

Save Energy Now LEADER Web Conference Project Implementation Seminar Series

11 - Preparing for Project Implementation Communicating Accomplishments

Fred Schoeneborn, CEM, CEA
October 13, 2010



Agenda

- Seminar **Series Overview**
- **Recap Seminar #10** – “Measuring”
- Communicating Accomplishments
 - Fred Schoeneborn - ORNL team
 - Steve Fugarazzo – Raytheon
- **Questions/Future Seminars**



Project Implementation Series

- **12** One-hour seminars assisting *Save Energy Now* LEADER Companies
- Conducted every **second Wednesday** of the month
- Focus on **real world** examples and solutions
- Practical **tools** made available
- **Peer** *Save Energy Now* LEADER participants



Measuring Energy Achievements

- Meter specific **operations/ equipment**
- Use “**management language**”
- Recognize measurement **requirements**
- Highlight **benefits** of measurements
- Develop a “**thermometer**” graph and a **scorecard**
- Follow a metrics **roadmap**



Sharing by ArcelorMittal

- Use **graphics** to represent energy trends
- **Measure** energy consumption
- Consider **factors**
- Implement a **tracking system**
- Compare **benchmarks**
- Issue **reports**
- Utilize **project tracking**



Communicating Accomplishments

- **Tell them** if you want others to know
- Determine the communication **tool** to be used
- Invite **others** to participate
- Identify the **audience** to be reached
- Seek suggestions from **supporters**



Communications Matrix

Communications Matrix								
	Audience							
	Internal			External				
Tools	Employees	Management	Team	Suppliers	Customers	Investors	Community	Other
Posters	✓		✓					
Emails	✓		✓					
Newsletters	✓	✓	✓					
Annual Reports	✓	✓	✓			✓	✓	✓
Budget Reviews		✓	✓					
Conference Calls			✓					✓
Executive Videos	✓	✓	✓					
Press Releases	✓	✓	✓	✓	✓	✓	✓	✓
Energy Fairs	✓	✓	✓	✓	✓			✓
Special Events	✓	✓	✓				✓	✓
Energy Tip Cards	✓		✓					
Brochures	✓		✓				✓	✓
“Green Teams”	✓		✓					



Publicity Works

- **Communicate accomplishments**
- **Share successes**
- Celebrate results at **company events**
- Get on agendas of **senior meetings**
- Have a “**hip-pocket**” item for a shareholders meeting



Show Business Unit & Plant Alignment

- Express **energy's contribution** to common goals
- Equate energy performance to **product equivalent**
- Stress the **certainty** of energy reduction paybacks
- Emphasize Best Practice **replication** opportunities
- Treat energy like a **major business** item



Tailor your Financial Message

- SPB – Simple Payback
- DPB – Discounted Payback
- ROI – Return on Investment
- IRR – Internal Rate of Return
- NPV – Net Present Value



Publish or Perish

- Sell your **accomplishments** but...
 - ✓ Sell with **facts**
 - ✓ Talk **quantitatively** not qualitatively
 - ✓ Give **credit** away
 - ✓ Check your **ego** at the door



Champion of Implementation

- Steve Fugarazzo
- Raytheon
- Manager, Facilities Engineering
- Focus is on Implementation





Energy Projects: Proven Tips for Implementing and Highlighting Your Achievements

Department of Energy
October 13, 2010

Steve Fugarazzo
Raytheon Company
Enterprise Energy Team

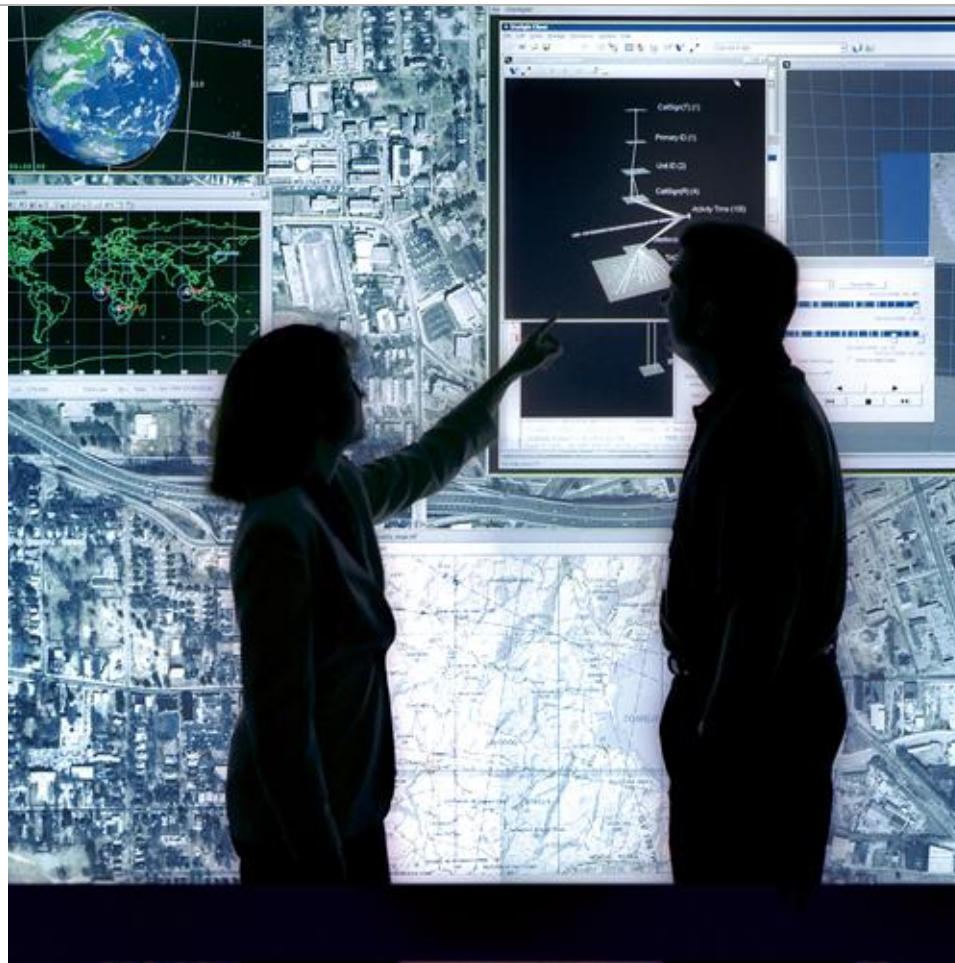
Presentation Overview

- Raytheon: Who we are
- Tips for implementing your energy project
 - Developing goals/themes/ideas
 - Getting people involved
 - Where to implement energy conservation
 - Ideas for altering energy use behavior
 - Offering energy awareness events and contests
 - Delivering metrics/reports
- Tips for communicating your achievements
 - Communicating with your internal employees, teams and customers
 - Showcasing your accomplishments beyond your business

Raytheon: Who We Are and What We Do

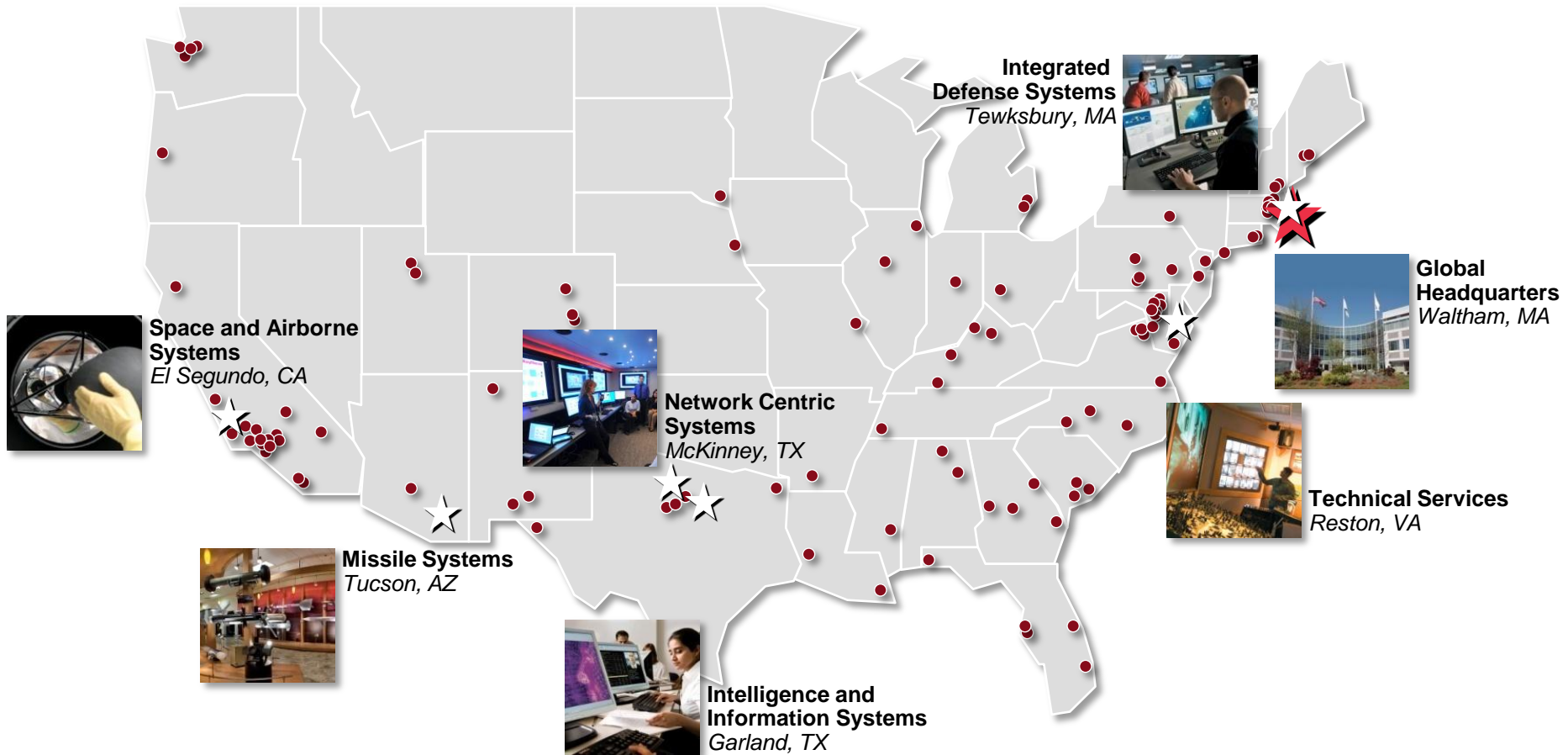
Raytheon is a global technology company that provides innovative solutions to customers in 80 nations.

Through strategic vision, disciplined management and world-class talent, Raytheon is delivering operational advantages for customers every day while helping them prepare for the missions of tomorrow.



Raytheon supports approximately 14,000 contracts

Raytheon Business Headquarters



75,000 employees worldwide, \$25 billion revenue in 2009



Raytheon's Approach to Energy Conservation, Sustainability

*How we **use** energy*

- ~90 percent of our carbon footprint
- Large expense yet necessary to do business
 - Estimated at \$120 million in 2009 and rising!

*How we **conserve** energy*

- Our corporate/social responsibility is to conserve energy through programs that help our business:
 - Eliminate unnecessary waste and cut expense
 - Reduce our environmental footprint



Energy conservation for sustainable growth

Example of Raytheon's Energy and Sustainability Programs


Raytheon [Contact Us](#) | [Connect With Us](#) | RTN ▲ 46.17 (+0.08)

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Home > Corporate Responsibility > Stewardship > Sustainability

- Community Relations
- Diversity
- Information Technology
- Math and Science Education
- Stewardship**
 - Ethics
 - Governance
 - Safety
 - Sustainability**
 - Energy
 - Environment
 - Wellness


Sustainability



We are stewards of our environment and we are committed to reducing waste and conserving natural resources.

Energy


Raytheon's energy program has an impressive legacy and is well recognized in both the public and private sectors.



[Read More >>](#)

Environment

At Raytheon, we strive to integrate environmentally friendly behavior into the daily practice of each of our businesses.



[Read More >>](#)

Contact

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Tips for Implementing Your Energy Project

■ Narrow the scope

– Implementation goals/themes/ideas should focus on three areas or less, such as:

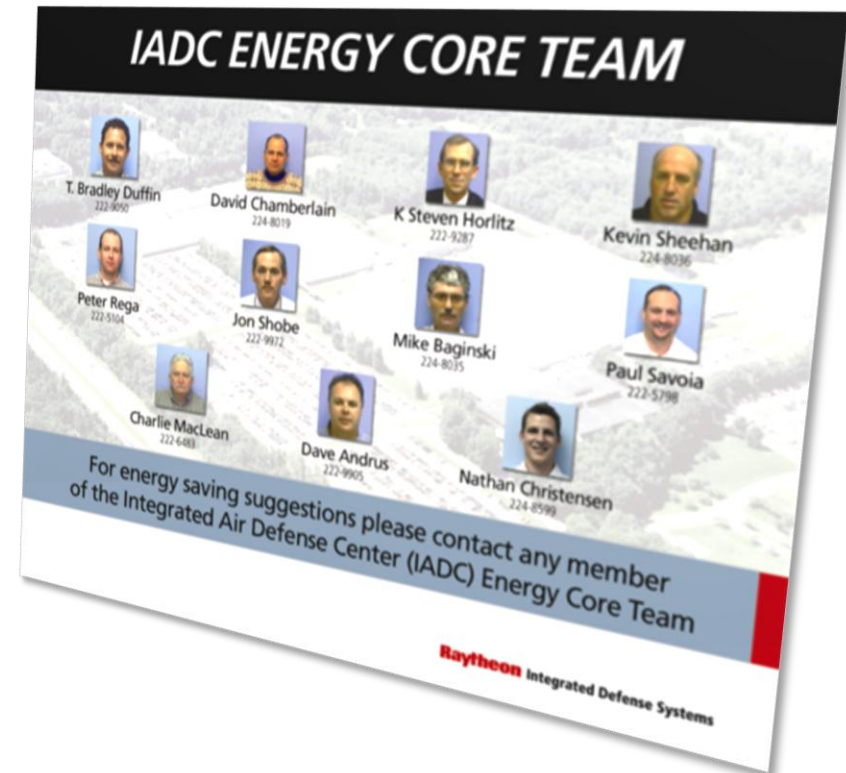
1. People – How many to engage? What levels?
2. Places – Which facilities to start with?
3. Things – Processes and behaviors to alter or shift



Focus on the high energy consumers

Tips for Implementing Your Energy Project: Get Your People Involved

- Build internal partnerships
 - Create and nurture key partnerships to ensure your implementation is adopted and successful
 - Recommended internal partners:
 - CFO and leadership team
 - Operations team
 - Area management
 - People who are passionate and interested in cutting energy consumption



Maintain focus on “What’s in it for them?”



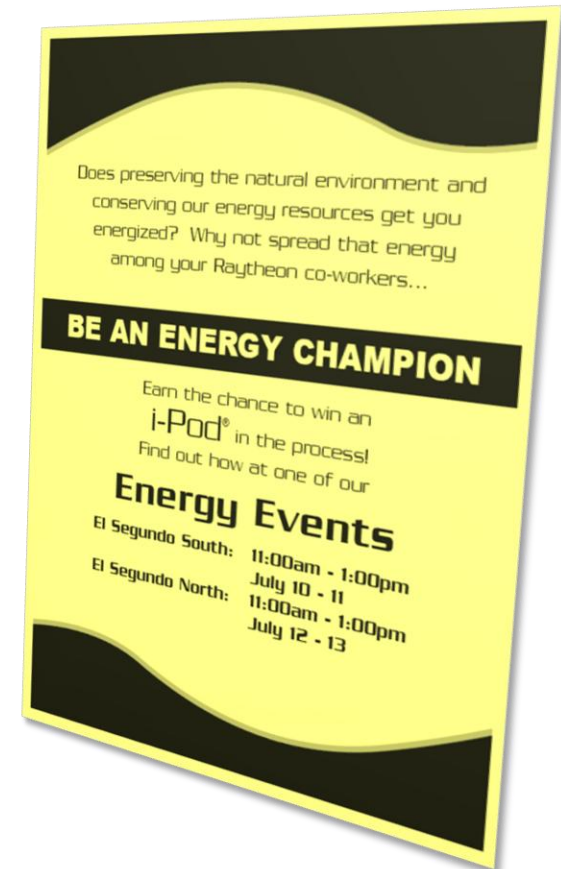
Partnerships With Internal Stakeholders

- Information Technology – Green IT
 - Raytheon recognized with InfoWorld Green 15 award
 - Named one of Uptime Institute’s 2009 “Global Green 100”
- Environmental, Health and Safety (EHS)
 - Earth Day events, employee contests
- Human Resources
 - New employee orientations
 - Online energy training
- Manufacturing
- Engineering
- Business Development



Identify and Recruit Your Energy Champions

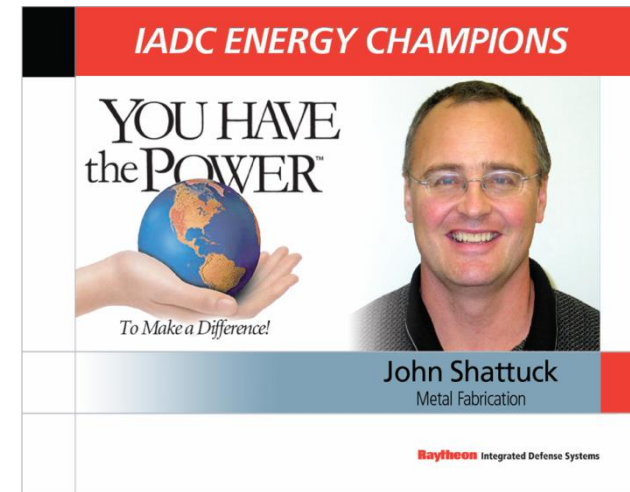
- Energy Champions are people who demonstrate and promote:
 - Energy conservation passion
 - Management chain support
 - Strong, positive peer relations
 - A good example for others
 - Energy conservation and efficiency every day



A critical step: Develop a network of Energy Champions

Develop Energy Champion Responsibilities

- The responsibility of Energy Champions includes:
 - Instilling a culture of energy conservation within their respective workspaces
 - Developing conservation strategies specific to their work areas
 - Identifying and implementing energy conservation measures
 - Assuring there is no backsliding — savings must be maintained
 - Sharing progress, lessons learned, and innovative energy practices with other team members



Focus on a cultural of energy conservation

Recognize Energy Champions



Acknowledge Energy Champions with awards and other types of recognition to call out their efforts and encourage others to follow in their footsteps.



Energy Champion networks tend to grow rapidly

Tips for Implementing Your Energy Project: Try Energy Citizens

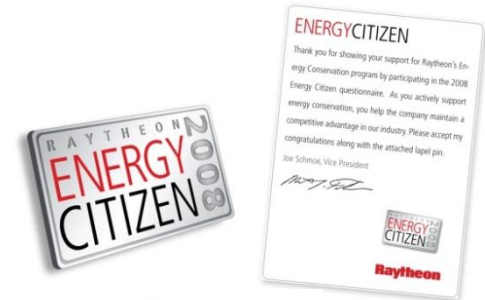
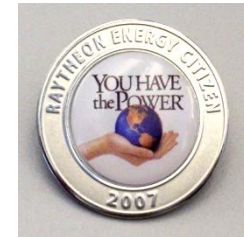
- Energy Citizens also support your energy goals
- Energy Citizens are employees who:
 - Participate in energy conservation learning experiences
 - Focus on how they can conserve energy at home, at work and on their way to work



Focus on “What’s in it for them”

Raytheon Energy Citizen: Background and History

- 2007 Energy Citizens program piloted at IDS
 - 18 work and home questions
 - 10% of IDS employees qualified from July-December 2007
- 2008 Energy Citizens: Companywide
 - 18 questions developed through collaborative effort of Enterprise Energy Team (EET)
 - 29% of all Raytheon employees were qualified
- 2009 Energy Citizens: Companywide
 - New and improved set of questions (14), including pop-ups with hotlinks for employees to learn more
 - 44% of all Raytheon employees were qualified
- 2010 Energy Citizens: Companywide
 - Fun and interactive learning tool instead of quiz
 - Goal is 50% of Raytheon employees
 - At 33% through May
- 2011 and future plans
 - Considering other tools to engage employees
 - Raytheon Sustainability tool (Groom Energy/Proactively Green)
 - Include Energy Citizens as part of “Sustainability Challenge”



Ultimate vision is 100% or Total Employee Engagement

Tips for Implementing Your Energy Project: Go Outside Your Business

Forge External Partnerships

- Look for partners who can help your business identify savings and other benefits you may otherwise overlook
- Seek out external partnerships with:
 - Department of Energy Industrial Technology Program/Save Energy Now Leader Program
 - Environmental Protection Agency's ENERGY STAR program
 - International Facility Management Association, Building Owners and Managers Association



Raytheon was awarded the 2010 ENERGY STAR Sustained Excellence Award by the U.S. Environmental Protection Agency. Raytheon's Energy Champions and Energy Citizens continuously find methods to conserve energy and engage others.



External partnerships help build credibility for your project

Tips for Implementing Your Energy Project: Places to Target

- Where to implement energy conservation measures
 - Common use areas
 - Cafeterias, mailrooms, storage areas and bathrooms
 - Industrial processes
 - Lab and special facilities
 - Look to conserve energy
 - Modified hours
 - Lights with motion detection
 - Signs to remind employees to conserve energy

Energy Conservation for a Competitive Advantage

Success Story

MDC – Dining Center

Team Members:
Kevin Gigliotti, MDC
Eurest Employees &
Eurest District
Management

Vision
Identify and implement energy conservation measures (ECMs) throughout the Dining Center.

Approach and Results

- Modified the operating procedures of the of equipment in the kitchen such as fryers, cook tops & grills.
- Posted signs in many areas to remind employees to turn off equipment and close doors.
- Installed Thermal Curtains on the open refrigerators to help conserve energy.

Benefits

- Air Curtains : Extends Compressor life. • Better temperature control. • Keeps food fresher, safer, longer.

Tips for Implementing Your Energy Project: Altering Behaviors & Processes

- Try a softer approach

- Subtle reminders
- Energy audit showing results



Energy Conservation for a Competitive Advantage

Energy Audit Results


An Energy Audit of this area was conducted on date _____ time _____.

Results: See checked boxes.

All equipment and lights were turned off! Thank you for contributing to the energy conservation initiative!

Items below were found left on in your office. In the future please follow the below.

- PC's should be powered off
- Monitors should be powered off
- Task light should be powered off
- Peripherals with power switches should be powered off
 - External hard drives
 - Scanners and local printers
 - Speakers
- Unused power cords with transformers should be unplugged
 - Laptop power cords
 - Cell phone power cords


*Help Make a Difference.
 Conserve energy wherever you can!*



UP

DO NOT POWER DOWN - CRITICAL PRODUCTION EQUIPMENT

POWER DOWN ONLY WHEN EQUIPMENT IS NOT IN USE

PRODUCTION IN PROCESS DO NOT SHUT DOWN UNIT _____

DAILY: FOR INSTRUCTIONS SEE BELOW

POWER DOWN AT END OF SHIFT: 1st 2nd 3rd

POWER UP AT: _____

WEEKEND: FOR INSTRUCTIONS SEE BELOW

POWER DOWN AT: AM PM ON: FRI SAT SUN

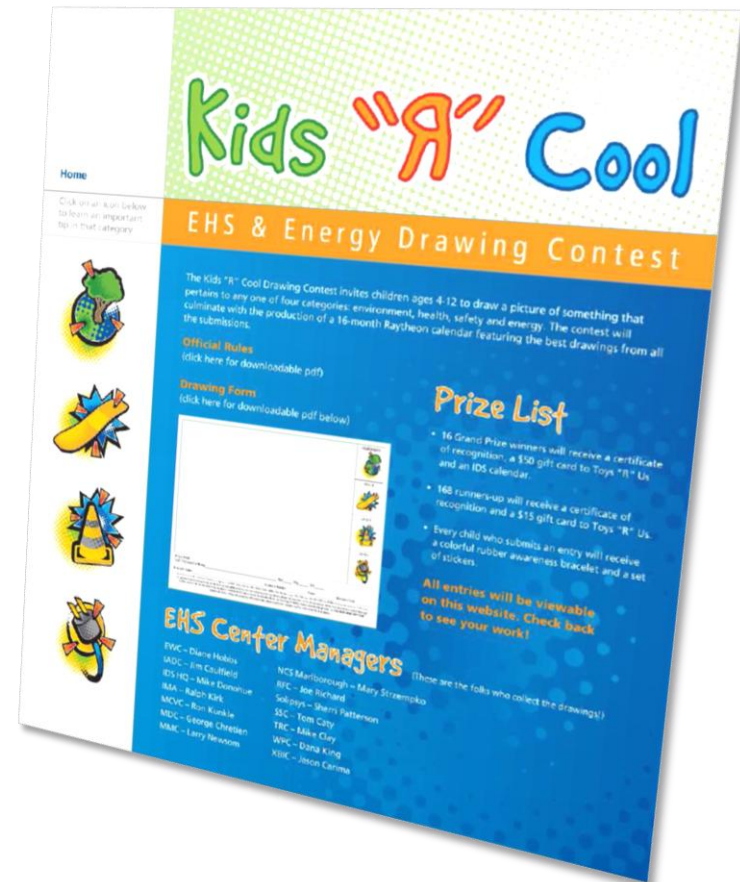
POWER UP AT: _____

REFER TO PROCESS/ PROCEDURE NUMBER _____

POWER DOWN PER SPECIAL INSTRUCTIONS: _____

Engaging Your Teams: Energy Awareness Events and Contests

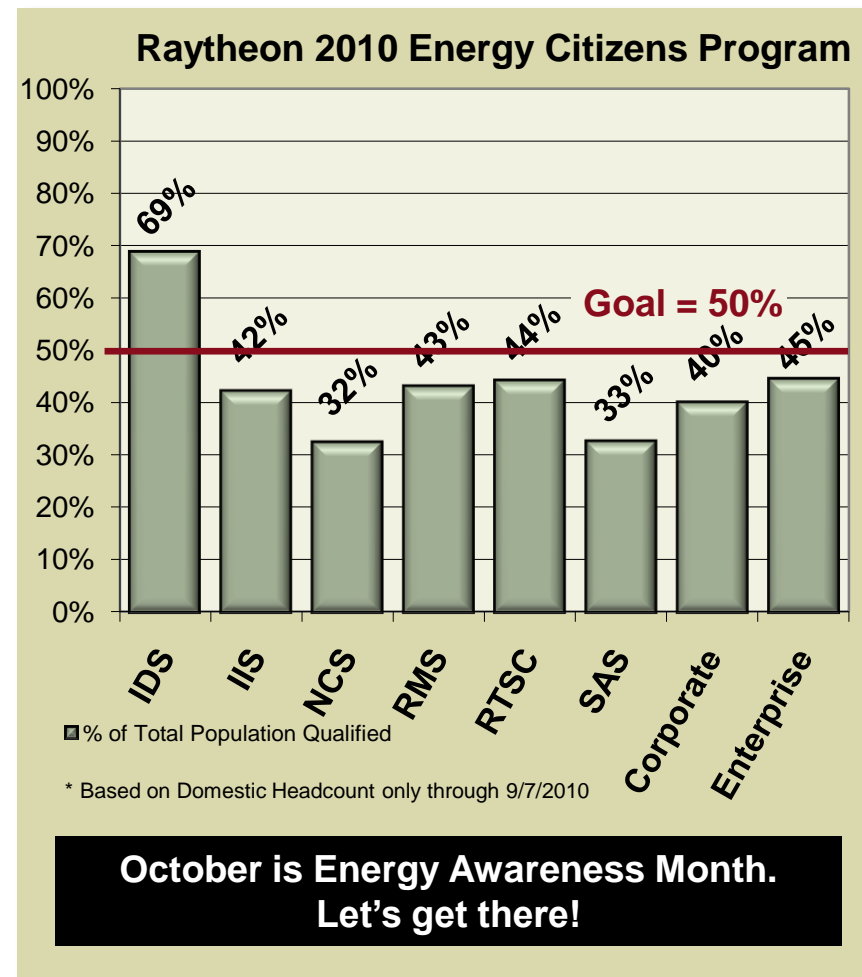
- Use celebrations to reinforce your energy program goals
 - New Year's resolution – current year goals
 - Earth Day in April
 - Ice cream socials
 - Energy awareness month
- Create contests
 - Involve family
 - Guess the amount of the next energy bill
 - “Wheel of Fortune”-themed contest



Continuously create positive buzz

Deliver Metrics/Reports

- Keep it simple
 - Internal to the team: Energy units
 - Every building, all sites, each business unit
 - Every month
 - External to the leadership team – energy costs and percentage reduction
- Reports to the leadership team
 - Be concise, focus on costs
 - Roll up each site, each business unit
 - Explain all anomalies
 - Estimate projected energy use



Report progress against goals

Tips to Communicate Your Achievements

- Partner with your communications groups
- Utilize their media
- Internally, up the chain, and externally
- Draft articles for them
- Engage your utility companies and energy suppliers
- Draft case studies
- Keep the DOE, EPA ENERGY STAR, IFMA organizations informed
- Submit articles for publications such as Buildings Magazine and other trade journals
- Communicate with your local towns and state



Focus on accomplishments by people

Tips to Communicate Your Achievements: Example 1

[Corporate Update Archive](#)

Raytheon Celebrates the 40th Anniversary of Earth Day

For the 40th anniversary of Earth Day April 22, 2010, Raytheon is celebrating our commitment to sustainability. At Raytheon, sustainability starts in the workplace and extends far beyond. We are dedicated to engaging our employees, customers, suppliers and communities to protect our environment and conserve natural resources.

The following 40 statistics for 40 years of Earth Day reflect our engagement in upholding sustainable practices at work and at home now and for years to come.

Raytheon's Long-Term Sustainability Goals

1. Raytheon's goal is to reduce absolute greenhouse gas emissions **10 percent** by 2015.
2. Raytheon plans to reduce landfill and incinerated waste disposal **25 percent** normalized by revenue by 2013.
3. Raytheon aims to reduce water consumption **10 percent** by 2013.

Energy Management at Raytheon

4. In 2009, energy consumption declined on an absolute basis by almost **3 percent**, saving approximately **\$3 million** in energy costs and has declined **13 percent** since 2002.
5. When measured on a per dollar revenue basis, Raytheon reduced its energy use **10 percent** in 2009.
6. Raytheon's energy per dollar revenue reduction has been **38 percent** since 2002.

Climate Change and Greenhouse Gas Emissions (GHG)

7. Raytheon has been a charter member of the U.S. Environmental Protection Agency's (EPA's) Climate

Earth Day 2010



Our Commitment to Future Generations

More Information

[Raytheon Sustainability](#)

[Environmental Protection Agency \(EPA\): Earth Day 2010](#)

Related Articles

[Our Commitment to Future Generations: Energy Efficiency Update](#)

[Renew Your Commitment: Become a 2010 Energy Citizen](#)

[Raytheon Recognized for Leadership in Reducing Toxic Material Use](#)

[Smart Sprinklers: NCS Fullerton's New Irrigation System Highlighted as Raytheon Sustainability Best Practice](#)

[Raytheon Recognized With 2010 ENERGY STAR Award](#)



Tips to Communicate Your Achievements: Example 2

[Corporate Update Archive](#)

Raytheon Celebrates Energy Awareness Month

October is Energy Awareness Month, and Raytheon is using its 31 days to highlight the company's Energy Champions, support activities promoting an energy conservation culture, and announce a new greenhouse gas reduction goal. The observance is another part of Raytheon Sustainability and its goals of maximizing efficiency and reducing environmental impacts.

Raytheon's New Greenhouse Gas Reduction Goal

Nearly 90 percent of Raytheon's greenhouse gas (GHG) emissions are energy related. So energy awareness plays an important role in helping the company reach its new greenhouse gas reduction goal. As an industry partner in the U.S. Environmental Protection Agency's voluntary Climate Leaders program, Raytheon pledges to reduce its absolute U.S. emissions by 10 percent between 2008 and 2015. Climate Leaders is the country's largest GHG goal-setting program.

This new goal builds upon [Raytheon having successfully achieved its first GHG goal](#). In 2002, as a charter Climate Leaders partner, Raytheon pledged to reduce GHG emissions from its U.S. operations by 33 percent between 2002 and 2009, normalized for revenue and adjusted for inflation. Raytheon not only met but exceeded its reduction goal one year ahead of schedule. By the end of 2008, the company had reduced its emissions 38 percent normalized for revenue and adjusted for inflation.

Energy Champions in the Spotlight

Raytheon is a leader in successfully driving strategies and programs to reduce energy consumption, as demonstrated by five ENERGY STAR awards from the EPA in the last nine years. Much of the credit for these programs goes to the company's Energy Champions – employees who continually seek out energy reduction opportunities, implement concepts, and share their enthusiasm by challenging others to be equally proactive.

More than a dozen Raytheon Energy Champions from across the company and every Raytheon business are being profiled for Energy



More Information

[Corporate Responsibility Report](#)

[Raytheon Sustainability](#)

[EPA Climate Leaders Program](#)

[Home Energy Checklist](#)

[Office Energy Checklist](#)

[Resources for Kids](#)

[Residential and Commercial Incentives](#)





Questions

Contact: Steve Fugarazzo
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Next Seminar in the Series

- **November 10, 2010**
- **2:00 p.m. Eastern**
- **Providing Rewards and Recognition**
- **Guest Speaker from 3M**
- **Please register**

Feedback

- **Welcome** comments regarding Seminar Series
- Seminars are **your sessions**
- Make seminars **meaningful** for you
- Feedback aids **continuous improvement**
- Send **comments to** Lindsay Bixby at:
lbixby@bcs-hq.com

Your Implementation Case Studies

- Let DOE help you **CELEBRATE**
- Highlight **Accomplishments in Implementation**
- **Recognize** your team's efforts

