

Save Energy Now LEADER Web Conference Project Implementation Seminar Series

7 - Preparing for Project Implementation Motivating Employees to Implement Projects

Fred Schoeneborn, CEM, CEA
June 9, 2010



Agenda



- Seminar **Series Overview**
- **Recap Seminar # 6** – “Resources”
- **Motivating** Employees to Implement Projects
Fred Schoeneborn - ORNL team
Steve Coppinger – CalPortland Company
- **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



Providing Resources

- “Mine” **Best Practices** from other facilities
- Distribute a **list of experts**
- Encourage **PR** folks to publicize your efforts
- Have **Procurement** establish National Agreements
- Team with your **Finance folks**
- Assist others by “**phone/email/assessment**”
- Be recognized as the “**Center of Expertise**”
- Check **Government and non-Government** groups
- Review **pilot project** opportunities/funding



Sharing by Schneider Electric



- **Gain management support**
- **Sell your project** using company “buttons”
- **Evaluate** your project **honestly**
- **Appeal** to your **audience** when selling
- Build a **business case** and use marketing folks
- Reduce **energy** vs. reduce **headcount**
- Plan for success using **experts**
- Support the **budget** and planning **cycle**
- **Review** energy performance **regularly**



Motivation per Napoleon Bonaparte

“With enough **Red Ribbons**
I could conquer the world”



Prepare for Recognition

- Use **give-aways** that relate to energy
- Distribute shirts displaying Plant/Company/*Save Energy Now* **Logo**
- Formally recognize achievers at **events**
- Conduct **contests**
- Invite **key performers** to special events



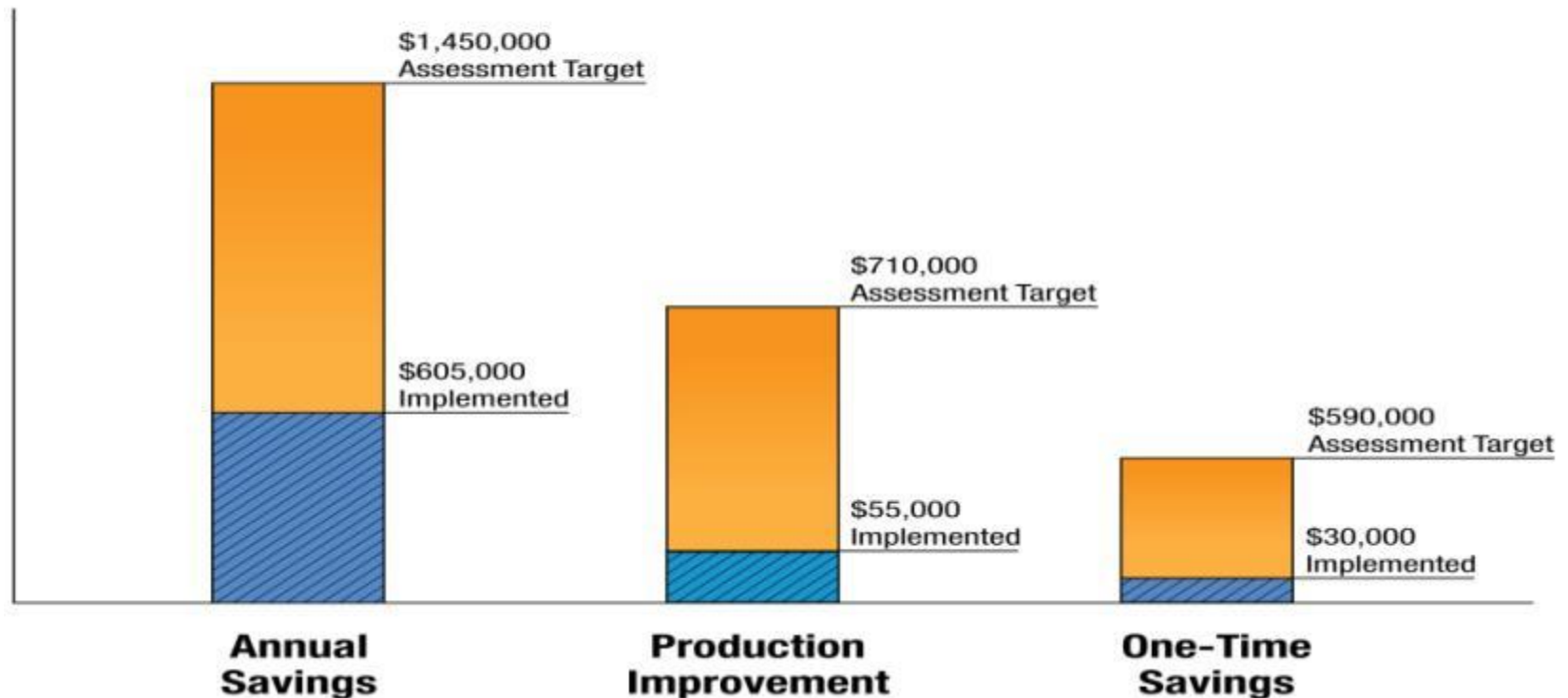
Publish Results

- Develop and display energy **posters**
- Provide frequent **updates**
- Send **e-mails**
- Post energy info on the company **intranet**
- Utilize company **newsletters**



Project Implementation Thermometer Graph

ASSESSMENT IMPLEMENTATION RESULTS



Solicit Management Assistance

- Create a management **involvement** perspective
- Schedule periodic **reviews** of implementation
- Recognize **good performers** – money works
- Keep your eye on the “**implementation ball**”
- Welcome good **pressure**



Conduct Events Periodically

- Celebrate “**Earth Day**” and “**Energy Month**”
- Participate in “**Bring your kids to work**” Day
- Organize “**Energy Fairs**”
- Consider “**Energy Summits**”
- Schedule **training sessions**



Power of Networking

- Establish an Energy **Network**
- Develop **structure**
- Provide **support**
- Facilitate “**Best Practices**”
- Offer **resources**



Champion of Implementation

- Steve Coppinger
- Director, Energy Services
- CalPortland Company
- Focus is on Implementation

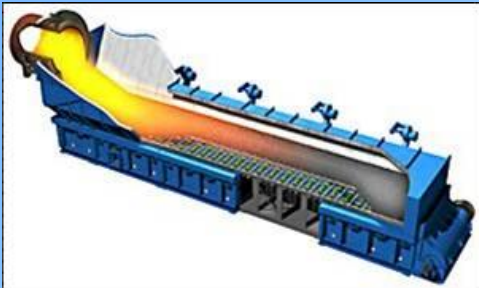


Motivating Employees to Implement Projects

Save Energy Now LEADER Web Conference

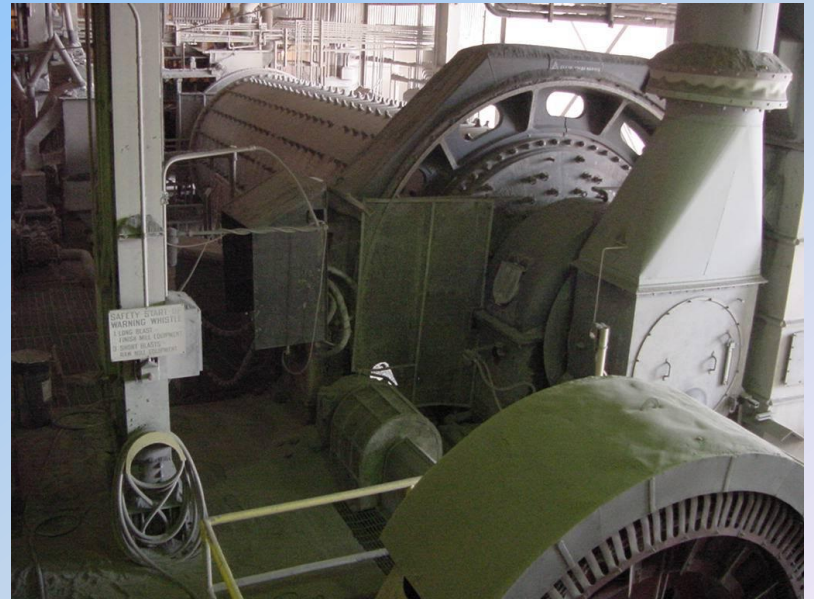
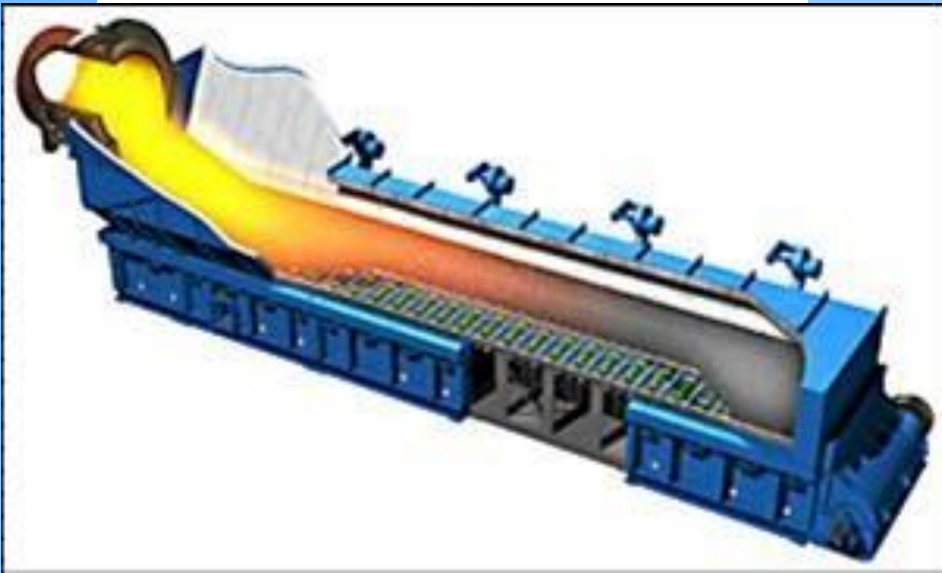
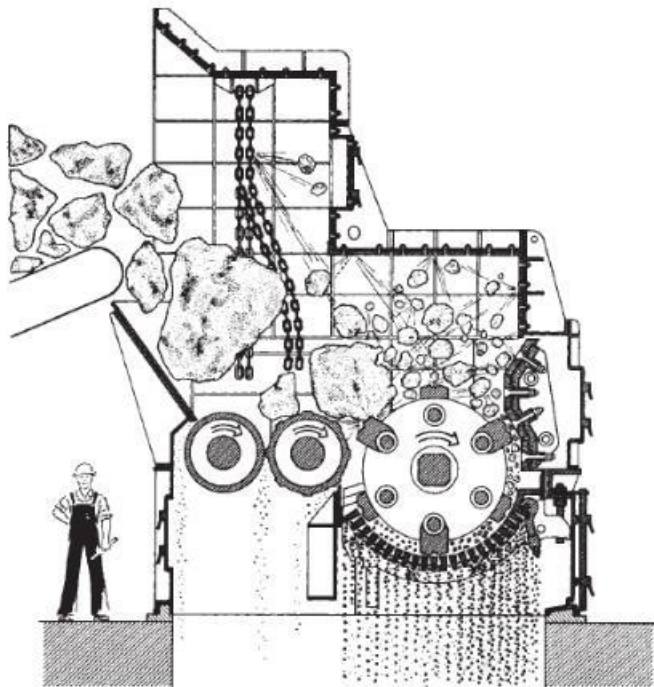
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Steve Coppinger, PE (Director, Energy Services)
CalPortland Company



Company Background

- Founded in 1891 in California
- Producer of Cement, Concrete, Concrete Products, Aggregates and Asphalt
- 119 Facilities in Western U.S. & Canada from Alaska to Mexican border
- 2300 Employees
- \$60 – \$90 Million Annual Energy Spend



Corporate Commitment

- Establish a core culture of energy efficiency (like safety)
- CEO Support
- Invite CEO to accept awards
- Clearly communicate program benefits to company
- Executive Involvement in program
- Energy Steering Committee
- Plant Manager Involvement & Support

Organization

- Corporate Energy Team
 - Meets every 2 months
 - Extensive video conferencing
 - CEO & other execs attend meetings
 - Share best practices
 - Review energy performance
 - Energy Director & Full Time Energy Manager
 - 16 Energy Managers (Large Plants & Divisions)
 - Responsible for energy performance
 - Facilitate energy projects
 - Local Energy Teams
 - Process Energy Team
 - All employees at all levels
-

CEO Speaking at Energy Meeting



Employee Engagement

- Awareness
 - Treasure Hunts
 - Newsletters, emails, intranet energy site, posters, signs
 - T-shirts, caps, hard hat stickers, award logos on trucks
 - Earth Week Celebration – Green bag handouts
 - “Bring Your Green to Work/Home” in paychecks
 - CFL distribution to all employees
 - “Idea of the Month” programs
- Training
 - Safety meetings, energy meetings, DOE, vendors
 - enManage Program – survey & raffle
- Rewards & Recognition
 - Emails, newsletters, award ceremonies, employee bonus
 - Key performers invited to Award Ceremonies
 - Replicate trophies & re-award

Treasure Hunt





ENERGY MANAGEMENT PROGRAM

compressed air is not free!

compressed air leaks			
diameter of leak	leak rate	leak volume	cost
inches	cu ft / min	1000 cu ft per year	per year
1/64	0.23	121	\$33
1/32	0.92	484	\$130
1/16	3.67	1,929	\$520
1/8	14.7	7,726	\$2,084
3/16	33	17,345	\$4,678
1/4	58.7	30,853	\$8,321
3/8	132	69,379	\$18,712
1/2	235	123,516	\$33,312

savings R us

it's true! energy savings start with you.

in fact, saving energy depends on you.

Energy Award Ceremony



External Promotion – Community Open House



Arizona Founder's Day Booth



Annual Energy Summit – Customer Outreach

- All day energy training event
- Invited customers, utility reps, employees & executives
- Training & case study panel discussions by CalPortland employees



Energy Website

- Energy Performance
 - Dashboard – Corporate energy usage
 - Plant energy performance
- Project Tracking
- Resources
 - Specifications, guidelines, energy meeting minutes
 - Training presentations
 - Event calendar
- Promotion
 - Press releases, photos, recognition of employees

Project Execution

- Identify opportunities through assessments & best practices
- Document opportunities on a project list
 - Assign person responsible
 - Assign completion date
 - Include costs, savings & incentives
- Provide engineering assistance to complete identified projects
- Use Work Order system to implement energy projects
- Capital Projects – Apply for rebates
- Review project list status at energy meetings

Institutionalize Initiatives

- Purchasing & Inventory Practices
 - e.g. Purchase only NEMA MG1 premium efficiency motors
 - Life cycle analysis
 - Stock energy efficient equipment
- Equipment & Construction Specifications
 - e.g. Mechanical transport instead of pneumatic
- Capital project design review for efficiency
- Good maintenance practices
 - Corporate Reliability Engineer

Summary

- Solicit executive commitment and involvement
- Develop an extensive organization
- Create awareness at all company levels
- Reward and recognize employees
- Promote the program externally
- Instill a sense of pride to employees

QUESTIONS?



Steve Coppinger, P.E. (Director, Energy Services)
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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



Next Seminar in the Series

- **July 14, 2010**
- **2:00 p.m. Eastern**
- Having Plant Management announce “**The Prize**”
- Guest Speaker from **Alcoa**
- Please **register**



Your Implementation Case Studies

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



U.S. DEPARTMENT OF ENERGY Energy Efficiency & Renewable Energy INDUSTRIAL TECHNOLOGIES PROGRAM

Flambeau River Papers Makes a Comeback With a Revised Energy Strategy



Burdened by increasing operational costs, a century-old paper company in Wisconsin changes the way it used energy to turn around its business from a complete shutdown in 2006 to thriving paper production to day.

The closure of the Flambeau River Paper in 2006 was not surprising. The mill's excessive dependence on fossil fuel and the use of antiquated machinery had crippled the company in the face of rising energy costs. A fresh approach to energy management implemented by its new owners, however, changed the course for the company. The company has seen an increase in paper production by 11.7% since 2006, benefiting from an initial Energy Savings Assessment* conducted in 2007 and subsequent changes at the mill. Steps such as fuel switch and energy efficiency improvements in plant steam systems, combined with a grassroots approach that relies on its employees for recommendations, have all made it happen for Flambeau River Paper.

Flambeau River Papers has had a huge impact not only on Park Falls but in Northern Wisconsin, perhaps even throughout the entire United States. What the company has accomplished regarding energy efficiency in such a short time is nothing short of amazing. The company has set an example for other companies to follow in their industries because the employees helped turn the mill around. Flambeau River Papers is the majority for the town.

Park Falls Mayor Thomas Ratzliff

The Company

Flambeau River Paper has been a major force of economy for the city of Park Falls, a small town in northern Wisconsin with a population of roughly 2,200.¹ Originally opened in 1896, the mill has been one of the largest employers of Irons County in Wisconsin, producing a variety of paper products, such as printing, cover stock, tag, apply card, index, envelope, and liner board paper. Park Falls was thus hit hard when Flambeau River had to shut down its mill in 2006 due to its exorbitant energy costs and antiquated machinery. The mill's closure had left approximately 13.2% of the city's residents unemployed.

Flambeau River, however, received a fresh lease of life under a new ownership led by Brian Johnson. All its previous employees were offered their jobs back at the same salary and benefits prior to the mill's closing, an offer which was accepted by approximately 92.8% of them.² The reopening of the mill had also provided a unique opportunity to assess the company's business model and identify what needed to be in place in order for the company to thrive.

The Mill's Energy Challenges

Pulp and paper mills have traditionally been large consumers of energy in the United States and that trend is to be hit by the rising energy costs if their processes are not utilizing modern standards of efficiency and are heavily dependent on fossil fuels.

Exhibit 1: Average Industrial Electricity Price in Wisconsin



Year	Price (cents per kWh)
1997	4.25
1998	4.54
1999	4.40
2000	4.60
2001	4.88
2002	5.00
2003	5.14
2004	5.30
2005	5.50
2006	6.00

Source: Energy Information Administration's <http://www.eia.doe.gov/pub/natl/ind/ind/ind.html#ind01>

*The U.S. Department of Energy's Industrial Technologies Program offers Energy Savings Assessments to help its industrial clients identify inefficiencies and help plants cut consumption energy more effectively. To learn more, visit <http://www.eia.doe.gov/pub/indtech/indtech/indtech.html>

continued

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