



Superior Energy Performance: Taking Strategic Energy Management Up and to the Right

Market Transformation 2011 John Wallner, Sector Manager April, 2011

NORTHWEST ENERGY EFFICIENCY ALLIANCE

Public Participant Summaries									
Company	Amcor Rigid Plastics	Grays Harbor Paper	Kenworth/PACCAR - Renton	Simplot Food Group – Aberdeen Site	EartH2O				
Industry	Packaging	Paper Production	Automotive	Food Processing	Bottled Water				
Sell Products Retail?	No	Yes	Yes	No	Yes				
# of Corp. Sites Globally	>300 (~28 Rigid Plastics in NA)	1	15 manufacturing	34 manufacturing	1				
Ave. Annual Global Revenue (US\$)	>\$10 billion	>\$100 million	>\$1 billion	>\$1 billion	Unavailable				
International?	Yes	No	Yes	Yes	No				
Participating Site Location	WA	WA	WA	ID	OR				
# Personnel at Participating Site	~100	~250	~100-1,200	~250	~50				
% of Site Operating Expenses Attributed to Energy Costs at Site	~12%	~8%	~1%	~5%	~2%				
MW of Electricity Saved Since Start of Pilot	None yet - expected in 2012	3,774	17	None yet	N/A				
MMBTU's of Natural Gas Saved Since Start of Pilot			2,565		N/A				
Year Participating Site ISO 9001 Certified		2005	1994						
Year Participating Site ISO 14001 Certified		Currently pursuing (2012 anticipated)	2007						
Site Required by Parent Company to Participate in Pilot?	Yes	N/A	No	Yes	N/A				
Site Pursing ISO 50001 &/or SEP Certification?	Possibly, waiting to see benefits and/or customer demand - both	Yes - both (2012 anticipated)	Yes - both	No, waiting to see benefits and/or customer demand - both	No – withdrew from Pilot before Phase II				
Last updated: 4-6-11									

#### NW Energy Management Demonstration Pilot Project



## Agenda

## Strategic Energy Management Questions?

- Where does SEP and ISO fit in?
- Why is this a Market Transformation play?
- Why is this a good investment for industrials?
- How does this interact with utility programs?
- Can utilities rely on this for energy savings?
- Where does SEP and ISO fit in ?
- When are these not appropriate?
- Who benefits?

## NW Superior Energy Performance Pilot

Successes, challenges, forecasted outcomes



## Strategic Energy Management





## **Our Market Transformation Aim:**

# Give a man a fish and he will eat for a day. Teach a man to fish and he will eat for a lifetime.

Chinese proverb



## **STRATEGIC ENERGY MANAGEMENT:**



WHAT IS THE MINIMUM?

A Threshold of a System

**Executive Sponsorship** 

**Goal Setting** 

Tracking System



## **Market Transformation Theory**

## Our working hypothesis

 Implementation of CEI leads to persistent measureable energy savings

## Testing the hypothesis

- Deploy CEI through field advisors to a targeted industry
- Work with companies to raise the level of implementation maturity
- Measure energy savings
- Independently validate results



## CEI Deployment 2006-2010

Engaged Northwest Food Processors Association to leverage membership awareness

32 facilities committed to CEI

25 facilities engaged in CEI

**15 facilities** self sustaining CEI 2010



## **Levels of CEI Implementation Maturity**



#### Level 5 Self Sustaining

Firm is maintaining NEEA's CEI independently of NEEA.

#### **Level 4 Practicing**

Firm is implementing plans, measurements, and is generating savings

#### Level 3 Committed

Firm has a policy & plans, some dedicated energy management resources

#### Level 2 Engaged

Management staff is participating in energy assessment process

#### Level 1 Aware/Receptive/Interested

 Firm is aware, key 1/1's explain the program, management is interested



## **Measuring Energy Savings**





## **Measuring Energy Savings**



- Establish baseline energy usage
- Initiate intervention
- Document change in energy usage



## NEEA SEM aMW savings 2006-2010

Year	Energy Capital Projects	Business Practices O/M	Total
2006	.4890	.3800	.8690
2007	.5120	.7910	1.303
2008	1.923	1.642	3.565
2009	.6180	1.828	2.446
2010	1.450	1.192	2.642
To Date	4.992	5.833	10.825



# **7 Habits of Highly Efficient Companies**

- 1. Efficiency is a core strategy
- 2. Leadership & organizational support is real and sustained
- 3. The company has SMART energy efficiency goals
- 4. The strategy relies on a robust tracking and measurement system
- 5. The organization puts substantial resources into efficiency
- 6. The energy efficiency strategy shows demonstrated results
- 7. The company effectively communicates efficiency results

Source: 2009 Pew Center on Global Climate Change



## **NW SEP Pilot Companies**

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## Key Learnings: Successes

- Facilities understand management system rigor and costs/benefits.
- Energy efficiency projects in participating facilities are generating results.
- Field Advisors developing core expertise.
- Industrial interest outside of participants.



## Key Leanings: Major Challenges

- Facilities understand management system rigor and costs/benefits.
- Constancy of purpose.
- Investment decision criteria.
- Demand for certification.



## **Forecasted Outcomes**

- Facilities understand management system rigor and costs/benefits.
- 2 facilities are responsible for spreading ISO registration across their companies. (> 20 plants)
- 60% of Field Advisors/Energy champions planning to become certified as *Energy Management Practitioners*.
- Energy Trust will begin to support ISO 50001.



## **Questions & Comments**



#### Filling the Energy Efficiency Pipeline

Delivering Regional Advantage



#### Thank You!

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