



#### Webinar 5

#### How to Increase Staff Engagement in Energy Management Activities

SPONSOR: Simon Vickers, Program Manager Commercial Marketing

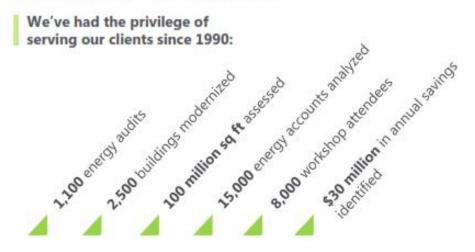
### **Introductions**



Prism Engineering provides consulting services to address technical, behavioural and organizational aspects of Energy Management

We design and implement cost effective approaches to address comfort, efficiency and reliability.

#### Our Work By the Numbers



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### Introduction to your Prism Facilitators



Robert Greenwald has 23 years of energy management experience including developing SEMPs, determining opportunities, designing building upgrades, setting up MTR programs, acting as an Energy Coach and supporting cultural change through training and engagement programs. Robert has a genuine passion for training and has facilitated over 200 energy management workshops.



Sarah Smith leads Prism's Training + Engagement Team and has been working with clients since 2010 to design and deliver sustainability staff engagement programs. With a background in behaviour and organizational change theory, volunteer management, social science research and program development, Sarah works with organizations to design and implement solutions that will enhance their creativity, capacity and stewardship.

### Introduction to your BC Hydro Facilitators



Craig Hunt has been with BC Hydro in Power Smart Engineering for 6 years supporting the Commercial Energy Manager Program; working with 120 organizations to develop their Strategic Energy Management Plans. He is a Certified Energy Manager (CEM) and a Certified Demand Side Manager (CDSM). Previously, he worked internationally with a nuclear medicine manufacturer for 2 decades.

#### **Guests**

- Energy Manager Program: Simon, Jenn, Paul
- KAMs: Wayne, Jeff, Lindsay, Ron

# **Webinar Logistics**

- We need your focus and attention throughout
- We will engage participants directly in the webinar
- We will have several Q&A sessions throughout and will let you know when they are - use the Live Meeting tool for Questions
- Please ensure your phone is muted from background noise

## We will Learn from Each Other









































































of Victoria















# Six Webinar Topics (3 Hours)

Sep 19 Evolving Your Strategic Energy Management Plan Oct 24 Project List – Lighting & Electrical Technologies Nov 21 Project List – Mechanical & Controls Technologies Jan 23 Building the Business Case including Financial **Analysis** Feb 20 How to Increase Staff Engagement in Energy Management Activities Mar 20 Monitoring, Targeting & Reporting

# Desired Webinar Series Outcomes

- increase your ability to be an effective Energy Manager by specific training on SEMP, MTR, and Engagement Programs
- provide you ideas to incorporate into your work
- provide you references to increase your learning
- provide you tools to promote your program
- add structure for planning, implementation and follow up
- inspire you to take on new challenges
- motivate you to continue your efforts to reduce energy use
- CEM preparation

# How We Plan to Achieve These Outcomes

### Webinar Series (6)

Content, dialogue, case studies, experience sharing

### Ongoing Support

 Between Sessions we will be providing one-toone coaching and support for the topic presented

### **Key points**

### **Evolving your Strategic Energy Management Plan**

#### Value of SEMP

 SEMP is backbone of program: targets and a plan, showing organization's commitment

#### Developing SEMP

- Connect SEMP with Energy Policy to create an energy road map
- Use to measure and track progress towards targets
- Helps to get finance onboard funding requests get tied to SEMP,
   part of capital planning
- Understand your situation through consumption history, performance indexes and benchmarking

#### Writing & Communicating SEMP

- Craft your message for Multiple stakeholders
- Make it real through equivalencies, leverage social media tools
- Update quarterly, ongoing or annual

#### **Key points**

# Project List - Lighting, Electrical, Mechanical & Controls Technologies

- 1. Start by identifying opportunities
- 2. High level estimate of savings
- 3. Determine level of interest
- 4. Use audits and analysis to refine numbers
  - Match the need
  - Maximize the efficiency
  - Optimize the supply
- 5. Build your business case
  - Electrical Opportunities (Lighting, Fans/Pumps, Refrigeration)
  - Thermal Opportunities (DDC/HVAC, Boilers, Envelope)
- 6. Update list as more info is available
- 7. Track status (potential, approved, in progress, complete)

# **Key Points Building Your Business Case & Financing**

- We need to speak the language of the decision makers
- NPV and IRR are preferred methods to evaluate the financial performance of a project
- Build the business case to include operational, financial and strategic aspects of your project
- There are internal and external procurement and financing options to consider
- Green revolving funds can be set up to internally fund projects through past incentives and savings

# **Your Suggestions**

- WCA (Developing a strategic behavior change management team (WCA X<sub>3</sub>)
- Using Public Narrative for engagement and behaviour change
- Using video training to help facility managers understand energy
- Change management theory and practice from a high level and detailed perspective
- Social media
- Creating student engagement
- Examples and lessons learned

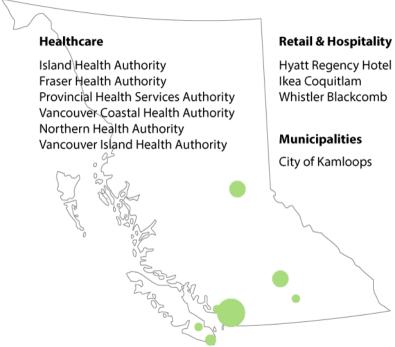
# **Today: Staff Engagement**

- Why Engage?
- The Challenge
- Build Your Team
- Secure Internal Support
- Develop and Implement your Plan
- Measure Results

# Tools, Strategies and Theories

- Community Based Social Marketing
- Change Management
- Volunteer Management
- Human Centered Design
- Change Management
- Stakeholders and Building Support
- Communications + Social Media + Story Telling
- Influencing without Authority

## **Case Studies**



#### Hospitality Education

British Columbia Institute of Technology
Capilano University
Langara College
Simon Fraser University
Thompson Rivers University
University of British Columbia
University of the Fraser Valley
University of Northern BC
University of Victoria
Vancouver Community College

#### **School Districts**

North Vancouver School District

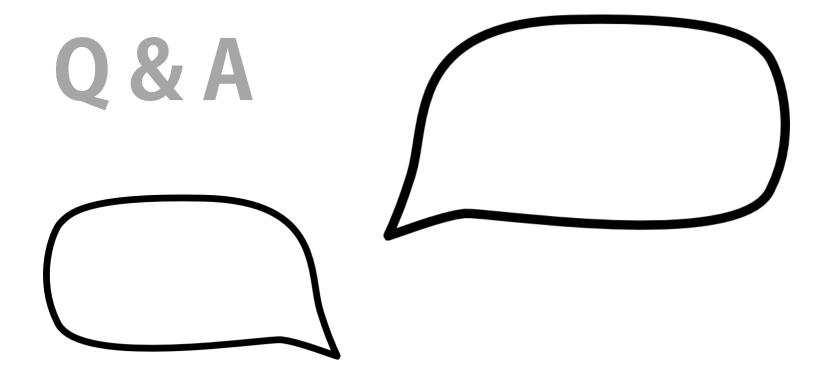
Vancouver Island University

#### Government

Department of Fisheries & Oceans ICBC Royal Canadian Air Force Shared Services BC

#### Industrial

Freshwater Fisheries Society of BC New Gold Afton Mine



### **First Some Definitions**

- Behavioural Change
- Staff Engagement
- Culture Change

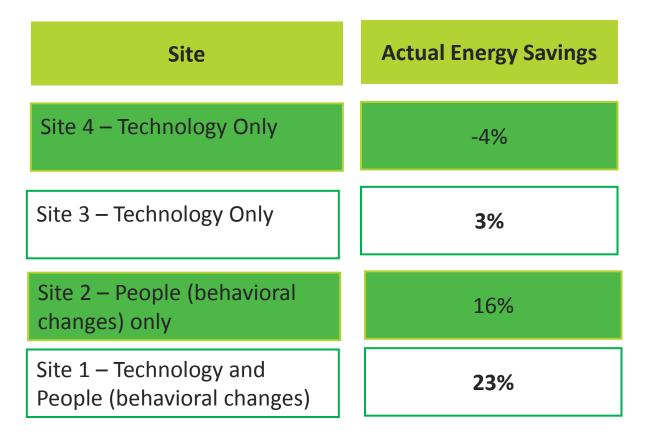


## WHY ENGAGE?





# Technology + People



The key to large savings is a combination of people and technology. **Behavioral change** alone saves more than technology alone.

# **Behaviour Change is Possible**



Source: http://www.youtube.com/watch?v=GrIEQ15mVPM

# Changing Behaviour: Your Experiences

- Identify a situation where you tried to change people's behaviour
- What worked?
- What didn't work?



### Your Ideas . . .

## THE CHALLENGE



# Some of the Challenges

- Psychology + Social Science
- Organizations and Culture



# Psychology + Social Science

- Discounting Future
- Positive Illusions
- Single Action Bias
- Status Quo Bias



The Psychology of Climate Change Communication: CRED, Columbia University (2009)

# 3 Hours a Day



Ruben Anderson, Communications Specialist from Metro Vancouver from the 2011 RCBC Conference: <a href="http://vimeo.com/26943709">http://vimeo.com/26943709</a>

# **Organizations + Culture**

Inner Individual



Outer Individual



Cultural Influences



Systems Influences



# What are some challenges you face?



### **BUILD YOUR TEAM**

## It's "not one size fits all"



## Who are your Key Allies?

- Facilities Department
- Human Resources
- Communications
- Major Departments
- Students? Patients?



### How do you build Effective Teams?

- Effective teams need:
  - Support, motivation and guidance.
  - Shared purpose
  - Clear roles and responsibilities
  - Create team norms
  - Best practices for group coordination

# **Create Clear Expectations**

- Time commitment
  - Meeting length and frequency
- What with their involvement look like?
  - Input
  - Action
- Group Process
  - Long term project!



# FFSBC eFishent Energy Team

#### Hatchery eFishent Energy Team Members



Attend regular energy team meetings (prepare, participate, produce)
☐ Share your worksite energy management strategies and results with other eFishent Energy Team members.
Oversee action items assigned to you from EM team
<ul> <li>Take responsibility for energy use, measurements and targets for your area</li> <li>Assist in the preparation of energy reduction targets</li> <li>Share energy tracking results with staff</li> </ul>
Gather feedback on energy performance improvement opportunities at your site by communicating with workers and observing incidents of energy waste and inefficiency.
$\square$ Get feedback from staff on results, problems, issues with equipment retrofits (lighting, motors, speed drives)
Meet regularly with Hatchery Manager and Facilities Supervisor to develop energy conservation strategies for your site.
Work with Hatchery Manager and Facility Supervisor to update SOPs to include EM functions and ensure adequate training on these items for appropriate staff
☐ Encourage EM behaviour with staff
$\ \square$ Promote awareness of the energy mandate and continual energy performance improvement
Steward the implementation of energy performance improvement measures in respective work areas
☐ Lead by example (through the actions you take)
☐ Monthly Hours Expectations: hours

### Roles and Responsibilities Document

# **Effective Meetings**



### **Meet to Solve Problems**

### Three Behaviours to Avoid

- 1. Meet but don't discuss
- 2. Discuss but don't decide
- 3. Decide but don't do

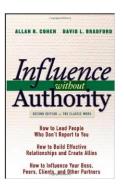
Q&A

### **SECURE INTERNAL SUPPORT**

# Secure Internal Support

- 1. Stakeholder Analysis
- 2. Link with other programs

# Stakeholder Analysis





# **Stakeholder Analysis**

Who	Motivation	What are you asking?	What is your power source?	Tactics	Strategy
Senior Leadership					
Middle Managers					
Green Team					

### What motivated them?



- What are their key interest + issues?
- What drives the individual?

How can you connect to their goals?

# What are you asking?



Be clear and upfront about what you're asking

- Are you looking for:
  - Commitment
  - Compliance
  - Resistance



# What is your "power"?

- Role
- Expertise
- Relationships





### **Tactics**

- Reasoning
- Inspiring
- Consulting
- Support
- Last resort



# Senior Leadership Support



Royal Canadian Air Force Comox Wing

# **Change Leaders**



• Identified key decision makers and influencers in the organization to champion sustainability.



# **Look for Links to Programs**



- Events
- Programs
- Safety
- Contracts
- Training
- Performance and bonuses

# Link up with National or International events





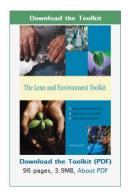


SFU Sweater Day, 2014

### **LEAN and Green**



 Bright Ideas contest submissions sent to LEAN coordinator to identify LEAN project potential



http://www.epa.gov/lean/environment/toolkits/environment/



### eDay at New Gold Mines



- Daily crew huddle to ask:
  - Did we have an "E-Day" yesterday?
  - What can we do to have an "E-Day" today?

"Key here is that people are talking about energy on a daily basis."



#### **Results**

Shutting down of conveyors at shift change time saves approx \$12,000 per month in electrical energy costs.

# Food Services Contracts



 Students worked with Purchasing on Food Services Committee.

 Identified desirable services and added to RFP



### **Sustainability Training**



- Facilitated by an IKEA Green Team volunteer to educate IKEA staff on company's commitment to being "People & Planet Positive".
- Interactive training connects employee's personal values to IKEA values.
- Employees gain confidence in incorporating IKEA's sustainability values in their delivery of customer service, which strengthens customer engagement, loyalty, and trust in the brand.



#### **Targeted behaviour**

**Employee environmental stewardship** 



#### Result

Mandatory training for all staff after 3 months of employment

### Whistler Blackcomb



- Salaried staff:
  - 5% reduction target
  - impacts their bonus \$
- provides resourcing, prioritizes energy management and gets people's attention.



Q&A

#### **DEVELOP AND IMPLEMENT YOUR PLAN**

# Plan + Implement

- Planning Process
- Engagement Models
- Campaign and Initiative Design
- Communications

# **Planning Process**



- Pre planning meetings with core group
- Planning meetings with key stakeholders
- Solicit ideas and input from larger group
  - Green Team meetings
  - Townhall meetings
  - Online engagement
- Develop an Action Plan

# **Gather Ideas**





# **Look for the Bright Spots**





### Remember to connect with Energy Management Program

 Use behaviour change campaigns and programs to support and augment your other energy management efforts





Nanaimo Regional

### **Create a Schedule**

January 2014	February 2014	March 2014	April 2014
· Program Planning	Workshop     Program Survey	<ul> <li>Finalize Action Plan</li> <li>Green Team Meeting</li> <li>Lights Campaign</li> </ul>	· Green Team Meeting
May 2014	June 2014	July 2014	August 2014
· Green Team Meeting	Bike to Work Week and Alternative Transportation		
September 2014	October 2014	November 2014	December 2014
September 2014	October 2014	November 2014	December 2014
· Green Team Meeting	· Green Team Meeting	· Green Team Meeting	
Campaign#3 (TBD)			
January 2015	February 2015	March 2015	
· Green Team Meeting	· Green Team Meeting	· Green Team Meeting	
<ul> <li>Program Planning and evaluation</li> </ul>	· Program Survey		

### **Add Details**

#### Campaign Details

The following section provides a general overview of the three campaigns planned for 2014/15: water reduction, lights and monitors off and close doors and windows. Each campaign overview includes an outline of the behaviour focus, target audiences, strategies and success metrics. The campaign strategies have been developed into a set of toolkits for use by the site Energy Champions and/or efishent Energy Team members.

#### Water Reduction Campaign

In addition to the Water Strategies and Energy Moment meetings, the <u>eFishent</u> Energy Team plans to launch the following water reduction campaign in the fall of 2014.

Behaviour Focus	<ul> <li>Optimize rearing strategies – minimize unused space</li> <li>Regularly monitor oxygen levels and adjust flows based upon minimum DO valves (Fish Culturists)</li> <li>Look for additional ways to reduce water use in every day practice.</li> </ul>
Target Audiences	Everyone at Hatchery with an emphasis on Fish Culturists
Strategies	<ul> <li>eFishent Team members will be sent a portable water meter to collect water flow data, correlate with energy consumption data and determine what every liter of water costs at their hatchery.</li> <li>Raise this issue regularly at hatchery meetings</li> <li>Energy scavenger hunt: staff to seek out wasteful situations and suggest strategies to improve it</li> <li>Use Water Reduction case study to share successes and ideas.</li> <li>Develop and put up posters and/or fact sheets outlining the cost of water and key message: Saving water saves money, reduces maintenance, helps the environment and provides opportunities for EFSBC and benefits for staff</li> <li>Hold a conference call for fish culturists (4-5 people)??</li> <li>Consider reviewing and updating SOPs regarding water use. This would help to address fear of impacts on fish by having clear instructions/ standards/ set perimeter/ range</li> </ul>
Success Metric	· Benchmarking, setting targets and tracking L/min/kg of fish for each hatchery

# **Engagement Framework**



#### Goals

- 1. Continue to grow ICBC's culture of sustainability
- 2. ICBC staff feel empowered and take action on sustainability initiatives













#### Mechanisms

#### Engaging Leadership

#### Policies + Compliance

#### **Training**

#### Campaigns

#### Communicate

#### Assessment + Reporting

#### Tactics

- · Values + strategy alignment (operational excellence)
- Green Team
   Program Refresh
- Senior Leadership
- Middle Managers
- Thought Leaders

- Governance role of key groups
- Performance management
- Modules for key groups
- General tutorial for all staff
- New employee training material
- Sustainability
   Stories (examples of actions)
- Sweater Day
- Summer campaign
- Paper + Printing Reduction

- News articles + blog posts
- Campaign
   messaging
- Infographics

- Survey
- Sustainability audits

Q&A

# Plan + Implement

- Planning Process
- Engagement Models
  - Different Models
  - Volunteer Management
- Campaign and Initiative Design
- Communications

### **Structures for Getting People Involved**

- 1. You as the Champion
- 2. Advisory Committees
- 3. Green or Energy Teams
- 4. Departmental Champions



## 1. You as the Champion

You as the main messenger

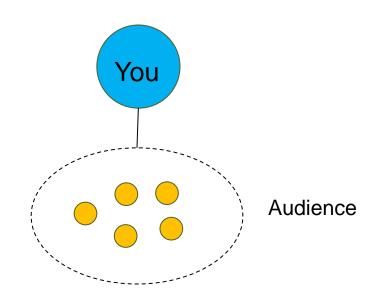
#### **Pros**

- Easy to implement
- Relationships with staff
- Flexible

#### Challenges

- Less behaviour modeling
- Not "part of organization"

### You as Champion



### **Turn it off: Sticky Notes**



- Addressed lack of employee awareness of "Turn it Off" policy
- Employees used sticky notes to recognize and reward their colleagues.
- Sticky notes gave recipient an entry into a **prize draw**.





#### **Targeted behaviours**

- Turn off computers at end of day
- Turn off monitors after 15 mins.



#### **Results**

500 Entries received

## 2. Advisory Committees

 Feedback and approval on programs 1-4 times/ year, representatives from depts.

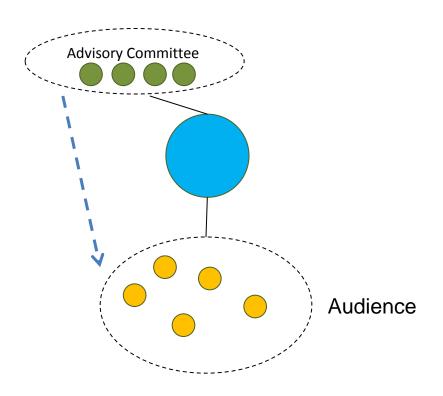
#### **Pros**

- Involves decision makers
- Improves reach of campaigns
- Top-down approvals

#### **Challenges**

- Time to set-up
- Approvers are not volunteers
- Resources to chair meeting

### You as Champion & Advisory Committee



# **Advisory Committee Example: VCC**



### 3. Green Teams

Members from any stakeholder group working together on joint projects.

#### **Pros**

- Builds staff leadership
- Builds community
- Moderately easy to set up

#### Challenges

- Team process
- Effective meetings
- Time and resources to support

### **Island Health**





Working together as a Team

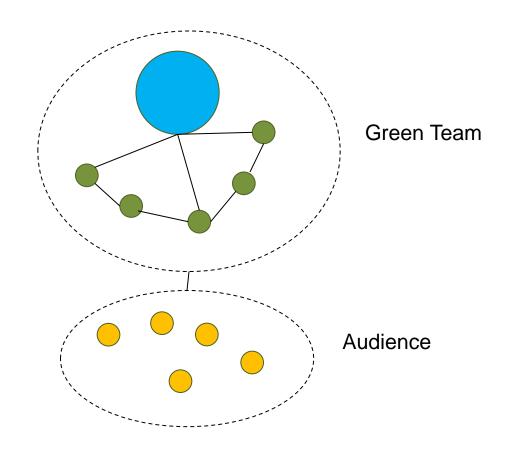
### **BCIT**



INSTITUTE OF TECHNOLOGY



### **Green Team**



## 4. Champions

Champions working independently in their departments.

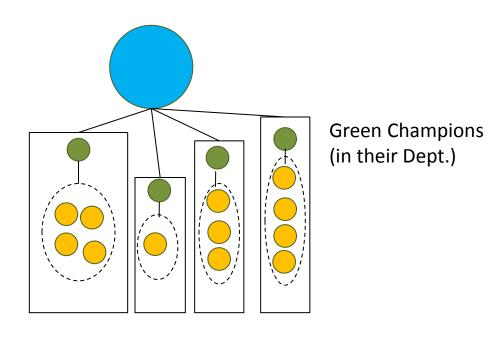
#### **Pros**

- Building Staff capacity + leadership
- Behaviour modelling

#### **Challenges**

- need support from all levels
- Time and resources to support champions

## **Green Champions**



#### **Champions Example: Green + Leaders Champion Program**

#### **Key Features**

- Champion model
- Depart level campaigns
- Self directed toolkits
- Program Training
- Education events
- Annual schedule









#### **GREEN+LEADERS**



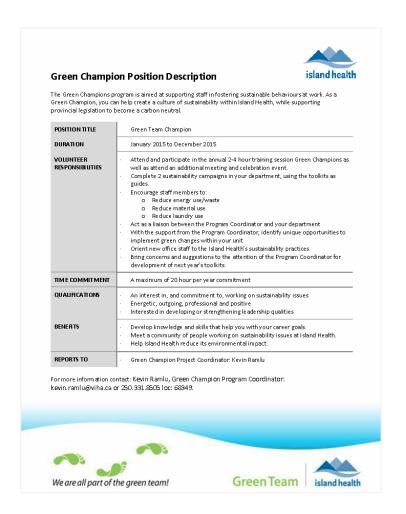


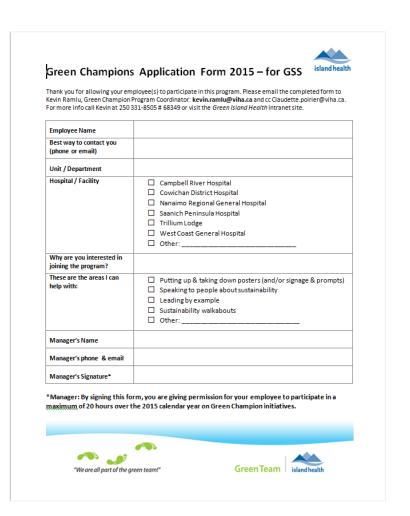
### The Volunteer Management Cycle



Brenda Sawada, Business Community Connections

### **Job Description + Application Form**





## **Training**

#### Purpose:

- Build skills and knowledge
- Create community and connections
- Understand program tools
- Provide support
- Create clear expectations



## Thank you!

#### **GREEN+LEADERS**





Green + Leaders Celebration Lunches

### **Creating a Positive Volunteer Experience**

- Create clear expectations and roles
- Provide support
- Recognize and thank (as much as possible!)

Incorporate elements into your program

Q&A

## Plan + Implement

- Planning Process
- Engagement Models
- Campaign and Initiative Design
  - Community Based Social Marketing
  - Human Centered Design
  - Change Management
  - Training to Build Capacity
- Communications

### A Framework for Behaviour Change

#### **Community Based Social Marketing**

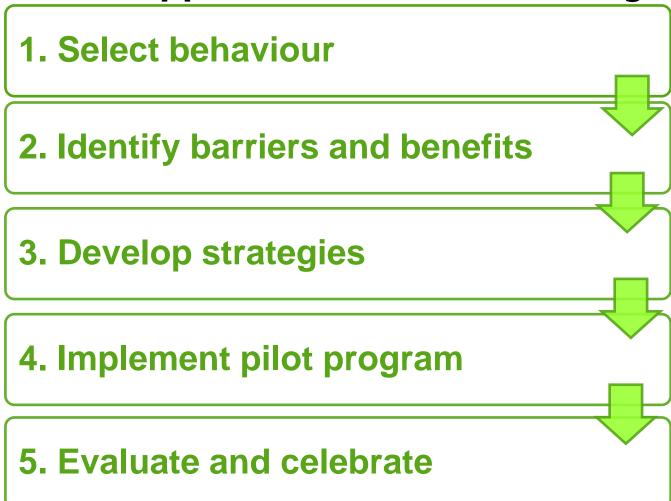
• A "brand" of social marketing that emphasizes direct contact between people at the community level.





Fostering Sustainable Behaviour, D. McKenzie-Mohr & W. Smith (1999)

#### Systematic approach to behaviour change

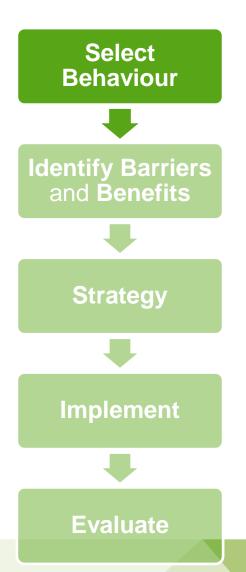


## Why this Approach Works

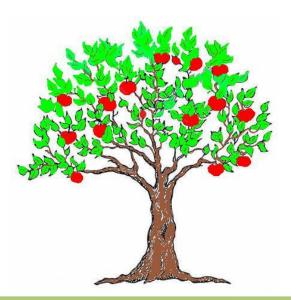
 Facts and information do not change behaviour

## Why this Approach Works

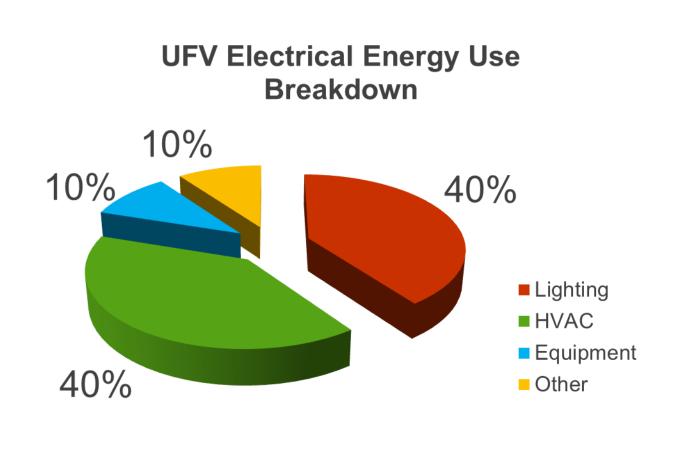
Behaviour modeling & direct appeal from peers



 Select high impact "low hanging fruit" behaviours







Select Behaviour



Identify Barriers and Benefits

Identify your target audience



**Strategy** 



Implement

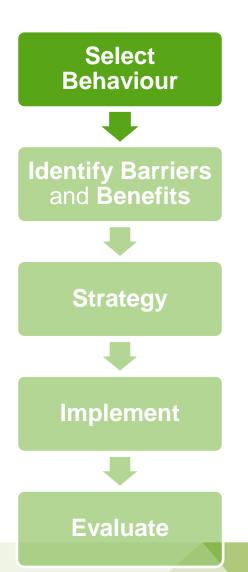


**Evaluate** 



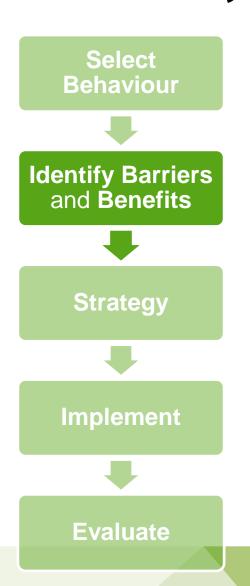








### 2. Identify Barriers & Motivators





### **Less Laundry**



- Washing laundry is the 4<sup>th</sup> largest consumer of natural gas. Costs Island Health Authority \$700,000 per year.
- Laundry champions helped to promote campaign by sharing laundry reduction tips and raising awareness of laundering costs with fake money.
- Engagement with housekeeping staff
  was important for counting laundry to
  assess success of campaign.

#### **Targeted behaviour**

Reduce unnecessary laundry use





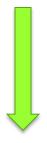


#### Result

• 6.5% - 9% combined reduction in laundry use at two facilities

## 3. Develop Strategies





### **Barriers**





## **Organizations + Culture**

Inner Individual



Outer Individual



Cultural Influences



Systems Influences



## City of Kamloops













#### Results:

16% of staff participated in Quiz and Site Tours

## **Behaviour Change Tools**



#### The Power of Fun

Make it something that people want to do.



#### Social norms

Behavioral expectations and cues within a society or group



**Commitments** Move from awareness to action



Communication Make your message clear and vivid



**Prompts** Visual or auditory aid as a reminder



**Incentives** Enhance the motivation to act



## **Behaviour Modeling**

#### Following the Leader



Source: http://www.youtube.com/watch?v=fW8amMCVAJQ



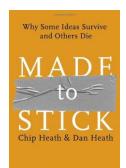
### **Commitments**

Ask for a commitment & make it public





## Communication













Use prompts as reminders to act.





Post it Notes

**Stickers** 

## **Monitoring Monitors**



- Encouraged energy efficient computer use with monitor audits.
- Rewards staff that turned off monitors with chocolate and thank-you note.





#### **Targeted behaviours**

- Turn off computers at end of day
- Turn off monitors after 15 mins.



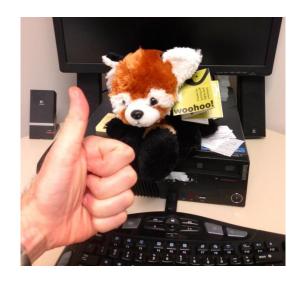
## 5. Evaluate and Celebrate

Select **Behaviour Identify Barriers** and Benefits **Strategy Implement Evaluate** 



West Coast General Toolkit pizza party

# **Woohoo Campaign**



#### Results

of staff participated 80%

more lights off 56%

78% more monitors off





#### It's your turn to take part in the Woohoo! Contest!

Meet Wally. Wally and his friends need your help to encourage your colleagues to turn off lights and monitors, in 3 simple steps.



To enter the contest, find a colleagues' workspace where the light and/or monitor has been turned off.



Take a photo of the Woohoo! animal at your colleague's workspace. Once you've taken a photo, leave the animal (It's now their turn to pass it on and have a chance to enter the contest!)



Email your photo to vancouverthrive@hyatt.com and if possible, indicate the name of your colleague who you want to recognize for turning off lights and/or monitors.



You'll be entered to win a prize and your photo will be featured on Beepers.

Flip to the back for contest details.

#### contest details:

The Woohoo! Contest will run from Nov 1-30th, 2014.

Prizes will be drawn at the end of each week

While we know it will be tempting to hang on to our fuzzy friends, you have 24 hours to pass on the Woohoo! animals and submit a photo to be entered to win a prize.

The faster you pass on youranimal and submit an entry the more likely it will be to come around again.



Win one of four gift certificates to Forage Restaurant in Vancouver www.foragevancouver.com.

Each of the Woohoo! animals will also be raffled off at the end of the contest.

#### energy conservation

As a company, Hyatt strives to ensure the long-term vitality, health and beauty of our planet by diligently managing our resource consumption, our waste and by preserving the natural environment in our local communities

The Thrive program focuses on three areas:

- 1. Water&EnergyConservation 2. Waste & Pollution Reduction
- 3. Environmental Education

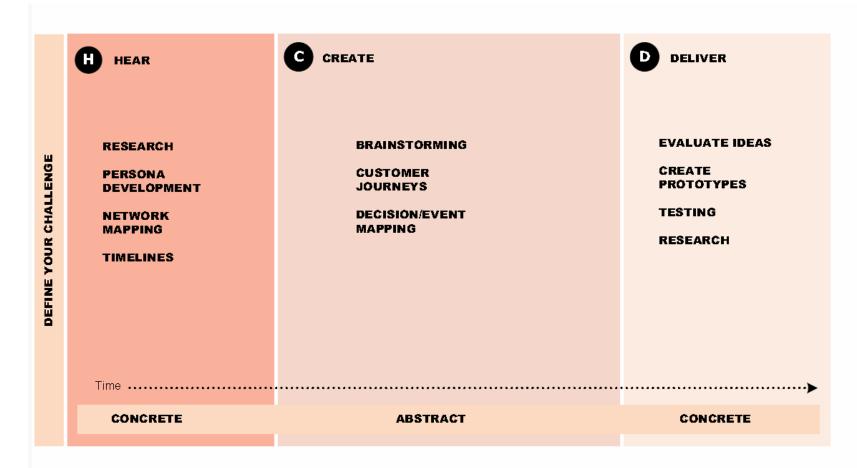




## What is your Campaign Success Story?

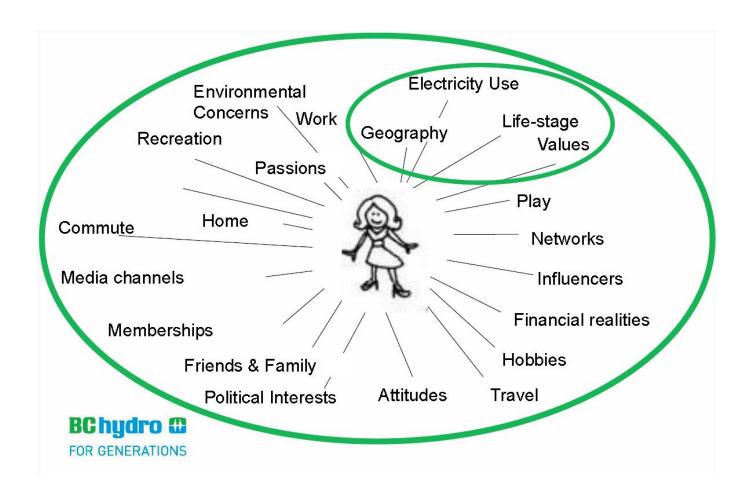


# **Human Centered Design**

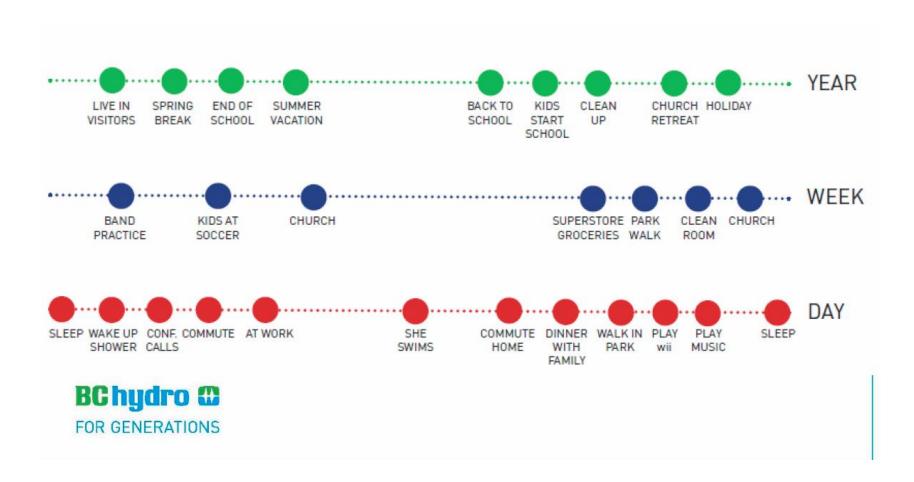




# **Network Map**



## **Event Journey**



# **Change Management**

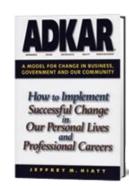
Awareness of the need for change

Desire to participate and support the change

Knowledge on how to change

Ability to implement required skills and behaviors

Reinforcement to sustain the change.



from Prosci's ADKAR Model

# **Training to Build Capacity**

- Purpose: Competency Training
- Audience: Operations and Maintenance Staff
- Method: online, face to face, curriculum based
- Length: 1 hour to 1 week per person
- Cost: \$0 to \$1000+ per person

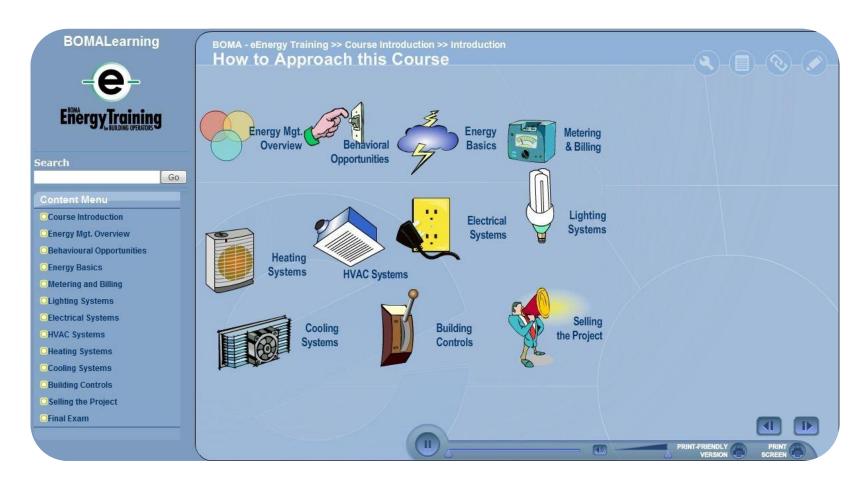
### **BOMA Energy Training**



- Addresses technology, behaviour and organizational
- Online training for building operations staff on energy management
- Self-learning format
  - Participants learn at their own pace and have access from remote locations
- Designed for commercial buildings but transferrable to Health Care Sector.

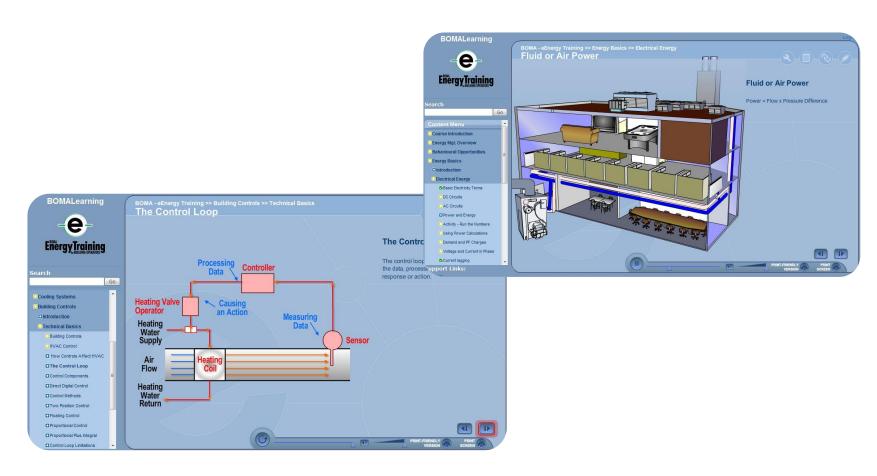
www.bomalearning.com

# The Topics

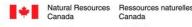


www.bomalearning.com

# **Animation and Graphics**



www.bomalearning.com



## **Dollars to \$ense**



### **Energy Management Workshops**

- Energy Master Plan
- Spot the Energy Savings
- Energy Monitoring
- Energy Efficiency Financing
- Recommissioning
- Energy Management Information Systems

http://www.nrcan.gc.ca/energy/efficiency/industry/training-awareness/5461



# Build Knowledge



## T12 to T8 lighting upgrade in MCC Rooms



#### **Project Description**

Two motor control centers (MCC) in the Prince George Pulp and Paper Mill recently underwent a lighting upgrade. The T12 lamps were replaced by more energy efficient T8 lamps controlled by occupancy sensors. Other than significant energy savings, the upgrade also provides quality improvements like quiet operation and enhanced visibility levels.



#### General Comparison — T8 vs. T12

Туре	Average life (hrs)	Lumens* per Watt		
T12	20,000	73		
Т8	35,000	94		

\* Lumens is the total amount of visible light emitted by a source

#### Status

This lighting project has been completed. The lamps have been upgraded to T8, supported by occupancy sensors. They were installed by the mill electricians. More lighting projects are being planned for the PG and Intercon Mills.

#### Savings

The upgrade saves about 20 Watts of energy per fixture. Annual energy savings total to 18,000 kWh per year. This accounts to total savings of about \$4250 over a period of five years.







### **RULE OF THUMB ENERGY COSTS**

Cost of Steam Leaks/Losses		Cost of Condensate Leaks/Losses		Cost of Warm Water Leaks/Losses *					
Steam (per 1,000 kg): \$10.00		Condensate (per 1,000 kg): \$2.00		Pumping Costs (per Million Liters): \$8.00					
Class	Approx Leak [kg/hr]	Cost per Year	Class	Approx Leak [L/min]	Cost per Year	Approx Leak [L/min]	Water Lost [Million L/yr]	Cost per Year (50°C Water )	Cost per Year (70°C Water)
Wisp	15	\$1,300	Wisp	5	\$4,900	25	13	\$7,500	\$11,300
Mild	150	\$12,800	Mild	30	\$29,100	75	38	\$22,400	\$34,000
Moderate	500	\$42,600	Moderate	150	\$145,700	200	102	\$59,600	\$90,600
Severe	1,000	\$85,200	Severe	500	\$485,600	500	256	\$149,100	\$226,500
Cost of Mil	Cost of Mill Water Leaks/Losses **		Motor Operating Costs **		Cost of Air Leaks/Losses **				
Cost of Pump	ing (per mil. L):	\$9.50	Cost of Po	wer (per HP-yr):	\$300.00		Cost of Power	r (per kWh):	4.35 ¢
Approx Leak [L/min]	Water Lost [Million L/yr]	Cost per Year	Motor Load [HP]	Power [MWh/yr]	Cost per Year	Hole Dia. [Inches]	Leak @ 90 psi [scfm]	Power [MWh/yr]	Cost per Year
25	13	\$120	25	170	\$7,500	1/8	14	27	\$1,200
50	26	\$240	50	350	\$15,000	1/4	58	108	\$4,700
100	51	\$490	100	700	\$30,000	1/2	231	433	\$18,800
300	153	\$1,500	300	2,100	\$90,000	5/8	361	677	\$29,400
500	256	\$2,400	500	3,490	\$150,000	Air Hose	682	1,278	\$55,600

<sup>\*</sup>Average cold water temperature of 12°C assumed.

<sup>\*\*</sup>Motor efficiency of 91% assumed.

## **Interior Health**



- Site Tour Materials
- Lunch and Learns
- Contests
- Webinars



Q&A

# Plan + Implement

- Planning Process
- Engagement Models
- Campaign and Initiative Design
- Communications
  - Develop your Plan
  - Public Narrative + Story Telling
  - Social Media

# Developing a Communications Plan

**Step 1**: Start building a relationship with communications

Understand how media is used in your organization and who makes the decisions

# Developing a Communications Plan

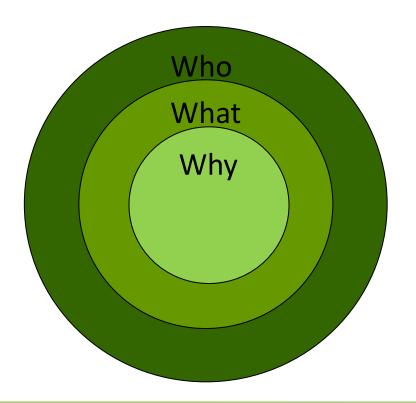
Step 2: Gather Data

- Identify target audiences (internal and external)
- Identify types of communications
- Get input from communications

# Developing a Communications Plan

Step 3: Craft your Key Messages

- Who are you communicating to?
- What do you want to say?
- Why should they care/ why do they need to know?



## **Communications Plan**

EES Team Communications & Engagement Strategy Table of Contents Executive Summary.....1 Strategy Purpose.....2 How to use the Strategy......2 Context & Background......3 EES Vision, Mission, Values Greencare and EES Explained Ourrent Communication Channels Stakeholders/Allies Priorities & Ranking Vision, Lessons & Action.....9 Monitoring & Evaluating Progress.....19 Tools & Resources......22 Key Messages Engagement Tips for Change Projects O Engagement Tips for Presentations Lessons......24 Recommendations & Next Steps......25

#### Communication Activities and Schedule

#### Internal webpages

Update environment page on the Pass and the Landing.

#### xternal website

Update the external page during next general update.

#### Green Tips

Provide communications with 52 green tips.

#### Sustainability Stories

Write short success stories about the people and the projects at Whistler Blackcomb. Every Step Counts.

Create 4 – 5 stories a year. Potential Topics: Christina, Natai, Stu Snownball, Cleaners

#### Videos

Use videos produced for Cranworx to share message.

#### Communications Boards

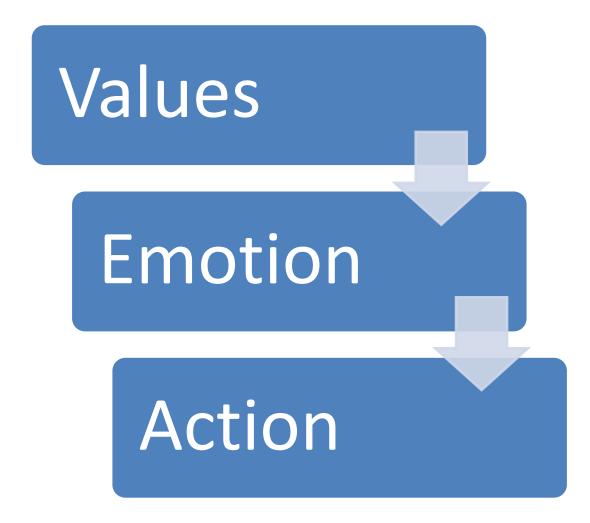
Update communications boards with sustainability stories and tips.

September 2014	October	November		
· Weekly Green Tips	Internal and external webpages updates     Sustainability Stories     Weekly Green Tips	· Weekly Green Tips		
December	January 2015	February		
<ul> <li>Sustainability Stories</li> <li>Weekly Green Tips</li> </ul>	· Weekly Green Tips	- Sustainability Stories		
March	April	May		
· Weekly Green Tips	Sustainability Stories     Weekly Green Tips	· Weekly Green Tips		
June	July	August		
	Weekly Green Tips	Weekly Green Tips		

## **Public Narrative**



## **Public Narrative**



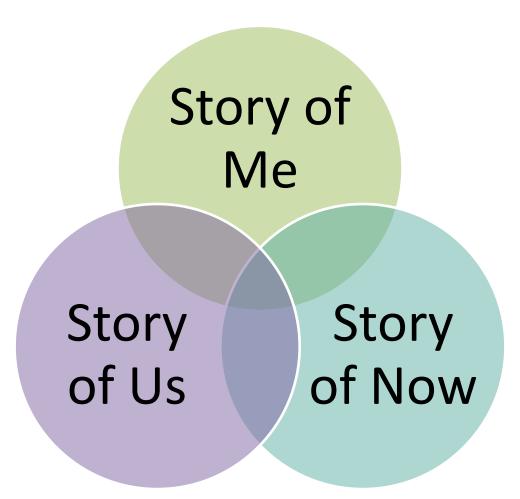
# **Story Structure**

- Challenge
- Choice

Outcome



# Storytelling



# **Using Social Media**

- Use photos
- Way to track participation
- CEO Blog
- Video competitions
- Share successes

## SOCIAL MEDIA EXPLAINED (DONUT EDITION)





## **Social Media**

Social is about being social

- 1. Are your stakeholders on social media?
- 2. What platforms are they using?
- 3. Does your organization already use certain platforms?

Q&A

## **MEASURING RESULTS**

## Ways to Measure Results

- Overall Consumption Data
- Participation Rates
- Social Media as an Assessment Tool
- Smaller Studies
- Program Surveys



## But First...

 Define what success looks like at the end of the initiative.

 How will you know you've been successful?

# **Overall Consumption Data**



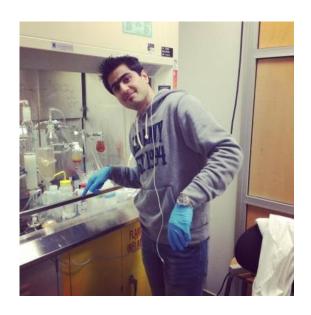
#### TLLTC Trillium Lodge



### **Participation Rates**



### UBC Shut the Sash Campaign





It's going down	Spread awareness round and rour
I'm yelling conserve	Make sure the sash is going down
You better shut	Turn off the light, starting now
Your fume hood sash	Make sure the sash is going down
Let's keep the Earth	Spread awareness round and rour
This green forever	Make sure the sash is going down
Make the sash one	Turn off the light, starting now
You won't forget	Make sure the sash is going down
Woocooah, woooooah, woooooooooah,	It's going down
Woocooah, woocooah, woocoocoocoah	I'm yelling conserve
	You better shut
The bigger the bills, the more they fall	Your fume hood sash
Saving energy benefits us all	
I respect the earth, so lights off	Let's keep the Earth
And recycling doesn't take too long – conserve	This green forever
Sash down, computers off – conserve	Make the sash one
That's the way we like to -what?- conserve	You won't forget
Don't waste and raise that bill	

Labs competing for spirit points

### Shut the Sash



- Laboratories consume 10 times as much energy as other types of space on campus.
- Lab groups formed teams and competed to keeping their sash shut over 6 weeks for prizes.
- Spirit challenge component increased engagement, encouraging teams to promote the habit to their peers and online using social media.

### **Targeted behaviour**

Shut the sash when not in use





#### 2014 Results

- Overall 81% improvement in sash height
- 80% participation rate
- Successful spirit challenge: 79 entries submitted by 16 teams

# Social Media as an Assessment Tool







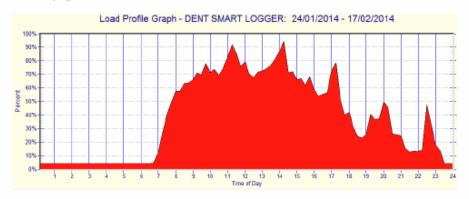
### **Smaller Studies**





Case studies on campaigns

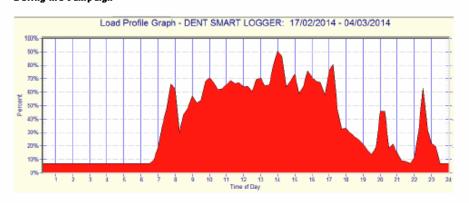
#### Pre-Cam paign





38%

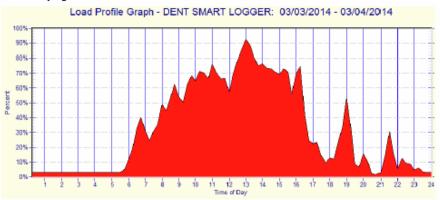
#### During the Campaign



6% reduction in lights left on

36%

#### Post Campaign

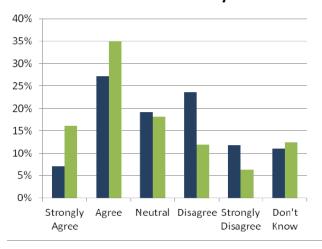


**32%** 

# **Program Surveys**

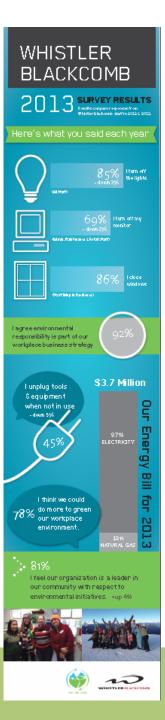


### Energy conservation is a part of our Health Authority's mandate



### Northern Health WCA Program Surveys

# Infographics



# The Approach

 Measure energy savings, but also track nonenergy benefits

Use more than one approach

Remember to take photos!



Q&A

### **WRAP UP**

# **Key Messages**



- Change is not an event. It's a process.
- People are key to change.
- Not everything will work!

# **Key Points (Part 1)**

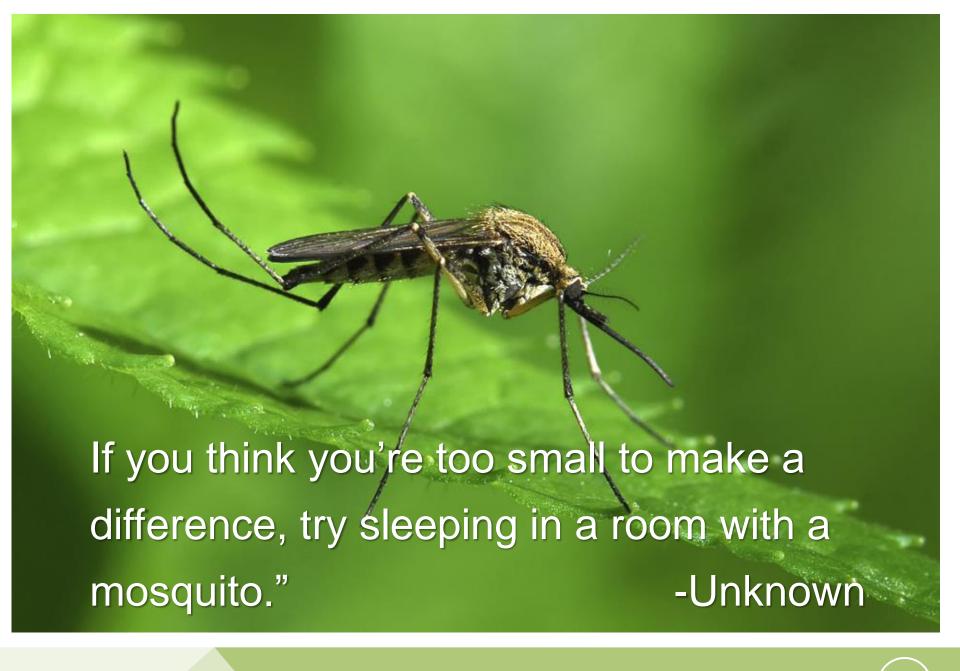
- Why Engage?
- The Challenge
- Build Your Team
- Secure Internal Support
  - -Stakeholder Analysis
  - -Links to Other Programs

# **Key Points (Part 2)**

- Develop and Implement your Plan
  - Creating the Plan
  - Engagement Models
  - Campaign Development
  - Communications
- Measure Results

# Tools, Strategies and Theories

- Community Based Social Marketing
- Change Management
- Volunteer Management
- Human Centered Design
- Stakeholders and Building Support
- Communications + Social Media + Story Telling
- Influencing without Authority



Q&A

### **WRAP UP**

### **Webinar Series**

Next Session:
 Friday, March 20, 9am-12pm
 Monitoring, Targeting & Reporting

# Thank you.

Sarah Smith, Training + Engagement Lead Robert Greenwald, P.Eng., MBA, President



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