

# CLIMATE LEADERS

SETTING THE STANDARD IN GREENHOUSE GAS MANAGEMENT

## Introduction for Low Emitters: Technical Resources and Program Requirements



Introduction to the Climate Leaders program

Inventories

Reporting to EPA & Tracking Progress

Timeline for task completion

Set a GHG Reduction Goal

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](http://www.energystar.gov)
  - Green Power Partnership: [www.epa.gov/greenpower](http://www.epa.gov/greenpower)
  - Business Guide to EPA Climate Partnerships

# Climate Leaders for Low Emitters

- Low emitters are defined as office-based organizations and small manufacturers, including suppliers to Climate Leaders Partners.
- Low emitters typically have total corporate-wide emissions equal to less than 10,000 metric tons of CO<sub>2</sub>-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

[www.epa.gov/climateleaders/resources/lowemitters.html](http://www.epa.gov/climateleaders/resources/lowemitters.html)

# 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 year GHG reduction goal, domestic or global**

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



**Partner Achieves Goal**



# Inventory & Reporting

# 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

# 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?

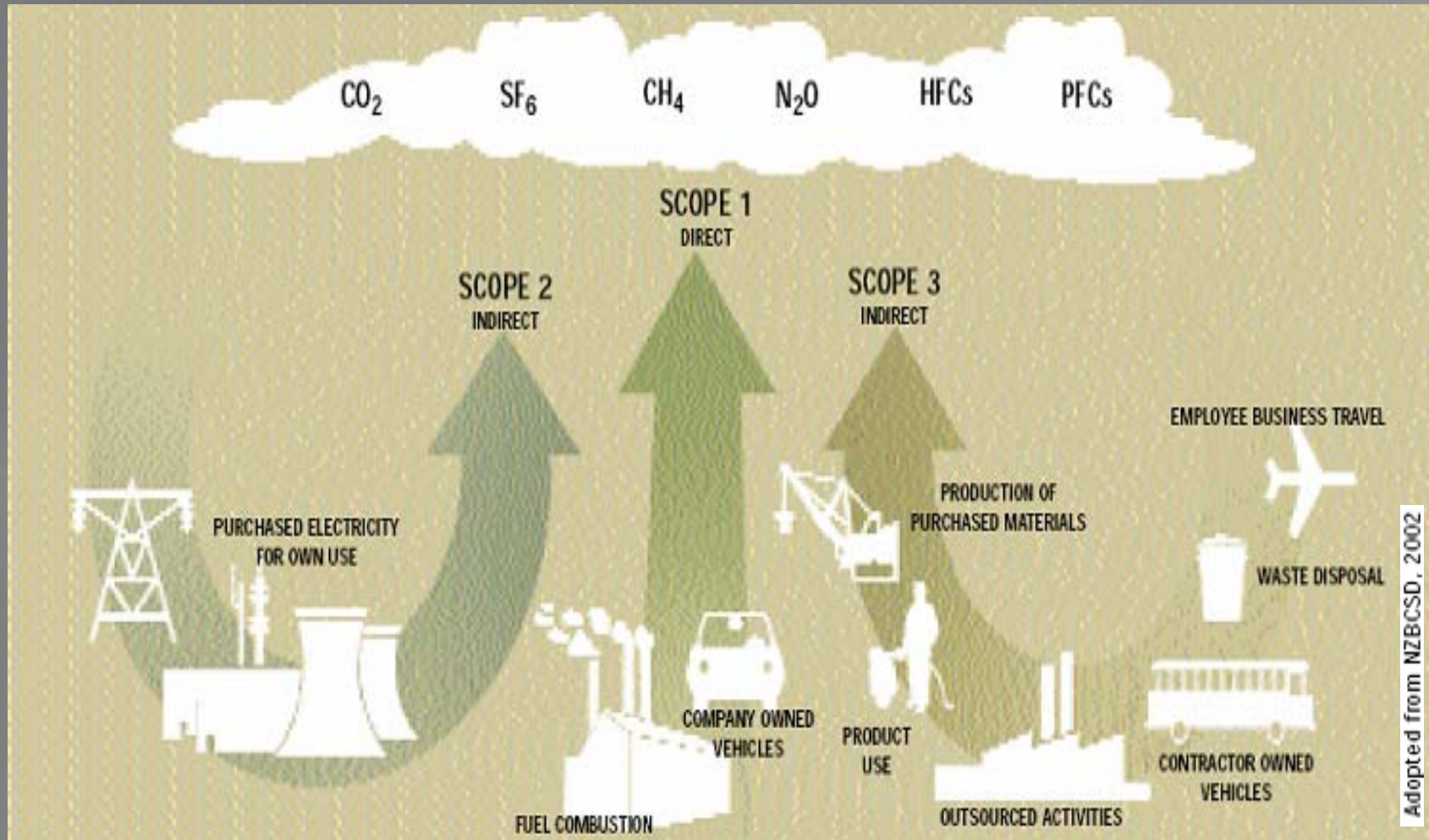
- Equity Share Approach- by ownership, or
- Control Approach- by control
  - Financial control versus operational control

*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

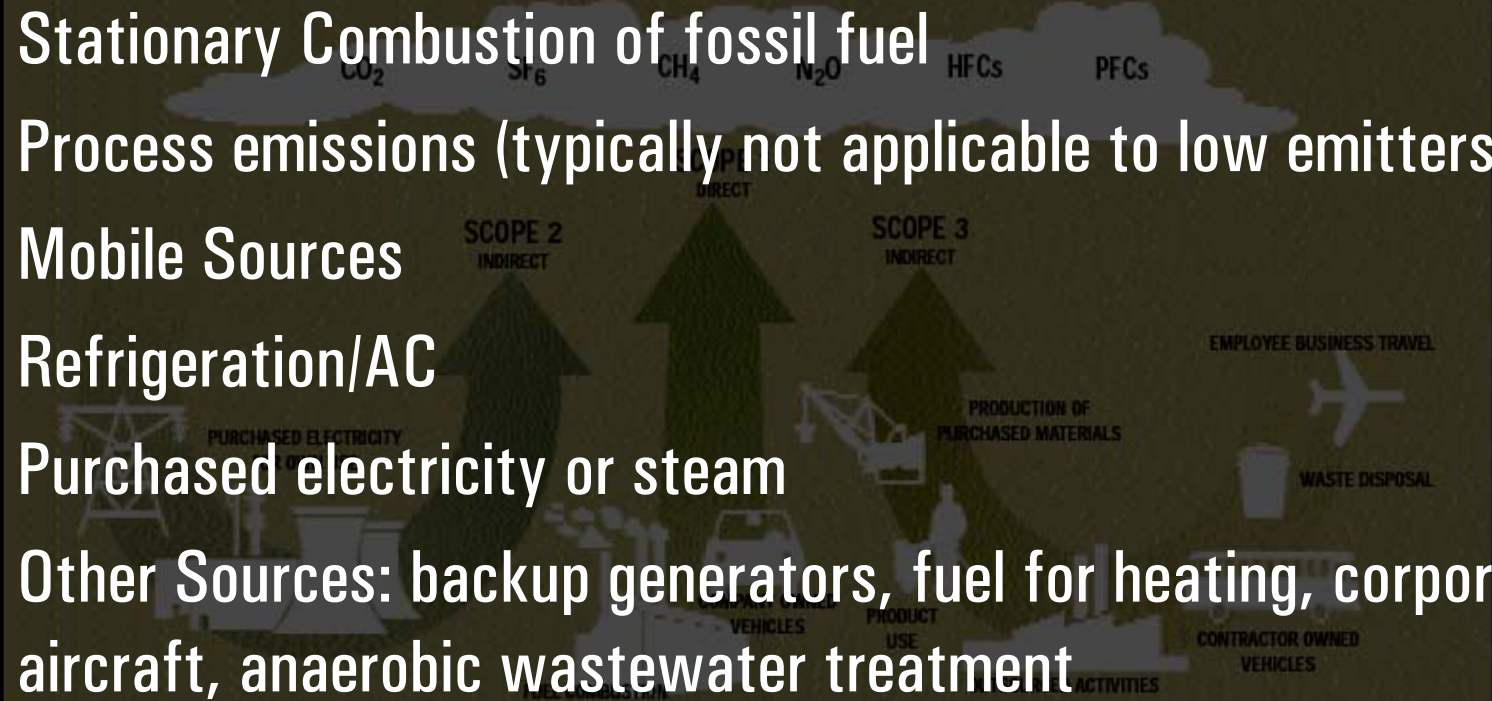
*Based on International WRI/WBCSD GHG Protocol*



# 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)
- 

# 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

[www.epa.gov/climateleaders/resources/lowemitters.html](http://www.epa.gov/climateleaders/resources/lowemitters.html)

- 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 2.8

*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<sub>2</sub> 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
  - Download IMP form at [www.epa.gov/climateleaders/resources/lowemitters.html](http://www.epa.gov/climateleaders/resources/lowemitters.html)

## Step 3 – Create an IMP

### Benefits of an IMP

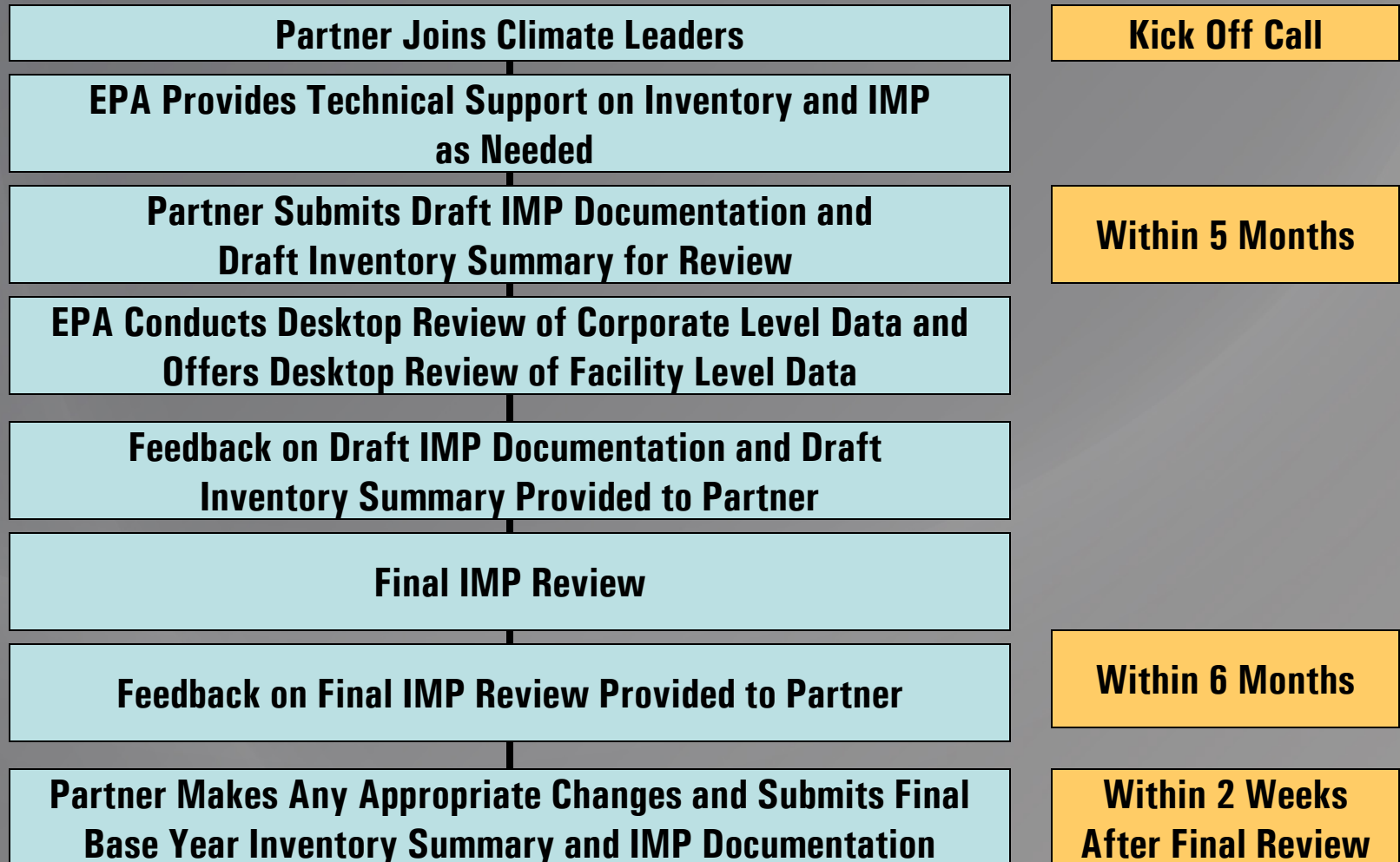
- EPA review of a company's IMP provides assurance that Partners develop a high-quality inventory that is consistently maintained and updated over time
  - Institutionalizes inventory process
  - Leads to comprehensive & credible data management
  - Increases efficiency/lowers costs by centralizing processes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



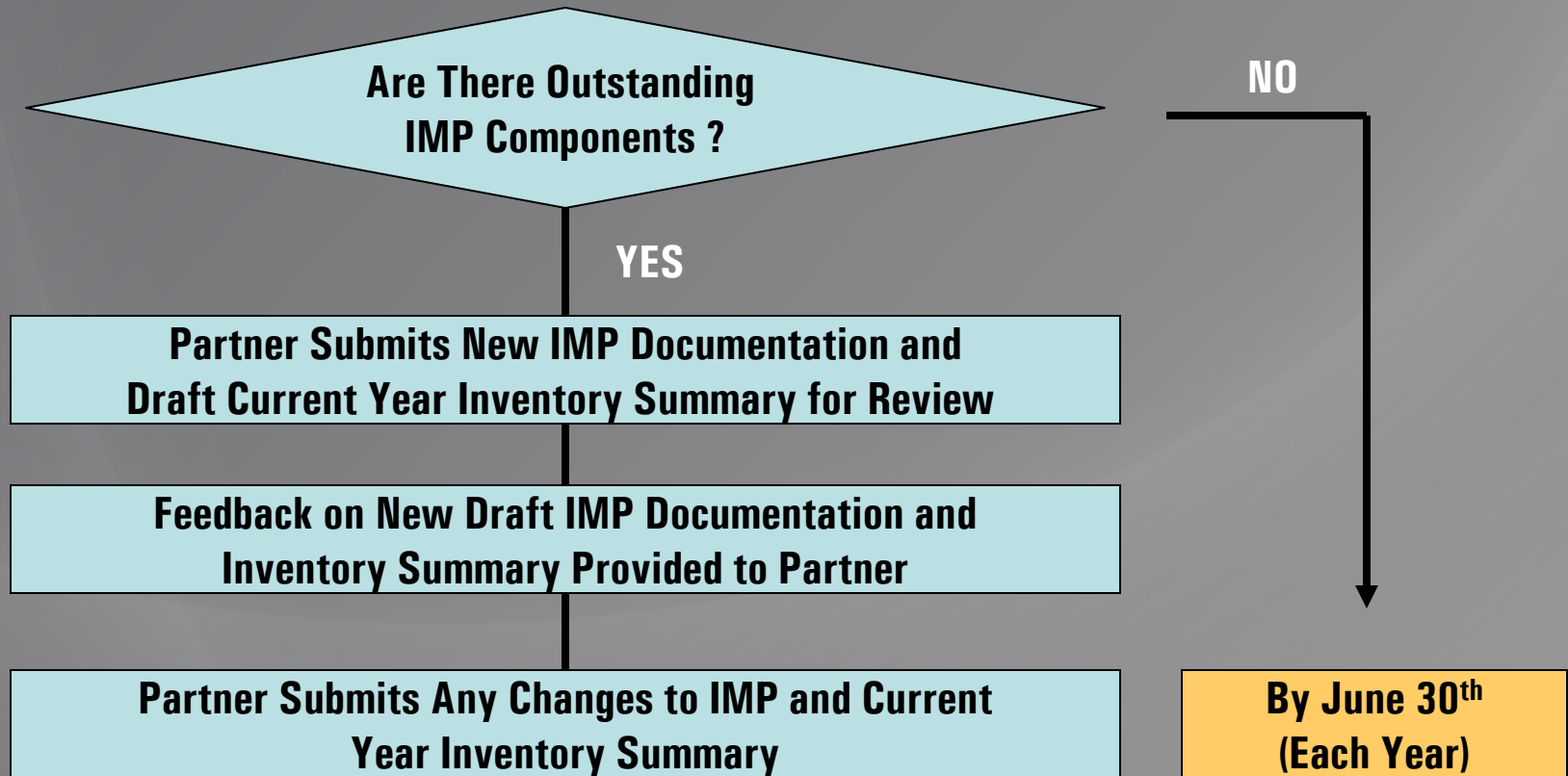


# Timeline for Task Completion

# Year 1 (Base Year Data)- submit base year inventory within 6 months of joining



# Year 2 Through Goal Year (set goal within one year of joining)





# Set A Goal & Track Progress



# Step 5 – Set a Goal

## Set long-term GHG reduction goal

*About 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
- Net Zero (“Carbon Neutral”)
  - 3Degrees to achieve net zero U.S. GHG emissions by 2007 and maintain that level through 2012

# Step 5 – Set a Goal

## 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 years
  - Expressed as an absolute GHG reduction or as a decrease in GHG intensity
  - Aggressive compared to the projected GHG performance for the sector

# Step 5 – Set a Goal & Track Progress

## Ensuring leadership goals

- Goal Development Process

- Partner proposes a reduction goal using the “Goal Proposal Template”, on the Low Emitters page of the Climate Leaders website: [www.epa.gov/climateleaders/resources/lowemitters.html](http://www.epa.gov/climateleaders/resources/lowemitters.html)
- EPA evaluates goal
- If goal does not meet Climate Leaders’ criteria, Partner reassesses opportunities and proposes a new goal

Climate Leaders Draft Goal Proposal Template

August 2008

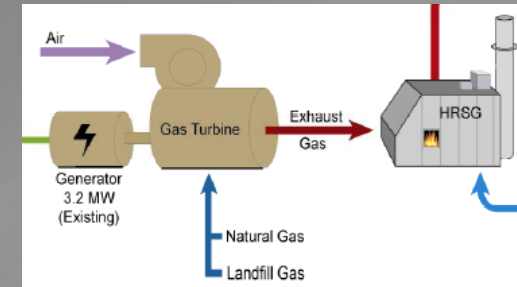


### **Partner Goal Proposal Template**

*This template can be used by Climate Leaders Partners in submitting a goal for review by EPA. This template is a guide and does not need to be filled out completely prior to the Partner entering into discussions with EPA on goal-setting. EPA is available to review goals at any stage of the Partner’s goal development process. Partners may submit equivalent information in a Powerpoint presentation or other format if preferable.*

# Achieving your Goal: 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 (employee travel/commuting and product transport)
- “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 and wind building exposure)
  - Green Roofs



# Thank You and Welcome to Climate Leaders!

**Verena Radulovic**  
**EPA Climate Leaders**

**Radulovic.verena@epa.gov**

**Jessica Jacobs**  
**CH2M Hill**

**jessica.jacobs@ch2m.com**

**[www.epa.gov/climateleaders](http://www.epa.gov/climateleaders)**