Sustaining Sustainability: A framework for organizational change

Presented by Christopher Payne and Rick Diamond April 30, 2015



ENERGY TECHNOLOGIES AREA

BERKELEY I

Today's Webinar

- Why organizational change?
- 5-Step Framework for Organizational Change
- Key Takeaways
- Resources

Why Organizational Change?

Goal of Organizational Change

To go beyond individual awareness and actions and move towards a changed institutional culture by creating a durable sustainability ethic and a sustainable way of operating the physical infrastructure of agencies

Why this approach?

- Key for long-term change
- Need a new approach to get a new outcome
- Lessons from social science can lead to more effective programs

5-Step Framework for Organizational Change



Determine Goal

- Broad goals may be determined externally
 - Executive Order, Agency Strategic Sustainability Performance Plans, Federal Green Challenge
- How should you focus efforts?
 - Make goals relevant to core mission

Goal Exercise

- Federal Green Challenge Target Areas
 - Waste
 - Water
 - Energy
 - Purchasing
 - Electronics
 - Transportation

Step 2: Identify Context

An assessment of Roles, Rules, and Tools

Roles

• Roles

- Who has responsibility?
- Who has authority?
- Who has incentive?
- Who takes action?
- Examples
 - Chief Sustainability Officer
 - Contract Officer
 - Building Operator

Context Exercise: Roles

Engaging staff in recycling and waste reduction

Roles:

- People who create waste (everyone)
- Janitorial staff
- Sustainability officer

Rules

- Rules
 - What rules exist?
 - Which requirements are salient?
 - How are they enforced?
- Examples
 - Statutes, Executive Orders, Regulations
 - Agency policies, site policies
 - Training, certification requirements
 - "The way things are done...", culture

Context Exercise: Rules

Engaging staff in recycling and waste reduction

Rules:

- Executive Order 13693
- DOE Order 436.1
- "Don't put trash into the recycling bin"

Tools

- Tools
 - What systems support desired action?
 - What are the default system conditions?
 - What additional tools are needed?
- Examples
 - Physical infrastructure
 - Standard forms
 - Training content
 - Recognition and award programs

Context Exercise: Tools

Engaging staff in recycling and waste reduction

Tools:

- Waste bins (shape, placement, visibility)
- Janitorial service (how are bins emptied?)
- Hauler contracts (who takes the waste away?)
- Catering contracts
- Mechanisms for feedback?

Identifying Context: Recap

- Understanding existing roles, rules, and tools reveals current strengths and barriers
- Consider new/modified roles, rules, and tools needed to achieve goal
- Use this information to guide action plan

Step 3: Develop Action Plan

Action Plan

- 4 Key Elements
 - Engage
 - Educate
 - Enable
 - Evaluate
- How to address key elements?
 - 8 principles provide guidance



Principle 1: Social Network

People take cues from others, so identify and highlight change in peers.

Example: The single most explanatory factor in a recent analysis of residential PV adoption was proximity to previously-installed systems.

Principle 2: Social Empowerment

People often seek engagement to greater purpose, so support a sense of shared group participation.

Example: The US Postal Service's 630 Lean Green Teams collaborate across job functions to identify and implement sustainable actions.

Principle 3: Social Commitment

Specific, public commitments support taking action.

Example: Assessors working with a California utility asked homeowners to commit to a time when they would undertake an energy efficiency project, increasing the number of completed projects by 3x - 4x.



Principle 4: Information and Feedback

Information must be actionable, and results must be perceptible.

Example: Workers in an industrial organization increased energy-saving behavior when they received weekly updates on their energy use and reductions.

Principle 5: Multiple Motivations

Different people will be attracted to different elements of change. Highlight variety of benefits.

Example: Maintenance staff at a Navy base preferred energy-efficient exit signs because they lasted longer, reducing effort for replacement.

Principle 6: Leadership

Transformational leadership must be visible and consistent to allow new actions to be accepted and integrated.

Example: At the CDC, the charismatic Director led stair walks that were part of the sustainability connection between health and "green" efforts.

Enable

Principle 7: Infrastructure

Changing the physical context makes new behaviors easy or desirable.

Example: Prompts and enhanced aesthetics, visibility, and accessibility to stairwells prompted an 8.2% increase in stair use.

Principle 8: Continuous Change and Innovation

Develop a process for change, not an outcome.

Example: IBM implemented a monthly energy reporting system for its various facilities where operations are driven by simple checklists...Facility managers use the checklists to verify that procedures have been performed on a regular basis.

Evaluate

- Develop evaluation strategy
 - Define appropriate metrics
 - Conduct regular measurements
 - Provide feedback
- Consider piloting your plan, using a treatment and control, or trying two different approaches and comparing outcomes

Action Plan Exercises: 8 Principles

"The U.S. Navy's Naval Station Great Lakes (NSGL) took an aggressive and multi-faceted approach to raising its diversion rate. Active participation of employees and trainees to maximize collection and minimize contamination of recyclables by trash was critical...NSGL asked their recycling and composting vendors to track and report tonnage of material produced at each collection point. This encouraged a friendly competition for increasing recycling and food waste tonnage collected among areas of the facility. Along with collecting food waste for composting from the five galleys (cafeterias), NSGL switched to using biodegradable plates, cutlery and napkins to further reduce materials sent to a landfill."

<u>New Composting Program Boosts Waste Diversion</u>, Federal Green Challenge, Waste

"The U.S. Navy's Naval Station Great Lakes (NSGL) took an aggressive and multi-faceted approach to raising its diversion rate. Active participation of employees and trainees to maximize collection and minimize contamination of recyclables by trash was critical...NSGL asked their recycling and composting vendors to track and report tonnage of material produced at each collection point. This encouraged a friendly competition for increasing recycling and food waste tonnage collected among areas of the facility. Along with collecting food waste for composting from the five galleys (cafeterias), NSGL switched to using biodegradable plates, cutlery and napkins to further reduce materials sent to a landfill."

<u>New Composting Program Boosts Waste Diversion</u>, Federal Green Challenge, Waste

"NSGL asked their recycling and composting vendors to track and report tonnage of material produced at each collection point."

Principle 4: Information and Feedback (Educate)

"This encouraged a friendly competition for increasing recycling and food waste tonnage collected among areas of the facility."

Principle 2: Social Empowerment (Engage)

Case Study: Education and Outreach Campaign Reduces Paper Usage

The U.S. Office of Personnel Management's Chicago office "began a...campaign to buy less paper by using less paper. OPM's newly established office green team asked staff to set default printer preferences to double-sided printing. They also provided computer screenshots to show how to do it...Monthly, they emailed results on how many people had switched to double-sided printing."

Education and Outreach Campaign Reduces Paper Usage, Federal Green Challenge, Purchasing

Quiz!

The U.S. Office of Personnel Management's Chicago office "began a...campaign to buy less paper by using less paper. OPM's newly established office green team asked staff to set default printer preferences to double-sided printing. They also provided computer screenshots to show how to do it...Monthly, they emailed results on how many people had switched to double-sided printing."

Which principles do you see incorporated in OPM's work to achieve their purchasing goals? (May be more than one!)

- 1. Infrastructure (Enable)
- 2. Social Network (Engage)
- 3. Social Empowerment (Engage)
- 4. Social Commitment (Engage)
- 5. Information and Feedback (Educate)

Our answers

The U.S. Office of Personnel Management's Chicago office "began a...campaign to buy less paper by using less paper. OPM's newly established office green team asked staff to set default printer preferences to double-sided printing. They also provided computer screenshots to show how to do it...Monthly, they emailed results on how many people had switched to double-sided printing."

- **1. Infrastructure (Enable)**
- 2. Social Network (Engage)
- 3. Social Empowerment (Engage)
- 4. Social Commitment (Engage)
- 5. Information and Feedback (Educate)

Implement Plan

- Informed by Step 2 (Context) and Step 3 (Action Plan)
- Implementation can be overwhelming
 - Small steps to a greater outcome
 - Start with one or two important pieces
- It doesn't have to be perfect

Measure and Evaluate

- Impact Evaluation
 - What kind of change did you see?
 - e.g. Federal Green Challenge Reporting
 - What caused the change you saw?
- Process Evaluation
 - If you met your goal, what's next?
 - If you didn't meet your goal, why not?
 - Refer back to 8 principles
 - Adjust actions and goals based on implementation and evaluation

Closing the Loop



Key Takeaways

- Start with a broad view of your situation, then narrow in for opportunities and implementation
- Framework is an overall guide
- Consider your specific case
- Use a mix of principles, but you don't have to use every one

The Framework Checklist

1. Context

- **Roles**
- **Rules**
- **D** Tools

2. Elements

- Engage
- **Gamma** Educate
- Enable
- **D** Evaluate

3. Principles

- □ Social Network
- **Gold Social Empowerment**
- Social Commitment
- Information & Feedback
- □ Multiple Motivations
- □ Leadership
- ☐ Infrastructure
- Continuous Change & Innovation

Additional Resources

Institutional Change for Sustainability

http://energy.gov/eere/femp/institutional-change-sustainability

- Material covered today
- Readings
- Case studies

Sustainable Institutional Change for Federal Facility Managers

http://femp.energy.gov/training/

• Training Module



FEMP Lead

Hayes Jones Hayes.Jones@ee.doe.gov (202) 586-8873

Lawrence Berkeley National Lab

Christopher Payne CTPayne@lbl.gov (510) 495-2577

Rick Diamond RCDiamond@lbl.gov (510) 486-4459

Events

- Energy Exchange
 - August 11-13, 2015 in Phoenix, AZ
- Behavior, Energy and Climate Change Conference (BECC)
 - October 18-21, 2015 in Sacramento, CA