

CLIMATE LEADERS

SETTING THE STANDARD IN GREENHOUSE GAS MANAGEMENT

Introduction to the Climate Leaders Program: For Low Emitter Partners



Introduction to the Climate Leaders program

Recognition opportunities

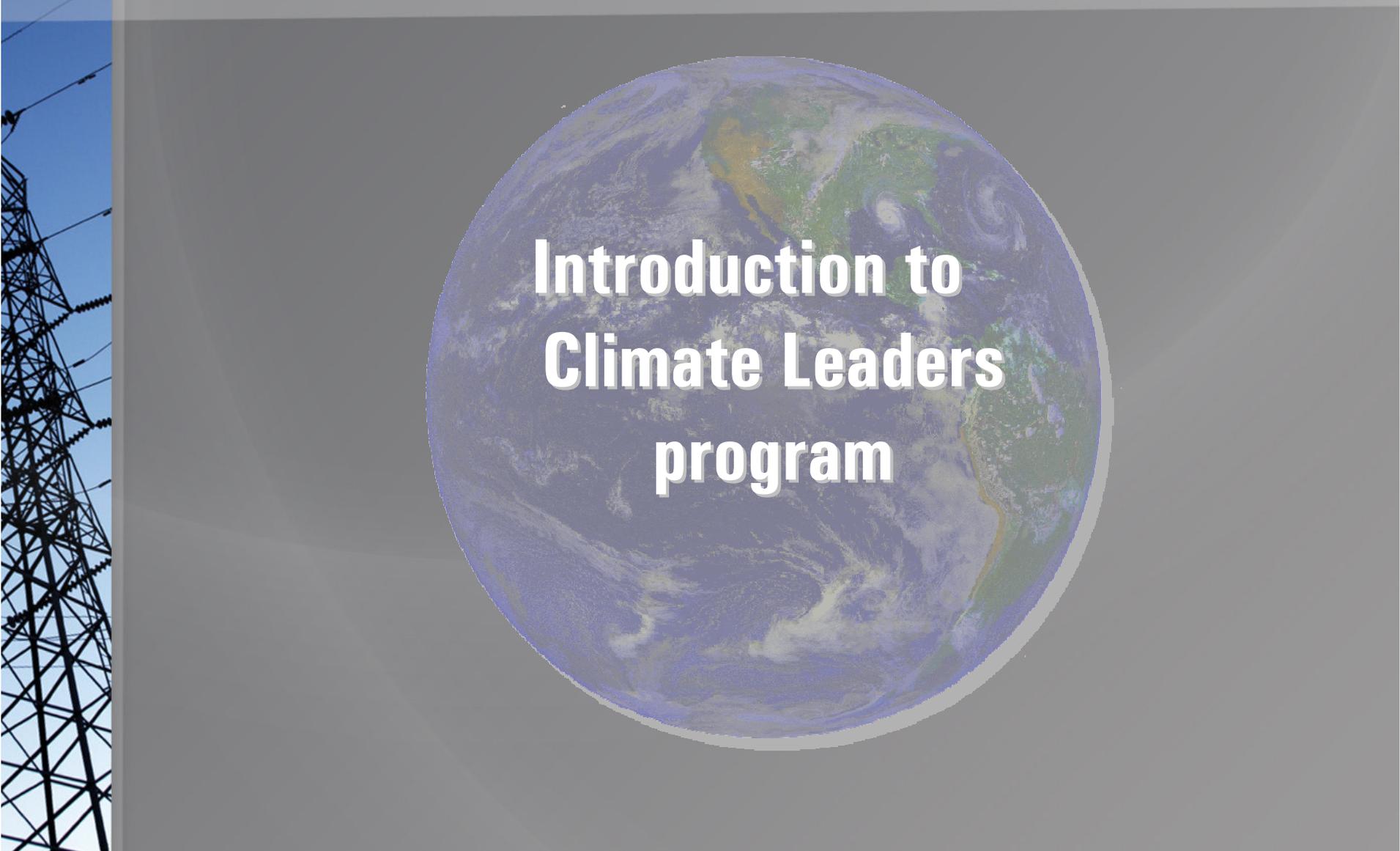
Inventories

Timeline for task completion

Reporting to EPA

Set a GHG Reduction Goal & Track Progress

Questions



Introduction to Climate Leaders program

- Largest corporate greenhouse gas goal-setting program, with over 8% of U.S. GHG emissions
- Total annual U.S. revenue of the partnership represents 10% of the U.S. Gross Domestic Product
- Goals pledged in program reduce annual emissions equivalent to 9 million cars
- Over 200 Partners of all sizes in many sectors, with operations in all 50 states
- Climate Leaders started in 2002 with 11 charter partners
- Related EPA programs for small businesses:
 - Energy Star: www.energystar.gov
 - Green Power Partnership: www.epa.gov/greenpower

Climate Leaders for Low Emitters

- Growing interest by small businesses wishing to take action on climate prompted us to create simpler, non-technical tools specially designed for your needs
- Low emitters are defined as office-based organizations, suppliers to Climate Leaders Partners, and public institutions such as government agencies and universities
- Low emitters typically have total corporate-wide emissions equal to less than 10,000 metric tons of CO₂-equivalent
- Tools are divided into four steps that you can tackle or delegate at your convenience:
 - Get started
 - Calculate GHG Emissions
 - Create an Inventory Management Plan
 - Set a Reduction Goal & Track Progress
- Technical help is provided

Getting Started in the Program

- Partnership Agreement
- Kick off webinar (Partnership effective upon completion)
- Send in response to information request for web site, receive logo and technical assistance info
- Start using tools:
 - Low Emitter Guide to Reducing Greenhouse Gas Emissions
 - Inventory Calculator for Low Emitters
 - Inventory Management Plan (IMP) for Low Emitters



Recognition Opportunities



Outreach & Recognition for Partners

- Partner profile on web page
- Logo use with permission
 - *Corporate-wide, not product specific*
- EPA & Partner press releases
- Public Service Announcements (PSA)
 - 2007-8 campaign audience of 6 million in *Forbes, Kiplingers, Audobon, Fast Company*
- Special advertising opportunities
- Co-marketing ideas welcome
- October 2008 Partners Meeting
 - Details on web site Events page



www.epa.gov/climateleaders/communications

Credible Corporate Climate Strategy

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

- Road-tested with over 200 partners from every major sector across the country
- 3 critical components to credible strategy
 - Component 1: Complete Corporate-Wide GHG Inventory
 - Component 2: Develop Inventory Management Plan (IMP)
 - Component 3: Set Aggressive Corporate-Wide GHG Reduction Goal
- Annual reporting to EPA creates lasting record of accomplishments and identifies company as corporate environmental leader

Program Participation Steps

Partner Joins Program



EPA assists Partner in developing inventory and inventory management plan (typically around 6 months)

Partner sets corporate wide 5-10 year GHG reduction goal, domestic or global

Partner may participate in meetings, public outreach, press events, etc.

Partner reports annual inventory data to EPA and documents progress toward goal



Partner Achieves Goal



Inventory & Reporting

Step 1 - Get Started

Basics of a Climate Leaders GHG Inventory

A GHG inventory lists all emissions sources and associated emissions quantified using standardized methods. Climate Leaders uses the International WRI/WBCSD GHG Protocol

- Required Sources
 - Corporate-wide (all U.S. operations)
 - 6 major GHGs
 - Direct emissions
 - Indirect emissions from electricity, heat, and steam
- Optional Sources
 - International operations
 - Offset projects
 - Employee travel and commuting
 - Product transport

Step 1 - Get Started

Develop Inventory: Organizational Boundaries

Which facilities should you include?

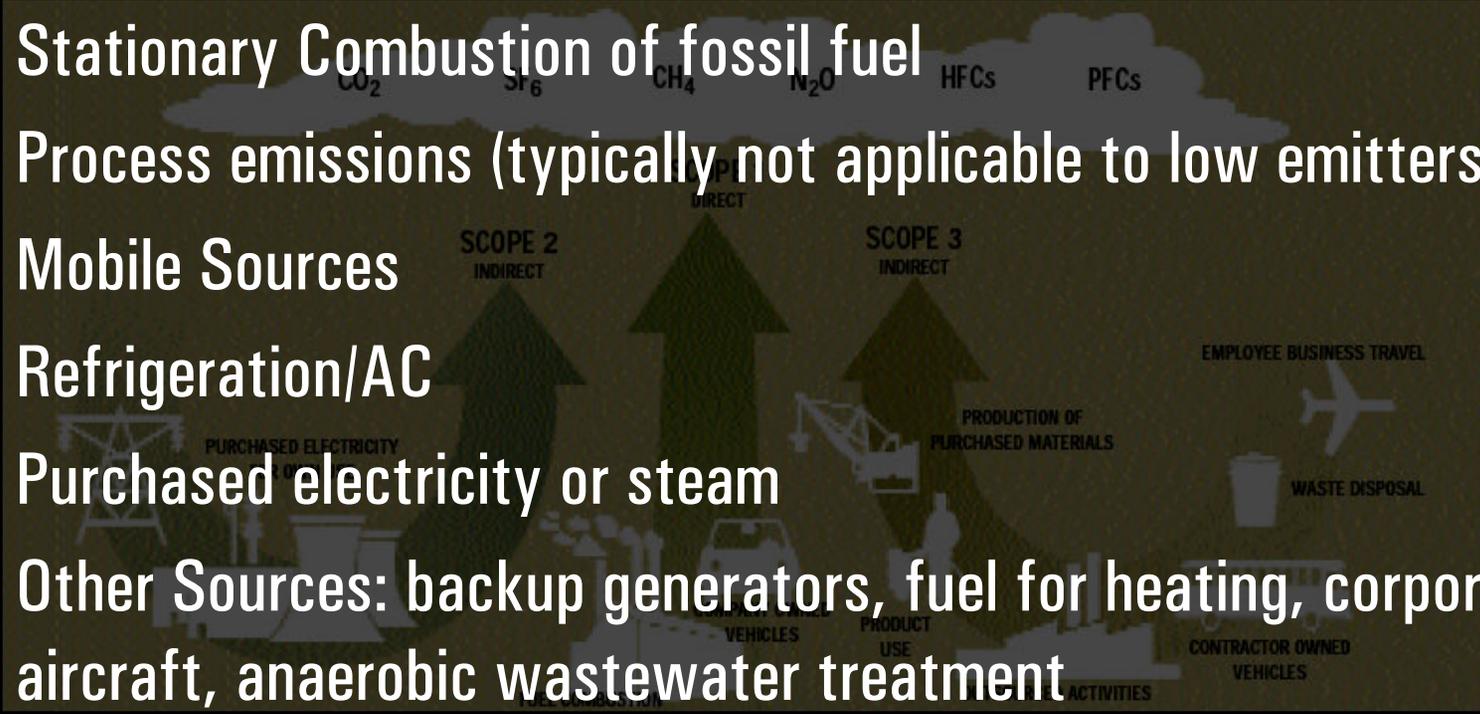
- Equity Share Approach- by ownership, or
- Control Approach- by control
 - Financial control versus operational control

Approach matters most for treatment of partially owned or operated facilities (joint ventures, subsidiaries) and for lease agreements

Step 1 - Get Started

Develop Inventory: Operational Boundaries

Which sources of emissions should you include?

- Stationary Combustion of fossil fuel
 - Process emissions (typically not applicable to low emitters)
 - Mobile Sources
 - Refrigeration/AC
 - Purchased electricity or steam
 - Other Sources: backup generators, fuel for heating, corporate aircraft, anaerobic wastewater treatment
 - Optional Sources (e.g., business travel)
- 
- A diagram illustrating greenhouse gas emissions and carbon footprint components. At the top, a cloud contains chemical formulas for greenhouse gases: CO
- ₂
- , SF
- ₆
- , CH
- ₄
- , N
- ₂
- O, HFCs, and PFCs. Below the cloud, three large green arrows point upwards, labeled SCOPE 1 DIRECT, SCOPE 2 INDIRECT, and SCOPE 3 INDIRECT. Various icons and labels are scattered around the arrows, representing different emission sources: a power plant for 'PURCHASED ELECTRICITY', a car for 'VEHICLES', a factory for 'PRODUCTION OF PURCHASED MATERIALS', an airplane for 'EMPLOYEE BUSINESS TRAVEL', a trash can for 'WASTE DISPOSAL', and a truck for 'CONTRACTOR OWNED VEHICLES'. Other labels include 'ACTIVITIES' and 'PRODUCT USE'.

Step 1 – Get Started

Develop Inventory: Choose a Base Year

What should be the base year?

- Typically the most recent year for which comprehensive data is available
- Base year Adjustments:
 - Acquisitions/divestitures: Adjust your base year data when these occur
 - Organic growth/decline: Do not adjust your base year data

Step 2 – Calculate Emissions

How to calculate emissions?

- Partners should use the EPA Climate Leaders Inventory Calculator for Low Emitters
 - Based on Climate Leaders guidance documents
 - Calculates corporate-wide GHG emissions
 - Includes calculation methods for optional sources

EPA Climate Leaders Simplified GHG Emissions Calculator (SGEC) Version 2.0

This calculator is designed as a simplified calculation tool to help organizations in estimating their greenhouse gas (GHG) emissions for reporting to the EPA's Climate Leaders program. All methodologies and default values provided are based on the most current Climate Leaders Greenhouse Gas Inventory Protocol guidance. The calculator will determine the direct and indirect emissions from all sources at a company when activity data is entered into the various sections of the workbook.

Tool Instructions:
 (A) Click on the grey boxes below to go to the appropriate Tool Sheet.
 (B) Enter data in Tool Sheet in ORANGE cells only. Final GHG emissions will be provided in CO equivalent emissions in BLUE or GREEN cells. If data is not known or applicable, leave default value (blank, zero or other) in cell.
 (C) Enter data in appropriate units. If needed convert units prior to entering into tool.
 (D) Guidance for each calculation method is provided in the references at bottom of each sheet.

Tool Sheets:

Direct 1.0	Direct Emissions from Stationary Combustion Sources - Traditional Sources
Direct 2.0	Direct Emissions from Mobile Sources
Direct 3.0	Direct Emissions from Refrigeration and Air Conditioning Equipment
Direct 4.0	Direct Emissions from Fire Suppression Equipment
Direct 5.0	Direct Emissions from Stationary Combustion Sources - Gas Waste Streams
Indirect 1.0	Indirect Emissions from Purchase of Electricity
Indirect 2.0	Indirect Emissions from Purchase of Steam
Optional 1.0	Optional Emissions from Business Travel
Optional 2.0	Optional Emissions from Employee Commuting
Optional 3.0	Optional Emissions from Product Transport
Conversion Factors	Useful Conversion Factors

Version Notes:
 Tool release date: July 1, 2008

EPA Climate Leaders Simplified GHG Emissions Calculator (Introduction) 1 of 1

Step 3 – Create an IMP

What is an Inventory Management Plan?

- An Inventory Management Plan (IMP) is a Partner developed collection of standard operating procedures that documents the inventory development process for EPA
 - EPA provides checklist of components for good IMP to use as guideline when preparing documentation
 - EPA offers a streamline IMP for low emitter Partners
 - EPA offers technical assistance to help companies complete IMP documentation

Step 3 – Create an IMP

Benefits of an IMP

- EPA review of a company's IMP provides assurance that Partners develop a high-quality inventory that is consistently maintained and updated over time
 - Institutionalizes inventory process
 - Leads to comprehensive & credible data management
 - Increases efficiency/lowers costs by centralizing processes
 - Increases accuracy and transparency
 - Facilitates long-term emissions/goal tracking
 - Facilitates documentation of capital savings
 - Allows for continual improvement

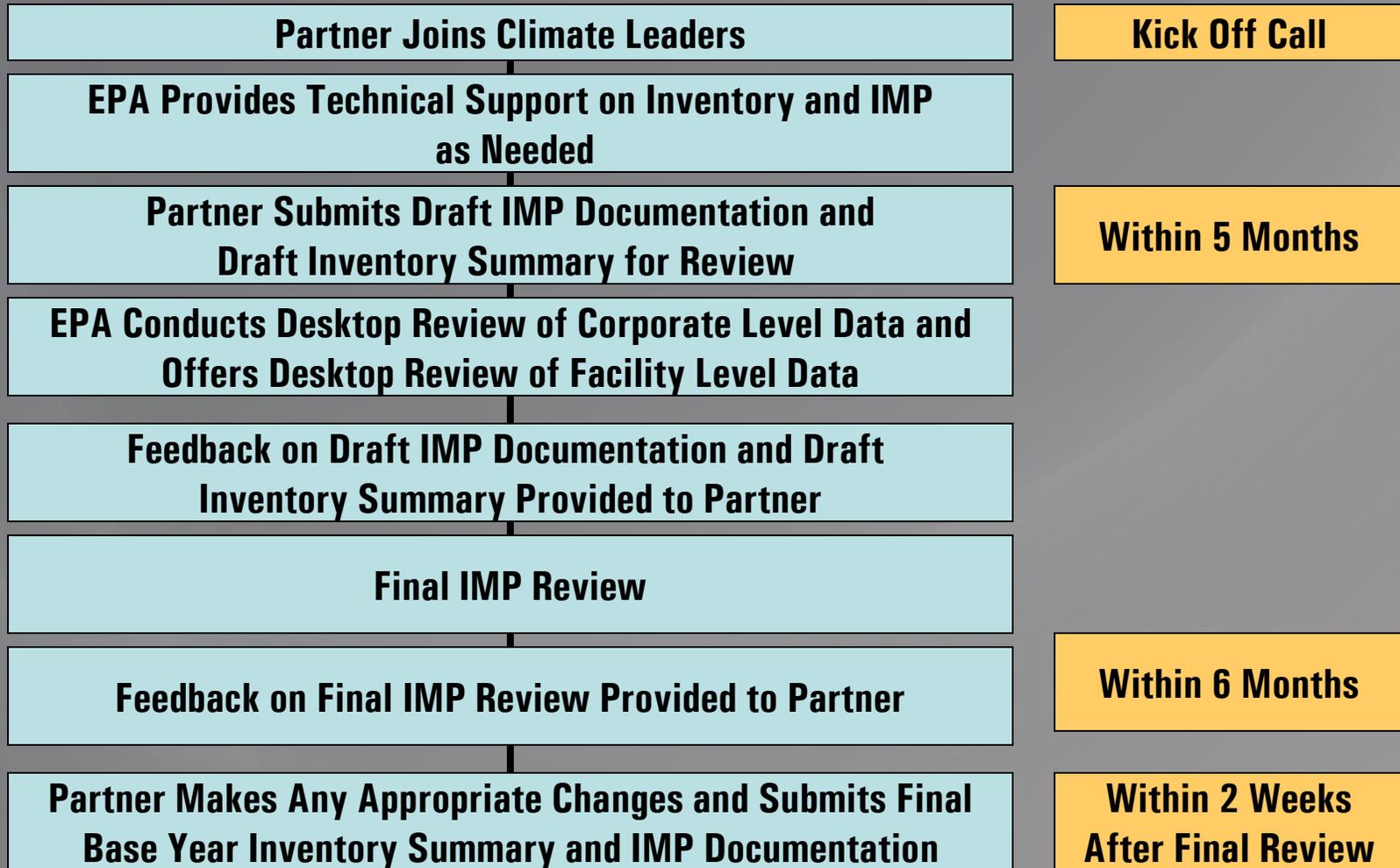
Step 3 – Create an IMP Ensuring Credibility

- EPA technical assistance for inventory/IMP development and reporting process
- Desktop reviews of corporate level inventory data and how IMP components are addressed
- Final review of IMP
 - Includes a review of how IMP is implemented at the facility level
- Climate Leaders does not offer third-party verification, but meeting reporting requirements will ensure that credible/verifiable inventory process is in place
 - Third-party verification option (must meet same criteria as Climate Leaders reporting requirements)

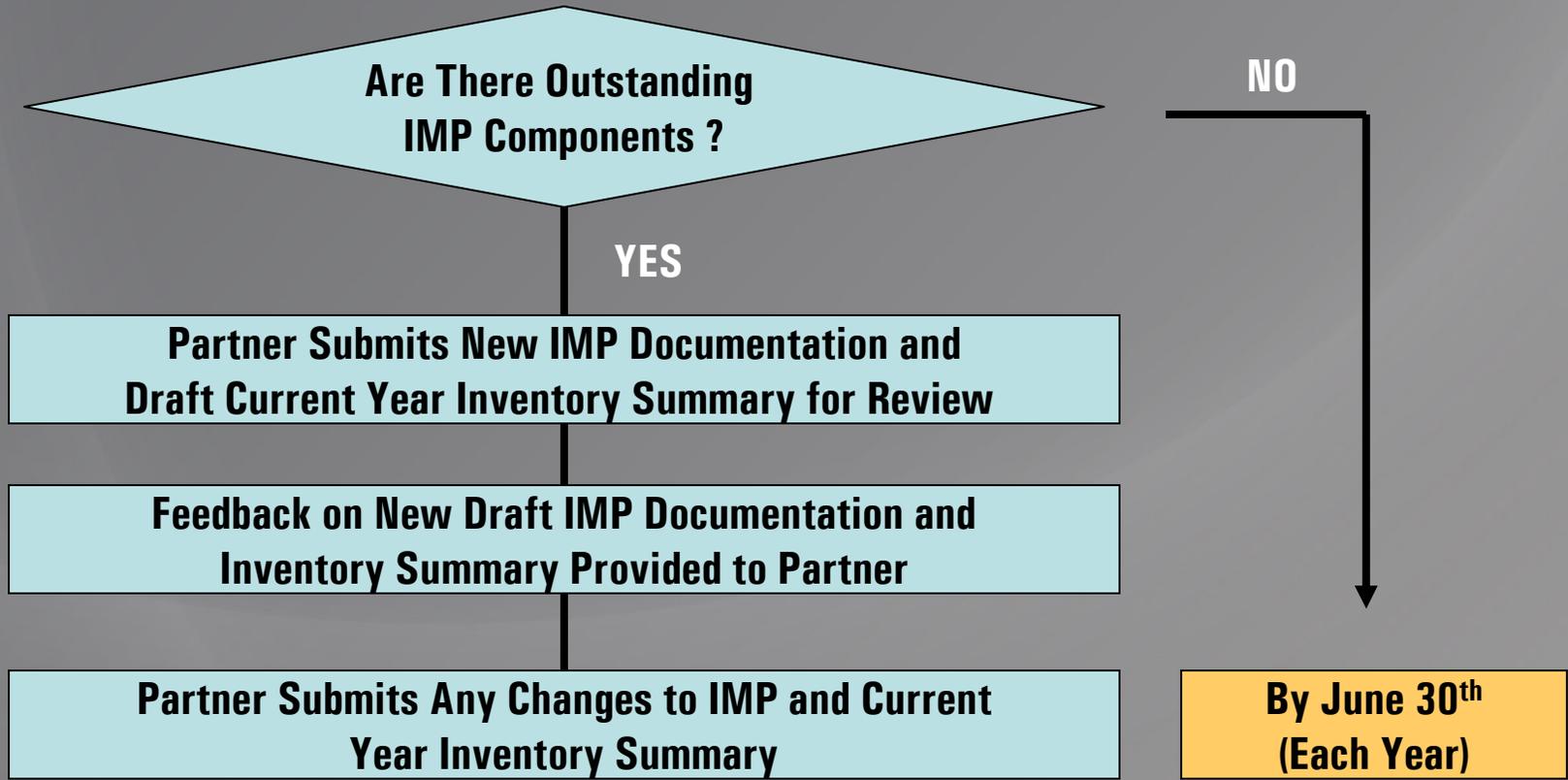


Timeline for Task Completion

Year 1 (Base Year Data)



Year 2 Through Goal Year





Set A Goal & Track Progress



Step 4 – Set a Goal & Track Progress Reporting to EPA

What are the reporting requirements?

- Partners report their base-year emissions to EPA
 - Emissions are reported at a corporate-wide level using the Climate Leaders inventory reporting form
 - GHG emissions are reported in terms of CO₂-equivalent emissions
- Partners provide EPA a copy of their final IMP
- Partners provide annual updates to inventory
- Partners provide IMP updates as necessary

CLIMATE LEADERS
U.S. Environmental Protection Agency

ANNUAL GHG INVENTORY SUMMARY AND GOAL TRACKING FORM

Name: [] Address: [] City: [] State: [] Zip Code: []
 Phone Number: [] Fax Number: [] Email Address: []

Corporate Inventory - U.S.	Base Year (2002)	Base Year (2005)	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Total U.S. Emissions												
International Emissions												
Other Emissions												
Total GHG Emissions												
Other Emissions												
Total GHG Emissions												
Other Emissions												
Total GHG Emissions												

Climate Leaders Reporting - Annual Inventory Summary and Goal Tracking Form Page 1 of 4 04/23/2004 10:00:00

Step 4 – Set a Goal & Track Progress

Set long-term GHG reduction goal

More than half of Partners have already set reduction goals, others completing inventories before announcing

- **Absolute Goal**
 - Sonoma Wine Co. to reduce U.S. GHG emissions by 15% from 2005 to 2010
- **Normalized Goal**
 - Lincus Inc. to reduce U.S. GHG emissions by 30% per square foot from 2006 to 2011
- **Index Goal**
 - Ball Corporation to reduce total U.S. GHG emissions by 16% per production index from 2002 to 2012
- **Net Zero (“Carbon Neutral”)**
 - 3Degrees to achieve net zero U.S. GHG emissions by 2007 and maintain that level through 2012

Step 4 – Set a Goal & Track Progress

Ensuring leadership goals

- **Goal Criteria**
 - Corporate-Wide (including at least all U.S. operations)
 - Based on the most recent base year for which data are available
 - Achieved over 5 to 10 years
 - Expressed as an absolute GHG reduction or as a decrease in GHG intensity
 - Aggressive compared to the projected GHG performance for the sector
- **Goal Development Process**
 - Partner proposes a reduction goal
 - Informal proposal encouraged
 - EPA evaluates goal
 - If goal does not meet Climate Leaders' criteria, Partner reassesses opportunities and proposes a new goal

Step 4 – Set a Goal & Track Progress Creating a Performance Benchmark

- Three models to determine business-as-usual sector improvement rates & current average intensity rates based on company's sector
 - ICF's Integrated Planning Model (IPM)
 - Typically used for Partners in the electric generation sector
 - DOE's National Energy Modeling System (NEMS)
 - Typically used Partners in the industrial sector
 - Bureau of Labor Statistics (BLS) Forecast input/output tables for the US economy
 - General analysis for all Partners that estimates fuel quantities purchased/\$output



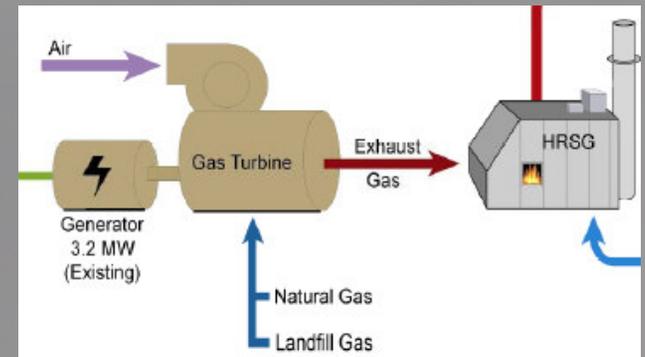
Step 4 – Set a Goal & Track Progress

Sample Goal Setting Analysis

- **California Portland Cement Company**
 - Goal Proposal: 9% per production index from 2003 to 2012
 - Sector's forecasted benchmark improvement rate (NEMS model) is a reduction in CO₂ emissions by 4.12% per ton of cement output by 2012
 - California Portland exceeds forecasted business as usual (BAU) improvement rate by 118%
 - Additional Factors: Energy Star Partner (Partner of the Year 2005), current intensity better than sector average

Innovative Climate Leaders Partners' Projects

- Staples
 - Energy and Climate
 - Alternative Fibers
- Bank of America
 - LEED Projects
 - Server and Network Systems Review
(Automated Shut-offs, Unplug Unused Servers, Advanced Cooling)
- SC Johnson
 - Methane Cogeneration Plant





Thank You and Welcome to Climate Leaders!

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