

Getting Connected...

- **Dial In (best connection):**
 - Dial: 866.775.0802; Participant Code: *3630#
 - Make sure your speakers are **off** or there will be an echo.
 - To merge your name with your phone number on the list:
 - Enter token number found in “Join Audio Conference” pop up box. The token ID can also be viewed within the webinar by clicking on the “i” icon at the top right-hand corner.
 - Click the drop down menu at the top right of the attendees pod and select "edit my information" then enter your name and phone number
- **Computer**
 - Make sure your computer microphone and speakers are **on**.

Community-Based Social Marketing

SSDN Education to Execution Workshop Series



Webinar #1: Selecting and Prioritizing Behaviors

September 8, 2015

If you are using the phone to dial-in, be sure that your computer mic/speakers are on mute. **This webinar will be recorded.**



Research • Social Marketing • Results

Agenda

Introductions (10 min)

- Announcements
- Name, City/County

Background (5 min)

- Webinar Series Overview
- Process Overview

Behavior Selection (30 min)

- Process
- Application

Introduce Tools (15 min)

- Worksheets/Spreadsheets
- Data Collection Tools

Q&A (30 min)

- Behaviors/Data Sources
- Challenges/Concerns

Introductions

Action Research: Intro to Speakers

Call Participants: Name, City/County

changing behavior

for the public good by applying marketing and social science research to outreach programs that promote **clean, healthy, + sustainable communities.**



clean	healthy	sustainable
community	workplace	environment
research	implement	evaluate

wide range of behavior change experience



waste + recycling



transportation



energy



water



health



conservation



agriculture



pollution prevention

webinar speakers

Jennifer Tabanico
President & Owner



Lori Brown Large
Director of Research Operations



Background

Webinar Series Overview

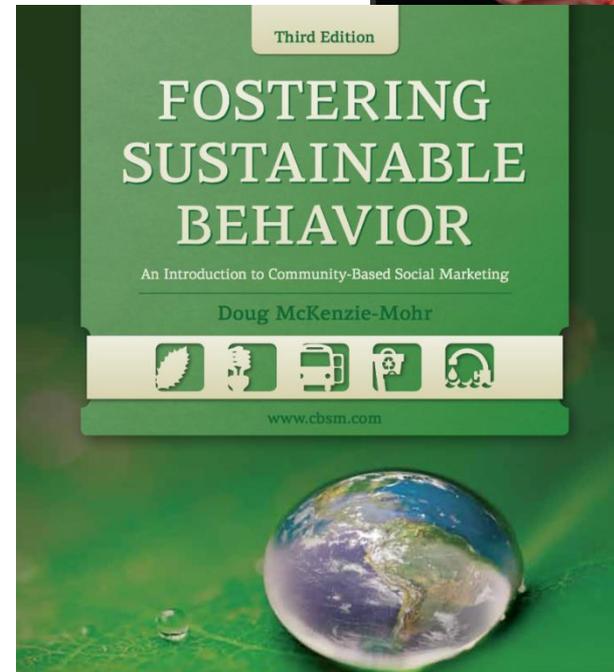
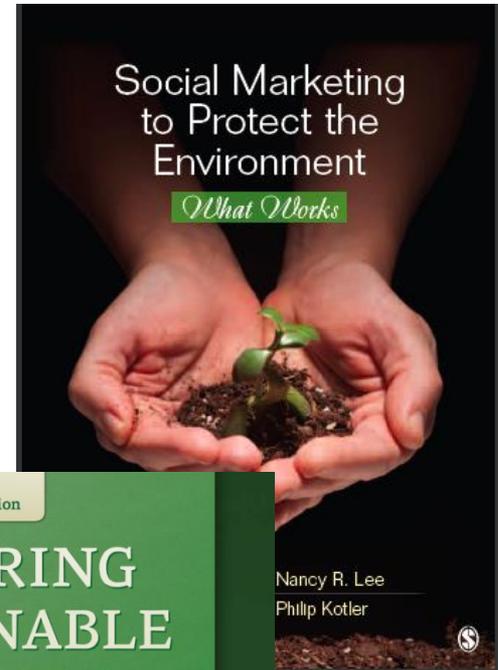
Process Overview

Webinar Series Overview

- ❑ **Selecting and Prioritizing Behaviors**
 - ❑ *Training and Tools*
- ❑ **Conducting Barrier and Benefit Research**
 - ❑ *Methods, Best Practices, Instruments, Resources*
- ❑ **Strategy and Message Design**
 - ❑ *Social Science, Matching Tools, Branding/Messaging*
- ❑ **Pilot Testing and Evaluation**
 - ❑ *Identifying Metrics, Design, Analysis, ROI*
- ❑ **Troubleshooting, Lessons Learned, Scaling Up**
 - ❑ *Discussion*

Background

- ❑ Fostering Sustainable Behavior
 - ❑ *Doug McKenzie-Mohr*
- ❑ Case Studies
 - ❑ *www.cbsm.com*
 - ❑ *“What Works”*
- ❑ USDN Turnkey Strategies
 - ❑ *Cold Water Wash*
 - ❑ *Computer Shutdown*



Community-Based Social Marketing

- ❑ origins in 100 years of social science
 - ❑ psychology, sociology, anthropology, etc.
- ❑ community-based
 - ❑ delivered at local-level
- ❑ removes barriers to action
 - ❑ motivational and structural
- ❑ behavior-based
 - ❑ outcomes (behavior change) not outputs (# of impressions)



Community-Based Social Marketing

Select Behavior

```
graph TD; A[Select Behavior] --> B[ ]; B --> C[ ]; C --> D[ ]; D --> E[ ]
```

McKenzie-Mohr, D. (1999, 2011). Fostering sustainable behavior. Canada: New Society Publishers. See also www.cbsm.com

Community-Based Social Marketing

Select Behavior



```
graph TD; A[Select Behavior] --> B[Barriers & Benefits]; B --> C[ ]; C --> D[ ]; D --> E[ ]
```

Barriers & Benefits

McKenzie-Mohr, D. (1999, 2011). Fostering sustainable behavior. Canada: New Society Publishers. See also www.cbsm.com

Community-Based Social Marketing

Select Behavior



```
graph TD; A[Select Behavior] --> B[Barriers & Benefits]; B --> C[Develop Strategy]; C --> D[ ]; D --> E[ ]
```

Barriers & Benefits

Develop Strategy

McKenzie-Mohr, D. (1999, 2011). Fostering sustainable behavior. Canada: New Society Publishers. See also www.cbsm.com

Community-Based Social Marketing

Select Behavior

```
graph TD; A[Select Behavior] --> B[Barriers & Benefits]; B --> C[Develop Strategy]; C --> D[Pilot Test]; D --> E[ ];
```

Barriers & Benefits

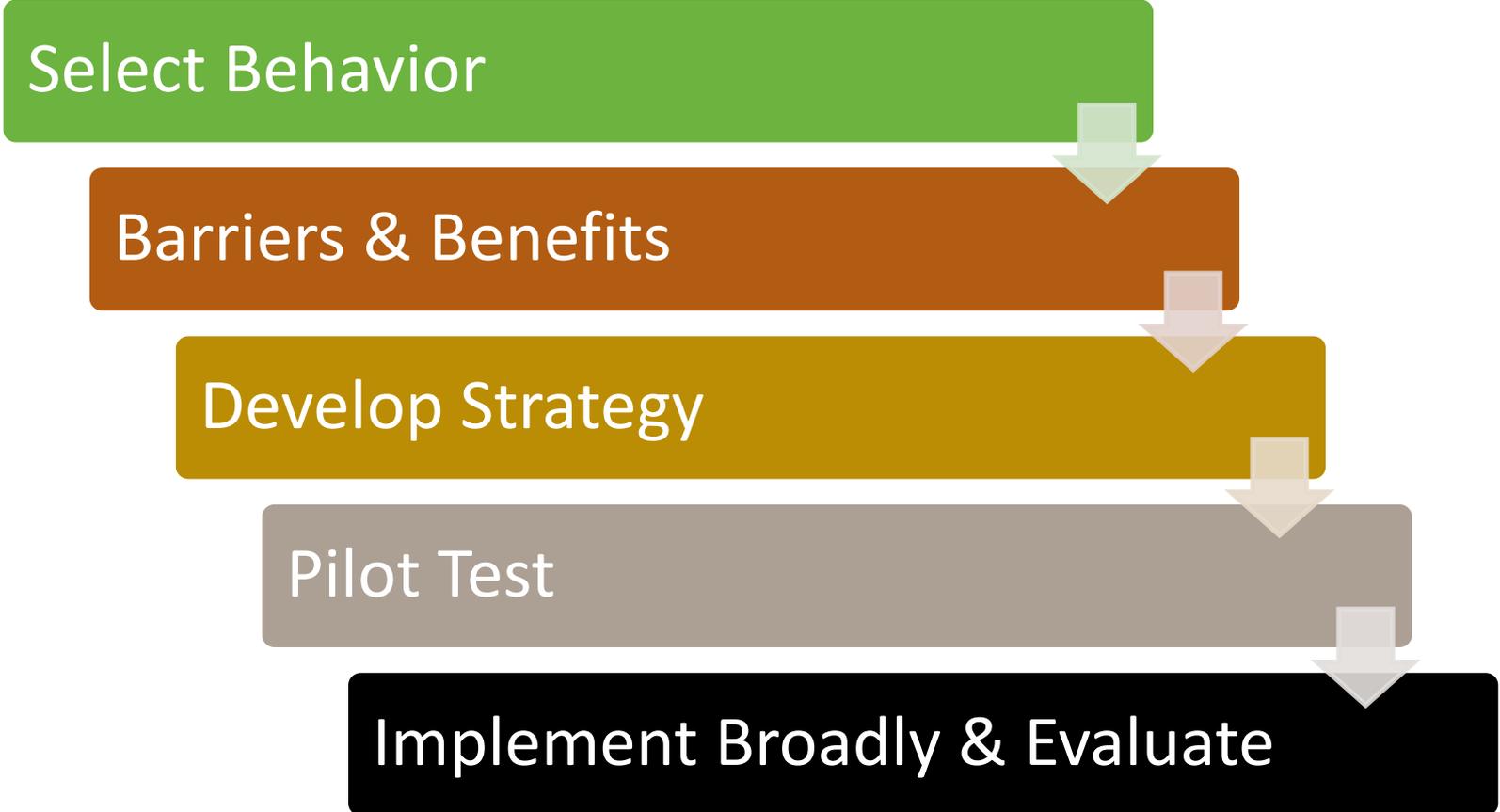
Develop Strategy

Pilot Test

McKenzie-Mohr, D. (1999, 2011). Fostering sustainable behavior. Canada: New Society Publishers. See also www.cbsm.com

Community-Based Social Marketing

Select Behavior



```
graph TD; A[Select Behavior] --> B[Barriers & Benefits]; B --> C[Develop Strategy]; C --> D[Pilot Test]; D --> E[Implement Broadly & Evaluate];
```

The diagram illustrates a five-step process for Community-Based Social Marketing. Each step is contained within a colored rectangular box, and the steps are connected by downward-pointing arrows. The steps are: 1. Select Behavior (green box), 2. Barriers & Benefits (brown box), 3. Develop Strategy (gold box), 4. Pilot Test (grey box), and 5. Implement Broadly & Evaluate (black box). The boxes are arranged in a descending staircase pattern from top-left to bottom-right.

Barriers & Benefits

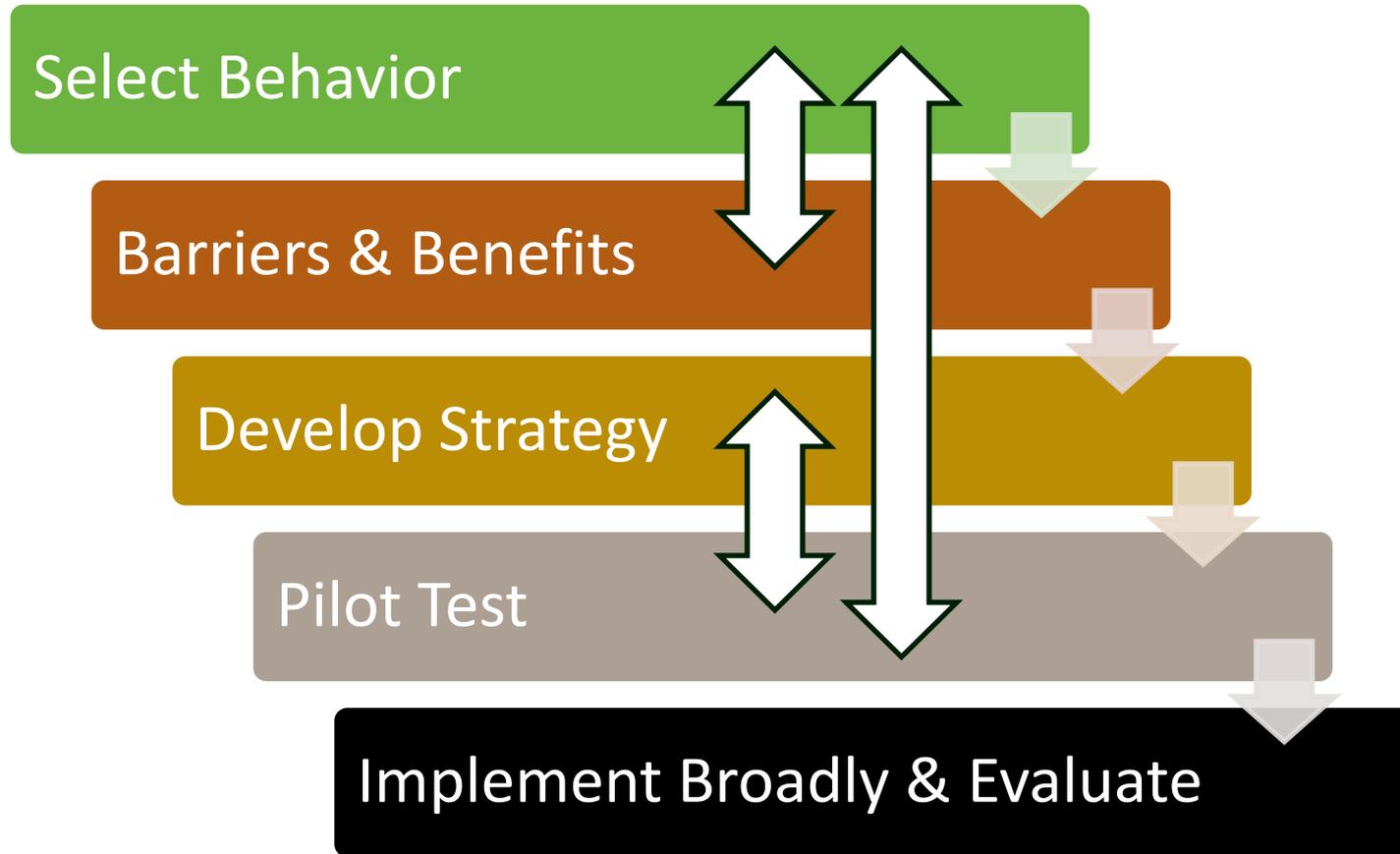
Develop Strategy

Pilot Test

Implement Broadly & Evaluate

McKenzie-Mohr, D. (1999, 2011). Fostering sustainable behavior. Canada: New Society Publishers. See also www.cbsm.com

Community-Based Social Marketing



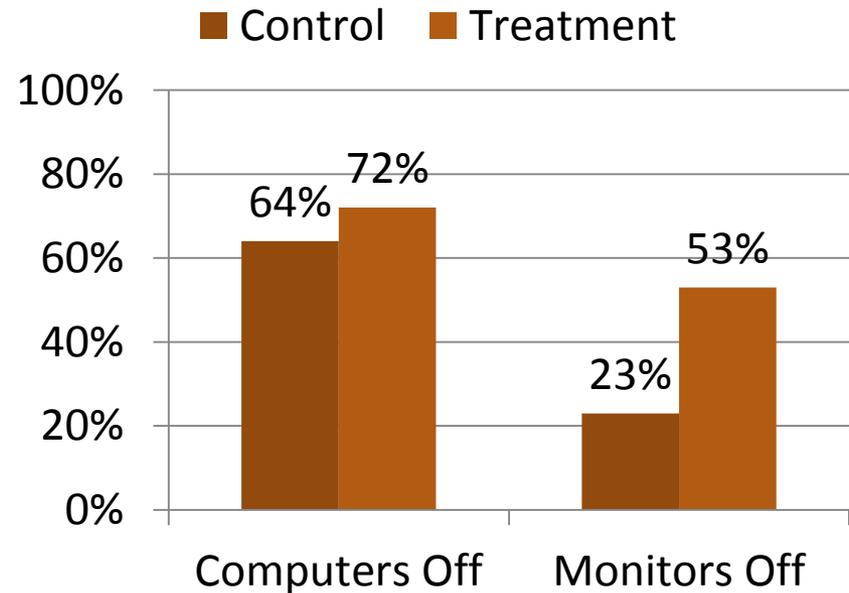
changing behavior

Urban Sustainability Directors Network

turn off computers and monitors at the end of the workday



Computer & Monitor Shutdown Rates



Santa Clara County, CA; Columbia, MO; Frederick County, MD

changing behavior

Urban Sustainability Directors Network

wash clothes in cold water

What Water Temperature do you Typically Use (Asheville)?

■ Treatment ■ Control

cool is clean Get Clothes Clean And Save Energy By Using Cold Water!

Clean Clothes
Change temperature, not brand. You don't need a special detergent to get your laundry clean in cold water. Consumer Reports gave these detergents high marks for cleaning in all temperatures.

Detergent Brand	Price per Load	Washer Model
Tide for Cold Water	18¢	Top-Load
Up & Up Ultra Concentrated (Target)	10¢	Top-Load
Tide Ultra plus Bleach*	23¢	Front-Load
Tide Pods	22¢	Front-Load
Sears Ultra Plus Concentrated 9879	13¢	Front-Load

*Top-rated detergent overall

Save Energy
90% of the energy used to wash a load of laundry goes to heating the water. Source: ENERGY STAR®

\$265 → **\$16**

Hot/Warm Wash 68¢ per load \$265 per year*
Cold/Cold Wash 4¢ per load \$15 per year*
*Based on average electricity costs and about 390 loads per year.

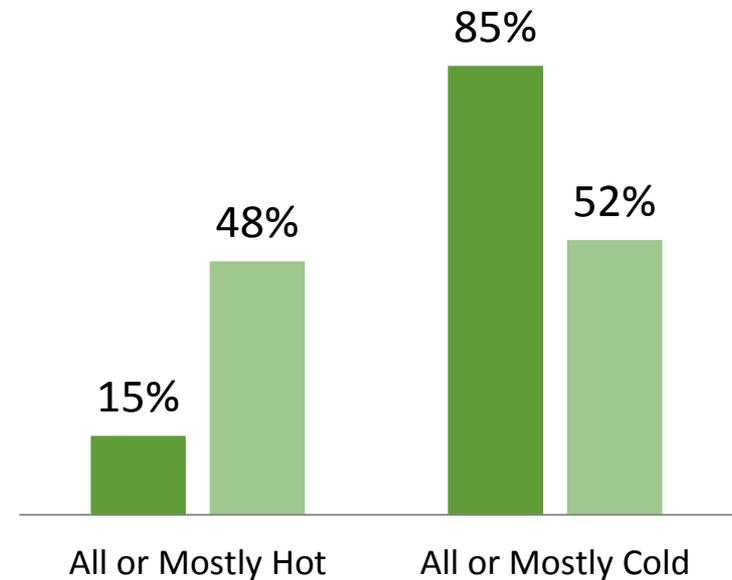
Ask Your Neighbors
Results from a recent survey in your neighborhood found that:

- Over 1/2 of your neighbors say they are using all or mostly cold water for their laundry.
- Those who wash in cold water feel strongly that it:
 - is better for the environment
 - saves energy
 - makes clothes last longer
 - saves money

“I have always washed with cold water, even my two boys' clothes, and our clothes have been clean, and last much longer. Stains are also easier to remove in cold water. I would tell all my neighbors to forget the idea that whites need to be washed in hot water, since no one has ever commented that our whites weren't as white.” —Gratchin Lewis, Asheville

“I've been washing our laundry in cold water for over 10 years. We save energy and have lower utility bills without sacrificing anything, since we never noticed any problems with our clothes. You can lower your costs, and be good stewards of the environment at the same time.” —Grace Curry, Asheville

Cool Is Clean and Clean Is Cool



Asheville, NC; Tucson, AZ; Berkeley, CA

changing behavior

City of Fort Worth, Texas
residential recycling

- ❑ Waste audits (N=415)
 - ❑ Mixed paper largest opportunity
- ❑ In-person surveys (N=261)
 - ❑ Barriers varied by material type
- ❑ Strategy
 - ❑ Privacy concerns
 - ❑ Knowledge (e.g., shiny paper, windows)



**MARK OUT
AND RECYCLE.**

If you're concerned about your privacy use the enclosed marker to mark out your information before you recycle.



You can recycle all types of paper in your blue recycling cart, including junk mail, envelopes with windows, magazines and glossy paper.

In a recent survey, 87% of Fort Worth residents stated that recycling at home was very important to them. However, some residents were unsure about recycling items that contained their name or personal information.

The City of Fort Worth would like to make it easier for residents to recycle all types of paper.

Let's keep junk mail, envelopes, magazines and glossy paper out of our landfill.

FORT WORTH.
CODE COMPLIANCE
SOLID WASTE SERVICES



Behavior Selection

Process
Application

CBSM Step 1: Selecting Behaviors

- ❑ Strategic selection
 - ❑ Desired outcome?
 - ❑ Sectors? Audiences?
 - ❑ Behavior linked to outcome?
- ❑ Informed choices
 - ❑ Hunches often disconfirmed
 - ❑ Confirmation bias
 - ❑ Technical and survey data



#1: Define Your Outcome(s)

❑ Outcomes

- ❑ kWh
- ❑ Gallons of water
- ❑ Tons of waste
- ❑ Gallons of used oil

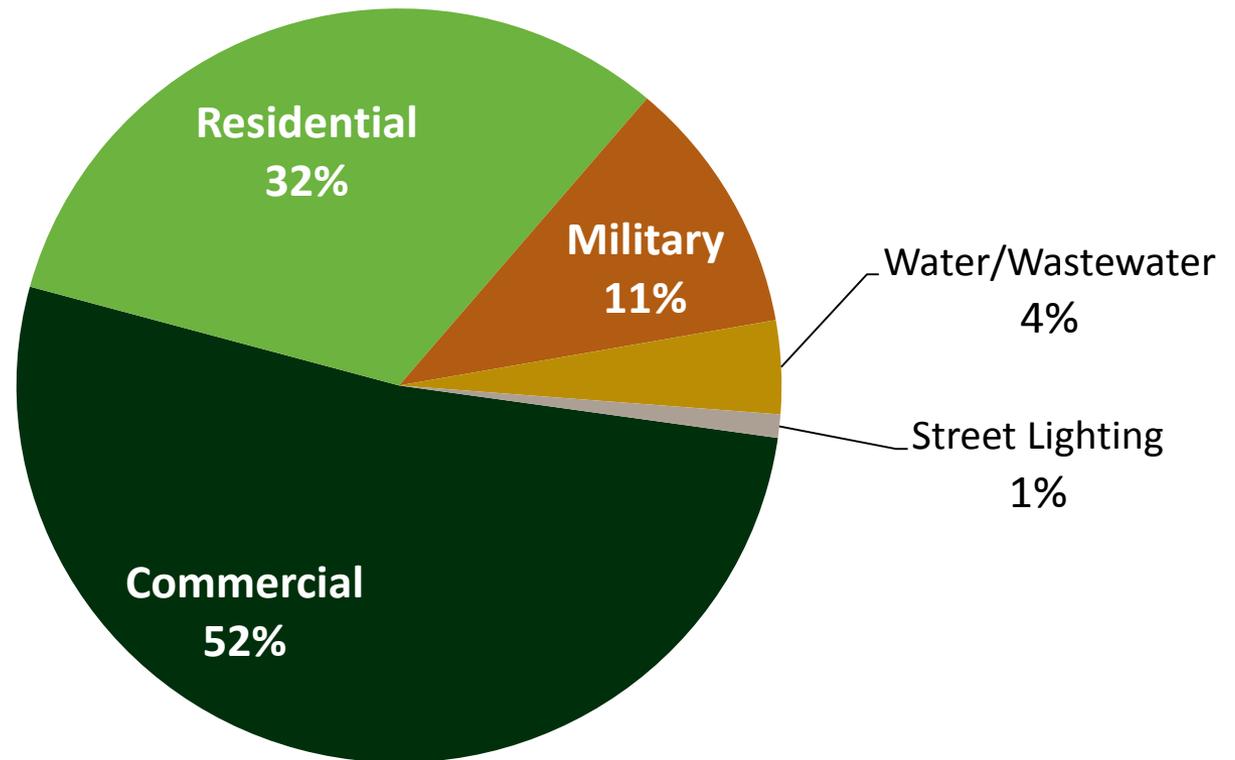
❑ Outputs

- ❑ Web hits
- ❑ Page likes
- ❑ Event participation



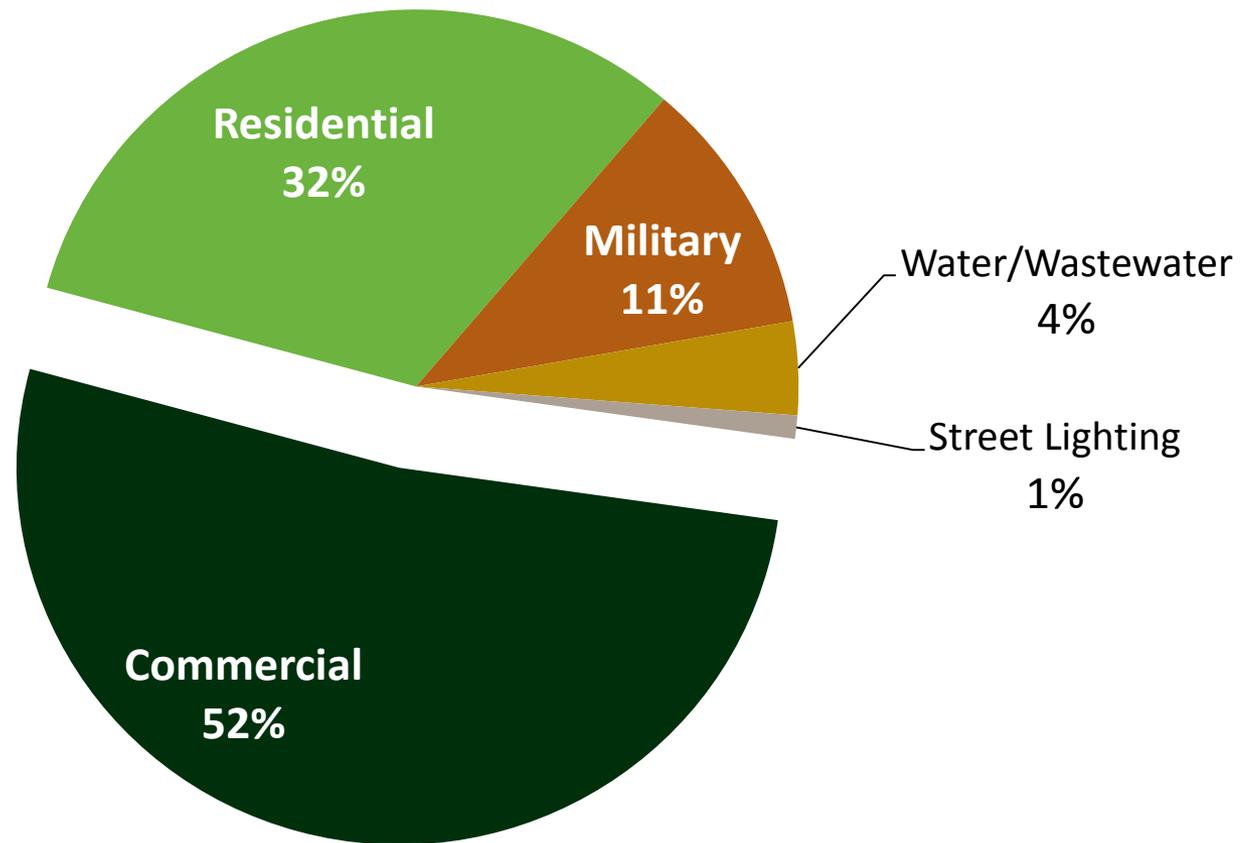
#2: Decide What Sector to Target

Hawaii Statewide Electricity Use by Sector, 2012



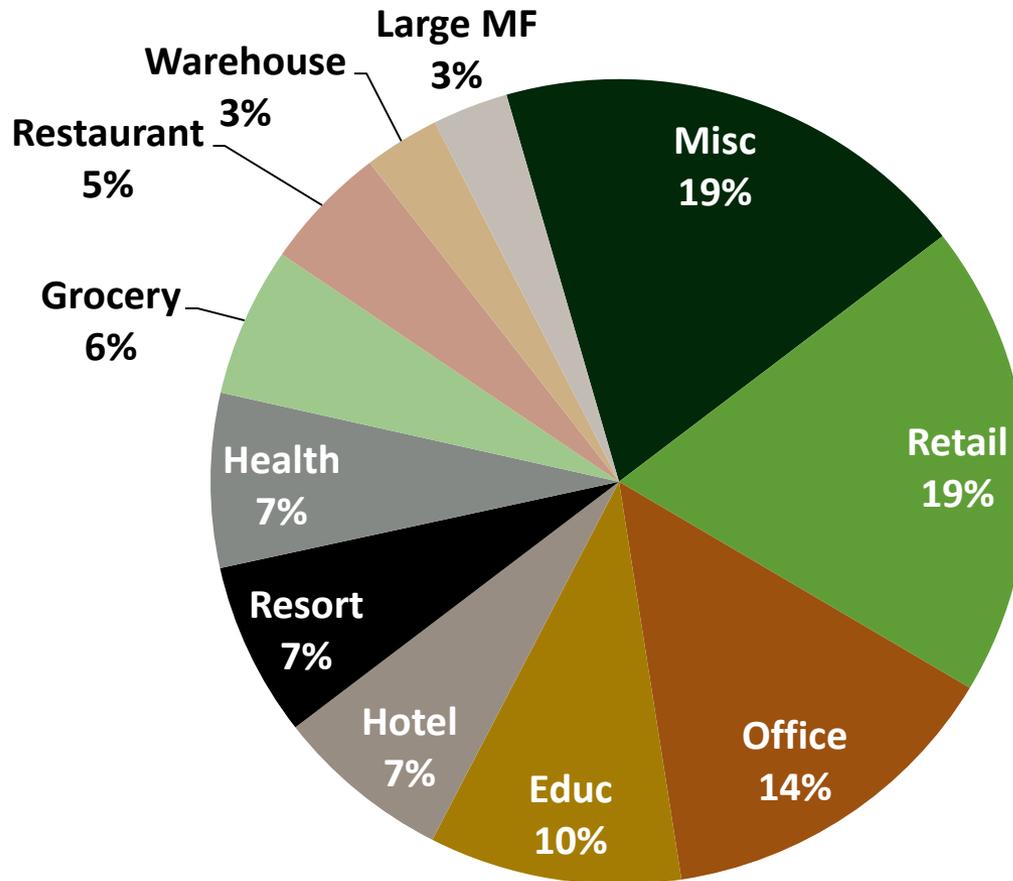
#2: Decide What Sector to Target

Hawaii Statewide Electricity Use by Sector, 2012



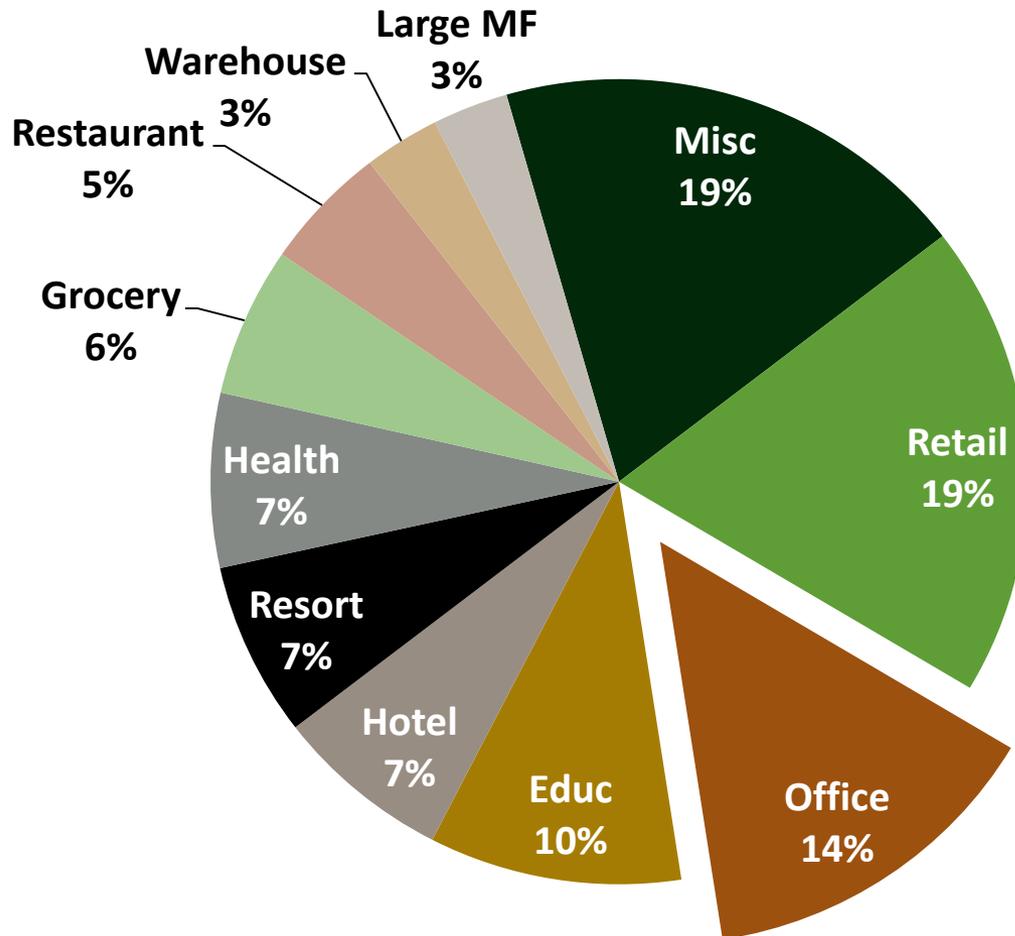
#3: Decide Which Usage Categories to Target

Commercial Sector Electricity Use by Segment, 2012



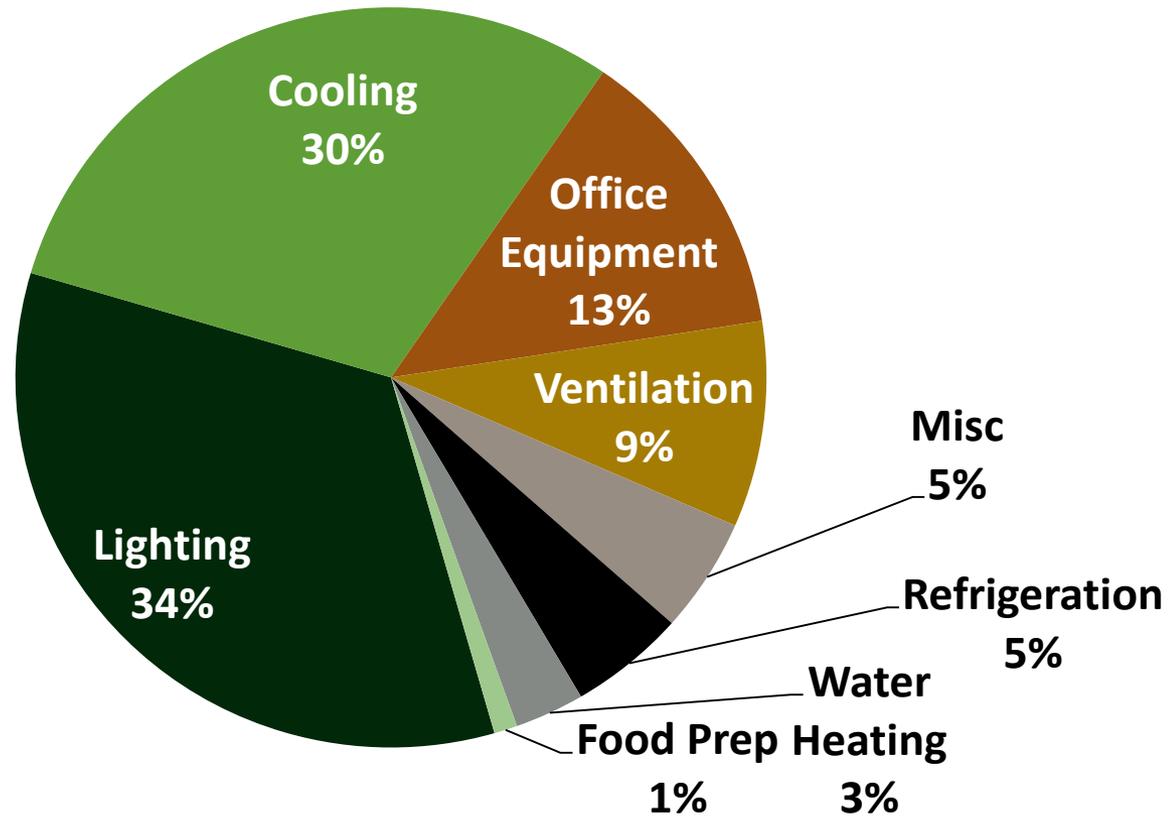
#3: Decide Which Usage Categories to Target

Commercial Sector Electricity Use by Segment, 2012



#3: Decide Which Usage Categories to Target

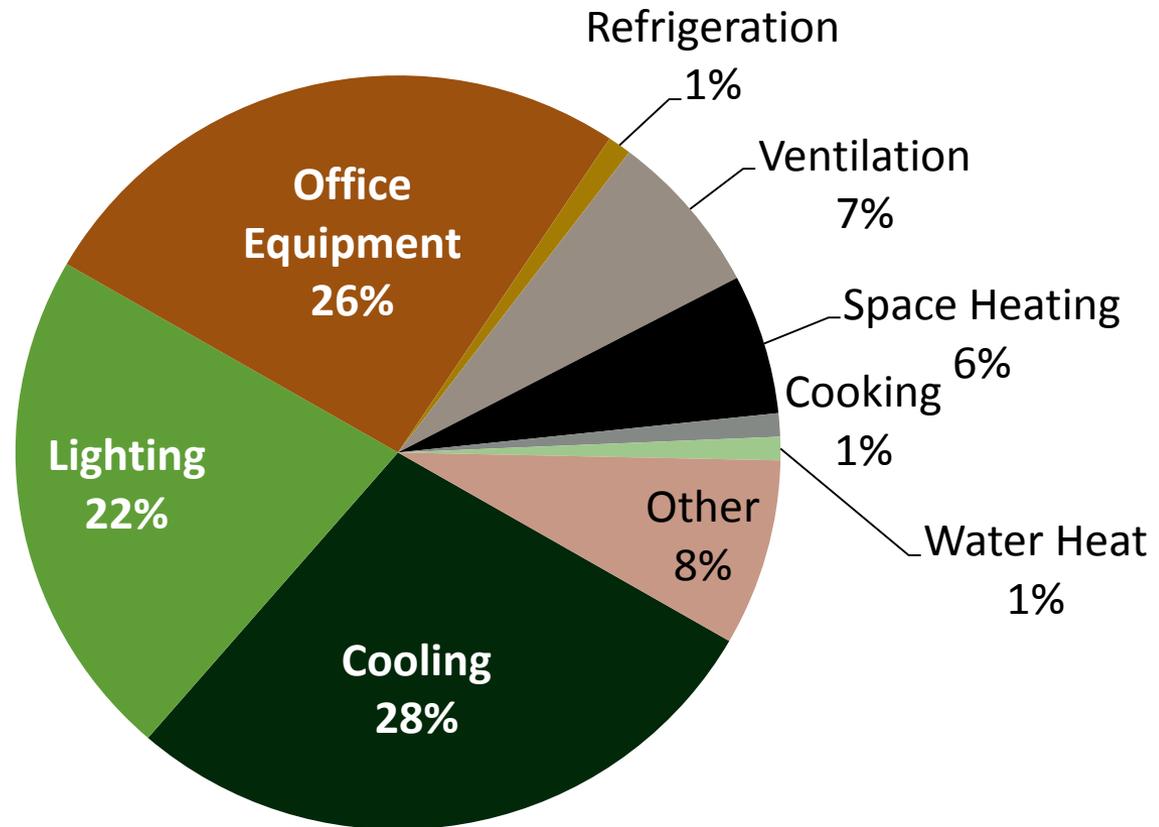
Office End Use Estimates



EnerNOC 2014

#3: Decide Which Usage Categories to Target

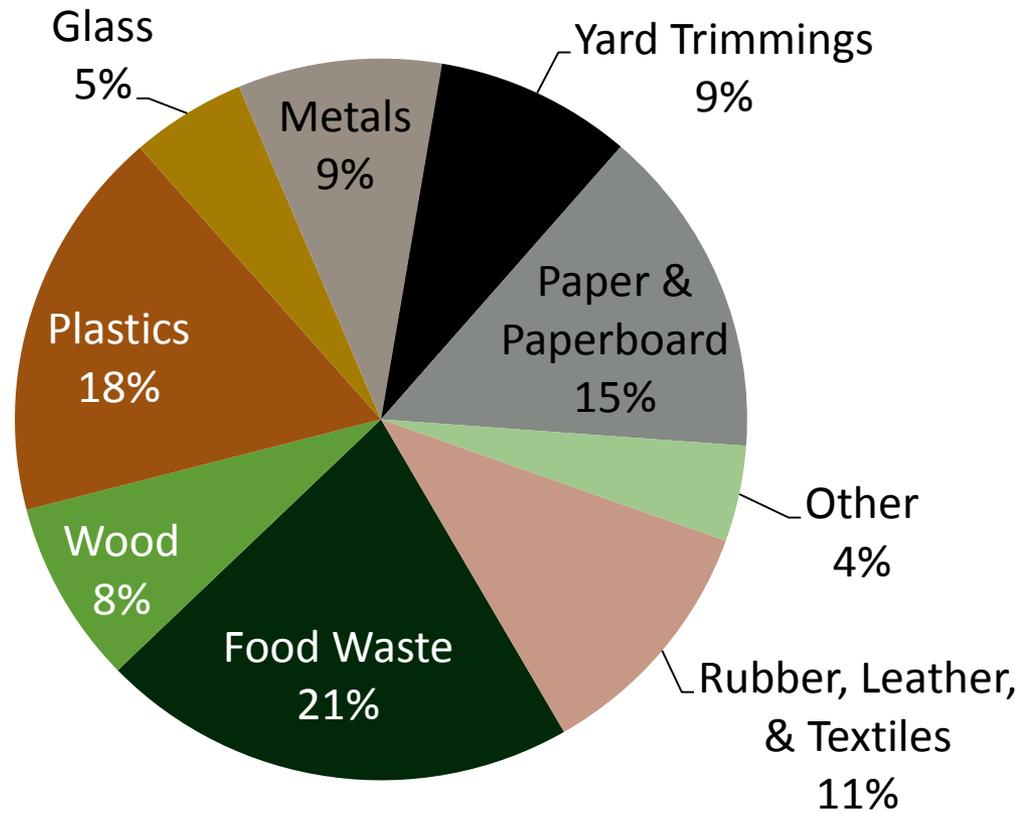
Office Building Electricity Use by End Use in U.S.



Source U.S. EIA

Waste Example

Total MSW Discards (by material), 2012
164 Million Tons (after recycling and composting)



#4: Create a List of Behaviors

End State

- **Action Causes the Outcome**
 - *Wash clothes in cold water*
 - *Turn off computer*

Non-divisible

- **Cannot be Broken Down into Smaller Actions**
 - *Conserve energy*
 - *Many actions embedded*

Avoid Strategies

- **Not Directly Linked to Outcome**
 - *Sign an pledge*
 - *Attend a workshop*

#5: Gather IPPA Information

Impact

- How much will it affect the goal?

Probability

- How difficult is change?

Penetration

- How many already engaged?

Applicability

- For whom is it relevant?

Impact

❑ Collect Data

- ❑ Technical Reports
- ❑ Actual Measurement
 - ❑ Audits
 - ❑ Kill-a-Watt meter

❑ Ask the Experts

- ❑ Independent ratings
 - ❑ 0 = No Impact
 - ❑ 10 = Significant Impact
- ❑ Average responses
 - ❑ N=30 ideal



Probability

❑ Literature Review

- ❑ Past Programs
 - ❑ Effects
 - ❑ Context

❑ Survey the Audience

- ❑ Representative Sample
 - ❑ 0 = No Likelihood
 - ❑ 10 = High Likelihood
- ❑ Question Structure
 - ❑ Specific
 - ❑ Context
- ❑ Methods
 - ❑ Mail, Web, Telephone, Intercept



Penetration

❑ Direct Observations

- ❑ When possible
- ❑ Some behaviors not observable (e.g., shower length)

❑ Survey the Audience

- ❑ Representative sample
- ❑ One time behaviors
 - ❑ Purchase EE appliance
 - ❑ Yes/No
- ❑ Repetitive behaviors
 - ❑ Cold water wash
 - ❑ Frequency
- ❑ Self-Report Bias
 - ❑ Couple with observations



Applicability

- ❑ **Proportion for whom it is relevant**
 - ❑ Census
 - ❑ Employer Profiles
 - ❑ Job Descriptions
 - ❑ Housing Stock
 - ❑ GIS Mapping
 - ❑ Etc...



#6: Calculate Weights

□ Populate Table

- Impact
- Probability
- Penetration
 - Reach (1-Penetration)
- Applicability

□ Calculate Weights

□ Weight =

- $\text{Impact} \times (1 - \text{Penetration}) \times \text{Probability} \times \text{Applicability}$



Summary of Behavior Selection Steps

#1: Define your Outcome



#2: Decide what Sector to Target



#3: Decide which Usage Categories to Target



#4: Create a List of Behaviors



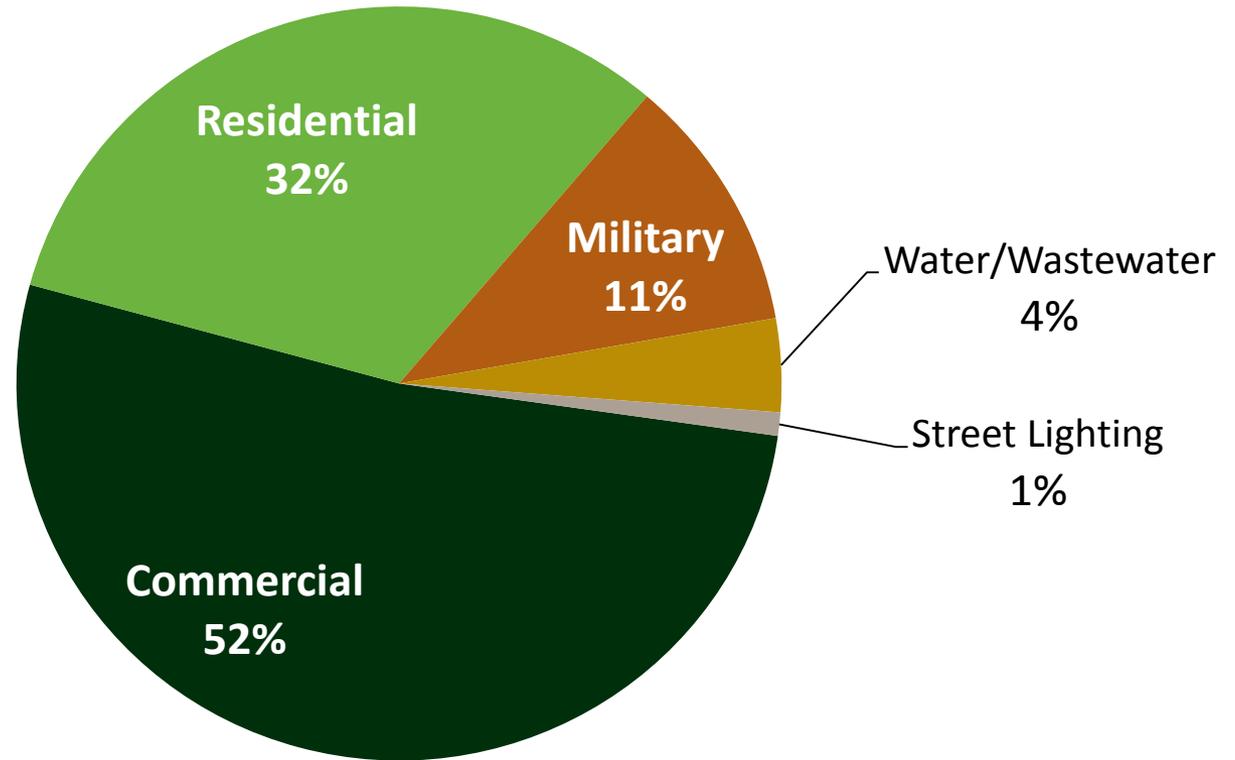
#5: Gather IPPA Information



#6: Calculate Weights

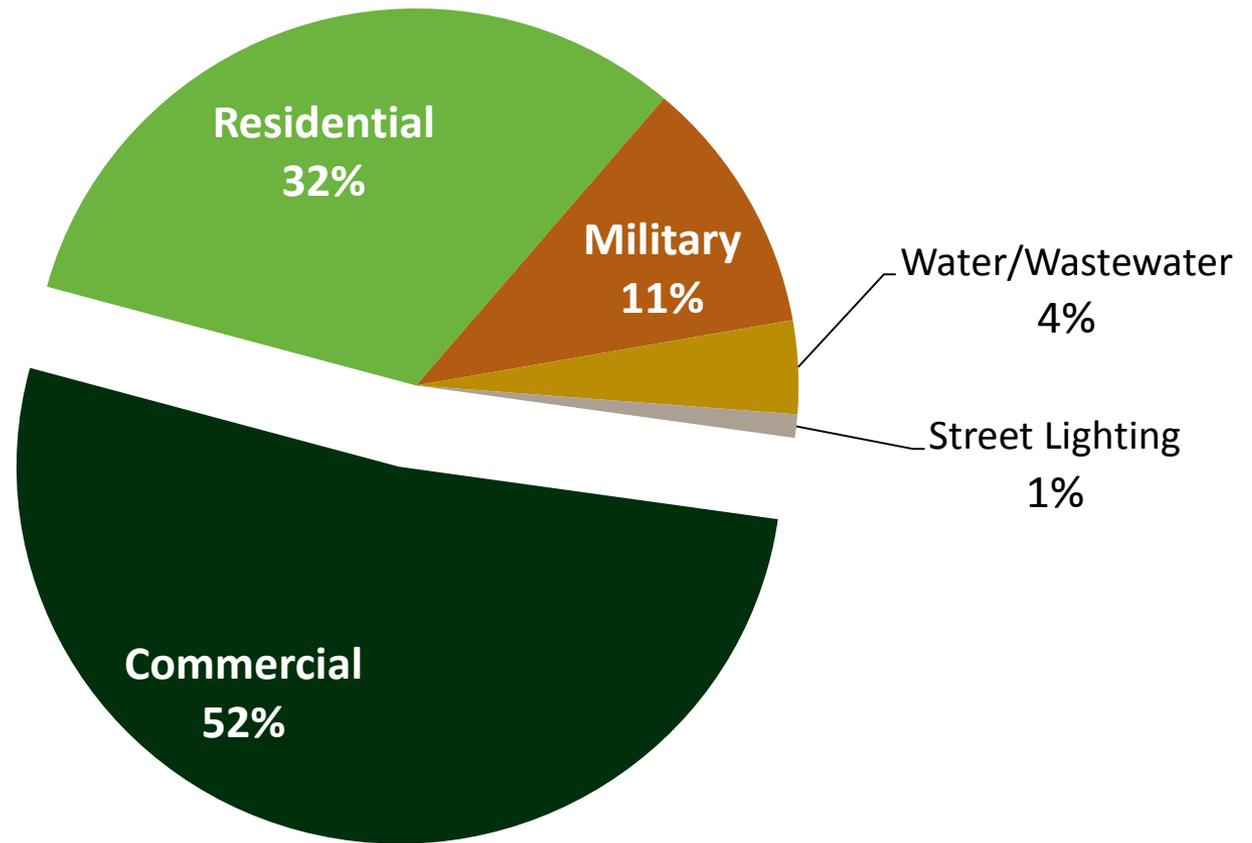
Step 1: Selecting Behaviors Example

Hawaii Statewide Electricity Use by Sector, 2012



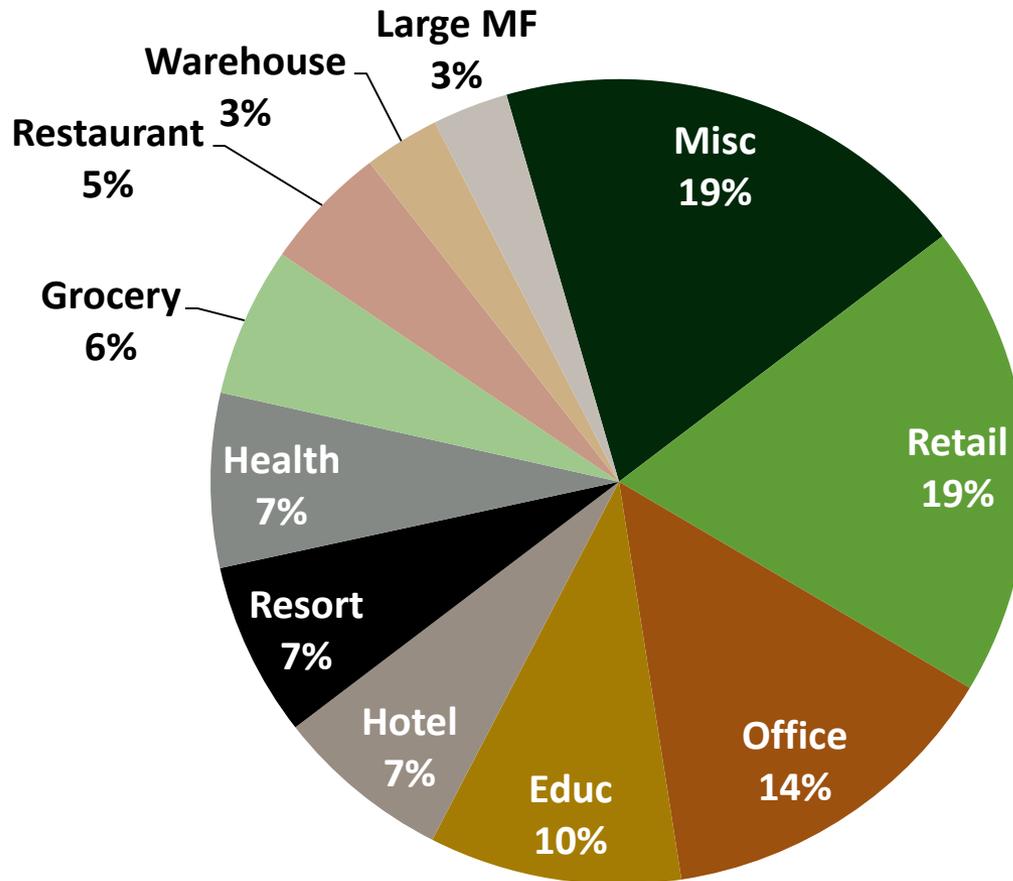
Step 1: Selecting Behaviors Example

Hawaii Statewide Electricity Use by Sector, 2012



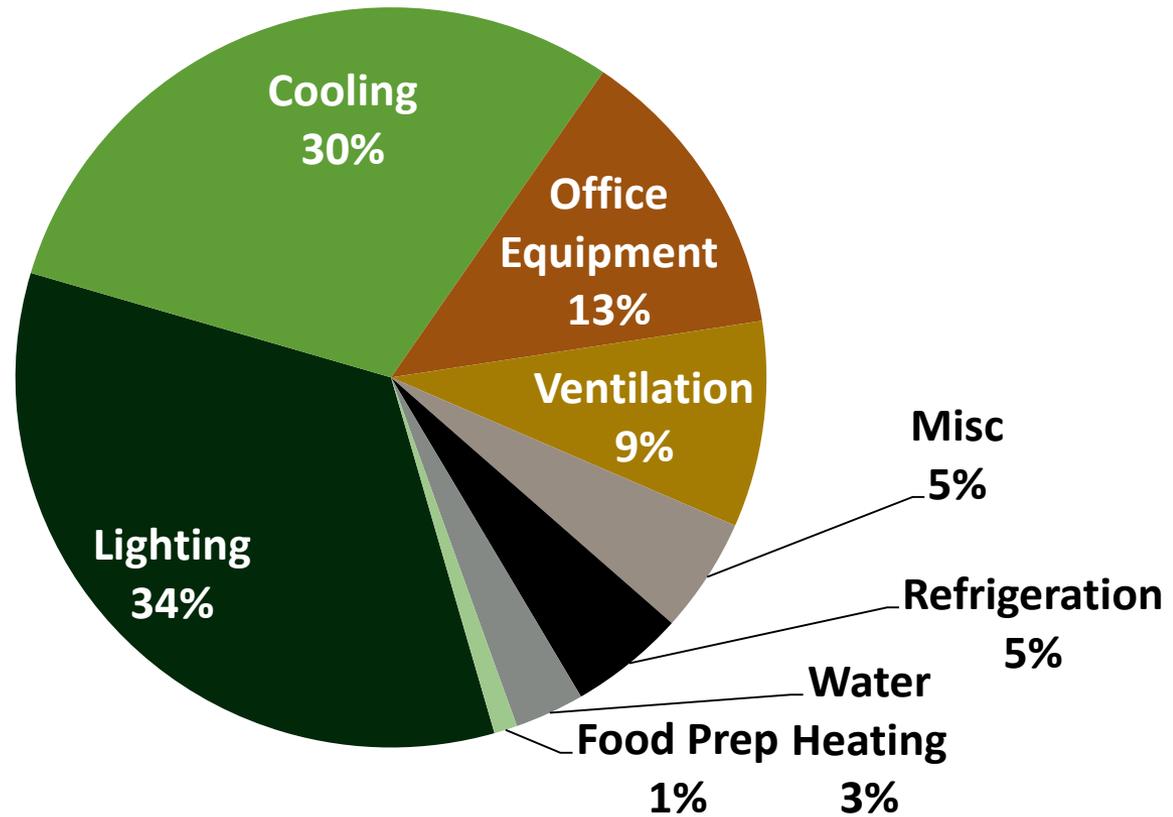
Step 1: Selecting Behaviors Example

Commercial Sector Electricity Use by Segment, 2012



Step 1: Selecting Behaviors Example

Office End Use Estimates



EnerNOC 2014

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday						
Turn off CPU at end of the workday						
Activate power management settings						
Unplug cell phone chargers when not in use						
Use smart strip to turn off computer and peripherals						

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday	3					
Turn off CPU at end of the workday	6					
Activate power management settings	8					
Unplug cell phone chargers when not in use	1					
Use smart strip to turn off computer and peripherals	9					

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight $2*3*5*6$
Turn off computer monitor at the end of the workday	3	9				
Turn off CPU at end of the workday	6	6				
Activate power management settings	8	3				
Unplug cell phone chargers when not in use	1	9				
Use smart strip to turn off computer and peripherals	9	2				

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday	3	9	.30			
Turn off CPU at end of the workday	6	6	.60			
Activate power management settings	8	3	.28			
Unplug cell phone chargers when not in use	1	9	.10			
Use smart strip to turn off computer and peripherals	9	2	.05			

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday	3	9	.30	.70		
Turn off CPU at end of the workday	6	6	.60	.40		
Activate power management settings	8	3	.28	.72		
Unplug cell phone chargers when not in use	1	9	.10	.90		
Use smart strip to turn off computer and peripherals	9	2	.05	.95		

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday	3	9	.30	.70	.90	
Turn off CPU at end of the workday	6	6	.60	.40	.60	
Activate power management settings	8	3	.28	.72	.75	
Unplug cell phone chargers when not in use	1	9	.10	.90	1.00	
Use smart strip to turn off computer and peripherals	9	2	.05	.95	.60	

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday	3	9	.30	.70	.90	
Turn off CPU at end of the workday	6	6	.60	.40	.60	
Activate power management settings	8	3	.28	.72	.75	
Unplug cell phone chargers when not in use	1	9	.10	.90	1.00	
Use smart strip to turn off computer and peripherals	9	2	.05	.95	.60	

1 Behavior (end state, non-divisible)	2 Impact (0-10)	3 Probability (0-10)	4 Penetration (0.00 – 1.00)	5 Reach 1-Penetration	6 Applicability (0.00 – 1.00)	7 Weight 2*3*5*6
Turn off computer monitor at the end of the workday	3	9	.30	.70	.90	17.01
Turn off CPU at end of the workday	6	6	.60	.40	.60	8.64
Activate power management settings	8	3	.28	.72	.75	12.96
Unplug cell phone chargers when not in use	1	9	.10	.90	1.00	8.10
Use smart strip to turn off computer and peripherals	9	2	.05	.95	.60	10.26

Tools

Data Collection Worksheet

Calculation Spreadsheet

Sample Survey Items

Data Collection Worksheet

Worksheet #1

Identify the Primary Outcome

What is the primary outcome that you are interested in?

Highlight only one. Complete additional worksheets for other outcomes as necessary.

- Water Use/Conservation
- Water Runoff
- Water Quality
- Air Quality
- Other: _____

Identify Metrics

How can changes in your target outcome be measured?

Type your response here.

List Behaviors

Using the spaces below, please list six to ten behaviors that directly impact the outcome you identified above. After listing the behaviors, go back through the list and ask yourself if they are end-state. That is, be sure that they DIRECTLY impact the outcome in a measurable way.

#	What is the Behavior?	End State?
1		<input type="checkbox"/> YES <input type="checkbox"/> NO
2		<input type="checkbox"/> YES <input type="checkbox"/> NO
3		<input type="checkbox"/> YES <input type="checkbox"/> NO
4		<input type="checkbox"/> YES <input type="checkbox"/> NO
5		<input type="checkbox"/> YES <input type="checkbox"/> NO
6		<input type="checkbox"/> YES <input type="checkbox"/> NO
7		<input type="checkbox"/> YES <input type="checkbox"/> NO
8		<input type="checkbox"/> YES <input type="checkbox"/> NO
9		<input type="checkbox"/> YES <input type="checkbox"/> NO
10		<input type="checkbox"/> YES <input type="checkbox"/> NO

2. The people who I want to participate in this behavior are (select only one):

- Other Teenagers (e.g., friends or classmates)
- Family Members
- Community Members
- Other: _____

3. Assuming that the program is successful, how large of an impact do you think that the behavior change will have on Ocean Acidification or CO2 Emissions reduction?

<input type="checkbox"/>										
0	1	2	3	4	5	6	7	8	9	10
No impact					Huge impact					

4. How will the impact of the behavior change be measured? In other words, how might you know if behavior changed?

5. Based on research you have read, input from experts, and/or your own experience, how many people in the target audience are already participating in this behavior? Please provide a response between 0% (none) and 100%. _____ % are already doing it

6. What was the source for the information you provided in #5 above (e.g., internet source, guess, etc.):

- Research Report: Title: _____
- Internet Research: Web Address: _____
- An Expert: Who? _____
- A Guess or My Own Experience
- Other: _____

7. How likely is it that the people who are not yet participating in the behavior can be encouraged to do it? Please select a response using a scale from 0 (Not a Chance) to 10 (Definitely Will).

<input type="checkbox"/>										
0	1	2	3	4	5	6	7	8	9	10
Not a chance					Definitely will					

8. What was the source for the information you provided in #7 above (e.g., internet source, guess, etc.):

- Research Report: Title: _____
- Internet Research: Web Address: _____

Calculation Spreadsheet

#	Behavior	Impact	Penetration	Reach (100%-Penetration)	Probability	Applicability	TOTAL WEIGHT
1				100%			0.00
2				100%			0.00
3				100%			0.00
4				100%			0.00
5				100%			0.00
6				100%			0.00
7				100%			0.00
8				100%			0.00
9				100%			0.00
10				100%			0.00
11				100%			0.00
12				100%			0.00
13				100%			0.00
14				100%			0.00

Sample Survey Items

This section is about energy-saving equipment or devices you may or may not have installed in your home.

If you are unable to do any of these things because you rent your apartment and don't purchase certain appliances, or don't have a place for these appliances in your unit, check *Does Not Apply*.

1: Do you currently have any of the following installed in your home?	Yes	No	Don't Know	Does Not Apply
a: Energy-efficient CFL light bulbs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b: Energy-efficient LED light bulbs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c: A thermostat programmed to keep your home at a temperature of 78° or warmer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d: Energy-saving window film to reduce the amount of heat that enters your home?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e: An Energy Star® window air conditioner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f: An Energy Star® split system air conditioner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g: A central air conditioner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h: An Energy Star® dishwasher?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i: An Energy Star® refrigerator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j: An Energy Star® clothes washer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k: Efficient WaterSense® shower heads (1 – 1.5 gallons per minute)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l: An insulating blanket on your hot-water storage tank?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 2. Installing or Replacing with Energy-Saving Equipment in the Next Year

These questions are about energy-saving equipment or devices you may or may not install *in the next year*.

If you stated in Section 1 above that you already have one, please check Done. If this is something that your landlord or building owner would have to do, please check *Does Not Apply*.

2: On a scale of 0 to 10, where 0 is <i>Not At All Likely</i> and 10 is <i>Extremely Likely</i> ,	
how likely is your household to . . .	Not at All Likely Extremely Likely
a: Replace traditional light bulbs with energy-efficient CFL light bulbs? <input type="checkbox"/> Done <input type="checkbox"/> Does Not Apply	0 1 2 3 4 5 6 7 8 9 10
b: Replace traditional light bulbs with energy-efficient LED light bulbs? <input type="checkbox"/> Done <input type="checkbox"/> Does Not Apply	0 1 2 3 4 5 6 7 8 9 10

Q & A

Behaviors of Interest

Data Sources

Challenges/Concerns

Post-Webinar Survey

<http://survey.takeactionresearch.com/cgi-bin/rws5.pl?FORM=SSDNpostwebinar>

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