

CLIMATE LEADERS

SETTING THE STANDARD IN GREENHOUSE GAS MANAGEMENT

Setting a Greenhouse Gas Reduction Goal

Climate Leaders Monthly Webinar Series

March 11, 2009



Today's Agenda

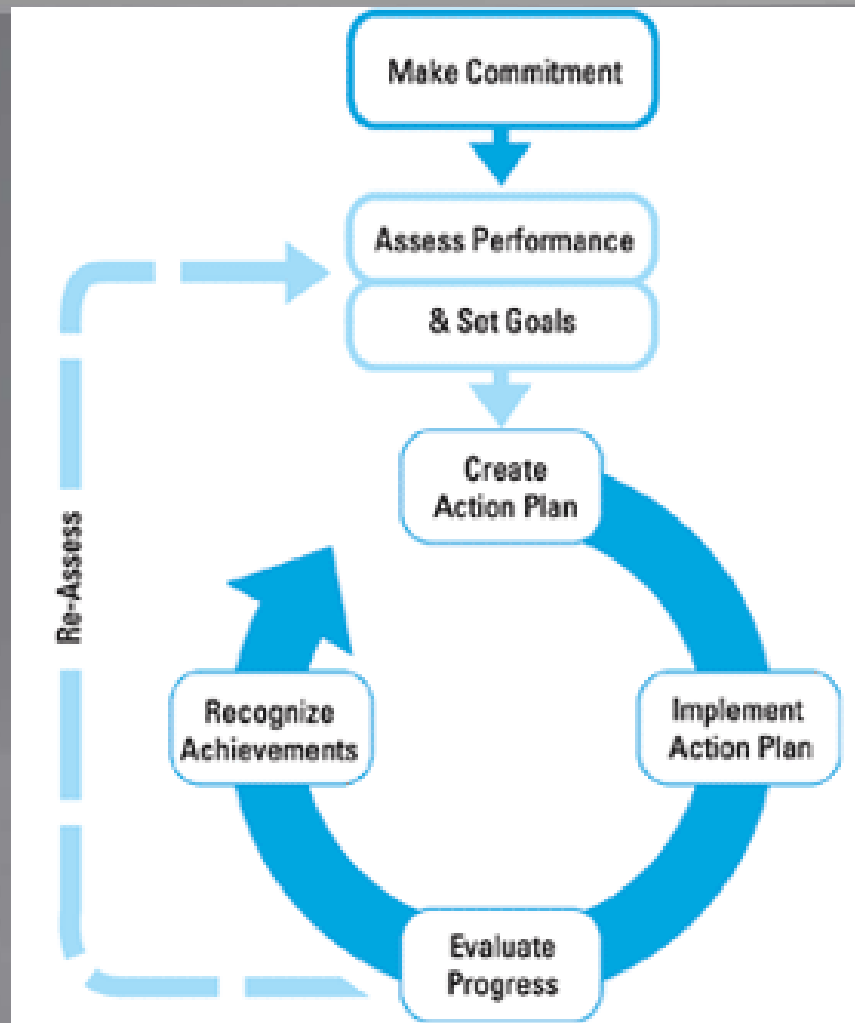
- 1) Intro to Goal-setting
(Susan Wickwire, Climate Leaders)
- 2) Case Study
(Cedric Robinson, Frito Lay, Inc.)
- 3) Q&A

Credible Climate Strategy

Climate Leaders works with organizations to develop a long-term comprehensive GHG management strategy

- Road-tested with ~ 260 partners from every major sector across the country, representing 8% U.S. emissions and 11% U.S. GDP
- 3 critical components to credible strategy:
 - 1) Complete Corporate-Wide GHG Inventory
 - 2) Develop Inventory Management Plan (IMP)
 - 3) Set Aggressive Corporate-Wide GHG Reduction Goal
- Annual reporting to EPA creates lasting record of accomplishments and identifies agency as environmental leader
- EPA recognizes and publicizes progress in the program

Steps to Good Energy & Climate Management



Benefits of Setting a Goal

- Focus high-level attention on existing and potential reduction activities
- Cut energy costs
- Encourage innovation
- Identify new reduction opportunities
- Employee morale, recruiting, and retention
- Positive stakeholder attention (media, investors)

Ensuring leadership goals

Criteria

- **Corporate-wide:** including at least all U.S. operations
- **Forward-looking:** based on the most recent base year for which data are available (generally no more than 1-2 years in the past)
- **Long-term:** achieved over five to 10 years
- **Reduction from baseline emissions:** expressed as an absolute GHG reduction, a decrease in GHG intensity, or as a goal to be “carbon neutral”
- **Aggressive:** in comparison to the projected GHG performance for the Partner’s sector

EPA individually negotiates each Climate Leaders goal

Types of GHG Reduction Goals

Absolute

- Applied Materials pledges to reduce total global GHG emissions by 20 percent from 2006 to 2012.

Normalized

- Interface, Inc. pledges to reduce U.S. GHG emissions by 15 percent per unit of production from 2001 to 2010.

Index

- Ball Corporation pledges to reduce total U.S. GHG emissions by 16 percent per production index from 2002 to 2012.

Net Zero (“Carbon Neutral”)

- Melaver, Inc. pledges to achieve net zero U.S. GHG emissions by 2006 and maintain that level through 2009.

Tracking your Progress

- Always track your absolute emissions
- For normalized goals:
 - Determine an appropriate production metric
 - Should correlate closely to GHG emissions to measure accurately improvements in efficiency
 - Examples: tons of production, MWh power generated
 - Partners with emissions primarily from office space should use square footage of space; Energy Star Portfolio Manager is a great tool for evaluating building efficiency:
http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager
 - If you acquire or divest a facility, make sure to adjust for production metric as well as emissions

Tracking Your Progress- Absolute Goal

	Partner Base Year:						2007			
	Partner Goal Year:						2011			
	Goal Emissions Tracking "Absolute" or "Normalized":						Absolute			
	Goal Year Emissions Target:						10%			
	(expressed as a percent decrease from base year)									
	Specify Normalization Factor (NF) Units:									
	(only if tracking normalized emissions for goal)									
Corporate Goal Tracking	Base Year	Year 2		Year 3		Year 4		Year 5 Goal Year		
Year	2007	2008		2009		2010		2011		
ABSOLUTE EMISSIONS GOAL TRACKING										
	CO ₂ -eq. (metric tons)	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	
Total U.S. Emissions	5,000	4,900	-2.0%	5,050	1.0%	4,700	-6.0%	4,400	-12.0%	
Total Non-U.S. Emissions	--	--	--	--	--	--	--	--	--	
Total Absolute Emissions	5,000	4,900	-2.0%	5,050	1.0%	4,700	-6.0%	4,400	-12.0%	
	CO ₂ -eq. (metric tons)	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	
Goal Year Absolute Emissions Target	N/A	--	--	--	--	--	--	4,500	-10.0%	

Tracking your Progress- Normalized Goal

Corporate Goal Tracking	Base Year	Year 2		Year 3		Year 4		Year 5	
								Goal Year	
Year	2007	2008		2009		2010		2011	
NORMALIZED EMISSIONS GOAL TRACKING									
	CO ₂ -eq. (metric tons)	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr	CO ₂ -eq. (metric tons)	% change from base yr
Total U.S. Emissions	5,000	5,500	10.0%	5,600	12.0%	5,650	13.0%	5,700	14.0%
Total Non-U.S. Emissions	--	--	--	--	--	--	--	--	--
Total Absolute Emissions	5,000	5,500	10.0%	5,600	12.0%	5,650	13.0%	5,700	14.0%
	tons of production	tons of production	% change from base yr	tons of production	% change from base yr	tons of production	% change from base yr	tons of production	% change from base yr
Total U.S. Normalization Factor Value	10,000	9,950	-0.5%	12,000	20.0%	12,250	22.5%	13,000	30.0%
Total Non-U.S. Normalization Factor Value			--		--		--		--
Total Normalization Factor Value	10,000	9,950	-0.5%	12,000	20.0%	12,250	22.5%	13,000	30.0%
	CO ₂ -eq. / NF Units	CO ₂ -eq. / NF Units	% change from base yr	CO ₂ -eq. / NF Units	% change from base yr	CO ₂ -eq. / NF Units	% change from base yr	CO ₂ -eq. / NF Units	% change from base yr
Total U.S. Normalized Emissions	0.50	0.55	10.6%	0.47	-6.7%	0.46	-7.8%	0.44	-12.3%
Total Non-U.S. Normalized Emissions	--	--	--	--	--	--	--	--	--
Total Normalized Emissions	0.50	0.55	10.6%	0.47	-6.7%	0.46	-7.8%	0.44	-12.3%
	CO ₂ -eq. / NF Units	CO ₂ -eq. / NF Units	% change from base yr	CO ₂ -eq. / NF Units	% change from base yr	CO ₂ -eq. / NF Units	% change from base yr	CO ₂ -eq. / NF Units	% change from base yr
Goal Year Normalized Emissions Target	N/A	--	--	--	--	--	--	0.45	-10.0%

Upcoming Goal-Setting Recognition Opportunities

- May 2009 Press Release
- Partners Meeting
 - December 2009 in Washington, DC
 - All post-May press release goals will be recognized by a Senior EPA Official and included in the EPA press release issued at the meeting
 - Many Partners choose to issue own press release as well
 - Work with Deb Berlin, berlin.deb@epa.gov, for template and quote

Steps In the Process

- 1) Partner submits an initial goal proposal to EPA (based on inventory and internal analysis)
- 2) EPA completes performance benchmark analysis- evaluates sector “business-as-usual” GHG intensity projected performance
- 3) Partner and EPA negotiate a mutually agreeable goal- “aggressive yet achievable”
- 4) EPA publicly announces the goal and provides recognition for company’s efforts

Working with a 3rd party to set a goal can add credibility to your effort

- Goal proposals may be submitted at any time
 - April time frame for May press release and no later than October for the December meeting
 - May want to consider submitting after reporting 2008 emissions in June if 2008 will be your base year
- Goal does not need to be final on your end
 - Gives us time to evaluate, ask questions, and get approval through our senior management
- Template available on the Climate Leaders website: www.epa.gov/climateleaders/resources/goal-setting.html

General GHG Reduction Methods

“Low Hanging Fruit”

- Lighting Projects (sensors, CFL and high efficiency lights)
- Upgrade Cooling Systems (high efficiency units, system balance)
- Reduce Plug Load (high efficiency equipment)
- Variable Speed Systems for Air Handling and Product Distribution
- Mobile Sources (reduce idling, encourage public transit, increase video-conferencing)

“Higher Hanging Fruit”

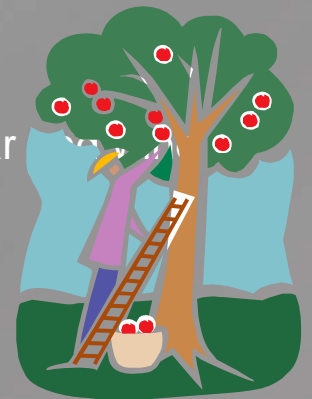
- Combined Heat and Power (CHP)
- Landfill Gas Recovery
- Install Green Power (solar panels, micro turbines)

Innovative Projects

- New Heating/Cooling Systems (ice, under floor distribution, solar building exposure)
- Green Roofs

Other Approaches

- Renewable Energy Certificates (RECs)
- Eligible Project Offsets





To set your goal, please contact
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Thank you!