.
- Winter driving under 40 mph with the windows down.
- Save gas.
- Saving money and energy with driving.
- Talking about carpooling.

#### **Game play:**

- How to score more points. Rules of the game.
- Mostly the competition, colleagues took it very serious, but in a fun way.
- Wanted to win before the game started.
- The fun people were having with the game and the different cards.
- It was less about what we talked about and more about action (i.e. remembering/reminding each other to reuse bags for shopping or use fabric bags) and carpooling at lunch for errands.
- One of my coworkers said they were disappointed that more people in our department didn't get on the ball to play so she didn't have a team to play with. I agreed with her.
- The team challenges and remembering to play every day.

#### **HVAC:**

- Furnace filters.
- Heat adjustment of furnace.
- How to make a homemade air conditioning unit to save on energy.

#### **Garbage/recycling:**

- Discussing the new recycling center in lunch room.
- Garbage waste scrap.
- How different municipalities handle recycling and how that affects how much the residents do in their efforts.
- Recycling. (4)
- Recycling pictures.
- Trying to decide which new garbage/recycle canister to use.
- The new compost bin in the lunch room.
- The new garbage cans.
- Which bin do I use to throw away variety of items? Not very clear on the new bins.

#### **Multiple:**

- About light bulb and how many items were plugged in.
- The focus on energy program and getting energy saving light bulbs.
- The ease of doing things that make a difference if you just take the time to think about it. Turning off lights for example. Also, using reusable shopping bags. It's the easiest thing in the world and a lot of stores give you a credit for doing so. You just have to think about it.
- How to save gas, and how to involve myself more into living a healthy environment, and also ways that can help me save money.

#### **Other:**

- An internal audit I did with one of the managers discussing what sustainability meant to me, how I saw our company saving energy, etc., and how I could help.
- Appliance changes.
- Being creative to show our "team spirit" of making cool choices.
- Conserving energy.
- Co-worker looking into new appliances, and discussing the energy efficient models. Also discussing window shades, saving on heating bills/a/c bills.
- Didn't have any.
- Don't have one.
- Energy savings. (2)
- Fun pictures of the team.
- How we as a company can do some simple things to lessen our "footprint".

- I talked with a customer about how important sustainability and the environment are to Inpro. Telling him about the game was fun and it emphasized that we are a company that "walks the walk".
- I work remotely. Little interaction.
- Just in general that it makes you think twice about the use of resources.
- Listening to other people and their creative choices in everyday things to save.
- Login!
- Money savings.
- Not sure.
- Our group picture and what would be considered uncool choices to make.
- Outside rep, no contact with others at work.
- Re-using containers, not using plastic bags for lunch and people were fired up about the pictures/contests.
- Riding bicycles to work.
- Saving energy.
- Saving money. (2)
- Some of us noted how we already took many of the game actions.
- Team picture.
- That about 95+ percent of the choices being presented were things that I already did on my own.
- The a'ha moments shared by colleagues.
- The photo contest was a big hit and many people were very creative with their ways to show sustainability.
- The picture challenges.
- Ways to shop locally. For example, I found an indoor farmers market and shared that information with people around me.
- We liked the photo challenges.
- What we were doing with our settings on our thermostat at home while away for extended periods of time, setting our water heater lower and our use of water.
- When we had to take the group picture.

#### **14) What was the most memorable experience you had playing the game?**

##### **Team photo:**

- Coming up with ideas for the photo contest on how to save energy at work.
- Coming up with picture challenges with teammates.
- Cramming a team in a vehicle wearing "Bob" name tags and MS/BB mustaches.
- Creating our group picture using recycled items and becoming warriors of protecting the environment, made shields and swords and hats from recycled items.
- Creating the team photo. Trying to display all of our cool choices in photo format.
- Getting our picture taken as a team.
- Getting our team together for a group photo.
- Getting the group to work together for a team photo.
- Getting together as a team to create our picture.
- Getting together with our team to take a picture.
- Group photo shoot. Little ideas that can help - for example- not idling car.
- Had a great time doing the group photo.
- Taking our group photo.
- Taking our team photo.
- Taking pictures.
- Taking team photos.

- Taking the group picture.
- Taking the photos.
- Taking the picture with our team.
- Taking the picture.
- Our team photo.
- Taking the picture and coming up with ideas.
- Taking the picture. Realizing that I already do a bunch of the things that the cards had on them.
- Taking the team photo.
- Taking the team photos.
- Taking the team picture about recycling.
- Taking the team picture.
- Team photos. (5)
- Team picture.
- Team pictures.
- The boring picture we did as a group.
- The group photo.
- The first photo challenge.
- The team photo. (2)
- Trying to plan the team picture and then seeing it!

#### **Competition:**

- Looking at score board.
- Trying to come in first place.
- Trying to get other colleagues to join the team.
- Trying to get to the top spot.
- Trying to motivate the less active participants on our team.
- Winning a gift card.
- Winning a weekly drawing.
- Winning for best picture.
- Winning for my quote!
- Winning the photo challenge! And our inner team emails encouraging each other to make choices and saying congrats when we passed up a team!
- Winning the team photo contest.
- Working together as a team.

#### **Playing specific cards:**

- Discovering how much gas I save when I slow to 65.
- Every time I drive a car. "Driving 65 instead of 75" card.
- Hearing how each team member did at least one of these for the first time, EVER. I never thought about idling the car for only 5 minutes... I'm amazed at how much gas is saved, especially when this winter was so cold and everyone was idling their cars to warm the interior, not thinking about saving on gas by warming the engine only.
- Recycling an old freezer and got paid to do it.

#### **Learning new ideas:**

- Energy calculations.
- Finding great resources.
- Finding out about the appliance recycling program.

- Having outside company come to my house and change light bulbs and low flow faucets. It opened my eyes!!
- I liked reading all the facts.
- I liked the facts that were displayed with the choices.
- Information you gain.
- Just learning new things that could save me money.
- Learning about all the additional information w/ each card.
- Learning about appliance cost savings.
- Learning all the new ways I wouldn't have thought of to save energy, water, etc. Which in return saves me money.
- Learning facts that I didn't know and sharing them at dinner.
- Learning how to save energy.
- Learning new ways to save energy.
- New ideas to save money at home.

**Other:**

- Awareness to share with other.
- Buying led light bulbs with my older son.
- Finding out how much I actually do already.
- Getting my wife to make some changes.
- Group activities.
- I bought new landscape lighting.
- It made me more aware of the little daily choices that we make that can make a difference. Started to talk with kids/family about better choices.
- Knowing that I can do more to make a bigger difference.
- Not being in last place.
- Not winning anything but winning at home with saving \$\$.
- Noticing the little things add up.
- Realizing how much we already do to conserve energy and recycle.
- Remembering to play every day, and applying what I learned to my every day needs.
- Seeing the facts of cost/energy savings after playing a card every day. Very eye opening!
- Seeing the gas I saved changing how I drive.
- Talking about the different cards with co-workers.
- The facts that would come up when you selected something. It gave percentages of how much you can save.
- The general hype of people excited about initiative.
- The team building experience as a whole.
- Trying to figure out what picture to take for recycling. I was in Hawaii at the time so plenty of beautiful places in nature.
- Utilizing the newer light bulbs in my home to save energy as well as monitoring my thermostat.
- Watching my energy bill go down.
- Water saving technique.
- When the cards would not work.

**Nothing/don't recall:**

- Don't have one.
- N/A. (2)
- None.

- Not sure.

**15) How frequently were the Cool Choices cards new ideas for you?**

	n	percent
always	2	1.4
often	36	24.5
occasionally	99	67.3
never	10	6.8
Total	147	100

**16) What was the most effective or your preferred method of getting day to day information about the game?**

	n	percent
Cool Choices newsfeed in the game	17	11.6
daily reminder email	127	87.0
other	2	1.4
Total	146	100

**Comments/other:**

- Myself.
- Team members.

**17) Did you look at the newsfeed while playing the game?**

	n	percent
yes, often	15	10.2
yes, a few times	81	55.1
no	51	34.7
Total	147	100

**18) Did you get useful tips from the daily reminder emails?**

	n	percent
yes, often	28	19.0
yes, a few times	94	64.0
no	20	13.6
did not look at the reminder emails	5	3.4
Total	147	100

**19) Have you heard of the Focus on Energy program?**

	n	percent
yes	65	44.5
no	81	55.5
Total	146	100

**20) Were you aware of the Focus on Energy program before the game?**

*[Question asked only of respondents who indicated awareness of Focus on Energy in question 19.]*

	n	percent
yes	50	76.9
no	13	20
don't know	2	3.1
Total	65	100

**21) Had you used any of Focus on Energy's services or rebates before playing the game?**

*[Question asked only of respondents who indicated pre-game awareness of Focus on Energy in question 20.]*

	n	percent
yes	26	52.0
no	22	44.0
don't know	2	4.0
Total	50	100

**22) Do you recall hearing of any Focus on Energy offerings as part of the game?**

*Question asked only of respondents who indicated awareness of Focus on Energy in question 19.*

	n	percent
yes	44	67.7
no	21	32.3
Total	65	100

**23) During the game, did you look into Focus on Energy offerings at all?**

*[Question asked only of respondents who recalled hearing of Focus on Energy offerings in question 22.]*

	n	percent
yes	30	68.2
no	13	29.5
don't know	1	2.3
Total	44	100

**24) Did you use any Focus on Energy services or rebates while playing the Cool Choices game?**

*[Question asked only of respondents who recalled hearing of Focus on Energy offerings in question 22.]*

	n	percent
yes	11	25.0
no	31	70.4
don't know	2	4.6
Total	44	100

**25) Where did you most often play Cool Choices?**

	n	percent
on a mobile device (smart phone)	11	7.5
on computer	108	73.5
used both equally	28	19.0
other	0	0
Total	147	100

**26) Please rate the influence each of the following factors had on your choosing the actions you took.**

	mean
was already doing the action (n=145)	4.21
easy to do (n=145)	4.05
fun to do (n=144)	3.27
save money (n=145)	4.24
good for the environment (n=145)	4.03
co-workers were doing them (n=143)	2.35
earn a lot of points (n=145)	3.45

**27) If there were other significant motivators that prompted you to play the cards you did, please tell us about them.**

- Already doing most of these things and others I wanted to work on.



- Can't think of any.
- Cards used most in my work and personal life.
- Competition.
- Curious to see other ways to save on energy, water, resources etc. Interesting tips, some I never thought of before playing the game.
- Easy wins! High points!
- Highest points per day.
- I always thought I should do the suggestion.
- I do a lot of driving on weekends and mostly played the driving cards. I need to save gas whenever I can.
- If the company can take some of the ideas submitted and use them, that's just a bonus! Also, some of the cards made my life easier; like not having to warm up the car. Before the game, I didn't realize that 30 seconds was sufficient.
- Kids.
- Little changes I could make that didn't take a lot of time.
- Management encouraging play. Colleagues playing.
- N/A. (2)
- Opportunities to help my team.
- Points, although I'm not sure if "winning" is points driven, or if simply the number of submissions played.
- Prompted me to implement some things at home I'd been thinking about but just hadn't done yet.
- Some cards were not applicable to me. No video game console, no second refrigerator/freezer, no landscape lights etc. This also affects the survey question about changes, since I did not have these items to change and I did not make a change on setting the furnace to auto or lowering thermostat, because these were things that I already did (not a change).
- The ability to get others involved.
- The one about making an appt. to have your fridge or freezer picked up. I did this, and it also made me feel better once I completed it and knowing it is good for the environment.
- These were activities that fit into my lifestyle.
- Things I was doing on a daily basis.
- Things that I could easily do every day or things that I could easily do that had the most bang for the buck.
- Things that were easy to do and could still save money.
- Truly could save energy and water by participating with the cards.

**28) What was the most meaningful new action you took as part of the game?**

**Electricity:**

- Trying to spend more time with TV off.
- Turning everything off when I'm not using it and replacing light bulbs.
- Unplug electronics when not in use.
- Unplugged extra refrigerator.
- We purchased an LED tv to replace a nine year old tv, and found that the LED tv will only cost \$6.00 a year in electricity!

**Lighting:**

- Changed the light bulbs.
- Changing my lights to leds.
- Changing out the light bulbs to save energy.
- Leaving cfl lights on instead of turning them off, if they will be off for less than 10 minutes.

- Replaced light bulbs.
- Replacing bulbs in house.
- Switching out light bulbs in my home.

#### **Water:**

- As I mentioned, we do a lot already. The biggest change I made at home was using cold water for laundry. There are 5 in our household so there's never a shortage of laundry. I'm looking forward to seeing if it makes a dent in our bill.
- Being more cautious about saving water when I'm using it at work as well as at home.
- Low flow faucets for showers.
- Monitor my water usage and find ways to cut back. I have arbitrarily tried to reduce water usage but never really gauged how much I was using for certain activities to really do it well.
- Saving water.
- To use less water.
- Using cold loads for laundry as much as possible. While it contributed to more buildup in my hot water heater (the water in my town has a lot of minerals in it) that I now need to flush, it did help reduce my energy bill significantly. I probably would have had to flush it eventually, but using warm water helped to clear it more often.
- Water use reduction.

#### **Transportation:**

- All the cards with driving, slow down, A/C, warm up, etc.
- Avoid jackrabbiting.
- Car idle.
- Carpooling.
- Changing the way I drive to increase fuel economy and use less gas.
- Driving more slowly on the freeway to save gas.
- Driving slower than 70... I didn't realize it sucked more gas driving 10 mph over the limits.
- Driving slower to conserve gas/ energy.
- I was doing a lot of these items before the game. I guess the biggest change was slowing from 75mph down to 65mph.
- I drive a hybrid.
- I would say most of the cards just made me more aware of what I was doing on a daily basis and how it affects the environment... for example, with the avoid "jack-rabbit" driving card, I am not typically a jack rabbit driver, but now it really makes me think twice while driving.
- Leaving car idle - I did that a lot particularly with winter and didn't think about the environmental impact. I no longer do that for more than a minute or two in cold weather.
- Made me re-think my driving. I commute a long distance to work every day and I was one of those crazy people slamming on the gas, and then hitting the breaks. I forgot how much pleasure you can take from driving by just slowing down and I seem to get home at the same time anyway!
- Making a habit of carpooling for shopping and combining errands.
- More conscientious about my driving (no jack rabbit starts, 65 MPH, no open windows over 40 MPH, less idling).
- Reducing my speed saves money. I was never a speeder but I know a speeder. I have shared that information.
- Reducing my speed to save gas.
- Saving gas.
- Saving gas options because I drive a lot.
- Stopped idling my car every day while picking up kids after work.

- Stopping jack rabbit driving. I was guilty of that. Saving gas is always beneficial
- The way I drive.
- Using a functionality already built into my car to more accurately monitor how much I drive and how much gas the car uses.
- Warming up vehicle.
- Watching my speed on the interstate.

#### **HVAC:**

- Adjust thermostat.
- Changed my thermostat even lower than originally programmed.
- Lowering my thermostat at home.
- Turned heat down while away.

#### **Multiple:**

- Composting and new the FOE audit and buying new LED lights.
- Keep TV and games off when not in use. Eat less red meat. Buy locally. Shorten showers/water use.
- Slowed down my driving and watch water use.
- Reducing energy use at home, through turning off lights and not using as much water.
- Shortened showers and trying to remember at home to turn off lights, unplug cords etc.
- Simple things like adjusting the water heater temp and installing a low flow shower head. They were quick to do, and you don't have to think about doing them again, yet you're still saving on water & electricity.
- Replaced shower head and light bulbs.
- Consciously turning lights off when leaving rooms, turning off devices we're not using.
- Wrapping the hot water pipes; not letting the car run for 5 plus minutes in the morning.

#### **Other:**

- Actions to save money.
- Already doing most of it.
- Analysis daily choices.
- Became aware that I was already doing most of it.
- General awareness.
- Home energy analysis.
- I was already performing many of the action items.
- Improving the energy efficiency of my home.
- Insulate hot water heater and pipes.
- Insulating my pipes around the water heater!
- It helped me become more aware of how I could save energy and to look for more ways to do so.
- Lowering the water heater temperature.
- Reading the post remark stats of selections which put a "face" to the savings to environment and pocket book.
- Recycle old magazines.
- Recycling our old fridge in the garage.
- To help out the environment.

#### **None:**

- Did nothing new. I was already trying to save energy as much as possible.
- Nothing, I am already very conscious about my impact on the environment both at work, home and when on vacation.

**29) Did you make any changes in the following settings and routines during the game?** (Please check all that apply.)

n=118	n	percent
changed your furnace fan setting from continuous (or on) to auto	69	58.5
lowered your thermostat setting at night or when no one is home	88	74.6
unplugged or removed second refrigerator/freezer	47	39.8
unplugged or turned off gaming system (Playstation, Xbox, etc.)	82	69.5

**30) Which of the following best describes how often you kept your furnace fan on the “on” (circulating air) setting before the Cool Choices game?** (Note: the “on” setting circulates air whether or not the furnace is heating or the air conditioner is cooling. The “auto” setting only circulates air when you are actively heating or cooling.)

*[Question asked if respondent checked ‘changed your furnace fan setting from continuous (or on) to auto’ in question 29.]*

	n	percent
“auto” all the time year round	31	44.9
“auto” most of the time, but “on” situationally to circulate air	13	18.8
“on” all the time year round	8	11.6
“on” some parts of the year, “auto” during the rest	13	18.8
other	0	0
don’t know	4	5.8
Total	69	100

**31) To lower your home’s temperature at night or when you are away, did you adjust the thermostat manually or use programmable features your thermostat may have?**

*[Question asked if respondent checked ‘lowered your thermostat setting at night or when no one is home’ in question 29.]*

	n	percent
adjusted temperature manually	36	40.9
used programmable features	52	59.1
Total	88	100

**32) At what temperature did you tend to keep your home during this past winter when someone was home and awake...?**

*[Question asked if respondent checked ‘lowered your thermostat setting at night or when no one is home’ in question 29.]*

before game		after game	
temp	n	temp	n

60	1	60	4
62	1	62	1
63	1	63	1
64	2	64	2
65	8	65	21
67	5	66	3
68	28	67	5
69	4	68	31
70	17	69	10
71	3	70	4
72	11	72	4
73	1	Total	86
74	4	mean	66.9
Total	86		
mean	68.7		

**33) At what temperature did you tend to keep your home during this past winter when everyone was sleeping...?**

*[Question asked if respondent checked 'lowered your thermostat setting at night or when no one is home' in question 29.]*

before game		after game	
temp	n	temp	n
56	1	50	1
58	1	54	1
60	9	56	1
62	5	58	1
63	2	59	1
64	8	60	14
65	13	62	12
66	5	63	6
67	7	64	10
68	15	65	22
69	3	66	5
70	10	67	2
71	1	68	6
72	4	70	4
74	2	Total	86
Total	86	mean	63.5
mean	66.0		

34) At what temperature did you tend to keep your home during this past winter when no one was home...?

*[Question asked if respondent checked 'lowered your thermostat setting at night or when no one is home' in question 29.]*

before game		after game	
temp	n	temp	n
50	1	50	2
55	2	54	1
56	1	55	2
58	4	56	1
60	10	58	3
62	9	60	22
63	2	62	12
64	6	63	6
65	14	64	6
66	3	65	18
67	7	66	3
68	11	67	2
69	1	68	4
70	9	69	1
71	2	70	3
72	2	Total	86
74	2	mean	62.5
Total	86		
mean	64.8		

**35) What type of refrigerator or freezer did you unplug or remove from your home?**

*[Question asked if respondent checked ‘unplugged or removed second refrigerator/freezer’ in question 29.]*

	n	percent
full size refrigerator	14	29.8
mini-refrigerator	20	42.5
stand-up freezer	6	12.8
chest freezer	5	10.6
other	2	4.3
Total	47	100

**Other:**

- Refrigerator/freezer combo.

**36) Since playing the Cool Choices game, have you replaced or plugged your refrigerator or freezer back in?**

*[Question asked if respondent checked ‘unplugged or removed second refrigerator/freezer’ in question 29.]*

	n	percent
yes	5	10.6
no	42	89.4
Total	47	100

**37) How often was your gaming system plugged in and on (even if you weren’t actively using your system)...? (Please answer in hours per week.)**

*[Question asked if respondent checked ‘unplugged or turned off gaming system (Playstation, Xbox, etc.)’ in question 29.]*

before game		after game	
hours	n	hours	n
0	13	0	28
1	2	1	5
2	5	2	3
3	1	4	2
4	2	5	3
5	1	6	2
6	4	7	1
10	2	10	6
12	1	12	1
14	2	24	2

15	1	25	2
20	1	28	2
24	1	40	1
28	1	56	2
40	2	80	1
50	2	84	1
60	1	168	1
84	1	only when in use	14
98	1	Total	78
100	2		
120	1		
140	1		
164	1		
168	25		
2 days/wk	1		
sometimes	1		
only when in use	1		
don't know	1		
Total	78		

**38) While the Cool Choices game was active, did you take any energy saving or sustainability actions that you didn't claim points for?**

	n	percent
yes	39	26.9
no	106	73.1
Total	145	100

**39) What energy saving or sustainability actions did you take that you didn't claim points for?**

- Actually it was more taking the information and helping my mom and her house to become more energy efficient.
- Added Insulation to the attic of our home. Cleaned up the wooded area behind our home from the garbage that blew back there. Recycled old home fixtures at Habitat for Humanity Restore.
- Avoid buying GMO food, start seeds indoor to plant a garden when it gets warmer, buy bulk foods (less packaging/waste), started using a solar charger for cell phone and tablet, use a rain barrel to water plants.
- Bought an energy efficient microwave, with an energy saver button and use it.
- Carpooling.
- Caulked basement windows.
- Closing blinds to keep warm air in and cold out.
- Energy audit.
- I can't remember specifically, but since I didn't have other teammates to help gain points I kept on doing the sustainable things and not logging in to claim points for them.



- I don't recall, but I notified the facilitator right away to correct. She was not able to do that.
- I took a closer look at my energy & water bills to see what programs, assistance (helpful hints/recommendations) those companies would make and how I could use the resources better.
- I took action with cards and the ones I had already done I claimed points for, before the game began.
- Insulated my basement and hot water heater.
- Keeping lights off.
- Line dry clothes (towels). Reduce load size on washer for less water.
- N/A. (2)
- Opening drapes on sunny days, kept them closed on cloudy days.
- Put new windows in. Energy star stove and fridge range.
- Replaced old single pane windows with new energy efficient windows.
- Replaced our washer with an eco-friendly, high efficiency washer. Ran the dishwasher less often. Turn the lights off in my office when I go to a meeting or to lunch.
- Replacement of old insulation. Reuse of materials.
- Sharing ideas/conversations, buying local and organic, cooking meatless meals all the time.
- Sometimes cards wouldn't work.
- There were days where we were allowed 3 choices and I had made more that day, but I think that over the course of the game I selected all that were applicable.
- Too many to mention.
- Unplug video game console, focus on watching less tv.
- Was more aware of recycling products at home. More aware of chemicals I used for cleaning and changed to mostly chemical free. Use reusable bags as often as possible when shopping.
- We have one TV in our home and do not watch it for more than 1 hour per day. We walk or bike to many places outside of work - school, library, park. We wash clothes on the cold cycle. We actively seek foods from local sources when available and participate in a CSA program. We do not use chemicals on our lawn. We live in a small house in a walking community. We do not use our air conditioner. We shovel snow instead of using a snow blower. We take walks and pick up litter almost every day. We use hand-me-down clothing and toys for the kids.
- We switched over to more energy efficient pump in koi pond.
- When you are limited to 2 or 3 options, you still did other ones. Line dry, carpool, avoid jack rabbit driving, these are things you can do all the time and then use other special cards instead.

**40) Please rate the following statements:**

	n	strongly disagree	disagree	neutral	agree	strongly agree	don't know
The Cool Choices actions were simple to do.	144	3, 2.1%	0, 0%	8, 5.6%	64, 44.4%	69, 47.9%	0, 0%
My family was enthusiastic about taking the Cool Choices actions.	143	2, 1.4%	8, 5.6%	71, 49.6%	43, 30.1%	14, 9.8%	5, 3.5%
I am more aware of opportunities to save energy since playing Cool Choices.	145	1, 0.7%	3, 2.1%	19, 13.1%	62, 42.8%	60, 41.4%	0, 0%
Many of the Cool Choices actions were things I'd already done.	145	3, 2.1%	3, 2.1%	11, 7.6%	60, 41.4%	65, 44.8%	3, 2.1%
I learned new things from the Cool Choices cards.	144	2, 1.4%	5, 3.5%	15, 10.4%	79, 54.9%	43, 29.9%	0, 0%
Since playing Cool Choices, I'm more likely to turn off lights in	144	2, 1.4%	3, 2.1%	24, 16.7%	58, 40.3%	55, 38.2%	2, 1.4%

rooms at work that aren't being used.							
I'm proud of the changes I've made as a result of playing Cool Choices.	144	1, 0.7%	0, 0%	24, 16.7%	62, 43.1%	56, 38.9%	1, 0.7%
Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.	144	3, 2.1%	3, 2.1%	31, 21.5%	56, 38.9%	47, 32.6%	4, 2.8%
Cool Choices feels like a meaningful part of Inpro's efforts toward sustainability.	145	1, 0.7%	1, 0.7%	18, 12.4%	49, 33.8%	74, 51.0%	2, 1.4%
All in all, I'm satisfied with my job at Inpro.	142	2, 1.4%	4, 2.8%	7, 4.9%	52, 36.6%	71, 50.0%	6, 4.2%

#### 41) Sustainability is important...

	n	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree	n/a
to me	146	0, 0%	1, 0.7%	3, 2.0%	70, 48.0%	72, 49.3%	0, 0%
to my household	146	0, 0%	5, 3.4%	10, 6.9%	74, 50.7%	54, 37.0%	3, 2.0%
my friends	146	0, 0%	3, 2.0%	50, 34.3%	66, 45.2%	22, 15.1%	5, 3.4%
to my extended family	145	0, 0%	3, 2.1%	48, 33.1%	63, 43.5%	25, 17.2%	6, 4.1%
to my co-workers	143	0, 0%	0, 0%	21, 14.7%	86, 60.1%	34, 23.8%	2, 1.4%
to leadership at Inpro	145	0, 0%	0, 0%	6, 4.1%	51, 35.2%	88, 60.7%	0, 0%

#### 42) Fostering a culture of sustainability is a key part of Inpro's standard practices. Was the Cool Choices game a good way for Inpro to help you integrate sustainability into your life? Please explain.

##### Yes:

- Absolutely, I know it was eye opening for me and I thought I was doing a lot already. It had to be eye opening for others.
- Absolutely. I'm impressed at how seriously Inpro leadership is taking sustainability by encouraging efforts outside of work for each individual. It shows me how sincerely Inpro's efforts are towards sustainability.
- I believe so. It has brought awareness to what I can do and what I already do to save.
- I guess it was a good way. I did most of the things already, but it did help to emphasize the importance of maintaining these sustainable choices with my family - particularly, my 6 year old son.
- I think anytime you have an opportunity to remind someone of some easy steps to help the environment it is always helpful. Often we get into our own routines and this allowed people to think twice or rethink their use of resources.
- I think it was a good idea. It brought back to mind many things that we may have known but became lazy in following the practices. It also suggested new ways to make improvements.

- I was impressed. Because I repeatedly quickly scanned cards to make choices and read the facts on choices, and thought about making choices every day, it did really reinforce things that I could do now and some things I didn't do now (changing out appliances), but will do in the future.
- Increases awareness.
- Inpro. It helped force decisions.
- It is. It makes you cognizantly think about your actions and to see just how easy it is to take steps to make more energy efficient decisions.
- It made me more aware of what I could change as far my usage of energy at home.
- It made me realize how much I am already doing without thinking about it.
- It served as a good reminder that the choices can be made daily.
- It was helpful in pointing out beneficial steps to make that are easy to accomplish
- It was. I will now compost more, purchase a rain barrel and plant more in my garden.
- Yes. (5)
- Yes - it made me more aware of things I can do to make a difference.
- Yes - made you aware on daily basis of choices.
- Yes and no. A lot of the cool choices I was already doing. I did make a couple changes and appreciate what Inpro is trying to do.
- Yes because I already make that choice.
- Yes because it helps to bring everyone together and to further integrate our "clean culture."
- Yes because it made me more aware of how easy it is to make cool choices by saving energy.
- Yes I believe this game was very resourceful and helpful. I learned many things that I didn't know, and I now am more aware of saving money and energy. I would highly recommend this game to anyone I know!
- Yes I think that it opened up people's eye to how much energy they are using on a daily basis.
- Yes it made me more aware of how much energy is wasted on a daily basis due of lack of knowledge.
- Yes it made me think about a lot of different things I wouldn't normally think about.
- Yes it was a good gentle reminder to think that way. I have developed a habit to think and act with sustainability in mind.
- Yes it was because it made me much more aware of how we can save energy at home, and to look for more ways to do so. Our son is going to go to college for environmental science, so he was very interested and involved with helping me with this at home. It became a fun thing for us to do!
- Yes it was. I learned many new ways to make my home more energy efficient and to reduce gasoline consumption in my vehicle, which I was able to integrate into my life.
- Yes just gave me knowledge I didn't know before.
- Yes!
- Yes! This game helped make sustainability "cool" again. It's nice to see people enthusiastic about saving energy & finding ways to make our planet better!
- Yes, whether at work or home being sustainable is important for lowering the carbon footprint overall.
- Yes, as it put it into my daily thought process.
- Yes, because it offered ideas on how to conserve energy and we're rewarded by the savings we experience because of it.
- Yes, cool choices made me more aware of my environment and how to preserve it along with preserving my pocketbook.
- Yes, gave good examples and brought it to your attention daily.
- Yes, I learned new things.
- Yes, I liked the Fun Facts that showed up when you played a card. It would be nice if those were on the back of the real cards so it could inspire you to make a change.
- Yes, I think it raised awareness in a fun way.

- Yes, I'm more aware of the actions I'm taking.
- Yes, it gave new ideas on how to save. It's something every adult can participate in, and I have passed the cards onto my extended family to see and use!
- Yes, it gave people incentives to want to become more sustainable.
- Yes, it got me to question aspects of sustainability that go on each day that I put little thought into. Most people are motivated by savings. It did a good job of showing what you can gain.
- Yes, it helped engage employees in practical efforts for sustainability.
- Yes, it just puts a focus on it more consistently.
- Yes, it made me focus and think about it a lot more, which led me to doing more things than I normally would have.
- Yes, it was fun and interactive.
- Yes, it was nice to have ideas that you may not think about every day. It also reminded you to do things you had forgotten saved energy.
- Yes, made me stop and think about things.
- Yes, many people don't understand their impact on the planet, this made it fun to explore how each person can help.
- Yes, many people were involved and with their involvement I'm sure learned quite a bit about sustainability if they didn't already.
- Yes, most of the things I was already doing with how the environment is going, and how expensive things are. We always need to save money whenever we can. Very expensive raising a family with the way the economy is.
- Yes, the game got a lot of people involved that otherwise may not have taken sustainable steps to save money and resources.
- Yes, with daily constant reminders.
- Yes. Brought increased awareness to all.
- Yes. Daily reminders/facts helped prompt you to take action.
- Yes. Even though I was doing many of the things already, I did pick up a few new tips.
- Yes. Great daily reminders that we can make a difference.
- Yes. If we didn't have the game we would have never thought about doing some of the things.
- Yes. It helped propose money/energy saving ideas that I had not originally thought about.
- Yes. It saves money and resources.
- Yes. It was an easy way to provide "easy tips" to be sustainable at home. I think people can be intimidated by the idea and think that it is expensive. There are many small actions that can be taken. You don't have to purchase a Prius to be sustainable.
- Yes. I think it helped quite a few people at Inpro become more sustainable because it made them aware of the ways they are wasting energy and hurting the environment.
- Yes. Inpro supported an activity, Cool Choices, as a way that didn't just bolster corporate sustainability efforts, but helped make the world a better place in encouraging individuals to do the same.
- Yes. It helped show me that little changes can make a big impact on the environment around me.
- Yes... made you think a little more before acting.

#### **No:**

- I don't think it effectively changed anything I was already trying to do.
- I don't think the cards were anything new and eye-opening. Perhaps for some people it may have been more helpful. What would help is a discount on some of those steps.. ie, low flow faucets, showers.. tell us how to do that economically. Rain barrel education would be helpful too.
- No.
- No- I already practiced a great deal of the items.

- Not for me since I already made many of the choices. I may have helped expose other though.
- Not for me. I've always been very conscious about taking care of the environment at all times.

**Other:**

- Again, it made me aware that I was already integrating sustainability.
- Frustrating because not all team members participated, so that pulled our standings down more and more as the game went on. They were not a part of our work group and although we tried to get them to play more, they didn't. Then it's not fun. Find a different way of accumulating points or scores to keep our spirits up while playing/learning. The game length was too long. Two weeks would've been fine - three at the most. Maybe have two segments, like one in the spring and one in the fall to break it up. Remove playing from home on the weekends. Make it Monday-Friday and give options for when a person is on vacation.
- I participated to be a team contributor. I learned a few new things. I'm glad we are finished.
- It's just trying to get a 10 year old boy and 15 year old girl who are my dependents to engage. Not easy.
- Mostly it reinforced what we should do, some of which we were already doing. We do a lot of recycling here already. I've always taken the steps instead of the elevator, drive carefully so as not to waste gas and tried to leave as small a carbon footprint as possible. We conserve water and electricity whenever possible as well.
- Our department has always talked about saving money so this game was perfect for us to learn new ways to lower our energy bills.
- Since I was doing most of these activities it wasn't a big change to my life. I feel some of my co-workers had the opportunity to see new ways of saving money and being more efficient.
- Sustainability has been a part of my life for a number of years as the community we live in fosters programs that we use routinely.
- Sustainability has been part of our daily routine at home; however, the game introduced new/other things we can do to be more sustainable (wrapping pipes near water heater, reviewing hot water settings, adjusting temperature, etc). We've been conserving water for many years and try to be conscious of energy usage too.
- Taught me how to do some simple efficient tips I never would have thought of.
- The game brought several new ideas to my attention. Small steps that can really save resources, money and that really are "common sense." Likewise it reminded me of the things I already do, and can encourage others to do.
- The game made it fun and kept the issue at the front of my mind.
- This initiative made me more aware of how I can do more to keep our planet green for my kids and future generations.
- This was a fun interactive way to integrate sustainability into our lives because we were able to involve ourselves in team activities. We could encourage each other to make changes and were rewarded for them.
- Was already pretty up on sustainability due to information we choose to surround ourselves with at home coupled with our love of the outdoors.

**43) Cool Choices would like to help you and other alumni build on what you have accomplished in the game. Please indicate how interested you would like to stay involved:**

n=97 (multi-response)	n	percent
Connect with Cool Choices alumni online with a computer, tablet or phone	20	20.6
Preview and test new Cool Choices cards and game features	38	39.2
Organize a Cool Choices game as part of another group (school, faith community, book club)	4	4.1
Participate in sustainability-oriented contests and prize opportunities	66	68.0
Other	6	6.2

**Other/comments:**

- I'd rather not continue.
- No need.
- No thanks.
- None.
- None right now.

**44) Cool Choices would like to know whether and how its alumni use the following media. Please indicate your use of each one.**

	don't use	business use only	personal use only	both
email (n=141)	1, 1%	20, 14%	3, 2%	117, 83%
Facebook (n=136)	41, 30%	1, 1%	87, 64%	7, 5%
Twitter (n=135)	92, 68%	12, 9%	21, 16%	10, 7%
LinkedIn (n=139)	51, 37%	55, 40%	8, 6%	25, 18%
Google+ (n=133)	86, 65%	4, 3%	24, 18%	19, 14%
Pinterest (n=134)	75, 56%	0, 0%	55, 41%	4, 3%

**45) Do you have any comments for Cool Choices regarding its game or offerings to alumni?**

- Cool Choices is a fun, innovative way to get people thinking about sustainability and the small ways they can work towards it every day.
- From a "Cool Choices" point of view, I don't get why all the paper cards were printed since they were all on-line. It didn't seem like a cool choice to make. Otherwise I thought the game ran great, even easier than I thought it would be and I think the employees had fun and learned something.
- Fun stuff!
- Fun way to get the whole company involved!
- Good job.
- Great job! The game was fun!
- Great way to make people think!
- I believe a lot of people here played for the points without doing what it said.

- I didn't see the need to have the card deck since everything was available online.
- I felt Inpro did a great job of putting this together and made sure it kept going throughout the whole process.
- I heard some cards played twice. I did not have that experience. Be very clear when sending emails. If you say a card will be up for a certain time make sure it is.
- I only received daily reminder emails for the first few days. It's possible that Inpro's junk filter started filtering them out, but I would have liked to see more email reminders/updates. Also, we really didn't need to have the card decks handed out. The purpose of the game is sustainability but we printed a bunch of decks of cards that were essentially useless? Seems wasteful to me.
- I really don't think the card deck to every participant is necessary. I looked at the deck before the game started and never picked up the smaller deck that was provided. I did everything on line once the game started.
- I think that there are too many "replay" cards that people just kept playing to get their points up - I prefer the ones where you have to come up with a legitimate suggestion or even proof that you did the action listed - I highly doubt that as many people that played the "unplug or recycle your second fridge" actually did it - I, on the other hand, actually have the \$40 check from the action being done.
- I think the process could have been shortened to 2 or 3 weeks and have the same effect. It was mostly repeating previous information.
- I would offer more new cards a couple weeks in. People on my team commented that they were bored with it. I had a little trouble keeping them motivated to play on weekends, etc.
- I would recommend getting rid of the decks of cards - it would be an environmentally friendly choice. Also, have a short video or something similar giving people a preview of how the game works once it starts. Getting the deck of cards ahead of time was a little deceiving (not having access to all the cards in the deck at start) of how it worked once it started.
- It was a little too long, I think if we do it again you should break it up for multiple times of the year.
- N/A.
- Need to give people an opportunity to make up if they miss a day. Our team was down 2 people for 3 weeks due to a family emergency, and they had no way of making up the daily participation. It brought our team down, and the morale went down since we knew we would never win at that point. Didn't make it fair to our group, or others who had the same issues.
- No. (5)
- Sad to see it end - was a lot of fun and each day brought a new idea to implement or keep for future. Very easy to play. The team environment was a motivator and made you feel part of something larger than yourself. I'm so glad our company decided to do it!
- Show fun facts other than when card is played. Some of the facts inspired me to make changes a habit.
- Some of the actions aren't able to do be done and won't cycle through unless played. For example, I have electric heat, there is no furnace fan options and electronic thermostats are not compatible.
- Some of the info links didn't have information attached. I would be happy to learn more about the choices if nice one page bullet point information was provided. I didn't have a lot of time to toggle among websites, so a quick link via the info button could help.
- Sometimes the news feeds are misleading. Once a card appeared stating that it was available until Friday. After Wednesday the card was gone. Would have been nice if the Cool Choices team honored the original working instead of taking it away. Also, the news feed currently states the game will end in 3 days so enjoy playing until 4/11. 4/11 is more than 3 days.
- Still have no idea what the cards were for. To me that was a waste of a resource. Also was not sure if the winning team was the team that had the most choices made OR the team that had the most points.
- Thanks for all the great information on saving energy.

- The game was very fun but I wish it was a little more interactive. It would make it even more appealing to others to join in and become more sustainable.
- The game went on too long for some of the team members. Also they had difficulty playing or remembering to play on weekends.
- The playing cards are a waste of energy.
- This survey is too long.





# MEMO

**DATE**           **July 22, 2014**

**TO**             **Kathy Kuntz, Raj Shukla, and Emily Loew, Cool Choices**

**FROM**          **Ingo Bensch and Karen Koski**

**SUBJECT**       *Cool Choices game for Outagamie County & Town of Grand Chute – post-game survey results*

Outagamie County and the Town of Grand Chute played the Cool Choices game from April 14 through June 7, 2014. Two hundred and seventy-nine of 1,351 employees participated by reporting at least one action. Players organized into 40 different teams.

One hundred and ninety-six Outagamie and Grand Chute players (and some non-players) responded to the post-game survey, representing 70 percent of the game participants. The Energy Center of Wisconsin fielded the online survey during the last week of gameplay and the week following the completion of the game in June 2014. This memo reports the results of that post-game survey.

We have organized the results along the following topics:

- factors that influenced play and social dynamics
- changes in practices and learning
- communications
- miscellaneous reactions and perceptions
- alumni engagement

Full frequency tables by question are attached.

## **Factors that influenced play and social dynamics**

We examined the factors that influenced play in two ways: by examining self-reports on what players said motivated them and by looking for correlations between social dynamics and player activity.

### **Self-reported motivators**

When Cool Choices asked what factors were influential in players' decisions to participate in the game, respondents rated an extrinsic reward (saving money by taking the actions) as the most influential factor, followed by an intrinsic reward (liking the lifestyle changes associated with the actions). The fun of playing, the opportunity to win a prize, encouragement from peers, the appeal of the game, and wanting to win comprised the next most highly rated factors. A sense of obligation was lower on the list.

Table 2 lists these factors in rank order with the average score (based on a five-point scale) given to each factor.

**Table 22: Self-reported influencing factors for playing the game**

<b>Question: How influential were each of the following factors in your decision to play the Cool Choices game? (n=192)</b>	<b>mean</b>
could save money by taking the actions	3.9
liked the lifestyle changes that could come from doing the actions	3.6
it was fun	3.4
might win a gift card	3.2
was encouraged by my colleagues	3.2
Cool Choices made it seem appealing	3.1
wanted to win	3.0
felt obligated as part of my job	2.2

Once people were playing the game, they reported that their choices of what cards to play were motivated mostly by the ability to claim points for actions they were already taking, the environmental benefit, saving money, and the ease of taking a new action. Doing well in the competition and fun were somewhat less important in players' self-reports, while peer influence ranked last, as shown in Table 3.

**Table 23: Self-reported influencing factors for which cards to play**

<b>Question: Please rate the influence each of the following factors had on your choosing the actions you took. (n=185)</b>	<b>mean</b>
was already doing the action	4.2
good for the environment	4.2
save money	4.1
easy to do	4.0
earn a lot of points	3.5
fun to do	3.2
co-workers were doing them	2.5

## **Social dynamics and motivators**

We know from past research that people are not fully aware of the degree to which social dynamics and social norms influence them. To facilitate analysis concerning the connection between social norms and player behavior, Cool Choices asked several questions about the degree to which participants felt encouraged to play the game by peers and what importance the players thought others in their social environment placed on sustainability.

### **Encouragement to play and conversations about sustainability**

As shown in

Table 14, most respondents reported that someone else had encouraged them to play. The encouragement came from all across the county and town—both within the respondent’s team and outside it.

**Table 24: Encouragement to play by peers**

<b>Question: Who encouraged you to play the Cool Choices game? (multi-response, n=195)</b>	<b>% of respondents</b>
team members (other than team leader)	36
team leader	24
management	23
other colleagues	13
someone else/other	6
no one	22

Similarly, the vast majority of participants (87 percent) talked about sustainability at work at least once while the game was active and many (42 percent) talked about it on at least a weekly basis. Participants talked about sustainability at home at the similar rates (89 percent). Not surprisingly, the people with whom participants talk about sustainability tend to be those closest to them (co-workers, immediate family), but some do report extending those conversations out to friends, neighbors, and extended family members.

We explored whether players who perceived encouragement from others to participate or self-reported conversations about sustainability were engaged in the game more actively. As shown in Table 15, the players who recalled being encouraged to play participated at a somewhat higher level than those who did not recall anyone in particular encouraging them to play. Similarly, players who reported engaging in conversations about sustainability seemed to be more engaged in the game.

**Table 25: Player activity by whether player recalled being encouraged to participate or discussed sustainability<sup>15</sup>**

	number of respondents	mean number of		
		total cards played	unique actions taken	new actions taken
Players who felt / did not feel encouraged to play				
not encouraged to play	33	68	38	10
encouraged to play	125	81	42	11
Players who reported talking about sustainability (at home or work) ...				
infrequently (never or “once or twice”)	65	70	38	10
weekly	43	80	43	12
regularly (several times per week or daily)	43	87	45	11

This analysis is limited to respondents who completed the post-game survey and, thus, does not include people who chose not to play the game.

<sup>15</sup> Table includes only post-game respondents for whom we could match responses to scoring data and thus is based on a somewhat smaller number of players than

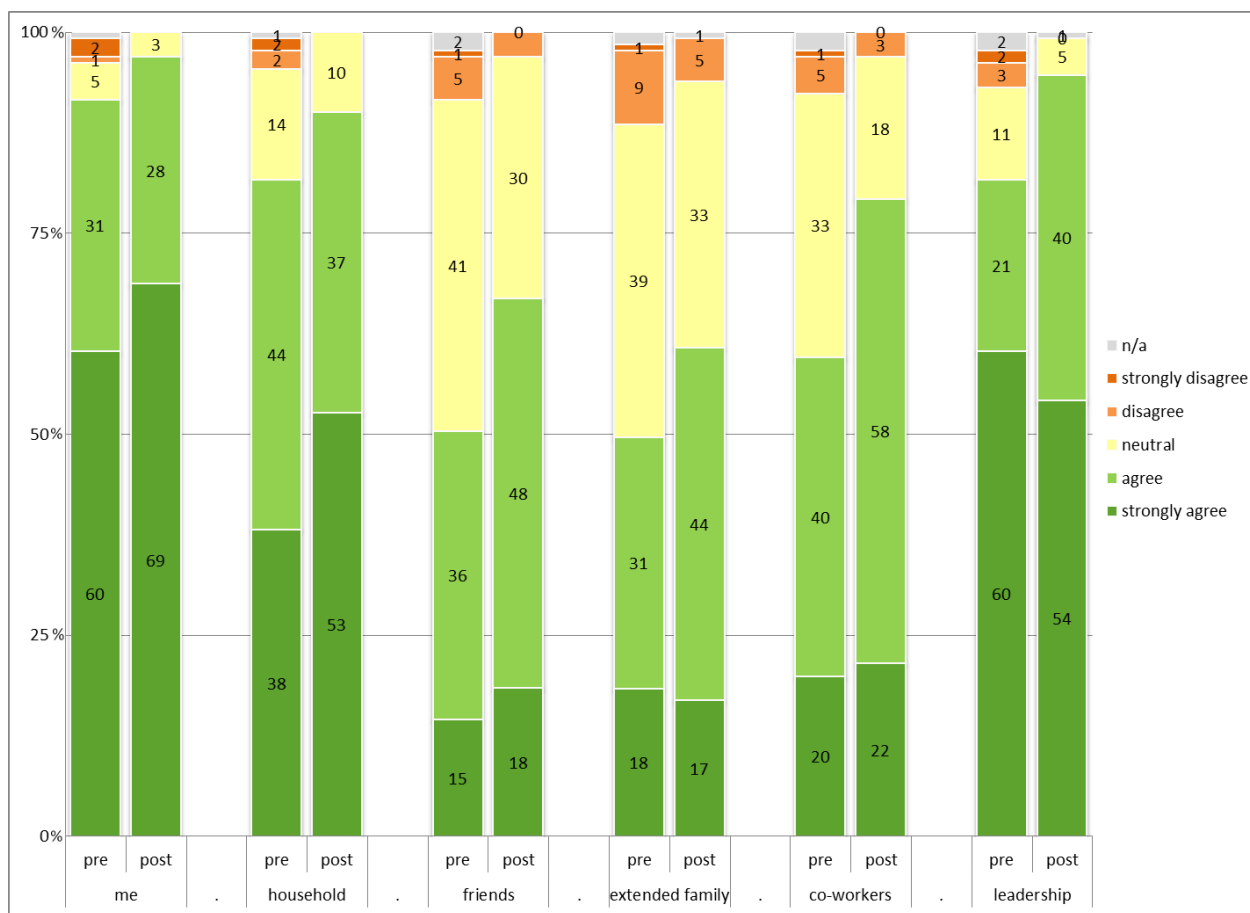
Open-ended comments provided by a few respondents provided a bit of additional insight about what encouraged people to play with several respondents citing e-mail encouragement (presumably from Cool Choices).

### Perceived importance of sustainability

One key metric for Cool Choices is the degree to which players in the game gain a sense that their peers value sustainability. The pre-game baseline included a set of questions about the degree to which respondents value sustainability themselves and how important they think sustainability is to various groups of peers. Those questions were repeated in the post-game survey, and we then compared responses for respondents whose answers we could match across the pre- and post-game surveys.

We did see increases across-the-board in the importance people ascribed to sustainability themselves and their perception of the importance others place on sustainability. Figure 19 shows pre- and post-game responses by peer group being asked about.

Figure 29: Importance of sustainability pre/post game, shown in percentages (n=131)



### Change in practices and learning

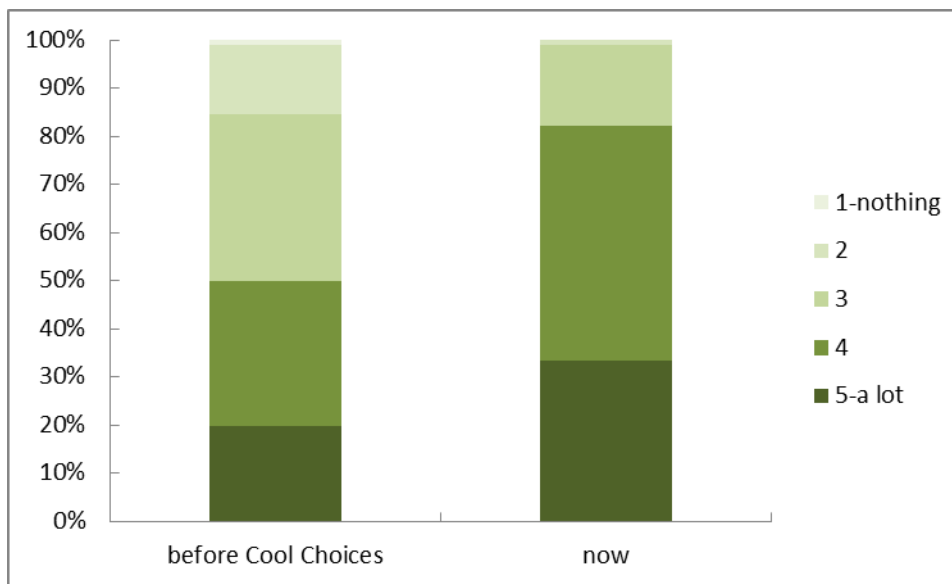
The Cool Choices game cards, in-game competition, and social dynamics during the game are intended to spur sustainable actions. While the scoring data collected by Cool Choices offer a good indicator of

player activity, the post-game survey explored several other measures of player engagement and practices in the post-game survey. These measures included self-reported changes in players' pre- and post-game efforts to save in-home energy, water, and gasoline; the degree to which they learned something new about sustainability; and the actual steps they took when they played one of four actions with potentially high impacts on in-home energy use.

### Self-reported degree of sustainable activity

Respondents reported increased levels of activity in all three facets of sustainability that were included in the survey, as measured by the share of respondents who said they were making substantial effort<sup>16</sup>. Self-reported post-game conservation activity was greater than pre-game activity for in-home energy use (82 percent of respondents vs. 50 percent; see Figure 25), water consumption (73 percent vs. 46 percent; Figure 26), and gasoline consumption (73 percent vs. 41 percent; Figure 27).

Figure 30: Self-reported pre- and post-game effort to reduce in-home energy use (n=188)



<sup>16</sup> We defined substantial effort as corresponding to a 4 or 5 on a 5-point scale that ranged from 1 (no activity) to 5 (a lot of activity).

Figure 31: Self-reported pre- and post-game effort to reduce water use (n=189)

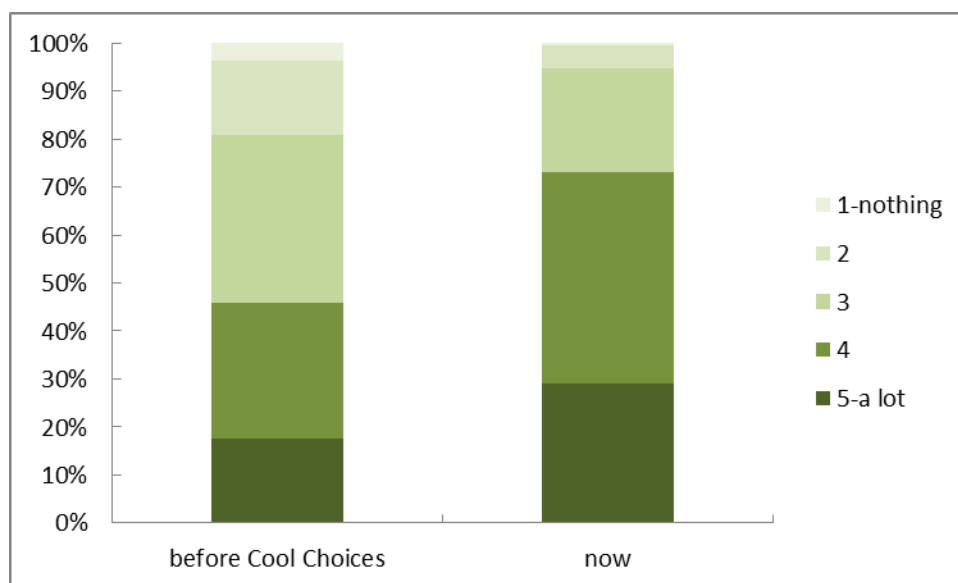
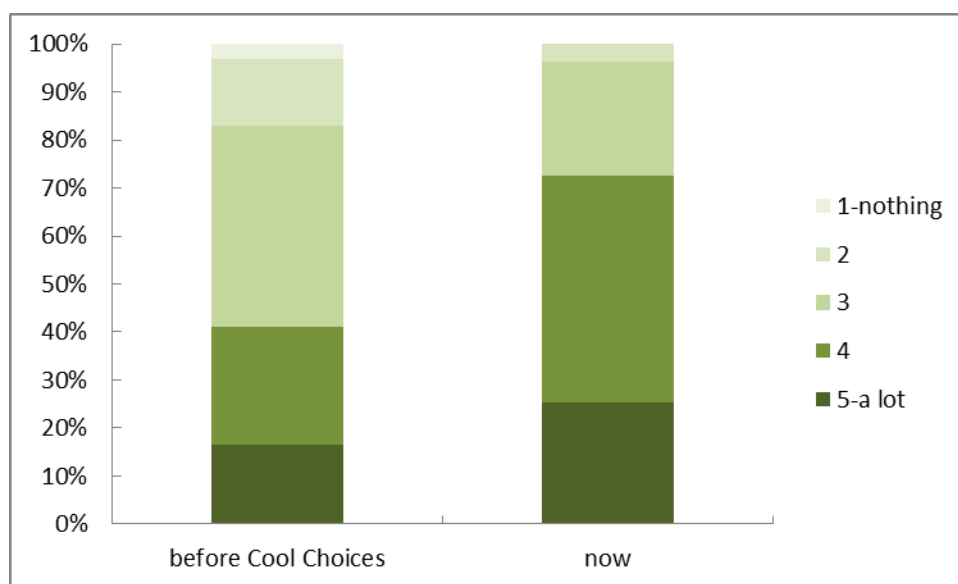


Figure 32: Self-reported pre- and post-game effort to reduce gasoline use (n=190)



### Most meaningful action

When we asked players to indicate the most meaningful new action they took as part of the game, respondents listed many of the actions included in the game cards, as well as a few new insights they picked up. Most of the respondents cited modest, everyday actions, but some respondents also mentioned bigger efforts, including getting a home energy audit, changing their furnace fan settings, and buying new appliances.

### Learning

One intent of the Cool Choices cards is to educate players about actions they can take that they may not have known about or for which they didn't have enough information to make informed judgments.

Respondents told us that the cards presented new ideas to them occasionally (73 percent of respondents), often (19 percent), or always (1 percent), suggesting that the game did educate its players at Outagamie County and Grand Chute.

### Selected high-impact actions

Cool Choices asked respondents if they played any of the following four high-impact actions and then inquired about some details about their pre- and post-game practices:

- changing the furnace fan setting from continuous to auto
- lowering the thermostat setting at night or when no one is home
- unplugging or removing a second refrigerator/freezer
- unplugging or turning off a gaming system.

Table 6 lists the frequency with which respondents reported having played these cards.

**Table 26: High-impact actions reported by the post-game survey respondents**

Action	number of respondents
changed furnace fan setting from continuous (or on) to auto	89
lowered thermostat setting at night or when no one is home	100
unplugged or removed second refrigerator/freezer	46
unplugged or turned off gaming system (PlayStation, Xbox, etc.)	83

As a cross-check, we compared self-reports from the survey with actual card playing from Cool Choices' scoring system for the first of these cards—changing furnace fan settings from continuous to auto. We found inconsistent results in how respondents answered the question about whether they had changed their furnace fan settings and their actual self-reports during the game. Table 7 shows the full results of this comparison.

**Table 27: Comparison of game actions and post-game responses to furnace fan question (n=158)<sup>17</sup>**

Player action during the Cool Choices game	Claimed to have changed furnace fan setting in post-game survey		
	yes	no	total
did not play furnace fan card	3%	6%	8%
played furnace fan card as a pre-existing sustainable action	44%	44%	87%
played furnace fan card as a newly taken action	2%	3%	4%
total	48%	52%	100%

(Percentages shown for 158 respondents for whom we could match post-game survey responses with scoring data.)

<sup>17</sup> Cells in the table are color-coded for consistency between player action during the game and self-report in the post-game survey. Green signifies an accurate response in the post-game survey (i.e., one that is consistent with the player's action during the game). Red signifies an inaccurate response. Gray cells are ambiguous as respondents who claimed points during the game for having switched their furnace fan to "auto" prior to the game could have always had the switch in that position (and never actually moved it), changed the position of the switch prior to the game and answered the post-game survey question as if it pertained only to actions taken during the game, or changed the position of the switch prior to the game and answered the post-game question with a more extensive time period in mind than just the game. As a result, either response to the post-game survey could be accurate for these players.

### **Changing furnace fan setting**

Additional details were asked of post-game survey respondents about their changes to their furnace fan settings. We restricted our analysis of these data to the 72 respondents who had actually played that card according to the scoring system and indicated having done so in the survey. As shown in Table 18, only three of these players had reported the action as newly taken during the game, but post-game survey responses suggest that several of those who indicated they had already switched their furnace fan setting to “auto” were operating it in the “on” setting before the game. Given the inconsistencies between their in-game reporting and their responses on the post-game survey, additional clarification would be needed to determine what change they actually made as part of the game.



**Table 28: Pre-game furnace fan settings by those who played the furnace fan card**

<b>Setting</b>	<b># of players who said the action was new</b>	<b># of players who said the action was pre-existing</b>
"on" year-round	0	9
"on" seasonally, "auto" during the rest of the year	1	16
"auto" year-round, but situationally switch to "on" to circulate air	0	14
"auto" year-round	2	28
don't know / other	0	2
total	3	69

### Changing thermostat settings

Overall the average self-reported thermostat temperature settings decreased when someone was home, sleeping and away (see Table 19).

**Table 29: Temperature setback temperatures reported by the post-game survey respondents (n=86)**

<b>Action</b>	<b>before (mean)</b>	<b>after (mean)</b>
when someone was home and awake	69.3	67.8
when everyone was sleeping	67.1	64.9
when no one was home	66.1	64.1

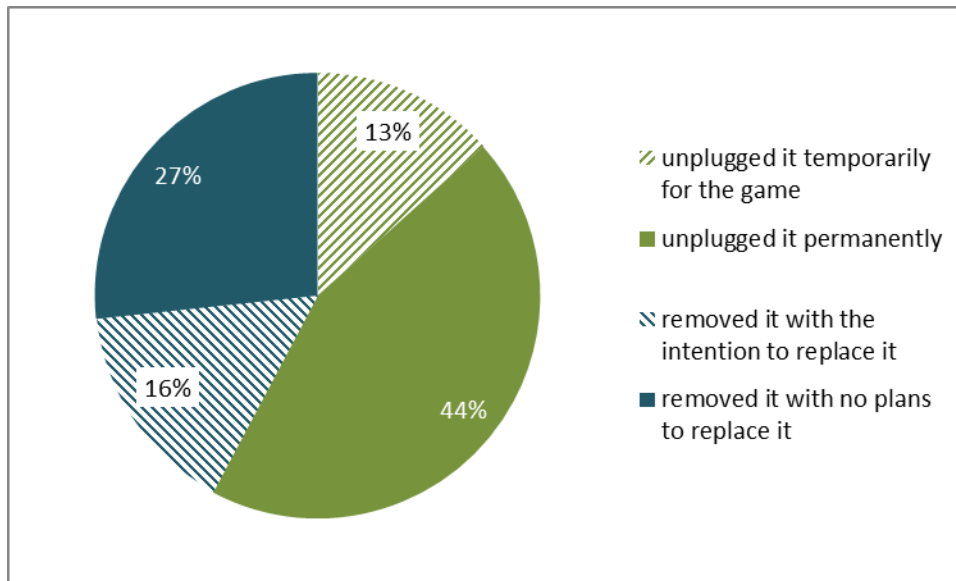
Forty-three percent of respondents who adjusted their temperature did so manually, while the other 57 percent used a programmable feature on their thermostat.

### Refrigerator removal

Twenty-nine percent of respondents who took a second refrigerator or freezer offline reported unplugging or removing a mini-refrigerator, 27 percent unplugged or removed a full-size refrigerator, and 40 percent unplugged or removed a chest or stand-up freezer. (Two respondents indicated that they acted on some "other" sort of unit.)

For more than two-thirds of these players, the refrigerator/freezer was unplugged or removed permanently, while the remaining players intended to plug it back in or replace it. See Figure 33 for full self-reported dispositions and intentions.

**Figure 33: Disposition of refrigerators/freezers**



### Gaming system use

Players who unplugged or turned off their gaming systems during the Cool Choices game reduced the number of hours their systems were plugged in and turned on. The 55 respondents who provided a quantitative estimate of their pre- and post-game hours per week of operation (active or inactive) suggested a dramatic reduction of “on” time for their systems from 72 hours to 10 hours.

### Unclaimed points

About a quarter of respondents took relevant sustainable actions for which they didn’t claim points, particularly for day-to-day actions (i.e. replacing light bulbs, recycling, etc.). Part of this may be due to the repetitive nature of these actions. There were a few respondents who took high impact actions (i.e., adding insulation/air sealing, car-free weekends) for which they didn’t claim points.

### Communications

The post-game survey also inquired about game-related communications, as well as general communications preferences and habits.

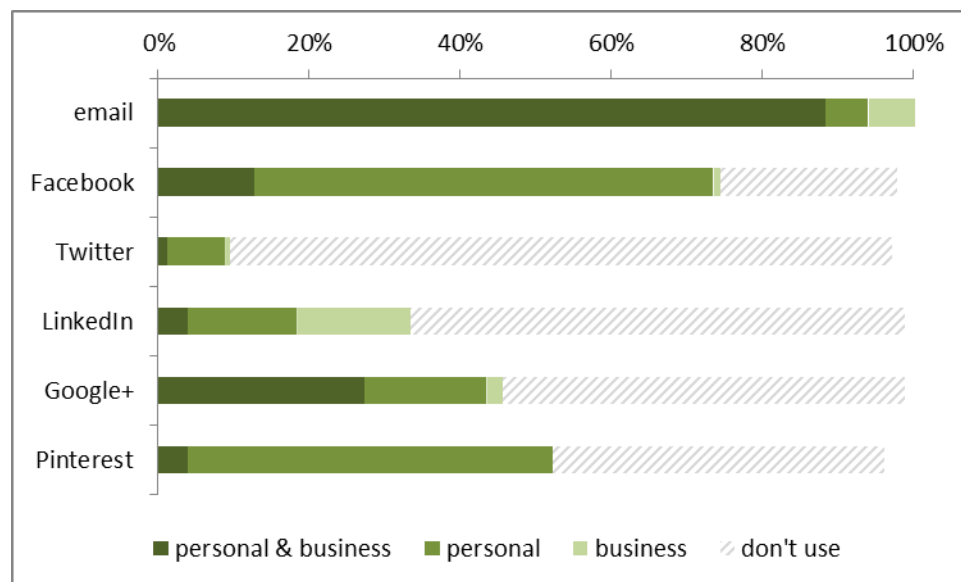
The daily reminder email was the most effective or most preferred method of getting day-to-day information about the game for 87 percent of the respondents. A smaller group of respondents (10 percent) preferred the Cool Choices news feed in the game.

The majority of respondents (83 percent) reported that they got useful tips from the daily reminder at least a few times. The remaining 17 percent of respondent either didn’t get useful tips or didn’t look at the reminder emails.

Respondents most often played the Cool Choices game on a computer, with 89 percent reporting this method. A much smaller number (4 percent) of respondents played the game most often on their mobile device, tablet, or via another means. The remaining eight percent used both equally.

The post-game survey also inquired about whether respondents used various electronic communications and social networking applications. Email use is pervasive for both personal and business use. Three-fourths of the respondents said they use Facebook (mostly for personal use), and about half use Pinterest (for personal use) and Google Plus (for varied use). Use of LinkedIn and Twitter were much lower among this group.

**Figure 34: Use of electronic communications and social networking services (n=183)**



## Miscellaneous reactions and perceptions

In the post-game survey, we asked the respondents how much they agreed or disagreed with a series of statements (see Table 20).

Statements with high agreement ( $\geq 80\%$ ) were:

- All in all, I'm satisfied with my job at Outagamie County/Town of Grand Chute.
- The Cool Choices actions were simple to do.
- Many of the Cool Choices actions were things I'd already done.
- I am more aware of opportunities to save energy since playing Cool Choices.

Statements with mid-to-high-level agreement (50-79%) were:

- I'm proud of the changes I've made as a result of playing Cool Choices.
- Cool Choices feels like a meaningful part of Outagamie/Grand Chute's efforts toward sustainability.
- I learned new things from the Cool Choices cards.
- Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.
- Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used.

Statements with low agreement ( $< 50\%$ ) were:

- My family was enthusiastic about taking the Cool Choices actions.

**Table 30: Level of agreement with various statements (n=183)**

	<b>strongly disagree</b>	<b>disagree</b>	<b>neutral</b>	<b>agree</b>	<b>strongly agree</b>	<b>don't know</b>
The Cool Choices actions were simple to do.	1%	1%	9%	53%	37%	0%
My family was enthusiastic about taking the Cool Choices actions.	3%	7%	56%	22%	4%	0%
I am more aware of opportunities to save energy since playing Cool Choices.	2%	2%	11%	54%	31%	0%
Many of the Cool Choices actions were things I'd already done.	1%	3%	6%	40%	49%	0%
I learned new things from the Cool Choices cards.	1%	5%	14%	56%	22%	0%
Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used.	3%	7%	20%	38%	32%	0%
I'm proud of the changes I've made as a result of playing Cool Choices.	1%	0%	18%	48%	31%	0%
Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used.	2%	5%	16%	44%	32%	0%
Cool Choices feels like a meaningful part of Outagamie/Grand Chute's efforts toward sustainability.	1%	3%	15%	46%	33%	0%
All in all, I'm satisfied with my job at Outagamie County / Town of Grand Chute.	1%	0%	4%	42%	49%	0%

The post-game survey concluded with open-ended questions that gave respondents an opportunity to provide comments and suggestions to Cool Choices. We have included the full set of responses in the attachment. Some of the themes were:

- Eliminating paper cards.
- Shortening the game.
- Improving some of the communications and technical functionality.

\* \* \* \* \*

## Attachment

### Cool Choices post-game survey: frequencies and verbatim responses

<b>1) How often did you play the Cool Choices game?</b>		
	freq	perc
Daily	81	42%
several times a week	98	51%
once a week	3	2%
a few times	6	3%
once or twice	6	3%
Total	194	100%

<b>2) Who encouraged you to play the Cool Choices game? (multi-response)</b>		
	freq	perc
your team leader	46	24%
other team members	71	36%
other colleagues	26	13%
Management	44	23%
someone else/other	12	6%
no one	42	22%
Total	195	

<b>Who encouraged you to play the Cool Choices game? (check all that apply)-other (please specify)-TEXT</b>	
Theme	Verbatim responses
1) emails / Cool Choices	all the emails
1) emails / Cool Choices	cool choices committee email
1) emails / Cool Choices	emailed cool choice reminders
1) emails / Cool Choices	emails
2) self	I wanted to participate
2) self	myself
3) other	boss
3) other	does anyone win?

<b>3) Did you look at the Cool Choices game cards?</b>		
	freq	perc
no, not at all	26	13%
skimmed through them	80	41%
looked at the cards to get a sense of them	65	34%
looked at some cards closely	23	12%
total	194	100%

<b>4) How much were you doing to save energy in your home...</b>				
	before the Cool Choices game started		now	
	freq	perc	freq	perc
1-nothing	2	1%	0	0%
2	27	14%	2	1%
3	65	35%	31	17%
4	57	30%	91	49%
5-a lot	37	20%	62	33%
Total	188	100%	186	100%

<b>5) How much were you doing to save water in your home...</b>				
	before the Cool Choices game started		now	
	freq	perc	freq	perc
1-nothing	8	4%	1	1%
2	29	15%	9	5%
3	66	35%	40	22%
4	53	28%	82	44%
5-a lot	33	18%	54	29%
Total	189	101%	186	100%

6) How much were you doing to save gasoline...				
	before the Cool Choices game started		Now	
	freq	perc	freq	Perc
1-nothing	8	4%	0	0%
2	26	14%	8	4%
3	79	42%	44	24%
4	46	24%	88	47%
5-a lot	31	16%	47	25%
Total	190	101%	187	101%

7) How influential were each of the following factors in your decision to play the Cool Choices game? (5-point scale; 192 respondents)	
	mean
could save money by taking the actions	3.9
liked the lifestyle changes that could come from doing the actions	3.6
it was fun	3.4
might win a gift card	3.2
was encouraged by my colleagues	3.2
Cool Choices made it seem appealing	3.1
wanted to win	3.0
felt obligated as part of my job	2.2

**Verbatim question 8: If there were other significant motivators that prompted you to play the game, please tell us about them here.**

If there were other significant motivators that prompted / you to play the game, please tell us about them here.	
Theme	Verbatim responses
competition	Friendly competition with co-workers.
competition	friendly office competition
competition	I thought it was cool how the entire County was involved, not just my department. I also loved that we were doing it with the town of Grand Chute - it made it feel like a fun competition and friendly rivalry :)
competition	Just wanted my team to win....or move up in the ranks.
competition	Like competition
competition	team competition
interesting/learning	Instead of just selecting a card, you were given information explaining your choices or potential choices which was helpful and interesting to learn.
interesting/learning	Interesting to see new cards each week

interesting/learning	It was a great way to get additional ideas of how to save money, water, [energy] and costs in general.
interesting/learning	Raised my awareness of energy saving
interesting/learning	There were some ideas presented that I hadn't really thought of as ways to conserve (energy/money/resources) - some I had already been doing, and some that were new to me. It was a good learning experience about what I can do to reduce my environmental footprint.
none	I already filled out this survey yesterday. There were no motivators-- chances of winning a prize were none. / It was [basically] assigned to us as to get a team for our office.
none	None
none	This was really kind of boring. I mean it's a nice way to look at your home and yourself and evaluate how you use energy, but wasn't really exciting to play. There was nothing else motivating me to play.
none	Took survey and don't know if people won the game
other	A nice reminder to make "Cool Choices"
other	Discovered I was leading and others were childish made me uneasy but stern. I am very frugal!
other	Prizes always work
other	The cool choices that are easy to make, especially once you know it saves gas/electricity/water etc. such as only using car air conditioning at 40 mph or more.
other	The daily reminders via email were helpful to continue with the game on a busy schedule.
sustainability/energy/envt	Felt it was important to be educated about energy-saving
sustainability/energy/envt	I am trying to live a cleaner lifestyle and have a small foot print.
sustainability/energy/envt	I believe we need to reduce our wasteful / Use of natural resources. I wanted to learn of news ways to reduce my use of water, gas , etc. I believe that global warming is real! / / / / /
sustainability/energy/envt	I try to be conservation conscious but admit that when life gets busy, I at times am less conscientious as I'd like to be.
sustainability/energy/envt	impact on future generations, including my children, and potential grandchildren ...
sustainability/energy/envt	I've been recycling and composting for many years. I like the feeling I get when I don't waste money and resources.
sustainability/energy/envt	Just feel it is important to try to [conserve] resources
sustainability/energy/envt	Just getting new ideas on "being green", and a fun activity to do at work for a minute or two in the morning.
sustainability/energy/envt	liked knowing the cumulative financial effect. feel like making some changes has a positive effect on the environment.
sustainability/energy/envt	Overall I believe in recycling and trying to be sustainable as much as possible anyways, so I was willing to work with this program.
sustainability/energy/envt	Saving Energy and Resources along with saving money.
sustainability/energy/envt	Since I work in the environmental field, I felt it was extremely important to participate in the challenge. "Walk the walk and talk the talk" as they say.



sustainability/energy/envt	The little tips to save the environment
sustainability/energy/envt	To help preserve our beautiful planet.
team	just wanted to help the team
team	I liked the feeling of teamwork with my colleagues. It was fun to discuss our progress each day and see what choices everyone else was making.
team	joining with co-workers
team	Wanted to be a part of the team and bring about environmental friendly change in the workforce and in my home.
team	Was a good team exercise at work. As a leader I felt obliged to be a good example.

<b>9) While the Cool Choices game was active, how often did you talk about sustainability at work?</b>		
	freq	perc
Daily	2	1%
several times per week	32	17%
Weekly	45	24%
once or twice	88	46%
Never	24	13%
Total	191	100%

<b>10) While the Cool Choices game was active, how often did you talk about sustainability at home?</b>		
	freq	perc
Daily	7	4%
several times per week	26	14%
Weekly	47	25%
once or twice	90	47%
Never	21	11%
Total	191	100%

<b>11) Whom did you talk with about sustainability? (multi-response)</b>		
	freq	perc
teammates	127	66%
other work colleagues	94	49%
spouse	125	65%
kids	70	37%
extended family (parents, brothers or sisters)	40	21%
friends	40	21%
neighbors	14	7%
no one	5	3%
total	191	

<b>12) Who at work talked about their Cool Choices experiences with you? (multi-response)</b>		
	freq	perc
teammates	130	68%
other colleagues	79	41%
no one	31	16%
total	191	

**Verbatim question 13: What was the topic of your most memorable conversation at work about sustainability?**

What was the topic of your most memorable conversation at / work about sustainability?
Verbatim responses
A conversation stating if everyone did just one sustainable choice each day or week, the amount of energy that would be saved is amazing and the positive impact it would have on our [environment].
About sleep modes on computers and also about not using the a/c for going under 40mph. I did not know these things before
analyzing electrical use (counting the number of items plugged into electrical outlets in the home)
Basically just what team members were doing and which cards they were playing. People considering changing life long habits.
bathroom towels- too short, so we take double towels- mentioned to [maintenance] when we first got the automatic machines, but no change. Prefer the no automatic towel dispensers
Being able to contact the company who will come in and do a check on my home's use
Best way to save on water usage.
Biking or walking to work.
Carpooling with another team [member]
Changing lighting in the offices
Choosing a name
Coming up with creative ways to be able to play higher point cards like flying for a conference and

calling it public transit.
computer topics- on vs off
Computers and saving energy -- shutting them down at night
Conversation about some of the little changes that can be made .
Cost savings of some of the recommendations.
Different ways to save energy or recycle at work.
Discussing the amount of paper used in this job, ways to conserve
Discussion on the use of air conditioning, water usage in showers and laundry, [especially] when kids are involved.
Discussion with teammate that installed insulated toilets when she built her new home.
don't remember. had lots
Driving habits
Driving habits / water usage
Driving habits and how they have changed.
energy
energy audit
Energy conservation
energy conservation techniques
finding a water barrel
Getting away from the TV and having some family time.
Hanging out laundry
Hope a 4 day work week could help save fuel and work and in our vehicles.
hoping no one walked in while taking a picture in the bathroom saving water at the sink
Hot water heaters
How a little change could save [a lot] of water or energy. Like time of use or changing your shower head.
HOW MANY PEOPLE DRINK AND THROW AWAY PLASTIC BOTTLES!
How much money was saved with doing the actions in your home.
how often the rules changed.
How to get everyone involved.
How to save money by having the company come in and change your faucet/shower head.
How to save money in the different areas
how to save water at work
I don't think we've had any really memorable [conversations], but have talked about how much easier it is to make choices when you know how much it saves in electricity, gas etc.
I think I learned more from the information on the cards.
LED [light bulbs] and the energy audit.
less waste, [recyclables]
Lights, water, etc
Looking forward to Cool Choices being over.
N/A
N/A

NA
New ideas from the cards. /
none
not memorable
Not realizing how much we are wasting electricity with everything we have plugged in
Not using plastic utensils. There has often been some issue with using utensils that are plastic (very expensive, bad for the environment, and wasteful). We went to purchasing inexpensive silverware, but in the end we all now use our own utensils and wash them after using them. We also compost our food scraps the last few years. This has been fun, and now some other coworkers do it at home.
Nothing really sticks out
Old appliances
Pictures taken
Plastic # 5 [recycling] in our [break room].
Play cards to beat other teams
Rain Barrels
recycling
recycling
recycling
Recycling
recycling and how to save paper
Recycling More
Recycling old equipment
reducing the amount of paper used.
Saving cost of gasoline
Saving energy
saving energy by working from home one day per week
Saving energy through different/sustainable building materials
Saving gasoline with better driving habits
saving money
Saving Water
Saving water with Paul Farrell on the toilet
Saving water.
Sharing ideas for conserving
Someone else winning and they want to see actions. They don't believe because [their] own insecurities in the game and life and [their] job.
Someone said that there is a place in Appleton that [recycles] yogurt containers. We now have a recycle bag for this in our kitchen.
speeding when driving
Taking part in the energy efficiency program offered through WE energies.
Taking time to look for ways to increase sustainability
Talking about getting new energy star appliances and how they actually do save substantial amount of money over time. We all thought it was a great argument for getting new appliances at home.

Talking with a co-worker about auto setting on thermostat.
temperature control in the building. It is way too cold in here, unnecessary energy and money spent on air conditioning.
That using any card counted, not just the top scoring cards.
That we moved up in rank.
The fact that I rode my bike 4 or 5 different times over one weekend when I normally would have taken my car.
The fact that suggestions for sustainability that were made 5 years ago have not been acted on.
The number of activities we, as a staff, already do in our own homes.
The only conversation that was had was about someone having focus on energy come to [their] home.
The rain barrels
The significance of small actions over time on the bottom line (ex. turning off computer at night).
The team photos. /
Things that we were already doing, and how easy it would be to make some changes.
toilet paper usage
toilets
Turning lights off.
Turning off electric equipment when not using it.
turning off water while brushing teeth
Using reusable bags in all stores rather than taking plastic bags, rather than just the grocery store. /
Using reusable containers, plates silverware etc as part of luncheons
Using the [dishwasher] versus hand washing.. air conditioner in car only if going over 40
Usually what we could do to get more points
water saving toilets
ways to save water
Ways to saving electric and heating costs in our home.
We discussed rain barrels and where to find them.
We found it interesting that eating meatless meals would be a cool choice.
We joked with a teammate who recently moved that she should be able to make the 'new toilet' and 'get rid of old refrigerator' choices since she did both of those things by selling her home and moving into a new one. / / We also discussed the feasibility of riding a bike to work for some of us who live in outlying areas. It is something I would consider if there were a safe route for me to take, but there really isn't.
We just turned off lights more often when leaving rooms
What it might be like in twenty years if we all don't take this seriously
what to name the team.
When someone came to your house to check to see when you could be more efficient with energy and water consumption
When we made the team we talked about what we already were doing in our lives to make cool choices, and joked around about team name ideas for a little bit.
[Winning] the Team picture that was very funny.

**Verbatim question 14: What was the most memorable experience you had playing the game?**

What was the most memorable experience you had playing the / game?
Verbatim responses
1. Learning some fun facts / 2. Winning a coffee mug
70 mph to 55...saving 25% in fuel
Beating out the other team!
Being able to access the game at home on the weekend.
Being able to sign up for the focus on energy home assessment
Being more aware of what I can change at home
being rallied by people on my team more competitive than I.
Biked to work. Should be more than 10 points!!!
checking the 'gallongage' in my shower
climbing into a dumpster to have our team photo taken
Climbing into the dumpster to have a team photo taken.
Climbing into the dumpster to take our team photo
Competing with teammates
Contacting Focus on Energy about an evaluation of my home.
Didn't realize that air conditioning made such a big difference when driving at lower speeds
Discovering how much tap water a person can drink to total 99 cents.
Everything
Feeling obligated to play, but I wanted to win a prize, which I didn't yet.
Finding out I already do a lot to conserve energy and resources.
Focus on Energy came to my home and installed energy efficient bulbs and low flow showerheads! [For] FREE:)
Frustration about lack of specific instructions for forming teams.
Fun to watch all of the teams and how much they were following the game.
Getting a large number of points for something I had done.
getting a State Park sticker!!
Having fun encouraging others to play
Having to play everyday
Helped to think more about making good choices.
Home energy audit getting CFL lightbulbs and recycling old [fridge]
How much everyone thinks about it.
I don't think I experienced anything
I just liked getting new ideas on how to make cool choices, and it is a reminder to me to get my composting bin going at home that's been on my "list" of things to do. It reminded me more daily of things to do to be more environmentally conscious. Also, won a gift card that I am excited to use one of these days!
I liked the facts after you played a card.
Information received with making each cool choice
it was a nice break from the work [routine].....and learned some new information along the way
it was fun to work together as a team with other coworkers

just learning from the various cards, statistics, etc.
Just the opportunity to learn more
Just the sheer number of activities that I had already been doing before playing the Cool Choices game.
Learning about the use of my A/C while driving under 40mph.
Learning all the different ways you can be active in improving our environment; all the cleaning products you can make from natural ingredients; and being aware of the different things you didn't realize you did when driving.
learning fun facts
like to do the activities with the most points [possible]. Gets me thinking about ways to be more sustainable.
listening to others be competitive
made me aware of things to watch closer. Instead of just turning the washer on, I make water choices, etc.
N/A
N/A
N/A
N/A
NONE
None
none
Not sure
nothing
Nothing in particular, just interesting reading the facts listed on the cards.
Nothing really....
nothing-it was annoying having to sign in every day and not having your information remembered for log in. But it did get me to plant a 4 x 4 garden.
Our team picture and having fun coming up with a theme
Photo challenges
photo week
picking my choices
Picture
Picture of team
Pictures, but they were difficult for me with different technology
Planting a garden
Reading the cards
[Reading] the information
realizing how much you can conserve
Realizing that I can make a difference by what I choose to do.
Realizing that making simple choices and changing a little of my lifestyle I can save money.
realizing what a difference it was to avoid A/C in my car under 40mph.
remembering to play on weekends

reminding myself that I was saving money and earning points while other drivers passed me on the highway.
same as above
Seeing our team move up in rankings - from 20th to 19th place. :0 It wasn't a meaningful move for the outcome of the game, but for our small team it felt like a huge victory!
Seeing the funny group pictures
Seeing the pictures in our company newsletter.
Seeing the pictures of the teams and what costumes they came up with.
Taking a group photo for the photo challenge.
Taking a picture of a teammate
Taking the photo of the team
taking the photos and trying to figure out how to get them into the game really stressed me out
Taking the photos for the photo card challenges
taking the team picture
Team photo was fun.
team picture
Team pictures
Team pictures
Team pictures
the cards being played
The cards relating to saving gas.
The educational aspect of it.
The eye opener of how much further my gas has been lasting by changing my driving habits (being more conscious of jack rabbit driving and trying to time speed limits between traffic lights to eliminate the need for slowing down and speeding up again).
The Focus on Energy appointment
The fun of comparing things other did that I may have not noticed.
The idea to gauge the shower flow, obvious.
The learning tips and tools associated with the choices.
The team photo challenge!
The team picture
The team picture to upload to Facebook.
The type of people who didn't play.
They all were
Thinking more about how much water is wasted when you don't turn it off when brushing teeth or rinsing dishes; or how excess weight in a vehicle can change your fuel efficiency.
Thinking of creative ways to be sustainable also expressing them through pictures.
To be honest, I don't have just one. However, I really enjoyed how the game explained how much [energy] is saved with by doing each activity.
Trying to figure out the rules and trying to figure out how people had time to come up with their creative pictures.
Trying to motivate the "[Occasional] Players" on our team.
Watching co-workers climb into a dumpster for a picture.



Watching our team daily increase their playing efforts
watching the maintenance team crawl in the dumpster.
Watching the points and actions add up.
Winning a gift card
winning best team once
Winning the Trophy!!
won a gift card

<b>15) How frequently were the Cool Choices cards new ideas for you?</b>		
	freq	perc
Always	2	1%
Often	35	19%
Occasionally	137	73%
Never	13	7%
total	187	100%

<b>16) What was the most effective or your preferred method of getting day to day information about the game?</b>		
	freq	perc
Cool Choices newsfeed in the game	19	10%
daily reminder email	161	87%
other	6	3%
total	186	100%

<b>17) Did you look at the newsfeed while playing the game?</b>		
	freq	perc
yes, often	38	20%
yes, a few times	79	42%
no	69	37%
total	186	100%

<b>18) Did you get useful tips from the daily reminder emails?</b>		
	freq	perc
yes, often	25	14%
yes, a few times	127	69%
no	24	13%
did not look at the reminder emails	8	4%
total	184	100%

<b>19) Have you ever heard of the Focus on Energy program?</b>		
	freq	perc
yes	130	70%
no	55	30%
total	185	100%

<b>20) Were you aware of the Focus on Energy program before the game? <i>(asked only if ever heard of Focus on Energy)</i></b>		
	freq	perc
yes	108	84%
no	14	11%
don't know	6	5%
total	128	100%

<b>21) Had you ever used any of Focus on Energy's services or rebates before playing the game? <i>(asked only if ever heard of Focus on Energy)</i></b>		
	freq	perc
yes	69	64%
no	36	33%
don't know	3	3%
total	108	100%

<b>22) Do you recall hearing of any Focus on Energy offerings as part of the game?</b>		
	freq	perc
yes	84	65%
no	46	35%
total	130	100%

<b>23) Had you ever used any of Focus on Energy's services or rebates before playing the game? <i>(asked only if ever heard of Focus on Energy)</i></b>		
	freq	perc
yes	51	61%
no	33	39%
don't know	0	0%
total	84	100%

<b>23) Had you ever used any of Focus on Energy's services or rebates before playing the game? <i>(asked only if recall hearing of any Focus on Energy offerings during game)</i></b>		
	freq	perc
yes	51	61%
no	33	39%
don't know	0	0%
total	84	100%

<b>24) Did you use any Focus on Energy services or rebates while playing the Cool Choices game? <i>(asked only if recall hearing of any Focus on Energy offerings during game)</i></b>		
	freq	perc
yes	20	24%
no	62	74%
don't know	2	2%
total	84	100%

<b>25) Where did you most often play Cool Choices?</b>		
	freq	perc
on a mobile device	3	2%
on a computer	163	89%
used both equally	14	8%
other	4	2%
total	184	100%

**26) Please rate the influence each of the following factors had on your choosing the actions you took? (5-point scale; 185 respondents)**

	mean
was already doing the action	4.2
good for the environment	4.2
save money	4.1
easy to do	4.0
earn a lot of points	3.5
fun to do	3.2
co-workers were doing them	2.5

**Verbatim question 27: If there were other significant motivators that prompted you to play the cards you did, please tell us about them.**

If there were other significant motivators that prompted / you to play the game, please tell us about them here.	
Theme	Verbatim responses
competition	Friendly competition with co-workers.
competition	friendly office competition
competition	I thought it was cool how the entire County was involved, not just my department. I also loved that we were doing it with the town of Grand Chute - it made it feel like a fun competition and friendly rivalry :)
competition	Just wanted my team to win....or move up in the ranks.
competition	Like competition
competition	team competition
interesting/learning	Instead of just selecting a card, you were given information explaining your choices or potential choices which was helpful and interesting to learn.
interesting/learning	Interesting to see new cards each week
interesting/learning	It was a great way to get additional ideas of how to save money, water, [energy] and costs in general.
interesting/learning	Raised my awareness of energy saving
interesting/learning	There were some ideas presented that I hadn't really thought of as ways to conserve (energy/money/resources) - some I had already been doing, and some that were new to me. It was a good learning experience about what I can do to reduce my environmental footprint.
none	I already filled out this survey yesterday. There were no motivators-- chances of winning a prize were none. / It was [basically] assigned to us as to get a team for our office.
none	none
none	This was really kind of boring. I mean it's a nice way to look at your home and yourself and evaluate how you use energy, but wasn't really exciting to play. There was nothing else motivating me to play.

none	Took survey and don't know if people won the game
other	A nice reminder to make "Cool Choices"
other	Discovered I was leading and others were childish made me uneasy but stern. I am very frugal!
other	Prizes always work
other	The cool choices that are easy to make, especially once you know it saves gas/electricity/water etc. such as only using car air conditioning at 40 mph or more.
other	The daily reminders via email were helpful to continue with the game on a busy schedule.
sustainability/energy/envt	Felt it was important to be educated about energy-saving
sustainability/energy/envt	I am trying to live a cleaner lifestyle and have a small foot print.
sustainability/energy/envt	I believe we need to reduce our wasteful / Use of natural resources. I wanted to learn of news ways to reduce my use of water, gas , etc. I believe that global warming is real! / / / / /
sustainability/energy/envt	I try to be conservation conscious but admit that when life gets busy, I at times am less conscientious as I'd like to be.
sustainability/energy/envt	impact on future generations, including my children, and potential grandchildren ...
sustainability/energy/envt	I've been recycling and composting for many years. I like the feeling I get when I don't waste money and resources.
sustainability/energy/envt	Just feel it is important to try to [conserve] resources
sustainability/energy/envt	Just getting new ideas on "being green", and a fun activity to do at work for a minute or two in the morning.
sustainability/energy/envt	liked knowing the cumulative financial effect. feel like making some changes has a positive effect on the environment.
sustainability/energy/envt	Overall I believe in recycling and trying to be sustainable as much as possible anyways, so I was willing to work with this program.
sustainability/energy/envt	Saving Energy and Resources along with saving money.
sustainability/energy/envt	Since I work in the environmental field, I felt it was extremely important to participate in the challenge. "Walk the walk and talk the talk" as they say.
sustainability/energy/envt	The little tips to save the environment
sustainability/energy/envt	To help preserve our beautiful planet.
team	just wanted to help the team
team	I liked the feeling of teamwork with my colleagues. It was fun to discuss our progress each day and see what choices everyone else was making.
team	joining with co-workers
team	Wanted to be a part of the team and bring about environmental friendly change in the workforce and in my home.
team	Was a good team exercise at work. As a leader I felt obliged to be a good example.

**Verbatim question 28: What was the most meaningful new action you took as part of the game?**

What is the most meaningful new action you took as part of / the game?	
Theme	Verbatim responses
analysis/paying attention	Analyze my home water and electricity usage
analysis/paying attention	Analyzed energy use at home.
analysis/paying attention	awareness, water, [electricity], car usage
analysis/paying attention	Being aware of what products I'm using, my driving habits and a variety of information about things I was not aware of.
analysis/paying attention	checking gas mileage
analysis/paying attention	did some [comparisons] between our home and our cabin and thought of ways to be more economical
analysis/paying attention	I have to be more aware of my driving. I need to continue to work on driving in a more efficient way.
analysis/paying attention	just becoming more aware of the environment.
analysis/paying attention	Just being more aware of the water, fuel and energy that we use.
analysis/paying attention	Just being more conscious every day of things to do to help preserve the environment, such as trying to use less water. I already have been doing [a lot] of these things, but the cool choices is an incentive to make even better choices concerning our environment.
analysis/paying attention	just remembering to do things that you know you should be doing - ie turning off lights, combining errands etc
analysis/paying attention	More aware of idling the car in cold weather
analysis/paying attention	reviewing home water and electricity consumption
analysis/paying attention	Talking to my family about the facts in the game. It helps to motivate all of us to know how much of a difference doing something a little differently can make.
analysis/paying attention	Thinking each day about how to save energy.
analysis/paying attention	Took [more] time to focus on saving resources
analysis/paying attention	Visit from Focus on Energy to my home.
analysis/paying attention	water use analysis and trash analysis
general comment	Reminders are always good.
general comment	visit a local park
home energy action	adjust computer settings at home to turn off the monitor after three minutes of non-use.

home energy action	Adjusting my [refrigerator]/freezer temperatures
home energy action	Bought some [LED light bulbs]
home energy action	[Convinced] spouse to turn off home computer and monitor when not in use
home energy action	energy audit. we changed our showerheads and some light bulbs as a result.
home energy action	Focus on Energy
home energy action	focus on energy gave us [LED] and compact [bulbs] and low flow shower heads
home energy action	have been unplugging appliances when not in use
home energy action	I became far more aware of things such as leaving lights on or letting water run. I also took shorter showers and started to unplug appliances I wasn't using such as toaster, blender etc....
home energy action	low flow shower heads
home energy action	Making [conscientious] decision to turn off computer when not in use
home energy action	New appliances for kitchen
home energy action	New refrigerator
home energy action	Reducing time in the shower.
home energy action	Replaced all our light bulbs in our home.
home energy action	Resetting brightness on TV's
home energy action	Starting the summer with the A/C running no cooler than 78 and keeping east and south window coverings closed.
home energy action	Taking shorter showers.
home energy action	Teaching kids at home to turn off game console and television
home energy action	turn off computers more often
home energy action	Turn off electronic equipment when not in use.
home energy action	turn off monitors when not in use.
home energy action	turned temps on fridge / freezer down - purchased energy star appliances
home energy action	Turning off tv more often when not watching or leaving room

home energy action	Unplugging appliances/electrical devices when not in use.
home energy action	Utilizing the focus on energy program
multiple types of actions	Changed driving [habits] and more closely focused on [turning] items off when not using them.
multiple types of actions	purchasing new energy and water efficient appliances.
multiple types of actions	Recycling as much as possible. Using LED lights and weatherizing the home.
multiple types of actions	Reducing water consumption and keeping air/heat warmer/cooler than we had in the past.
multiple types of actions	turned our furnace fan to auto....the dealer told us it doesn't take [a lot] of electricity to run it all the time, and that it's better for air circulation. I'll have to compare next winter to see the difference. / also turned AC off in the car and rolled down windows under 45 mph
multiple types of actions	Turning the water temperature down at our house and not speeding.
none	Haven't actually changed much. Was already doing it all.
none	no new actions taken
other	More wellness activities in my life.
other	Pic of my retrofitting toilet and both rain barrels
other sustainability action	Composting
other sustainability action	Helped my son and his family plant 10 new trees.
other sustainability action	I always drink water from the tap now.
other sustainability action	I NOW USE [A LOT] LESS WATER BOTTLES
other sustainability action	Keeping canvas shopping bags in my car so when I go shopping I don't have to use plastic or paper bags.
other sustainability action	My gardens! Im totally pumped on it!
other sustainability action	Plant a garden
other sustainability action	planted a raised 4 x 4 garden--now I can use all the water I saved brushing my teeth and bathing to water the garden.



other sustainability action	Recycling yogurt containers.
other sustainability action	Stopped buying water in plastic bottles and went back to using my reusable bottle and bringing water from home.
transportation	air pressure on my tires
transportation	Attempting to not jack rabbit drive as much.
transportation	Bought a bike.
transportation	carpooling
transportation	don't run the a/c in the vehicle for in-town driving
transportation	Drive slower.
transportation	driving habits
transportation	Driving habits
transportation	gas efficiency
transportation	getting better gas mileage
transportation	I was a rabbit driver before the game and am not now.
transportation	Jack Rabbit Driving
transportation	Less idle times in the car
transportation	less idling...turned the vehicle off instead of letting it run and waiting...
transportation	limiting use of air condition while city driving
transportation	More effective gasoline consumption which affects my budget and contributing on saving fossil fuels.
transportation	No idling of my car. I really had thought that it was ok if it was only for a little bit.
transportation	Not speeding, which saves on gas and not getting a speeding ticket.
transportation	Not using a/c when driving under 40mph and no idling!
transportation	Really watching my speed when I drive and not [turning] the air conditioner on under 40 mph.
transportation	Reduce air conditioning when driving under 40 MPH.
transportation	Reduce gas consumption
transportation	Reduce idling. I did not realize the impact of [idling]. Prior to cool choices, I let my car idle when I went in and out of daycare for dropping off and picking up kids. I no longer do this and I am much more aware of other times when I am idling and I shut my car off to avoid this when appropriate.
transportation	Shutting off the car rather than sitting idling for extended periods.
transportation	slowing down on the freeway
transportation	Smarter with car use
transportation	Trying to drive without air conditioning when going under 40 miles an hour.
transportation	Turn off air conditioner while driving slower speeds
transportation	Turning AC on above 40
transportation	turning off A/C under 40mph
transportation	watching how much fuel I use
water	Changing faucets, water heads insulating water heater

water	Installed a rain barrel at home.
water	Installing a rain barrel to water the garden.
water	Rain barrel
water	replacing my toilets at home
water	turning the water off while brushing teeth and washing dishes.....i used to let it run the entire time.
water	water usage savings

<b>29) Did you make any changes in the following settings and routines during the game? (multi-response)</b>	
	freq
changed your furnace fan setting from continuous (or on) to auto	89
lowered your thermostat setting at night or when no one is home	100
unplugged or removed second refrigerator/freezer	46
unplugged or turned off gaming system (Playstation, Xbox, etc.)	83

<b>30) Which of the following best describes how often you kept your furnace fan on the "on" (circulating air) setting before the Cool Choices game? (asked only if indicated changing setting to auto)</b>		
	freq	perc
"on" all the time year round	11	12%
"on" some parts of the year; "auto" during the rest	23	26%
"auto" most of the time, but "on" situationally to circulate air	19	21%
"auto" all the time year round	32	36%
don't know	3	3%
other	1	1%
total	89	100%

**31) To lower your home's temperature at night or when you are away, did you adjust the thermostat manually or use programmable features your thermostat may have? (asked only if indicated setting back temperature)**

	freq	Perc
adjusted temperature manually	43	43%
used programmable features	57	57%
total	100	100%

**32-34) At what temperature did you tend to keep your home during this past winter when...? (asked only if indicated changing thermostat setting)**

		before Cool Choices	after Cool Choices
someone was home and awake	mean	69.3	67.8
	median	70.0	68.0
	range	57 - 87	57 - 85
	n	94	95

everyone was sleeping	mean	67.1	64.9
	median	67.0	65.0
	range	50 - 87	2 - 87
	n	95	96

no one was home	mean	66.1	64.1
	median	65.0	65.0
	range	50 - 87	50 - 85
	n	95	95

**35) What type of refrigerator or freezer did you unplug or remove from your home? (asked if indicated unplugging or removing a second refrigerator or freezer)**

	freq	Perc
full size refrigerator	12	27%
mini refrigerator	13	29%
stand-up freezer	6	13%
chest freezer	12	27%
other	2	4%
total	45	100%

<b>36) Which of the following best describes what you did with this refrigerator or freezer? (asked if indicated unplugging or removing a second refrigerator or freezer)</b>		
	freq	Perc
unplugged it temporarily for the game	6	13%
unplugged it permanently	20	44%
removed it with the intention to replace it	7	16%
removed it with no plans to replace it	12	27%
total	45	100%

<b>37) How often was your gaming system plugged in and on (even if you weren't actively using your system)...? (asked only if indicated unplugging or turning off gaming system)</b>			
		before Cool Choices	after Cool Choices
hrs/week	mean	72.2	10.4
	median	40.0	1.0
	range	0 - 168	0 – 165
	n	55	55

<b>38) While the Cool Choices game was active, did you take any energy saving or sustainability actions that you didn't claim points for?</b>		
	freq	Perc
yes	51	28%
no	131	72%
total	182	100%

**Verbatim question 39: What energy saving or sustainability actions did you take that you didn't claim points for?**

What energy saving or sustainability actions did you take / that you didn't claim points for?
Verbatim responses
Added insulation. Installed door weatherstripping. Did not use the front door as often.
Already had a low-flow showerhead.
always put the windows down instead of using air [conditioner] in the vehicle. Haven't been letting my car idle.

any of the actions under 10 points
Biking to run small errands on the weekends.
[Can't] think of them off hand
Car free weekends-full day(s) with no vehicle usage /
changing all our light bulbs in our home
combining trips for errands
Compost food waste, turn TV and lights off when not using, line dry clothes, use a [reusable] beverage container and several other [actions] that were only worth 2 points. I do these things daily and thought they should be worth more points since if everyone did them on a daily basis it would have a much larger impact on energy savings. I think giving such low points to [these] everyday [actions] makes players think they are not worth doing on a daily basis.
Do not prewash dishes before putting them in the dishwasher
do not water the lawn
Eating my locally grown items, organic, etc
Every day I recycle, use reusable cups, make use of my rain barrel at home, try to turn off lights and all electronics when not in use, combine errands trips, walk when feasible instead of drive, etc...
Given the limited amount of choices you could make in a day most days you were doing other things on the list that you couldn't claim every day. Examples would be [recycle] an item, drink tap water, use a reusable glass, grocery bags, tire pressure, turn water off while you brush your teeth.....These are normal things I do daily.
Got new windows,
I am not entirely sure, I continue to take these actions but stopped playing the game because there was [no] excitement and enthusiasm in my office for it.
I am not sure if i did
I have entered this a few times and it [disappears]. Plant many trees, share ideas and such.
Keep temperature of home at 65 degrees at all times; not just in the evening. / /
light bulbs, recycling
Lots of the 2 points - inviting a friend to play, recycling an item, etc.
more meatless meals, turn water off more
Most we already were doing, but it made us thinks about them and follow thru with changes we were going to do.
Multiple, didn't take time to go on site on a daily basis.
NONE
Only water during early mornings or evenings. Turn off computer monitor at work when not in use. Turn off [lights] today. Replace red meat in a meal.
planting my own garden
Please keep in mind regarding the house temperature - we burn wood and my husband is a bit of a pyromaniac. :)
printed double sided and reusing paper I do every day. Lots of other low point things.
Recycle an item today. Only 2 points given, so I ignored it and went for higher points, but I always recycle items every day.
Recycle, compost for my garden, walk to certain businesses, shorten showers.
Recycled a lot of things in the house to Goodwill instead of the dump
Replacing a second toilet...

reusing bags. did that long before this game and did it even when i didn't claim points. same with the air conditioner in my car. never really run it event when it's 90 outside
Riding bike to do [errands]
Riding my bike to work always.
The driving test, I had the numbers written down and then I forgot them.
turn off computer screen / double sided copies
unplug clocks in unused bedrooms, block heat registers in unused bedrooms
Unplug the coffee maker and toaster when not in use.
Unplugged and turned off the gas to the gas fireplace.
Used my rain barrels to water my vegetable garden, take shorter showers, eat less meat and turn off computer system when not in use,
used pond water for watering garden and plants
using cloth diapers, cloth napkins, reusable silverware or reusing plastic silverware, limiting paper towel use, limiting ziploc bag use and rewashing
Using high efficiency washer.
Using reusable bags when [grocery] shopping and many more that I can not remember at this time. There were many but we could only do so many actions a day
using unneeded water already taken from the tap to water plants
Water saving - collect rain water for plants; also use "left-over" water, such as when changing out pet's water & washing the dish daily - save what is left to water outdoor plants rather than dumping down the drain.
we always compost, recycle, use tap water, use [reusable] water bottles (don't purchase bottled water), combine errand trips, don't run water during toothbrushing...I claimed them sometimes if I didn't find another I could use.
When I didn't need/want to wait for the tap water to get hot, [I] would just turn the faucet to cold so as not to drain any water from the heater and not having it have to refill and reheat anything.

<b>40) Please rate the following statements:</b>						
(n=183); Note: Percentages may not total 100% due to question-specific non-response.						
	strongly disagree	disagree	neutral	agree	strongly agree	don't know
The Cool Choices actions were simple to do	1%	1%	9%	53%	37%	0%
My family was enthusiastic about taking the Cool Choices actions	3%	7%	56%	22%	4%	0%
I am more aware of opportunities to save energy since playing Cool Choices	2%	2%	11%	54%	31%	0%
Many of the Cool Choices actions were things I'd already done	1%	3%	6%	40%	49%	0%
I learned new things from the Cool Choices cards	1%	5%	14%	56%	22%	0%

Since playing Cool Choices, I'm more likely to turn off lights in rooms at work that aren't being used	3%	7%	20%	38%	32%	0%
I'm proud of the changes I've made as a result of playing Cool Choices	1%	0%	18%	48%	31%	0%
Since playing Cool Choices, I'm more likely to turn off office equipment at work that isn't being used	2%	5%	16%	44%	32%	0%
Cool Choices feels like a meaningful part of (our) efforts toward sustainability	1%	3%	15%	46%	33%	0%
All in all, I'm satisfied with my job (here)	1%	0%	4%	42%	49%	0%

<b>41) Sustainability is important...</b> (n=183) Note: Percentages shown may not total 100% due to question-specific non-response.						
	strongly disagree	disagree	neutral	agree	strongly agree	don't know
to me	0%	0%	2%	31%	67%	0%
to my household	0%	0%	9%	40%	50%	0%
to my friends	0%	3%	28%	50%	18%	0%
to my extended family	0%	4%	33%	46%	15%	0%
to my co-workers	0%	3%	17%	58%	21%	0%
to leadership	0%	0%	6%	42%	51%	0%

**Verbatim question 42: Fostering a culture of sustainability is a key part of [the organization's] standard practices. Was the Cool Choices game a good way for [the organization] to help you integrate sustainability into your life? Please explain.**

Fostering a culture of sustainability is a key part / of Outagamie County/Grand Chute's standard practices. Was the / Cool Choices game a good way for Outagamie County/Grand Chute to / help you integrate...	
Theme	Verbatim responses
Negative / no	I myself try to live as sustainable as my current income and debt allow me to, Cool Choices has helped me to learn some new ways to do that. As for most other in my office i do not feel like Cool Choices has helped much to influence them to integrate sustainability into their lives.
Negative / no	I think it's a bit overdone. At times felt like a burden during a very busy workday. Like this survey.....
Negative / no	I think more actions are needed to support the game by administration.
Negative /	No, I believe most actions were items that people were already doing.

no	
Negative / no	No, Too time consuming when I am multi-tasking on daily basis. The game ran too long and employees stopped playing. Not everyone had the technology capacity to play on weekends. The actual deck of cards were a waist of money. Never looked at them or used.
Negative / no	No. These cards didn't do much and have the sites I tried to visit as part of the links in the game didn't open.
Negative / no	No. I was already doing much of [what] was in the game. The game went on way too long.
Negative / no	not sure, got kind of boring after a few weeks and then just wanted it to be over.
Other / comments	A bit like kindergarten in some ways, as I've been recycling etc., for years now. Can't afford some of the options offered like replacing the toilet, when there are other ways to conserve water in the household, like high efficiency washing machine. And I think Outagamie County works against it sometimes, like worrying about paper and coating paper in non-recyclable plastic to reuse. Eventually, the paper encased plastic will have to be thrown away to be burned, while at least paper alone is biodegradable. Bad choice there, I believe.
Other / comments	A lot of the things on the cards were things I already do.
Other / comments	Don't really hear about it anywhere else
Other / comments	I could teach them more. They are set in there ways and some are not open to new ideas. They only think about retirement day.
Other / comments	I have led a fairly sustainable lifestyle already. Cool Choices helped me very little, but I hope it helped others who took part in the challenge.
Other / comments	I really liked it but I thought some of the actions were unreasonable. Not everyone can afford to go out and buy new [televisions] or toilets. I stuck with the cards that were more daily that I already do like drinking out of reusable bottles.
Other / comments	I was doing MANY things already, but turning the lights off at work made me laugh because if I didn't know someone was in the bathroom .....they'd be startled and say.....HEY?????? OOPS LOL
Other / comments	It gave some good ideas but was very distracting and required [a lot] of job interruption and emails
Other / comments	It was a daily reminder - though I think it could have been done without PRINTING all those cards and handing them out. I wonder how many were even looked at once and just thrown away.
Other / comments	It was great to have reminder ongoing via emails, otherwise I would forget to enter. I think more intro to program would be useful, seemed to start out of no where and really understood what the program was just by participating.
Other / comments	Many of the tasks were unrealistic. For example, many people cannot bike or walk to work due to having to transport children.
Other / comments	maybe...it got people talking more about things.
Other / comments	Sometimes you don't realize when lights are on, temperature is higher than it should be in the home, what energy you are wasting and spending money that would need to be spent.



Other / comments	The deck of cards was a waste of money and resources. Now I have no use for them and will feel bad throwing them away, even if it is recycled.
Other / comments	We all need to do our part.
Positive / yes	Yes
Positive / yes	Yes. Although I was doing many of the things already, it helped me to dig deeper and learn more. It would be nice to have reminders, updates, and follow-ups once in awhile..maybe a "fun fact" here and there to remind us, or suggest other things. It brings about possibilities for good discussions and a way to inventory at home and work to find ways to change.
Positive / yes	Absolutely. Through these repeated reminders of [simple] daily actions I can take, it planted the seed of awareness that translates into more [conscious] decision making related to sustainable actions.
Positive / yes	Awareness is always good! I'm not sure I always understood the "red meat" substitution as it relates to sustainability...
Positive / yes	Encouraged me to always recycle, save energy and re-use items that I can.
Positive / yes	For some people, yes. For others like me, most of the actions taken had already been doing for years.
Positive / yes	Helped to reinforce sustainability measures.
Positive / yes	I already have been [doing] majority of the choices, however the statistics were interesting.
Positive / yes	I believe this was a great game for both the people who don't normally incorporate sustainability steps into their lives, and for the people who do. The game educated the people who don't normally think much about, or don't understand the importance of, sustainability. For those that do pay attention to sustainability the game provided a reminder of the actions we should be taking.
Positive / yes	I have been a strong advocate for sustainability lifestyle changes, but I liked the daily reminders to reinforce habits on days when things are really busy and some of the other ideas the card choices offered, as well as new suggestions that I could incorporate into my daily routines.
Positive / yes	I liked the fact that my company was behind this and made us think about how we spend energy.
Positive / yes	I think it was a fun [and interesting] way to look at [sustainability]. I was happy to be part of it.
Positive / yes	I think it was! Made more aware of things. I loved the opportunity!
Positive / yes	I was already making most of the Cool Choices that were offered in the game. I will continue to integrate sustainability into my work and personal life. The Cool Choices game has given me motivation.
Positive / yes	I'm already budget and energy conscience prior to this game. I think this game is a good start to get people involved and make them aware of some of the choices they make and how they might be able to make a different choice to help [themselves], others and their environment.
Positive / yes	It gave me additional ways to save water, gas, and energy...which will save money.
Positive / yes	It got me thinking about choices I was making such as jack rabbit starts, using the air conditioning when driving under 40 mph, the amount of energy the game console uses.
Positive / yes	It made you more aware and some teams really went all out-so in some area I guess for

	those teams who went gang busters--I guess it was good.
Positive / yes	It makes you aware that if everyone does a little it can add up and make a bigger difference. And sometimes knowing the facts makes a difference because you weren't sure how big an impact it could make.
Positive / yes	It showed how to make sustainable changes both at the workplace and at home.
Positive / yes	It was a good way to learn ways to help save money/the environment.
Positive / yes	It was a good way to show that the organization values sustainability
Positive / yes	Learned lots of new ways to save money
Positive / yes	More of an awareness of what I was already doing, and ways to encourage my family to participate as well.
Positive / yes	Our office has always been forward thinking in sustainability practices which has spilled over into my home life. We print informal reports on the copier and duplex with 2 pages per side of paper saving 3 sheets at a time. We also save some paper and print on the back side in some instances instead of wasting a clean sheet. These types of practices help cut down on [Outagamie's] expenses as well [as] our own while saving natural resources.
Positive / yes	Provided ideas not thought of prior to game
Positive / yes	Showed me things to do that were quite simple.
Positive / yes	Stressed the importance of saving resources through simple actions
Positive / yes	The Cool Choices Challenge was a constant reminder of sustainable things I should be doing on a daily basis.
Positive / yes	This is something I have done all of my life. It is nice to have a program like this to help those who are not aware, become aware of their over use.
Positive / yes	Yes
Positive / yes	Yes
Positive / yes	Yes
Positive / yes	Yes
Positive / yes	Yes
Positive / yes	Yes - changes your habits. Then you don't have to think about doing it, you just do it.
Positive / yes	Yes - it made me more accountable to choices I make on a daily basis.
Positive / yes	Yes - it provided suggestions for new ways to reduce energy use/consumption and was a constant reminder to make positive changes.
Positive / yes	Yes - learned some new energy savings technics and applied to my personal life
Positive / yes	Yes - reminders are important
Positive / yes	Yes and in a fun way.
Positive / yes	Yes as a reminder to do things that help the environment
Positive / yes	Yes as it made me stop to think about my choices and actions.
Positive / yes	yes because I would be less likely to take the time to look up all of the ideas on my own, being able to take a few minutes while at work to play the game allowed me to get more informed
Positive / yes	Yes by giving ideas of ways to be sustainable and by making it a game. Makes you not only think about changing habits but actually changing them. Brings awareness to all of the waste that goes on on a daily basis and makes you think of ways to change that.
Positive / yes	Yes I made some changes that will help to save money such as reducing idling times.

Positive / yes	Yes I think it was good because it got everyone thinking about sustainability. It [also] got a lot of people acting on what they have learned. Myself included.
Positive / yes	Yes I think this was a good way to integrate sustainability into our lives. It really helps to know the rationale behind why anything should be done differently.
Positive / yes	Yes- It was a daily reminder to take the extra step to make new changes and continue the things already being done.
Positive / yes	Yes it was and the facts that were supplied by Cool Choices on why that choice should be made were very beneficial.
Positive / yes	YES! I learned a lot and was able to share what I learned with my family. It has taught me a [lot] for when we purchase a home.
Positive / yes	yes, awareness
Positive / yes	Yes, I think it was really cool that administration set up a game for us to play (using teams) to encourage sustainability. I also feel that sustainability is important to the County or they would not have put time and resources into helping us make better choices. I would not have done so much of this had it not been presented in the fun way it was.
Positive / yes	yes, it had me looking into areas of our usage that I hadn't previously thought of.
Positive / yes	Yes, again, it just makes you more aware of the choices that you make.
Positive / yes	Yes, because it got everyone talking and sharing ideas. It also got me thinking about ways to save energy at work as I'm going around the buildings. / /
Positive / yes	yes, better than nothing. Helps make people aware of their decisions.
Positive / yes	yes, gave easy ways to make better choices.
Positive / yes	yes, good ideas and peer pressure!
Positive / yes	Yes, however the communication could have been improved greatly. And having prizes other than gift cards would have been nice. But the main goal of integrating sustainability into daily lives was reached I believe.
Positive / yes	Yes, I think it is important for everyone to be aware of ways to save whether at work or home. We can also share with friends and family to help spread the awareness.
Positive / yes	Yes, I think so.
Positive / yes	Yes, I thought it brought persons together from in the Department to focus on ways that they can conserve. Just on our floor I see major changes on conserving and being [respectful] of our environment.
Positive / yes	Yes, it brought sustainability into everyday life due to the daily reminders and the game being played.
Positive / yes	Yes, it brought things to the attention more. I don't know if I agree with the cost savings totals though, it seemed unrealistic to me.
Positive / yes	Yes, it gave me many ideas on how to be sustainable and conserve.
Positive / yes	Yes, it gave me many ideas that I could use both here at the office and at home.
Positive / yes	yes, it got the conversation going.
Positive / yes	Yes, it made me think about what I was doing sometimes out of habit
Positive / yes	Yes, it reminded me of doing things that I used to do more automatically and have at times become lazy about.
Positive / yes	yes, it was a good reminder of ways to save energy ect....maybe not all new information but a great way to remind us to be as green as you can to sustain some of our resources and cost reduction.

Positive / yes	Yes, it was a motivator to continue making "cool choices" and gave me some ideas to look into for the future.
Positive / yes	Yes, it's great to see my place of employment take an active role in doing something I have been actively doing for years!
Positive / yes	Yes, just being aware of simple energy saving tips add up over time.
Positive / yes	Yes, just felt too busy at work and home to actually do a lot of the activities or take the time to look over the cool choices to play the game. Would have liked to participate more.
Positive / yes	yes, made me aware of simple things I can do in every day life to help
Positive / yes	Yes, made more people aware of easy changes to make.
Positive / yes	yes, make us more aware
Positive / yes	Yes, offered new insight into other ways to be sustainable.
Positive / yes	Yes, provided easy examples.
Positive / yes	Yes, the fun facts were very informative and I was able to share this information with family and friends.
Positive / yes	yes.
Positive / yes	Yes.
Positive / yes	Yes. As stated, I feel that it helps serve as a daily reminder to make these choices even if you are already doing [a lot] of them, and motivate you to set a goal to make more cool choices.
Positive / yes	Yes. I have always thought about sustainability but took little action.
Positive / yes	yes. It made me more aware of the environment and sustainability
Positive / yes	Yes. It made people more aware that did not pay attention to these matters before.
Positive / yes	Yes. It truly increased my awareness to energy preservation.
Positive / yes	Yes. It was fun and by having this game for employees, it made me a better awareness of sustainability.
Positive / yes	yes. lets you know how well you use [sustainability] and offers a couple ways you weren't aware of.
Positive / yes	Yes. Overall, Cool Choices were easy and small steps for people to take.
Positive / yes	Yes. Reminders always help to keep things in mind.
Positive / yes	Yes. Sometimes the extra eye and help of others help to realize what you are really doing in a day to day life to stay sustainability.
Positive / yes	Yes. it gave more insight into what I can do to save more. Some ideas I had never thought of or didn't know that it could help to save in energy and also save in money
Positive / yes	Yes. Provided new ideas and a fun competition that subtly introduced new ways to save.
Positive / yes	Yes... the daily reminders kept energy saving in the forefront

**43) Cool Choices would like to know whether and how its alumni use the following media. Please indicate your use of each one. (n=180)**

Note: Percentages shown may not total 100% due to question-specific non-response.

	don't use	business use only	personal use only	both
email	0%	7%	6%	88%
Facebook	23%	1%	61%	13%
Twitter	88%	1%	8%	1%
LinkedIn	66%	15%	14%	4%
Google+	53%	2%	16%	27%
Pinterest	44%	0%	48%	4%

**Verbatim question 44: Do you have any comments for Cool Choices regarding its game or offerings to alumni?**

Do you have any comments for Cool Choices regarding its / game or offerings to alumni?	
Theme	Verbatim responses
Comment	Being in an office surrounded by those who don't care about the game and think it is a joke can make it very difficult to find excitement for it myself. I started out participating everyday but that faded fast as there was no talk of it in the office at all.
Comment	Besides learning about sustainability, it was a great way to interact with co-workers.
Comment	Fun game. I learned a lot.
Comment	I 'm not sure it was real worthwhile if one if already making an effort towards sustainability. But, I like games and a little friendly competition.
Comment	I was hoping to win prizes for getting all the badges.
Comment	I would do it again!!!! I loved the reminders!!!
Comment	It was fun to play and learn
Comment	It was fun.
Comment	Keep up the good work!
Comment	Keep up the great work.
Comment	Keep working on new ways to conserve and be sustainable. We only have one earth.
Comment	Love the game! Glad to have been a part of it!
Comment	thank you.
Comment	THANKS!!
Comment	The more you play, the more you learn.
None	No

None	No
None	no
None	no
None	no
None	No
None	No.
None	None
None	None
None	none
None	none at this time
Suggestions	Again, reminders, fun facts, updates, suggestions as we go along would be good. / / I have to say that a number of the links we could go to did not work, which was disappointing. Often it said "this website is being updated, or something to that affect". I would have liked to have been able to learn more and couldn't. I believe the ones for the audits were that way.
Suggestions	10 weeks seemed a little long
Suggestions	Better communication throughout the game. The deck of cards should not have been included in this challenge to all players as they were not needed or used.
Suggestions	Better instructions at the beginning would have been helpful. It took me a while to get in the habit of logging on. Had I thought to access this from home, I would have also played on the weekends earlier on. Because I received reminder e-mails at work, and I don't receive my work e-mail on my personal phone, I did not [participate] on the weekends and really thought of the "logging on" to record points as tied to work mainly. The cards were a waste of paper, especially once I understood they were electronic. I'd like to turn them in for someone else to use. I would need to know where to do so.
Suggestions	Daily emails were [irrelevant]. News feed on the site was too cluttered.
Suggestions	did not see a need for the physical cards.
Suggestions	Do not [disseminate] useless decks of cards. Most decks were thrown in the trash and not even recycled. VERY unsustainable action on behalf of Cool Choices.
Suggestions	Don't print out the decks of cards. Have them available online.
Suggestions	Game is too long.
Suggestions	Game was a bit long.....began to [lose] interest towards the end.
Suggestions	Get more points added for biking or walking to work. This would really encourage more to try this!
Suggestions	I didn't fully understand the necessity [distributing] the decks of cards when we were given daily reminders via email notification and we played the game on line, so never used them. Other than that, I applaud the program and thought it was a great idea to get people more involved in sustainability practices both at home and at work.
Suggestions	I didn't see any use of the actual cards unless I missed the point of them.
Suggestions	I had problems signing up for participation and unfortunately missed out on a couple work weeks :(
Suggestions	I think it could have been explained much better in the beginning. We received a lot of notification that it was coming and when I tried to sign up it was not available for a long time. I was never able to find instruction on how to play the game, and

	stumbled through it. I was not able to log on thru the internet, only thru my download onto my desktop so it was quite [frustrating] for me as I am not a computer [savvy] as most.
Suggestions	I think the deck of card was a waste. We could have previewed [this] without the cards. Or, maybe if you [continue] to print the cards include the facts you get when you play the card online to show how this choice can impact the environment.
Suggestions	I think the game lasted kind of long - really lost momentum after the first couple of weeks. Also, there were certain cards that didn't link to what they were supposed to or didn't have good instructions on how to complete the task.
Suggestions	I wish there were an iphone app for Cool Choices. I'd have participated on weekends if there were. / I'd also like to see if there is any outcome from all the suggestions made.
Suggestions	I would change the "personal" communication to the players. I wanted to know who was winning and how to get ahead - I was never sure if it was actions or total points?
Suggestions	I would enjoy seeing all the pictures that were submitted for the photo challenges.
Suggestions	I would say that the game lasted a little too long.. I felt that people get busy at work and would rather get caught up on workload rather than play cool choices. The prizes were motivators; however when you are so far behind, i think people are more likely to quit playing. I did like the "facts" that are associated with some cool choices. It would have been nice to have energy saving facts on all choices that were made.
Suggestions	If this game is to be played again I believe there should be more choices rather than a lot of repeat choices.
Suggestions	It lasts too long.
Suggestions	It started to get a little long and I am now ready to be done. I am glad I participated but really feeling done. I wont change my practices but it did take time and planning to play and summer is a busy time.
Suggestions	It'd be nice that when you do sign in for the first time ---it would actually remember you name/password.
Suggestions	Not sure how the teams are set up or how teams are picked to win - but some teams had way more players than others and received more points (obvious as there are more players). This was a bit discouraging to continue playing the game knowing there was not a chance my team could win any prizes (not that it was the only reason i chose to participate).
Suggestions	People should be told its not about winning. It's about reminding great choices you make today that affect LIFE. Your choice today impacts the future!
Suggestions	survey was two times too long
Suggestions	The cards that were given out at the beginning are really just a waste of a resource and everyone I know who took them just recycled them which seems to be a poor example for this type of game. I would skip the cards.
Suggestions	The cards were a waste of materials/money. They weren't used for anything in the game and weren't a very green choice.
Suggestions	the LONG [lead up] was [ridiculous]. It kind of backfired because it caused some negative vibes regarding the program. I liked the 'teams' and some of the competition. I think it wasted a lot of TIME at work.
Suggestions	The object of the game should've been explained, was it to get the most points or the most different actions? seemed like everyone went for points so they didn't play the low point actions just kept repeating the ones with more points.

Suggestions	The playing cards seemed like a waste of paper resources - especially in a game that involved sustainability. Might have been better to just send a sample of the online playing cards for people to look over in advance. / / Also, all of the information sent in advance of the game's start got confusing/overwhelming. I thought maybe it was just me not paying close enough attention, but I heard several other employees saying the same thing. It wasn't until the game actually got underway and we could go to the Cool Choices site that it began to make sense.
Suggestions	There were some choices that I didn't choose, because, in a sense, I was already doing more than the choice asked. For example, there was a choice to replace outdoor lighting with solar powered lighting. Well, I don't use any lighting at all, because it's a waste of energy. It would have been nice to provide a way to express other, more sustainable options.
Suggestions	too many emails
Suggestions	Try to have enough sustainability actions to have more new choices everyday.
Suggestions	Was not aware that I could [play] on the weekends, only had access through work. Give points for not watering lawns. Don't remember some of the paper playing cards as seen online as cards to play. I felt at a [disadvantage] as [I] do not download pictures, etc and could not get points for those actions.





December 1, 2014

To: Kathy Kuntz, Raj Shukla, Emily Loew – Cool Choices  
From: Elina Zaonegina  
Subject: *UUCW, End of Game Feedback*

## INTRODUCTION

Unitarian Universalist Church West launched an eight-week Cool Choices game on September 28, 2014 targeting approximately 500 congregation members. A total of 137 congregation members (27 percent) registered to play the game and 105 (21 percent) took at least one action. In total, 105 congregation members, participating in 16 teams, reported 2,891 unique actions as part of the game, which ended on November 20, 2014.

On November 17-21, 2014 Cool Choices launched a post-game survey to the registered players. A total of 59 congregation members (43.1 percent) participated in the survey. This memo summarizes those survey results.

I have organized the results along the following topics:

- factors that influenced game play and social dynamics
- changes in practices and learning
- communications and overall impressions

Based on the post-game survey responses, players were mostly encouraged by Earth Ministry team members to play. More specifically, intrinsic rewards, such as having fun and liking the lifestyle changes that the game promotes, were the most influential factors for game play. During the game, players reported that they primarily chose actions because they were good for the environment or were easy to do. Many respondents also indicated that they often discussed sustainability at home and work throughout the duration of the Cool Choices game, and the frequency of those discussions correlates to level of player activity.

Post-game survey respondents reported an increase in efforts to save energy, gasoline, and water after the Cool Choices compared to before the game. Some concrete actions that reflect this include lowering the thermostat during winter when people are asleep or not home, adjusting furnace settings, and unplugging electronics that are not in use. Respondents also reported an increase in more sustainable eating and recycling habits. Not only did the players' actions change but their view on sustainability did too. Respondents indicated that sustainability became more important to them compared to before the game, and the perceived importance of sustainability to their household, friends, fellow congregation members, and UUCW leadership increased after the game as well.

In regards to the implementation of the Cool Choices game, the vast majority of respondents said that they believed the game was a good indicator of UUCW's increased efforts toward sustainability. Some feedback suggested that areas of improvement include length of game, actions available, and making the game more kid-friendly. Most respondents shared positive remarks and suggested to implement the game at other churches.

I explore these findings more fully in the next sections of this memo. Additionally, full frequency tables by question as well as survey comments are attached.

## GAME PLAY AND SOCIAL DYNAMICS

When Cool Choices asked what factors were influential in players' decisions to participate in the game, respondents rated intrinsic rewards (liking the lifestyle changes that come from taking the game's actions and having fun) as the two most influential factors.

Table 2 lists these factors in rank order with the average score (based on a five-point scale where 1=not at all influential and 5=very influential) given to each factor.

**Table 31: Self-reported influencing factors for playing the game (n=59)**

<b>Question: How influential were each of the following factors in your decision to play the Cool Choices game?</b>	<b>Mean</b>
Liked the lifestyle changes that could come from doing the actions	3.86
It was fun	3.51
Cool Choices made it seem appealing	3.41
Could save money by taking the actions	3.37
Was encouraged by my colleagues	3.10
Might win a gift card	2.49
Wanted to win	2.47
Felt obligated as part of my job	2.16

As shown in Table 2, most respondents reported that Earth Ministry team members encouraged them to play. Others received encouragement from both within the respondent's team and outside it.

**Table 2: Encouragement to play by peers (n=55)**

<b>Question: Who encouraged you to play the Cool Choices game? (multi-response)</b>	<b>% of respondents</b>
An Earth Ministry team member	60.0%
Your team leader	27.3%
Other congregation members	23.6%
Other (please specify)	20.0%
No one	10.9%
Other Cool Choices team members	9.1%
Someone else (please specify below)	9.1%

Additionally, about 95 percent of respondents reported that they talked about sustainability at home at least weekly; and 25 percent reported talking about sustainability at work at least on a weekly basis (Table 3 and Table 4).

**Table 3: Discussions at home about sustainability (n=56)**

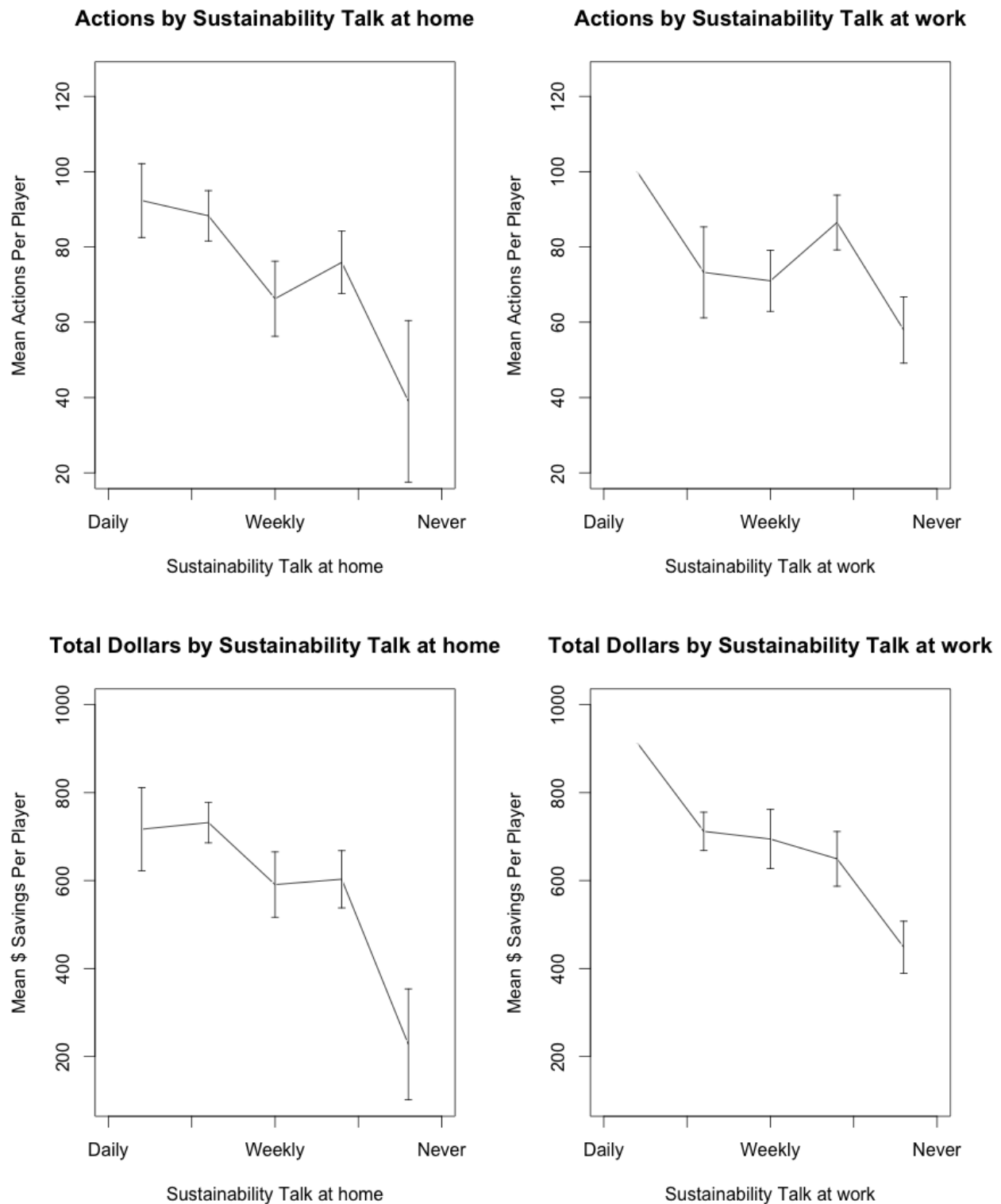
<b>Question: While the Cool Choices game was active, how often did you talk about sustainability at home?</b>	<b>% of respondents</b>
daily	10.9%
several times a week	38.2%
weekly	27.3%
never	5.5%

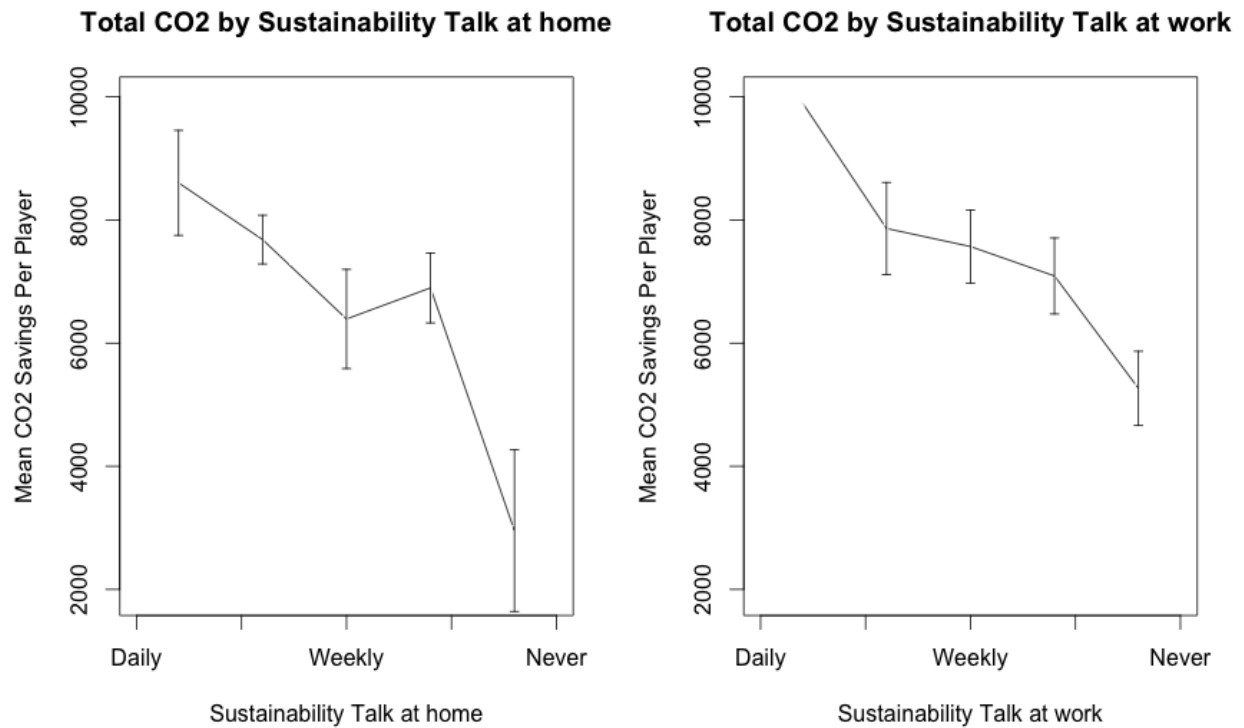
**Table 4: Discussions at work about sustainability (n=51)**

<b>Question: While the Cool Choices game was active, how often did you talk about sustainability at work?</b>	<b>% of respondents</b>
daily	2.0%
several times a week	7.8%
weekly	15.7%
once or twice	43.1%
never	31.4%

Moreover, respondents who reported frequent discussions about sustainability at work and at home completed more Cool Choices game actions and achieved higher dollar and CO<sub>2</sub> lbs. savings compared to respondents who did not have these discussions (Figure 1). This suggests that social interactions influenced the level of play, confirming respondents' self-reported motivation. Because this was the first game implemented in a church, the self-reported sustainability conversations at work were understandably lower compared to when the game has been implemented at companies. In fact, only one player reported talking about sustainability at work daily.

**Figure 1: Mean Number of Actions and Savings (Dollars and CO<sub>2</sub> lbs.) of Players who Reported Frequency of Sustainability Discussions at Home and at Work (n=48-52)**





Respondents reported that their game conversations were most often with their spouse (70 percent) and other congregation members (49 percent). Relative to the topics discussed, respondents reported that they talked about both specific actions and more general game dynamics.

Cool Choices is also interested in how players decide which actions to take and report. Respondents reported that they chose specific actions because the actions were good for the environment or easy to do (Table 5).

**Table 5: Self-reported influencing factors for playing specific actions (n=59)**

Question: Please rate the influence each of the following factors had on your choosing the actions you took. (Where 1 = Least Influential and 5 = Most influential)	Mean
Good for the environment	4.42
Easy to do	4.25
Was already doing the action	4.10
Save money	3.66
Fun to do	3.40
Earn a lot of points	3.36
Other congregation members were doing them	1.86

Additionally, almost 53 percent of respondents reported that they took energy savings or sustainability actions during the game for which they did not claim points. When prompted to list those additional actions many players identified small activities like recycling but a few mentioned major efforts like buying a new high efficiency boiler and purchasing a hybrid automobile. (See appendix for a full list of comments.)

## CHANGES IN PRACTICES AND LEARNING

The Cool Choices actions, in-game competition, and social dynamics during the game are intended to spur sustainable actions. While the scoring data collected by Cool Choices offer a good indicator of player activity, the post-game survey explored several other measures of player engagement and practices.

### Opportunities for Learning

Cool Choices aims to engage players of all ages and with varying levels of experience by making a wide range of sustainable actions available. The post-game survey indicated that the vast majority of players found the ideas presented throughout the game to be occasionally new (Table 6).

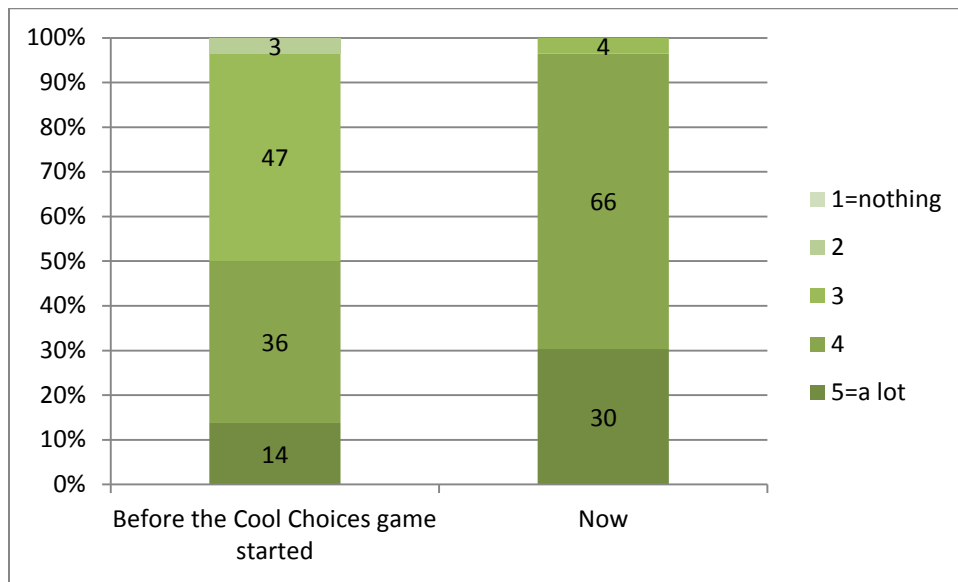
**Table 6: Cool Choices cards as new ideas for players (n=59)**

<b>Question: How frequently were the Cool Choices cards new ideas for you?</b>	<b>% of respondents</b>
always	0.0%
often	13.6%
occasionally	83.1%
never	3.4%

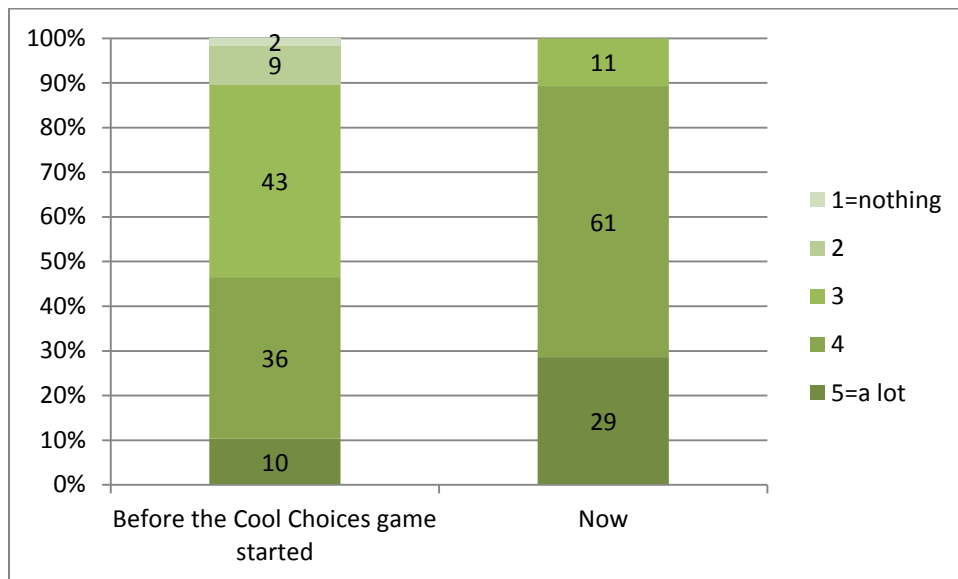
### Self-reported degree of sustainable activity

In the post-game survey Cool Choices asked respondents to reflect on their level of effort relative to saving energy, water and fuel before the game, and again at the end of the game. Cool Choices also asked respondents to reflect on their level of effort relative to changing their eating habits and recycling habits before the game and at the end of the game. Respondents reported increased levels of sustainable activity in all five facets of sustainability that were included in the survey. While 8 respondents reported doing “a lot” to save energy before the game, this number increased to 17 following the game. Similar trends were seen for the other four facets as well, as is evident in Figures 2-6.

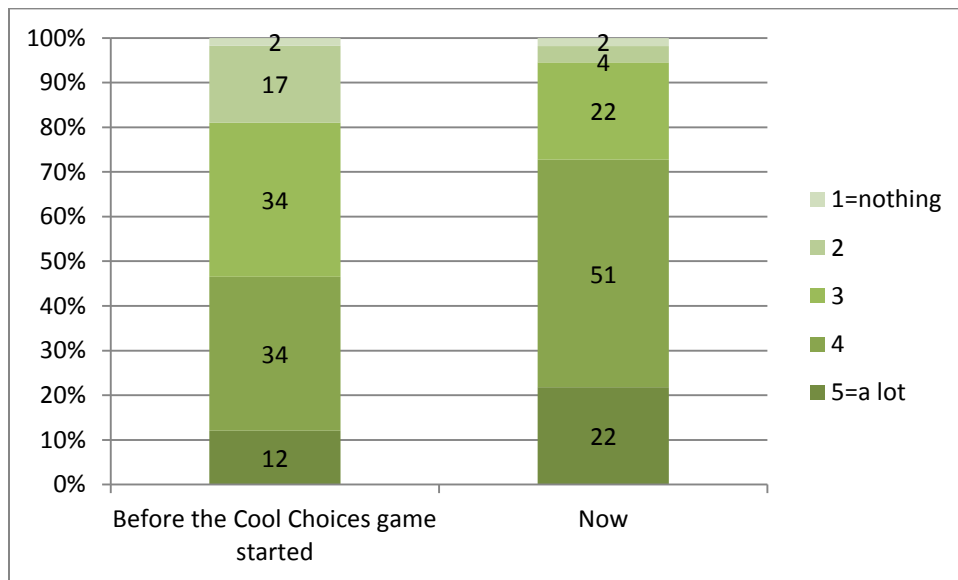
**Figure 2. Effort to save energy in home before and after Cool Choices (n=56-58)**



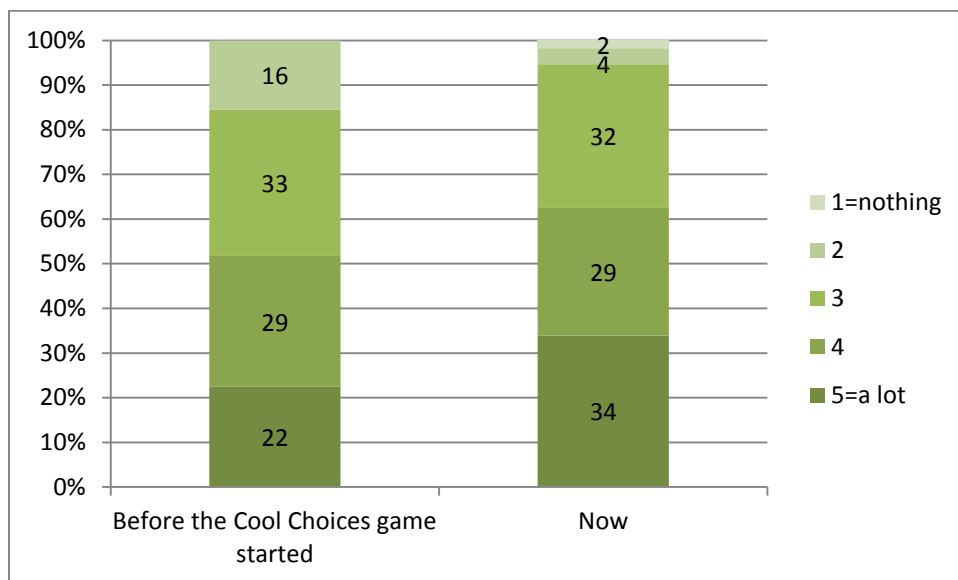
**Figure 3. Effort to save water in home before and after Cool Choices (n=56-58)**



**Figure 4. Effort to reduce gasoline use before and after Cool Choices (n=55-58)**

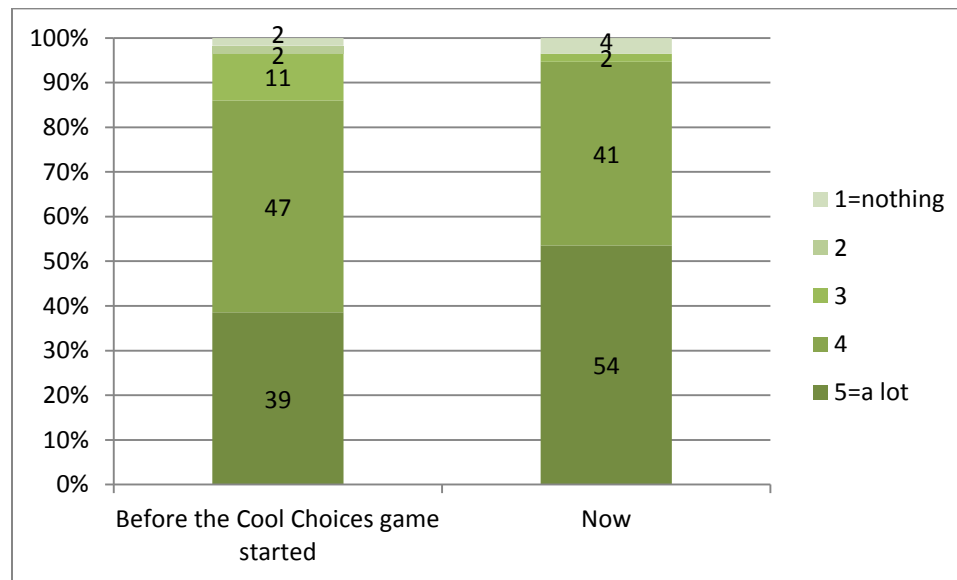


**Figure 5. Effort to change eating habits before and after Cool Choices (n=56-58)**





**Figure 6. Effort to change recycling habits before and after Cool Choices (n=56-57)**

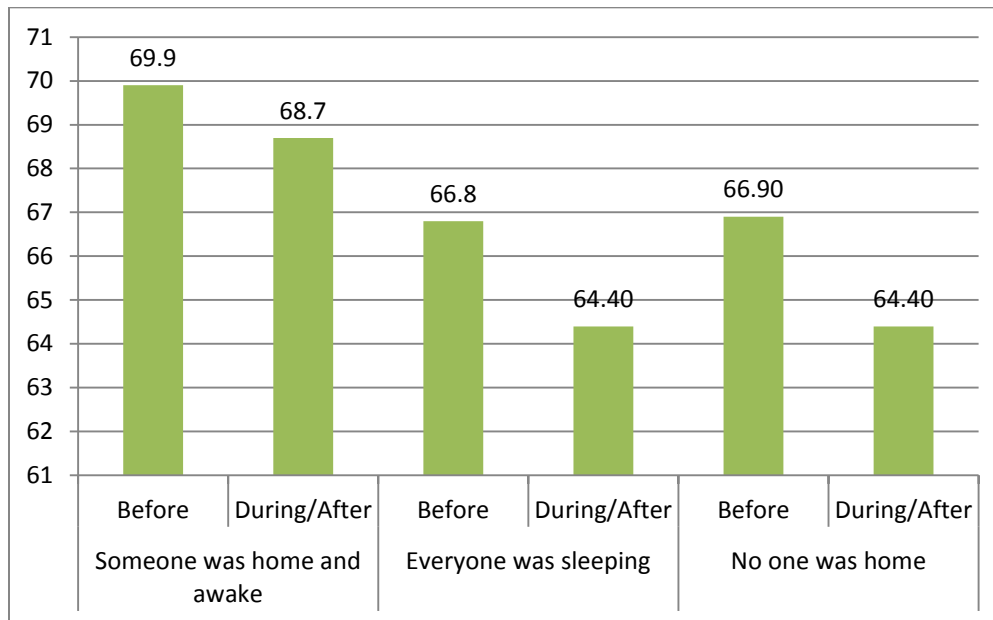


In addition to assessing the players' self-reported efforts to save energy, water, and fuel, and eating and recycling habits after the game, Cool Choices also asked post-game survey respondents whether they made specific changes during the game to be sustainable in these sectors. The majority of respondents reported that they reduced their energy use by lowering the thermostat settings, unplugging their gaming system, changing the furnace fan settings, or unplugging or removing a second refrigerator or freezer (Table 7). Those that lowered the thermostat settings did so by approximately five degrees after the game, as compared to before (Figure 5).

**Table 7: Changes in settings and routines during the game (n=31)**

Question: Did you make any changes in the following settings and routines during the game?	% of respondents
lowered your thermostat setting at night or when no one is home	64.5%
changed your furnace fan setting from continuous (or on) to auto	51.6%
unplugged or turned off gaming system (Playstation, Xbox, etc.)	45.2%
unplugged or removed second refrigerator/freezer	6.5%

**Figure 7. Mean winter thermometer settings before and after Cool Choices (n=10)**

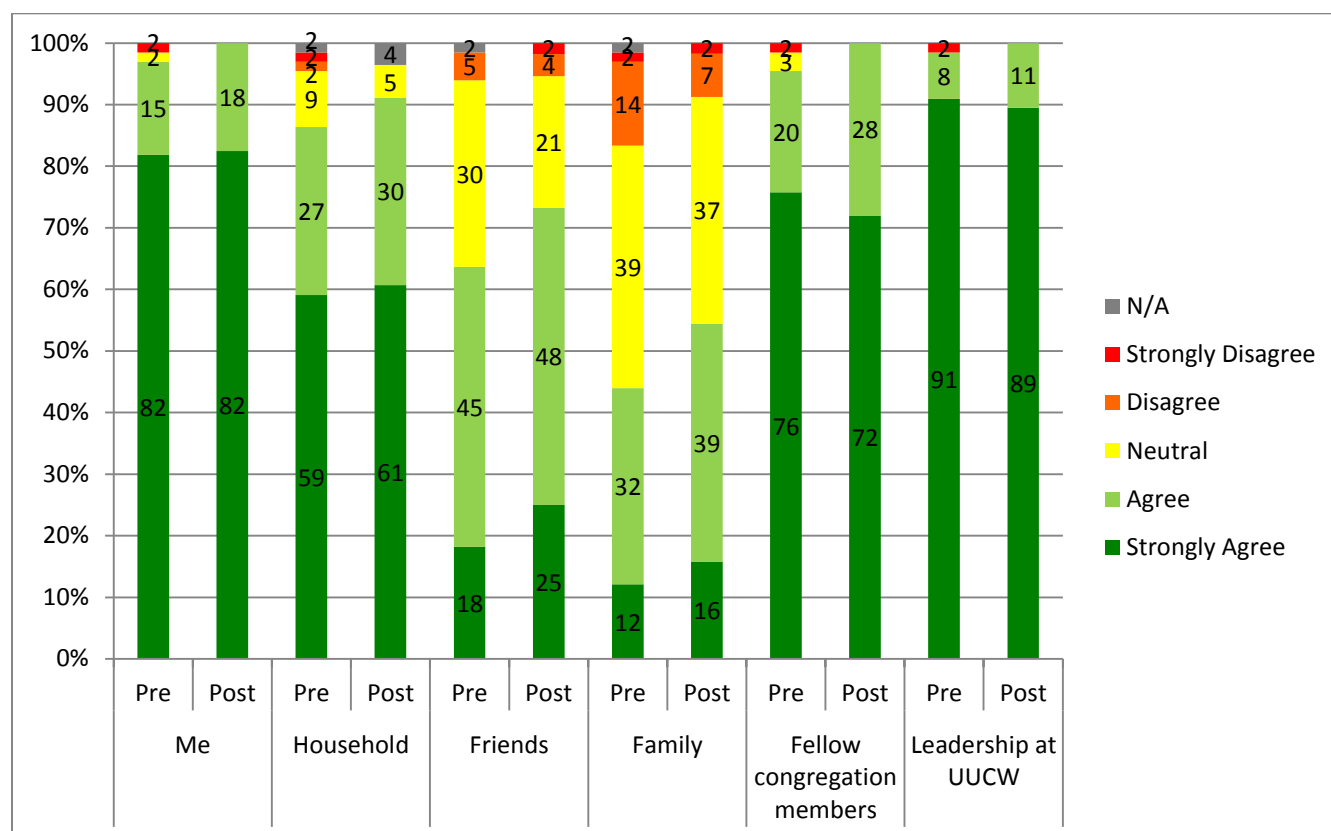


### **Perceived importance of sustainability**

One key metric for Cool Choices is the degree to which players in the game gain a sense that their peers value sustainability. The pre-game baseline included a set of questions about the degree to which respondents value sustainability themselves, and how important they think sustainability is to various groups of peers. Cool Choices repeated those questions in the post-game survey, and we then compared responses for the pre-game and post-game surveys.

There was an increase in agreement with 'sustainability is important' questions related to all categories. The increase in agreement was most dramatic for respondents relative to the perceived importance of sustainability to their extended family; in the baseline survey 44 percent of respondents agreed that sustainability was important to their extended family; this increased to 55 percent in the post-game survey (Figure 6).

**Figure 8. Perceived importance of sustainability before (n=66) and after (n=56-57) Cool Choices**



## COMMUNICATIONS AND OVERALL IMPRESSION

Relative to communications 63 percent of respondents said the daily email reminder provided useful tips about the game, and 55 percent reported that they viewed the stream while playing the game.

Cool Choices also asked respondents about their access to the game. Of the 59 respondents to the question, 14 percent indicated that they played on a mobile device, 70 percent played on a computer, 5 percent used both equally, and 8 percent played on an iPad. Unfortunately the other 3 percent experienced some difficulty accessing the game.

In the survey Cool Choices asked respondents to share their most memorable experience during the game and many respondents commented on team activities ranging from positive interactions with teammates to the team photo challenge. Other respondents noted that talking with their children about energy conservation was most memorable.

The vast majority of respondents indicated that they thought the Cool Choices game contributed to UUCW's sustainability efforts with less than 2 percent of respondents indicating that the game was not a meaningful part of UUCW's efforts toward sustainability. Respondents offered both thanks and specific thoughts on ways to improve the game in their comments. All comments are included in the appendix.

## Appendix – Post Game Survey Frequencies and Verbatim<sup>18</sup> Responses

Who encouraged you to play the Cool Choices game? (check all that apply)		
Answer Options	Response Percent	Response Count
your team leader	27.3%	15
other Cool Choices team members	9.1%	5
other congregation members	23.6%	13
an Earth Ministry team member	60.0%	33
someone else (please specify below)	9.1%	5
no one	10.9%	6
Other (please specify)		11
<i>answered question</i>		<b>55</b>
<i>skipped question</i>		<b>4</b>

Other specifics:

- Cool Choices representatives in community room
- I am an earth ministry member
- It was listed in weekly announcements.
- many people in the congregation
- I brought the game to UUCW because of playing it at work.
- Church announcements
- A YRUU Youth who was assisting with sign up. I'm not sure if he was on the Cool Choices team or not.
- Minister
- general Church publicity
- I am a member of the committee that funded this project.
- Announcements at church

How much were you doing to save energy in your home...						
Answer Options	1=nothing	2	3	4	5=a lot	Response Count
Before the Cool Choices game started	0	2	27	21	8	58
Now	0	0	2	37	17	56
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

How much were you doing to save water in your home....						
Answer Options	1=nothing	2	3	4	5=a lot	Response Count
Before the Cool Choices game started	1	5	25	21	6	58
Now	0	0	6	34	16	56
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

<sup>18</sup> Please note that clear typos in the comments were corrected for the sake of clarity.

How much were you doing to reduce your gasoline use....						
Answer Options	1=nothing	2	3	4	5=a lot	Response Count
Before the Cool Choices game started	1	10	20	20	7	58
Now	1	2	12	28	12	55
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

How much were you doing to change your eating habits....						
Answer Options	1=nothing	2	3	4	5=a lot	Response Count
Before the Cool Choices game started	0	9	19	17	13	58
Now	1	2	18	16	19	56
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

How much were you doing to change your recycling habits....						
Answer Options	1=nothing	2	3	4	5=a lot	Response Count
Before the Cool Choices game started	1	1	6	27	22	57
Now	2	0	1	23	30	56
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

How influential were each of the following factors in your decision to play the Cool Choices game?						
Answer Options	1=not at all influential	2	3	4	5=very influential	Response Count
Wanted to win	19	8	19	9	3	58
Was encouraged by my colleagues	8	10	18	12	10	58
Liked the lifestyle changes that could come from doing the actions	1	5	13	22	18	59
It was fun	7	1	19	19	13	59
Could save money by taking the actions	7	7	16	15	14	59
Felt obligated as part of my job	27	10	10	7	4	58
Might win a gift card	18	13	13	6	7	57
Cool Choices made it seem appealing	5	6	21	14	13	59
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

What were the lifestyle changes you liked?	
Answer Options	Response Count
	41
<i>answered question</i>	<b>41</b>
<i>skipped question</i>	<b>18</b>

#### Lifestyle changes Topics:

##### *Conserving resources*

- Saving water with low-flow faucets, Saving electricity with the new light bulbs.
- More mindful of water usage.
- saving water, recycling
- Turning off water, replacing lightbulbs
- Insulating pipes, documenting gas usage, considering power usage.
- Washing laundry in cold water and turning off the tap while brushing teeth.
- During this time period we moved to a new home. Having the Focus on Energy home visit was really beneficial for water and electricity changes.
- Being aware of more ways to improve saving & recycling etc
- Being more aware of energy waste, doing more to save water and electricity.
- We took several addition; actions to save water, gas, heat and electricity.
- Energy and resource changes
- Saving water
- Being more conscious of how we use our resources; saving money
- knowledge on gas usage and water usage
- Being more mindful of little things I could do to reduce my energy use.
- shorter showers
- Tips for recycling and water conservation

##### *Health/Wellness*

- Less red meat, local foods
- encouraged to buy more locally grown food
- Food changes

##### *Transportation*

- not jackrabbit driving!
- reducing bad driving habits

##### *Multiple*

- Drive less, walk more. Eat healthier foods - less red meat.
- Saving gasoline - changing driving habits, Eating choices
- no jack rabbit starts, calibrating TV,
- recycling, reducing gasoline, composting, all water conservation , reducing waste
- Water, electricity and food choices
- I liked the encouragement to replace lighting with LEDs, and I've been trying to reduce my meat consumption anyway, so the game helped to remind me.
- Looking for new ways to save energy and consider new ways to be sustainable - water use, eating habits.
- Meatless meals and recycling
- Learned different things to recycle. Encouraged me to improve eating less meat.
- Driving tip to save gas, Reminding me to be consistent with my efforts to reduce negative impact on environment, health

##### *Other*

- N/A
- Just being more aware of my carbon footprint.
- Think more about what I can do to reduce global warming.
- I didn't make many lifestyle changes as I have done "the easy ones." Any others would take renovation work on my house or moving closer to work to enable me to drive less.....
- There were very few new ideas for me, but it did reinforce that what I have been doing is worthwhile.
- Just heightening awareness of some of the lesser known options -- for ex. changing the temperature in my refrigerator and freezer.
- All of them
- Encouragement that it's the right thing to do.
- Feeling part of a community by carpooling more and sharing ideas for cool choices with fellow members.

While the Cool Choices game was active, how often did you talk about sustainability at the following locations?						
Answer Options	daily	several times a week	weekly	once or twice	never	Response Count
work	1	4	8	22	16	51
home	6	21	15	10	3	55
<i>answered question</i>						<b>56</b>
<i>skipped question</i>						<b>3</b>

Whom did you talk with about sustainability? (check all that apply)		
Answer Options	Response Percent	Response Count
teammates	32.2%	19
other congregation members	49.2%	29
spouse	69.5%	41
kids	47.5%	28
extended family (parents, brothers or sisters)	8.5%	5
friends	37.3%	22
neighbors	10.2%	6
no one	3.4%	2
<i>answered question</i>		<b>59</b>
<i>skipped question</i>		<b>0</b>

What was the most memorable experience or conversation you had playing the game?	
Answer Options	Response Count
	37
<i>answered question</i>	<b>37</b>
<i>skipped question</i>	<b>22</b>

Response Topics:

#### Family

- Another person told me how much her kids were enjoying it and that they were weighing their garbage together.
- discussing setting our water heater to a cooler temp--Really, though, the conversations didn't rank as that memorable!

- discussing furnace settings with my spouse.
- Talking with my wife, and comparing notes about how playing the game has affected our energy usage.
- The realization that we, as a family, have been doing much of what has been suggested by Cool Choices. Also, the realization that I remain a non-player of on-line games. It was challenging for me to stay enthusiastic and play the game every day. It's not something that appeals to me. So, I won't be participating again, but will encourage others who like this sort of thing, to go for it!
- Spoke with spouse about energy usage. Although we have done many of the actions prior to the game, this strengthened our commitment.
- The jack rabbit driving discussion with my husband, consciously trying to change that behavior.
- getting my kids to turn out lights
- Explaining to my 4 year old about paper towel usage in public restrooms.

#### *Resource Conservation*

- how to save on water use in a HUD housing situation
- finding out that there are good LCD dimmable lightbulbs
- Planting our rain garden
- Food choices
- Figuring out electric & water usage
- Adding LED and CFL lighting throughout the house.
- About the temp. in refrigerator and freezer.

#### *Teams/Involvement*

- The lack of empathy from our team leader. One of the other players and I had suffered health problems as well as a very difficult and hectic month. I found the lack of compassion (over the desire to win) very disturbing. I care about the environment and have been making most of these choices for years. And the sad face if I wasn't able to make a choice the day before made me feel judged :(
- with a team member saying she just can't do some of the options because she lives in a retirement home, and us having the conversation that sometimes it's just about that Conversation. . .
- Listening to my fellow staff members talk at lunch about their involvement with Cool Choices. I was glad they are taking part in the game
- The competition between teams - my husband and I were on different teams.
- Being able to share what we're doing with another Congregation...First Society in Milwaukee. They were really excited about checking out Cool Choices!
- Having more than expected signup to play.
- Congregational members shared news re: recycling.
- Unfortunately it had to do with how tired I was playing the game.

#### *Media*

- Taking recycling pictures while traveling in France!
- Having the team picture taken.
- Taking the team photo using a kayaking theme.
- Taking the team picture

#### *Other*

- ?
- Not sure
- The young man from Focus on Energy was very knowledgeable--a pleasure to learn from as he was giving us free stuff to make our home greener!
- none
- Shocked that most of my friends and even family did not conserve.
- during coffee hour at church, mainly about how as an older adult with a household of one (me!) that I consume very little energy and water so it was hard to take action to do more.
- This program is not suitable for people who don't have cars, live in retirement communities, and have already spent a lot of time in energy conservation programs.
- Affirmation that I'm doing the right thing.



- getting the t-shirt I won and being proud of it! :)

How frequently were the Cool Choices cards new ideas for you?		
Answer Options	Response Percent	Response Count
always	0.0%	0
often	13.6%	8
occasionally	83.1%	49
never	3.4%	2
<b>answered question</b>		<b>59</b>
<b>skipped question</b>		<b>0</b>

Did you look at the stream while playing the game?		
Answer Options	Response Percent	Response Count
yes, often	5.2%	3
yes, a few times	50.0%	29
no	44.8%	26
<b>answered question</b>		<b>58</b>
<b>skipped question</b>		<b>1</b>

Did you get useful tips from the daily reminder emails?		
Answer Options	Response Percent	Response Count
yes, often	15.3%	9
yes, a few times	47.5%	28
no	32.2%	19
did not look at the reminder emails	5.1%	3
<b>answered question</b>		<b>59</b>
<b>skipped question</b>		<b>0</b>

Where did you most often play Cool Choices?		
Answer Options	Response Percent	Response Count
on a mobile device (smart phone)	13.6%	8
on computer	69.5%	41
used both equally	5.1%	3
Other (please specify)	11.9%	7
<b>answered question</b>		<b>59</b>
<b>skipped question</b>		<b>0</b>

Other:

- On a computer which was unfortunate. It would shut down my iphone to play. So I had to fire up my desk top which would have remained off otherwise :(
- It didn't work on android phone. I dont have a computer at home. I went to the library a couple times & played.
- computer and iPad

- iPad
- ipad
- Ipad
- iPad

**Please rate the influence each of the following factors had on your choosing the actions you took.**

<b>Answer Options</b>	<b>1=least influential</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5=most influential</b>	<b>Response Count</b>
Was already doing the action	2	3	7	21	25	58
Easy to do	1	0	10	20	28	59
Fun to do	7	9	11	16	15	58
Save money	3	6	15	19	16	59
Good for the environment	0	1	5	21	32	59
Other congregation members were doing them	31	10	12	4	1	58
Earn a lot of points	6	6	23	9	15	59
<i>answered question</i>						<b>59</b>
<i>skipped question</i>						<b>0</b>

**What is the most meaningful new action you took as part of the game?**

<b>Answer Options</b>	<b>Response Count</b>
	41
<i>answered question</i>	<b>41</b>
<i>skipped question</i>	<b>18</b>

Responses:

*Resource Conservation*

- New shower heads and on/off switch for kitchen sink.
- used less water
- changed many lightbulbs –
- Finally installed a low flow shower head, had been meaning to do that for years!
- lower night time temperature in our home from 65 to 60
- Controlling my power usage.
- use less water in doing dishes/dishwasher
- I'm going to figure out how to get our pipes insulated 6 ft from the heater--I hadn't done that before. And, I'm installing a line to line dry clothing in my basement, for the winter months.
- Shorter showers.
- Replacing the old toilets in my home (will do this on Friday of this week -- should have been Monday!)
- get better shower heads and add a shutoff valve to our kitchen sink, also ensure water heater pipes were insulated.
- Committing to empty out our basement freezer and unplugging it. I won't be able to get credit for it for the game, but I know it's a huge energy loss as it's a really old freezer!
- Turning off my computer monitor when not in use.
- Will seriously consider insulating our water pipes, or at least check into this to save money.
- Figuring out particular usage. That was helpful, as I had no clue on how to do it.
- Turning off computers, tv, lights routinely now
- Complete review of our energy and water bills to maximize effectiveness.

- More recycling
- recycled more items
- Talking with my daughter about our energy choices, and running around the house with her counting plugged-in devices and deciding what we could unplug.
- recycling/passing on used appliances
- installed 3 new LED bulbs
- insulating the hot water heater and hot water pipes

#### *Transportation*

- driving habits - jack rabbit starts and speed
- Travel related changes
- Less driving
- Driving habits - trying not to jack rabbit
- combining errands
- Idling the car less.
- Driving - Jack rabbit starts. A lot of the other actions were things I already have in place but this is something I need to work on.
- Slowed my driving speed

#### *Health/Wellbeing*

- Eat less meat.
- Consuming less red meat
- ate sustainably by shopping at farmer market and picking friends fruit trees.

#### *Multiple*

- Quite a few related to driving (driving under 75, not idling as often, etc.) Also trying not to eat as much meat.
- Adjusting our household energy and water use, and modifying my driving habits. I really appreciated how the game kept those in mind day-by-day.
- Reducing the amount of water, and actions that helped with my car

#### *Other*

- N/A
- --reading and learning, or being reminded about different ways to tweak my ideas and actions to be more "green."
- can't recall on the fly
- Didn't know a PS3 used more energy than a DVDS player.

Did you make any changes in the following settings and routines during the game?		
Answer Options	Response Percent	Response Count
changed your furnace fan setting from continuous (or on) to auto	51.6%	16
lowered your thermostat setting at night or when no one is home	64.5%	20
unplugged or removed second refrigerator/freezer	6.5%	2
unplugged or turned off gaming system (Playstation, Xbox, etc.)	45.2%	14
<i>answered question</i>		<b>31</b>
<i>skipped question</i>		<b>28</b>

**Which of the following best describes how often you kept your furnace fan on the “on” (circulating air) setting before the Cool Choices game? (Note: the “on” setting circulates air whether or not the furnace is heating or the air conditioner is cooling. The “auto” setting only circulates air when you are actively heating or cooling.)**

Answer Options	Response Percent	Response Count
“auto” all the time year round	54.5%	24
“auto” most of the time, but “on” situationally to circulate air	22.7%	10
“on” all the time year round	6.8%	3
“on” some parts of the year, “auto” during the rest	6.8%	3
other	4.5%	2
don't know	4.5%	2
<i>answered question</i>		<b>44</b>
<i>skipped question</i>		<b>15</b>

**To lower your home’s temperature at night or when you are away, did you adjust the thermostat manually or use programmable features your thermostat may have?**

Answer Options	Response Percent	Response Count
adjusted temperature manually	54.5%	6
used programmable features	45.5%	5
<i>answered question</i>		<b>11</b>
<i>skipped question</i>		<b>48</b>

**At what temperature did you tend to keep your home during this past winter when someone was home and awake...?**

Answer Options	Response Average	Response Total	Response Count
Before the Cool Choices game	69.90	699	10
During/after the Cool Choices game	68.70	687	10
<i>answered question</i>			<b>10</b>
<i>skipped question</i>			<b>49</b>

Temperatures:

Before the Cool Choices game	During/after the Cool Choices game
66	64
68	68
68	68
69	68
72	71
70	68
70	68
70	70
72	70
74	72

**At what temperature did you tend to keep your home during this past winter when everyone was sleeping...?**

Answer Options	Response Average	Response Total	Response Count
Before the Cool Choices game	66.80	668	10

During/after the Cool Choices game	64.40	644	10
<i>answered question</i>			<b>10</b>
<i>skipped question</i>			<b>49</b>

Temperatures:

Before the Cool Choices game	During/after the Cool Choices game
65	64
65	60
65	65
65	62
71	69
70	68
62	62
65	65
70	65
70	64

At what temperature did you tend to keep your home during this past winter when no one was home...?			
Answer Options	Response Average	Response Total	Response Count
Before the Cool Choice game	66.90	669	10
During/after the Cool Choices game	64.40	644	10
<i>answered question</i>			<b>10</b>
<i>skipped question</i>			<b>49</b>

Temperatures:

Before the Cool Choice game	During/after the Cool Choices game
66	64
60	60
68	68
65	62
70	68
70	68
62	62
68	68
70	60
70	64

What type of refrigerator or freezer did you unplug or remove from your home?		
Answer Options	Response Percent	Response Count
full size refrigerator	0.0%	0
mini-refrigerator	0.0%	0

stand-up freezer	0.0%	0
chest freezer	0.0%	0
Other (please specify)	0.0%	0
<b>answered question</b>		<b>0</b>
<b>skipped question</b>		<b>59</b>

Which of the following best describes what you did with this refrigerator or freezer?		
Answer Options	Response Percent	Response Count
unplugged it temporarily for the game	0.0%	0
unplugged it permanently	0.0%	0
removed it with the intention to replace it	0.0%	0
removed it with no plans to replace it	0.0%	0
<b>answered question</b>		<b>0</b>
<b>skipped question</b>		<b>59</b>

How often was your gaming system plugged in and on (even if you weren't actively using your system)...? (Please answer in hours per week.)			
Answer Options	Response Average	Response Total	Response Count
Before the Cool Choices game	47.60	238	5
After the Cool Choices game	6.20	31	5
<b>answered question</b>			<b>5</b>
<b>skipped question</b>			<b>54</b>

Hours per week:

Before the Cool Choices game	After the Cool Choices game
50	20
2	1
14	4
4	1
168	5

While the Cool Choices game was active, did you take any energy saving or sustainability actions that you didn't claim points for?		
Answer Options	Response Percent	Response Count
yes	52.6%	30
no	47.4%	27
<b>answered question</b>		<b>57</b>
<b>skipped question</b>		<b>2</b>

What energy saving or sustainability actions did you take that you didn't claim points for?	
Answer Options	Response Count
	28

## Response Type:

### *Resource Conservation*

- turn off lights
- turned off lights in empty rooms
- composted yard waste and kitchen scraps.
- Recycling, using reusable bags, upcycling or regifting items instead of throwing them out.
- My hubby & I both telecommute, which I think is a sustainable choice (on the other hand, we have computers and phones plugged in ALL DAY long!!) trade-offs.
- Shoveled snow and raked instead of using machines
- Recycle everyday, seldom watch tv, do not have a gaming system and have high efficiency refrigerator and furnace.
- meat free meals
- Recycling - do it every day, but it was only worth 2 points so I chose other cards to play
- Full load of laundry
- Composting

### *Home Improvement*

- Focus on Home n/a in my area. Set up a home energy audit, but it is in future.
- bought new windows
- Bought a new high efficiency boiler and water heater
- Changed our furnace filter
- covered windows with plastic as winter started to keep house warmer.
- Ordered new door to cut air leakage

### *Transportation*

- I drive a hybrid car
- Was unable to claim points for driving a hybrid vehicle.

### *Multiple*

- repurposing products (like egg cartons, styrofoam, etc) opposed to just recycling. Never using a hairdryer. Carpooling to church. Composting. Creating better recycling practices at our children's schools. Encouraging lunches and snacks and drinks to be packed in tupperware or other containers instead of plastic bags.
- We chose NOT to install any type of landscape lighting. We use scrap (one side used) paper for most of our printing. We re-use envelopes by putting blank labels on the old return addresses. I collect gray water while waiting for my shower water to heat up to use for watering plants and in the kitchen to soak dishes. We just installed two energy star furnaces, paying extra for a DC fan which we were told was more energy efficient We also drive a Prius.
- Don't use a TV or gamestation, thus didn't need to claim that. Installed new energy saving windows. Caulked windows that needed it.
- I feel my whole day is filled with energy saving/sustainability actions--I carry reusable lunch containers/water bottle, shop carefully for food quantities to avoid waste, buy only things that I need and will use, use "scrap" paper for most of my work needs, .....

### *Other*

- A variety of things ... missed some days :)
- Unable to play
- can't remember
- I've been doing most of the 2 and 5 pointers for years but I claimed the higher point actions while playing the game.
- i don't remember

Please rate the following statements:							
Answer Options	strongly disagree	disagree	neutral	agree	strongly agree	don't know	Response Count
The Cool Choices actions were simple to do.	0	3	9	35	9	1	57
My family was enthusiastic about taking the Cool Choices actions.	2	9	15	13	7	9	55
I am more aware of opportunities to save energy since playing Cool Choices.	0	2	6	22	26	1	57
Since playing Cool Choices, I'm more likely to turn off lights in rooms that aren't being used.	5	3	16	16	15	2	57
I'm proud of the changes I've made as a result of playing Cool Choices.	0	1	11	24	19	2	57
I learned a lot from my fellow congregation members while playing Cool Choices.	6	14	26	8	1	2	57
Since playing Cool Choices, I'm more likely to turn off equipment that isn't being used.	1	2	11	28	13	2	57
Cool Choices feels like a meaningful part of UUCW's efforts toward sustainability.	1	0	5	27	21	3	57
answered question							57
skipped question							2

Sustainability is important...							
Answer Options	strongly disagree	disagree	neutral	agree	strongly agree	n/a	Response Count
To me	0	0	0	10	47	0	57
To my household	0	0	3	17	34	2	56
To my friends	1	2	12	27	14	0	56
To my extended family	1	4	21	22	9	0	57
To my fellow congregation members	0	0	0	16	41	0	57
To leadership at UUCW	0	0	0	6	51	0	57
answered question							57
skipped question							2

Do you have any other comments for Cool Choices?	
Answer Options	Response Count
	31



Comments:

*General Positive*

- This is a really clever game. Kudos to the developers! I hope other congregations and organizations play, and take the suggestions to heart.
- I'm glad we had the chance to be CC's first congregation to try the game. It was fun, and involved many people in a positive way.
- There are extra positive outcomes from the game besides sustainability - creating new friends, meeting new people, fostering community, providing an intergenerational opportunity for our members. There are other congregations in the greater Milwaukee Interfaith Earth Network that are very interested in learning about CC and engaging their congregations with the game. Thanks for all you do!!
- It was worthwhile and generated interest in sustainability.
- I loved the links that were provided on the cards. I learned new ideas from them.
- Great participation! Interesting experience!

*Cards/Points*

- Create a card once in a while where a participant can fill in a good choice they made even if it wasn't one of the options.
- I did not like the Cool Choices that required buying a new consumer product such as the buying a new flatscreen TV. I'm OK with buying a rain barrel or installing solar lights, but I wonder about the rationale for including purchase of a big consumer product.
- I had wished for more new tips I didn't know or simple things I could do that I wasn't already doing.
- Some of the choices were difficult as I live in HUD housing, and have no say in water and power choices as they are included in the rent.
- Consider adding a card relating to not using water (ie doing laundry or running dishwasher) during or just after a major storm. Using water in such times overruns the storm sewer system and increases sewer dumping into Lake Michigan
- I would like to see more points for the choices available to the teens playing. Mostly, the things kids could so were only worth 2 or 5 points.
- Some of the actions (ex: install an irrigation system) are not as sustainable as some of the actions we already do (i.e. not even watering the lawn in the first place).
- As a single woman living in a heated apartment, many of the options do not apply to me. Example: No control over furnace settings and cannot change to energy saving appliances.
- Is there anything more to suggest to people who rent?

*Game Logistics*

- Inform people in advance of what type of cell phone Doesn't Operate with game. It was very frustrating trying to play.
- I think it went on for too long for me. After 1 month my interest faded. I would suggest a shorter length of play in future.
- I was frustrated daily with the game for not giving me the ability to hide cards that weren't relevant to me. In the last few weeks, I could only play low-point cards (2 or 5) because I'm not a homeowner to make many of the changes. This was incredibly frustrating and I only kept playing to avoid being a lousy teammate.
- The website was clunky at times. Particularly annoying was that when I made choices they didn't seem to be immediately recorded so I couldn't tell if they were actually recorded and how many had been made. Also it wasn't intuitive how to get out of the play cards window. The buttons for going to other parts of the website were small and not at all obvious at the very bottom of the screen.
- I didn't know how to add pics, recipes. Unfortunately it was a really busy period for me so I didn't access the help I know was available.
- I think the game goes on too long. We lost interest after a while because there weren't enough new choices (old ones got boring) or the new choices were too difficult to do. Also, I know this is your first time doing this with a church, so for the next one, I'd recommend making this easier and more interesting for children

to participate. They were gung-ho at first, until they realized there was really nothing in it for them and most of the actions were for adults.

- No personal responses to problems; purely computer driven with no personal interaction.

#### *Multiple*

- I wish there was an app! Also, some choices weren't clear and it would have been nice to have more specific directions or a link to more information. Sometimes I wasn't sure what they wanted. Would have been nice to have more people talk on the stream, maybe posting a couple of questions to create interest. Also, a group message option would be cool to message our team on the game. I felt alone when playing with my team as I wasn't friends with my team and no one really talked (except our leader :) Overall it was interesting and I would play again.
- Challenging to have comradery with randomly assigned teams where you rarely (if ever) see each other in person. Didn't work on a mobile device. Perhaps went on a week or two too long.
- This has been lots of fun, but with moving, I have not time to read all the information available on each card. Will I have access after the game is over. It was so easy to flip the card and click on a tab. Please be more inclusive than using the word "spouse" on #10. "Partner" and "roommate" are other possibilities.
- 1. It was unfortunate that not all high point actions were options for me, such as being ineligible for the energy audit, not owning a game console, and others applicable to work setting.  
2. I got tired of playing the game. Trying to stay on top of the winners board got tiresome; competition got tiresome.

#### *Other*

- our congregation is very environmentally savvy, but my neighbors and friends are oblivious.
- Trying to "play" the game everyday often felt like Yet Another Item on my To Do List. I made big decisions, long ago, to arrange my life (and my household) in a sustainable way: recycling, re-usable bags, composting, non-toxic cleaning, local & organic foods, etc. It is a Lifestyle. Changing other peoples' habits is hard, but the more of us that choose to do these things as a Way of Life, the more the message will get across.
- I was hoping it would be more fun. Seemed more like homework than a game.
- Members of other churches are interested in Cool Choices.
- no

Does your household:		
Answer Options	Response Percent	Response Count
Own	86.0%	49
Rent	14.0%	8
Other (please specify)	0.0%	0
<i>answered question</i>		<b>57</b>
<i>skipped question</i>		<b>2</b>

Which of the following best describes your house?		
Answer Options	Response Percent	Response Count
Single-family home	80.7%	46
Duplex	7.0%	4
3-4 unit apartment building or condominium	1.8%	1
5-9 unit apartment building or condominium	3.5%	2
10-19 unit apartment building or condominium	0.0%	0
20+ unit apartment building or condominium	5.3%	3
Other (please specify)	1.8%	1

<i>answered question</i>	<b>57</b>
<i>skipped question</i>	<b>2</b>

How old are you?		
Answer Options	Response Percent	Response Count
16 and under	0.0%	0
17-24	0.0%	0
25-34	8.8%	5
35-44	15.8%	9
45-54	24.6%	14
55-64	33.3%	19
65 years of age or older	17.5%	10
<i>answered question</i>		<b>57</b>
<i>skipped question</i>		<b>2</b>

Please enter your zip code.	
Answer Options	Response Count
	56
<i>answered question</i>	<b>56</b>
<i>skipped question</i>	<b>3</b>

Zip codes:

Response Text
53228
53214
53226
53226
53149
53122
53209
53089
53072
53122
53045
53213
53213
53209
53226
53005
53005
53213
53189
53005
53214
53214
53005

53213  
53226-3657  
53154  
53226  
53122  
53186  
53045  
53225  
53051  
53209  
53222  
53213  
53222  
53225  
53045  
53188  
53222  
53226  
53226  
53226  
53228  
53226  
53045  
53213  
53225  
53213  
53213  
53045  
53188  
53222  
53005  
53226  
53235

To be eligible for the prize drawing, please provide your name and email. (Your responses are completely confidential and have no bearing on the prize drawing)		
Answer Options	Response Percent	Response Count
Name	100.0%	56
Email	100.0%	56
<i>answered question</i>		<b>56</b>
<i>skipped question</i>		<b>3</b>