



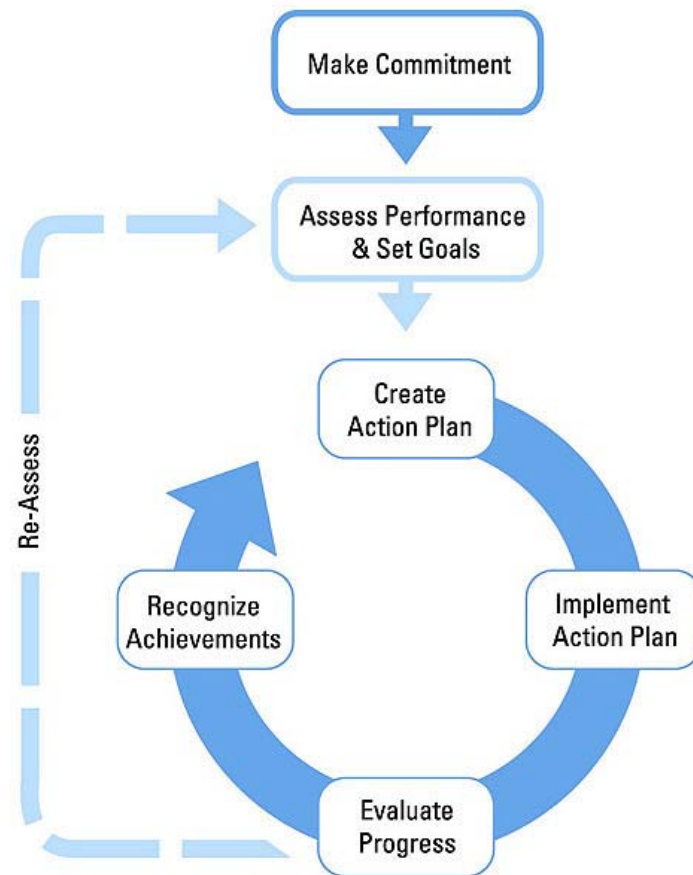
Green Power Primer

**ENERGY STAR Web Conference
July 20, 2005**

Call-in Number: 1-800-914-3396
Access Code - 9307720

About The Web Conferences

- **Monthly**
- **Topics are structured on a strategic approach to energy management**
- **Help you continually improve energy performance**
- **Opportunity to share ideas with others**
- **Slides are a starting point for discussion**
- **Open & interactive**



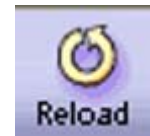
Web Conference Tips



- Mute phone when listening! Improves sound quality for everyone.

Use * 6 – to mute and * 7 to un-mute

- If slides are not advancing, hit reload button or close presentation window and press the launch button again.



Web Conference Tips

- Chat Feature



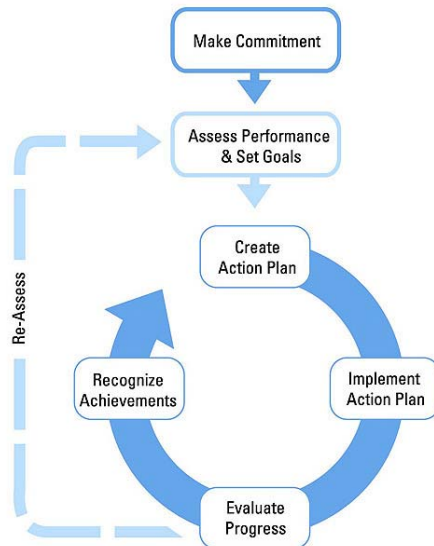
- Presentation slides will be sent by email to all participants following the web conference.
- Hold & Music – If your phone system has music-on-hold, please don't put the web conference on hold!



Today's Web Conference

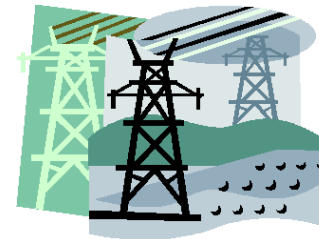
Energy Management

Demand Side



*Organizational
Energy Management*

Supply Side



Procurement



On site generation

Today's Web Conference



Speakers:

- Blaine Collison – U.S. EPA Green Power Partnership
- Peter Solomon - Safeway



Green Power Partnership: Opportunities for ENERGY STAR Partners

July 20, 2005

Blaine Collison

(202) 343-9139 – collison.blaine@epa.gov

www.epa.gov/greenpower

Overview

- **Why Businesses Buy Green Power**
- **Green Power Basics (How, Where, and \$)**
- **Green Power Options**
- **Buying Green Power**
- **How EPA Can Help**
- **Joining the Green Power Partnership**

Why Green Power?

Reason Businesses Buy

- **Strong Value Proposition**
 - ✓ Enhance image or branding
 - ✓ Variety of marketing opportunities
 - ✓ Influence stock market performance
- **Corporate Responsibility**
 - ✓ Meet organizational environmental or social objectives
 - ✓ Strengthen stakeholder relationships
 - ✓ Join ranks of companies implementing sustainable activities
- **Easy Way to Improve Environment**
 - ✓ Single easiest way to reduce environmental impact associated with electricity consumption
 - ✓ Supporting new industry focus on climate change

Why Green Power?

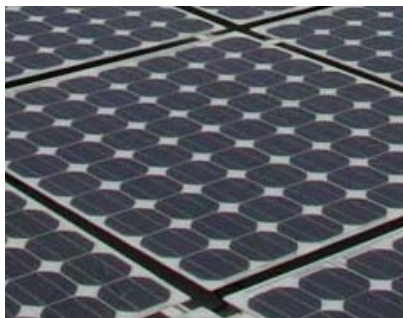
Marketing Benefits

- **Creates new value by enhancing organizational brand**
 - ✓ Meets any corporate responsibility or environmental objectives (or helps define those objectives)
 - ✓ Creates new opportunities to solidify corporate image
 - ✓ Strengthens key stakeholder relationships
- **Still opportunities to be “biggest” or “first” purchase in a sector**
- **Little effort goes a long way**
 - ✓ Simple press-releases and Web site announcements can have a big impact
 - ✓ Earned Media
 - ✓ Marketing value can exceed energy or environmental value
 - ✓ Compelling cost to benefit ratio
- **Audiences**
 - ✓ Consumers or clients
 - ✓ Stakeholders
 - ✓ Investors
 - ✓ Employees



Green Power Options

- Green power is an “environmentally-differentiated” electricity product from:
 - solar
 - wind
 - geothermal
 - biomass
 - biogas
 - small hydro



Buying Green Power Product Options

1. Green Power Electricity Products

- ✓ Buy electricity from utility green pricing programs or green power retail marketers that is all or partially generated from renewable sources



2. Renewable Energy Certificates (REC)*

- ✓ Buy only the "attributes" associated with the electricity generated (1 REC = 1MWh)



3. On Site Generation

- ✓ Install renewable energy system on site, e.g. Solar panels



Buying Green Power REC Benefits

- **Availability**

- ✓ Even if local power provider has no green power options

- **Flexibility**

- ✓ Type of renewable resources
- ✓ Volumes purchased
- ✓ Location of resource
- ✓ Leased space
- ✓ Simplicity for companies with locations across multiple states
- ✓ Can be purchased to “green” events - conferences

- **Blend Resources**

- ✓ Wind/ Landfill Gas/ Solar/ Geothermal
- ✓ Local/ National

- **Avoidance of physical supply issues**

- ✓ Does not impact contract with current provider

- **Attribute ownership**

- ✓ Buyers should specify ownership of attributes in contract

Buying Green Power

Sample REC Prices

Sample Range of Voluntary Market REC Wholesale Prices for NEW Sources (by Type and Region in \$/MWh)

Location	Wind	Solar	Biomass	Small Hydro
California	\$1.75-2.00		\$1.50	
Western States (WECC)	\$1.25-7.50	\$30.00-150.00	\$1.50-3.50	
Central U.S.	\$2.00-5.50		\$1.50	
PA, NJ, MD (PJM)	\$15.00-17.00	\$80.00-200.00	\$4.00-5.00	
New York	\$15.00-16.00		\$6.00	
New England (NEPOOL)	\$35.00		\$45.00	\$5.00
Southwest (SPP)	\$2.50-5.00			
Southeast			\$3.50	

You can find real-time REC wholesale prices online through Evolution Markets (a REC Broker):

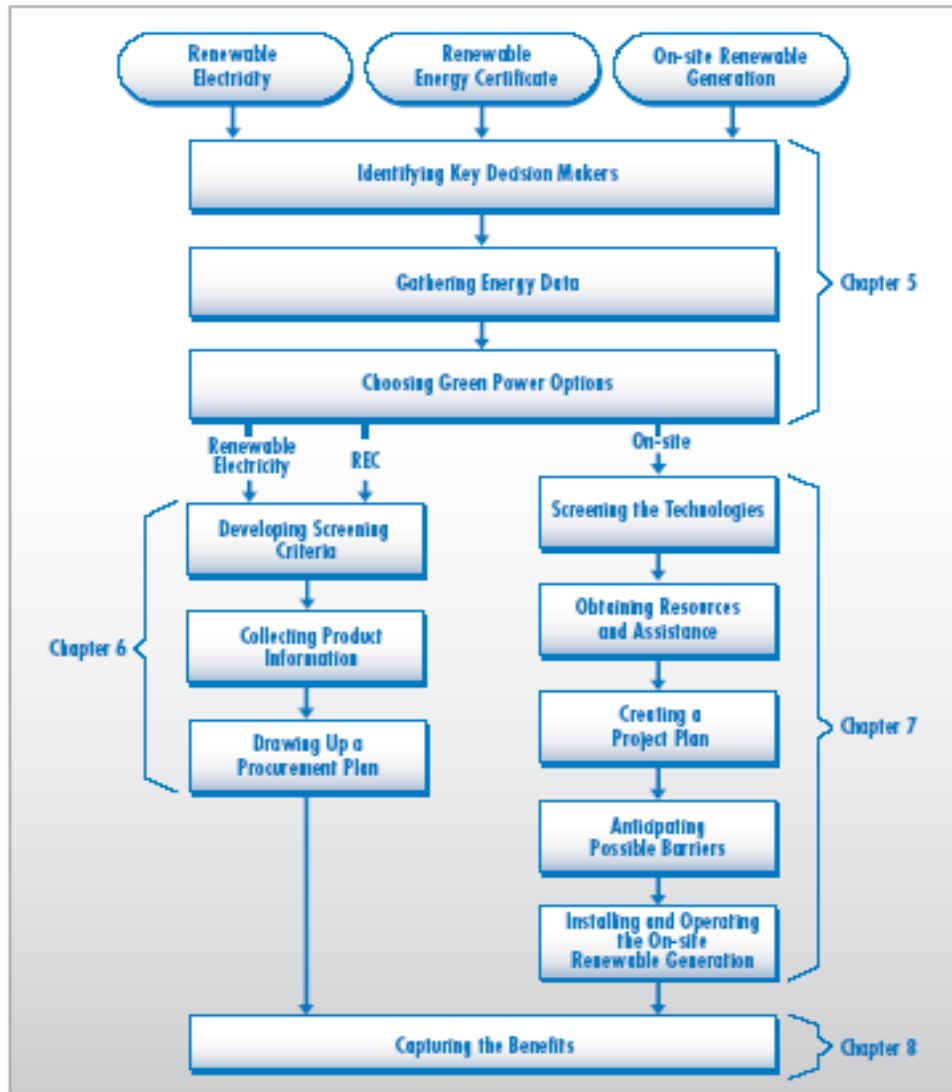
www.evomarkets.com

8 □ Source: From the National Renewable Energy Laboratory (NREL) 2005 report - <http://www.eere.energy.gov/greenpower/resources/pdfs/37388.pdf>

Note: The Texas (ERCOT) market is not represented in this chart.



Steps to Buying Green Power



From the *Guide to Buying Green Power* available at:

<http://www.epa.gov/greenpower/buygreenpower/guide.htm>



Buying Green Power

How Much Do You Need to Buy?

- Choose organizational entity that will benefit from green power purchase (all facilities, those in a single state, headquarters, etc.)
- Identify total annual electricity consumption of the facilities selected & determine minimum green power purchase.

	GREEN POWER PARTNERSHIP BENCHMARK	GREEN POWER LEADERSHIP CLUB BENCHMARK
If your annual electricity use is ...	You should, at a minimum, use this much green power	You should, at a minimum, use this much green power
Over 100,000 MWh	2%	8%
100,000 – 50,000 MWh	3%	12%
50,000 – 10,000 MWh	3%	18%
10,000 – 1,000 MWh	6%	24%
1,000 – 100 MWh	10%	40%
Under 100 MWh	15%	60%



Buying Green Power

The Green Power Partnership

- **Voluntary program like ENERGY STAR**
- **Goal of Partnership**
 - ✓ Increase demand for green power products & expand overall market
 - ✓ Lower air pollution and greenhouse gases associated with electricity consumption
- **Over 590 Green Power Partners since July 2001**
 - ✓ Partners commit to purchase green power
 - ✓ EPA provides procurement and communications assistance
- **Annual Partners' Commitments over 2 billion kWh**
 - ✓ Includes most significant non-residential buyers
 - ✓ **More than 70%** of commitments are for new renewables
 - ✓ If generated by wind power alone, estimate **750 MW** required to serve Partners



How EPA Can Help Overview

- **Credible Benchmarks**
 - ✓ Metric for “How much green power is enough?”
 - ✓ Metric for “How much green power is outstanding?”
 - ✓ List of eligible renewable resources
- **Market Information**
 - ✓ *Guide to Buying Green Power*
 - ✓ List of green power vendors
 - ✓ Environmental impact information
 - ✓ Other resources online (www.epa.gov/greenpower)
- **Recognition**
 - ✓ Use of EPA Green Power Partner mark
 - ✓ Press and communications support
 - ✓ Green Power Leadership Awards eligibility



How EPA Can Help Meet Management Goals

- **Investor initiatives are focusing on climate change risk:**
 - ✓ UN Investor Summit on Climate Risk (+\$1 trillion in assets).
 - ✓ Carbon Disclosure Project (89 investors, +\$9 trillion assets).
 - ✓ CalPERS and CalSTRS 4-point plans (+\$250 billion in assets).
- **Environmental performance influences stock performance**
 - ✓ Environmental performance is an excellent proxy for management quality.
 - ✓ Management quality is a leading determinate of stock market performance.
 - ✓ Corporations increasingly publishing sustainability reports:
 - 1990: 7 reports, 1995: 194 reports, 2001: 487 reports
- **Buying Green Power addresses both = exemplary environmental performance and climate change risk management**

How to Join the Partnership

Easy, Objective, Voluntary

- **Sign Letter of Intent (available on web site)**
 - ✓ Purchase green power within a year of joining program
 - ✓ Purchase must meet or exceed facility(ies) benchmark level
 - ✓ Products: green power, renewable energy certificates (RECs), onsite generation
 - Certified green power products are not currently required
 - ✓ Content: eligible renewable resources
 - “Eligible” as currently defined by Green-e & EPA
 - ✓ 50% of minimum green power purchase must be “new” renewable resources
- **Provide Annual Update**
 - ✓ Electricity usage, percentage of “new” renewables, provider, and resource type

The Bottom Line

Build Demand for Green Power

Green power has significant benefits:

- **Environmental Leadership**

- ✓ Greenhouse Gas Emissions Reductions
- ✓ Strengthened Stakeholder Relationships

- **Institutions who buy green power get public support**

- **Partnering with EPA makes switching to green power easier and more rewarding for large energy end-users**

- **For more information, call Blaine Collison
202-343-9139.**



Safeway and Green Power

- Safeway Overview
- Safeway's Green Power Program
- Business Case for Green Power
- How RECs work

SAFEWAY OVERVIEW

- One of the largest food retailers in the US
- \$36 billion in sales
- 1,800 stores, mostly in West, Southwest and Western Canada
- 33 manufacturing and processing plants
- 17 large distribution centers
- Over 300 fuel stations in North America
- Familiar brands: Safeway, Vons, Carr's Dominicks, Randalls, Tom Thumb

Why Green Power?

- Right Thing to Do
- Competitive Challenge
 - Extremely competitive, low-margin business
- Opportunity for Differentiation
 - RECs are cost competitive with other differentiation strategies
- Adds Brand Luster
 - Helps define who we are, develops our identity
- Positive Publicity expected in media and news articles
- Alignment with Stakeholder Values
- Contributing to Shareholder Value

Who's Driving Change?

In a recent survey, “80% of CEO’s said that climate change was a potential risk, but only 40% were doing something about it”

■Business Week- August 2004

“In our judgment, climate change represents the single largest environmental threat this century”

-Sir John Bond, HSBC Bank

- Corporate Green Power Purchasing:
Starbucks, HSBC, Johnson & Johnson, Kinkos,
Philips, HP, Agilent, Roche, Lockheed Martin,
and others



August 2004

Opportunity: Alignment with Stakeholder Values

- **Community**
 - Committed communities where we live and work
- **Employees**
 - People like idea of a working for a green company
- **Customers**
 - Marketing to consumers - can tie into Ingredients for Life campaign
 - Safeway seeking to enhance the shopping experience- feed customers needs and passions
 - Reaching customers through ads and organically
 - People like idea of shopping at a green store
- **Investors/Corporate**
 - Well-supported in organization
 - Contributing to shareholder value



The Consumer Stated Preference

In a nationally representative poll of 1,000 adults **70%** said they are more likely to buy a product from a company *known to implement environmentally friendly practices in its operations*.



Opportunity: Alignment with Employee Values

STANFORD UNIVERSITY

A recent study of more than 800 MBA's found more than 97% of respondents said they'd forfeit financial benefits to work for an organization with a better reputation for CSR and ethics

-(Stanford Graduate School of Business, 2005)

"Our employees actually applauded"

- Lyn Halliday, Director of Guest Operations and Environmental Affairs, **Steamboat Ski and Resort**



"The choice of (spending more on) wind power was presented to the entire New Belgium Brewing Company staff and, although its additional cost would diminish the size of their bonuses (which are paid out on costs per barrel), the 70-person vote was unanimously in favor."

- Press Release, **New Belgium Brewery**



Opportunity: Contributing to Shareholder Value

- Investor initiatives are focusing on climate change risk:
 - UN Investor Summit on Climate Risk (+\$1 trillion in assets).
 - Carbon Disclosure Project (143 investors, +\$20 trillion assets).
- Environmental performance influences stock performance
 - Environmental performance is an excellent proxy for management quality.
 - Management quality is a leading determinate of stock market performance.
- Buying Green Power displays exemplary environmental performance and addresses climate change risk management

Opportunity: Add Brand Luster

What is Brand Luster?

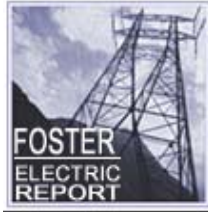
- Brand Luster describes not just the product, but the company associated with the product.
- This includes the linkages consumers make with brand quality, attitude, innovation, and corporate responsibility.

(6/22/04 PIBA Conference on Green Marketing Presented by Kevin Sweeney, Haas School of Business, former director of communications, Patagonia Inc.)

“Corporate reputation is a more important measure of success than stock market performance, profitability and return on investment.”

World Economic Forum survey of world’s leading CEO’s and organization leaders

Opportunity: Earned Media (Starbucks)



Starbucks Takes Action to Address Climate Change

Source: GreenBiz.com

SEATTLE, April 15, 2005 - Starbucks Coffee Company has committed to purchasing enough clean, renewable wind energy to match 5% of the energy needed to power its company-operated retail stores in North America using renewable energy certificates.

"Starbucks is mindful of the long-term implications that climate change has on the environment," said Sandra Taylor, Starbucks senior vice president of corporate social responsibility. "Because the energy used at our retail stores makes up nearly 50 percent of our total greenhouse gas emissions, this is a natural starting point for us. By supporting renewable energy sources we believe we are taking a step in the right direction and encourage other businesses to do the same."

Starbucks voluntarily conducted an inventory of its greenhouse gas emissions in 2004 in an effort to understand and evaluate its contribution to climate change. As a result, the Company has committed to setting an emissions reduction target in 2005. Additionally, Starbucks has joined with other organizations to



U.S. Department of Energy
Energy Efficiency and Renewable Energy



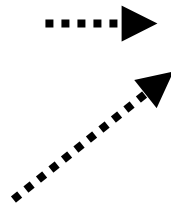
THE ARIZONA REPUBLIC

Seattle Post-Intelligencer



What Solutions Exist?

How can companies reduce emissions from electricity usage?



Supply Options

Utility Green Power Programs

- Enrollment in green power programs offered by local utilities

Renewable Energy Certificates

- Purchase of environmental benefits of renewable energy

Onsite Options

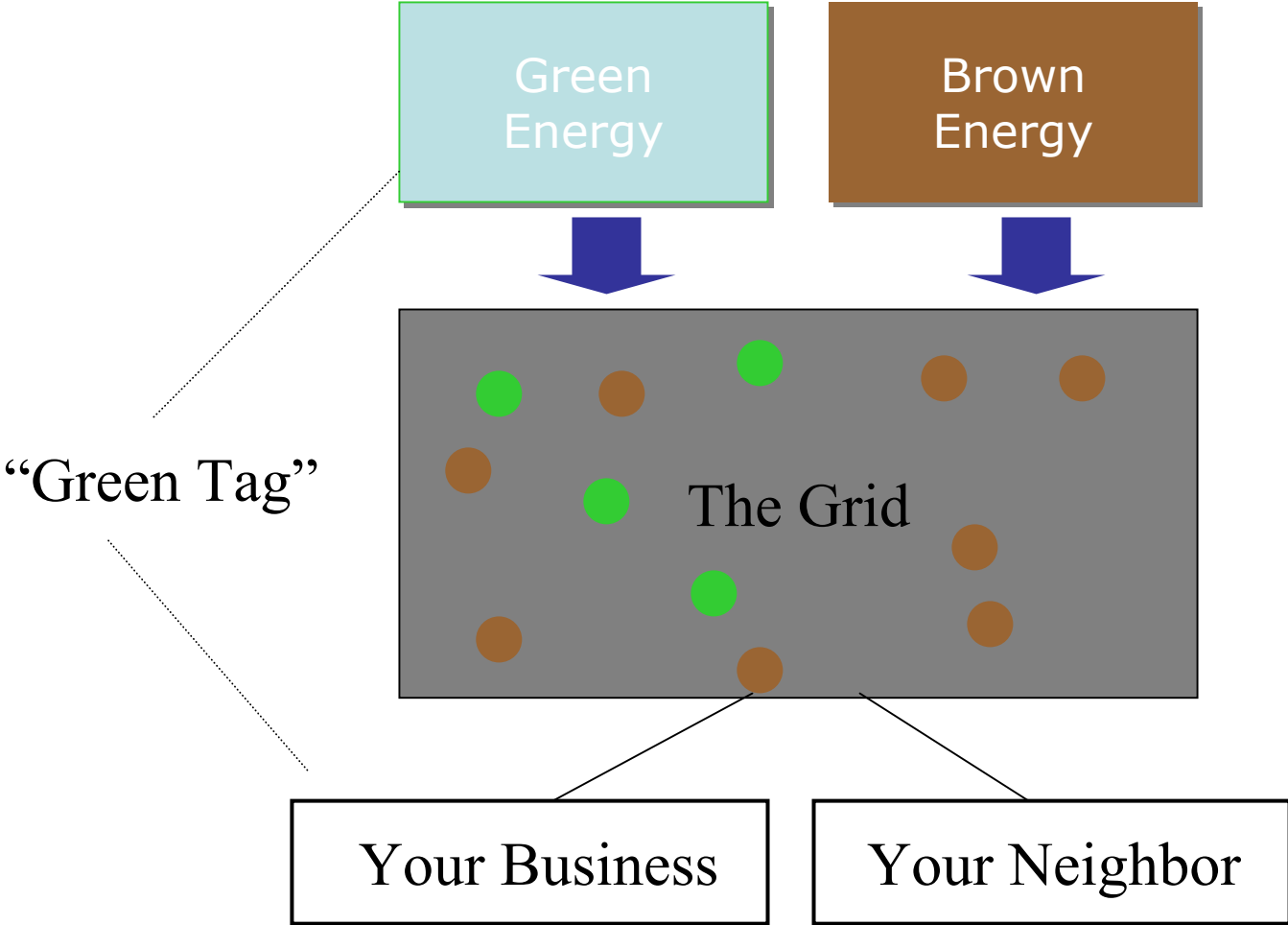
Minimize Consumption

- Manufacturing & supply chain improvements
- Energy efficiency upgrades in lighting & cooling

Onsite Renewable Generation

- Installation of solar PV systems

The Need for RECs: Where Does the Green Power Go?



What's a Renewable Energy Certificate?

A Renewable Energy Certificate provides a tangible, verifiable statement that the actual megawatt hours you consume have been offset by an equivalent amount of renewable power. It also provides an offset of hundreds of pounds of carbon per MWh



Why RECs are good for Safeway:

- RECs are flexible
- Not tied to geography – all fuel station locations in a single contract
- Lower cost than utility green power offerings
- No shipping or transfer costs
- Can apply to any business unit - customizable

Lessons Learned & Recommendations

- **Tie to internal, core business focus**
- **Safeway is food company, not energy company**
- **Major rollout of Ingredients for Life campaign**
- **Use a RECs retailer**
 - **Helps educate yourself and management**
 - **Retailer absorbs risk**
 - **Provides national portfolio of sources**
 - **Can provide marketing support**
 - **Simplifies green power transaction**

Questions?

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Questions & Comments

Upcoming Web Conferences



August 17 – About The ENERGY STAR Awards

September 21 – Climate Risk, Carbon Trading
And Energy Management

October 26 – Partner Networking Meeting
Washington DC

www.energystar.gov/networking



ENERGY STAR

Thank you for participating!