

# Cummins Climate Leaders Progress

A Strategic Imperative for  
Energy Efficiency



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Corporate Environmental Policy  
7 October 2008



# Outline

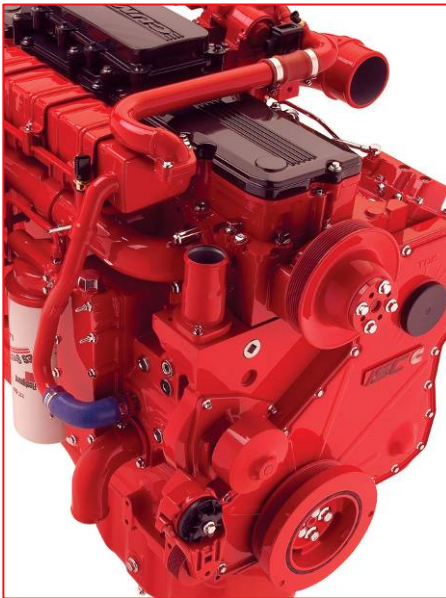
- Company Overview
- Climate Stewardship
- Planning for Success
- Organizational Development and Employee Engagement



# Independent US Company



- Founded 1919 in Columbus Indiana
- Four Complementary Businesses



Engines  
52%



Power Generation  
19%

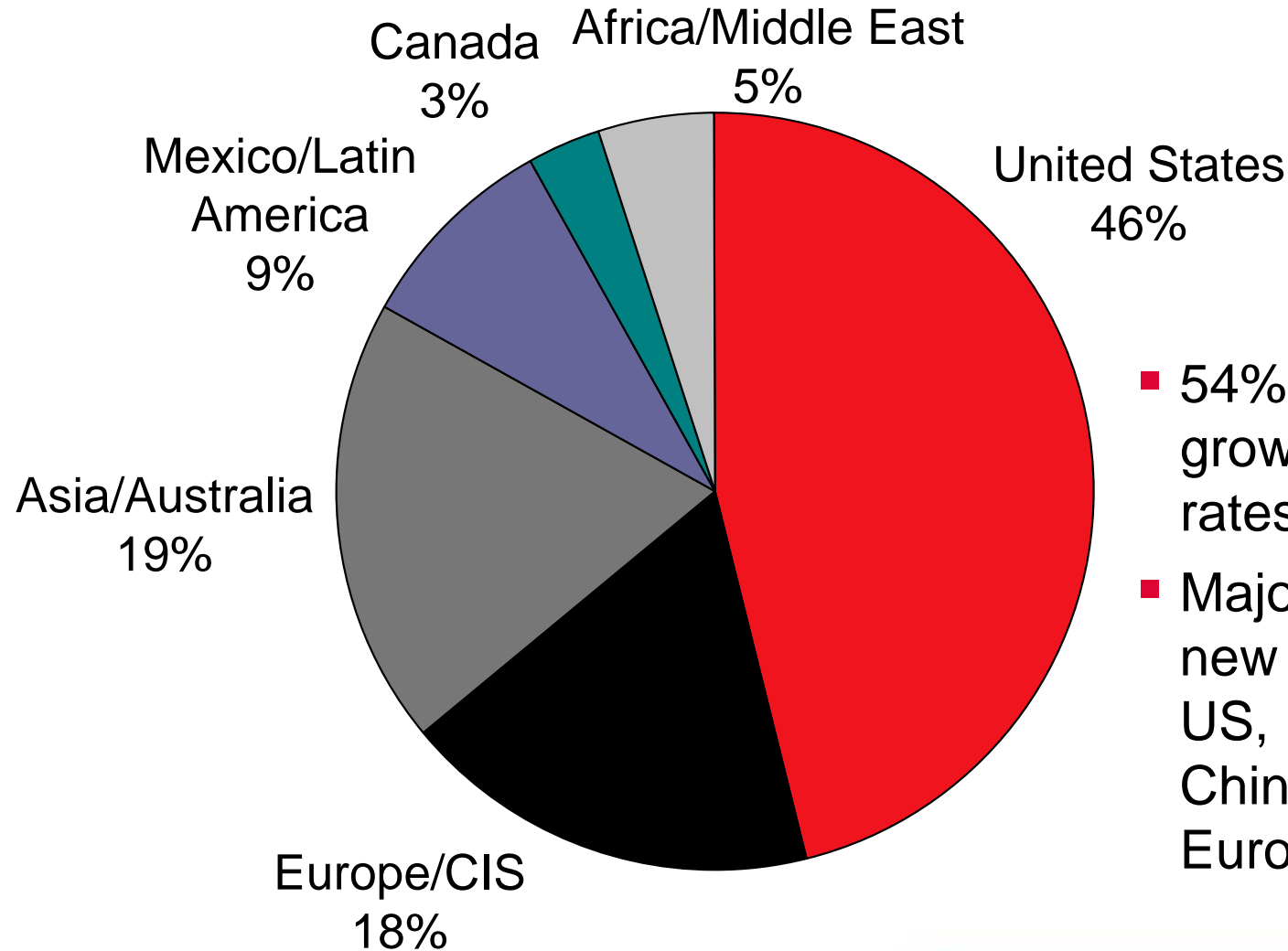


Components  
19%



Distribution  
10%

# Global Footprint

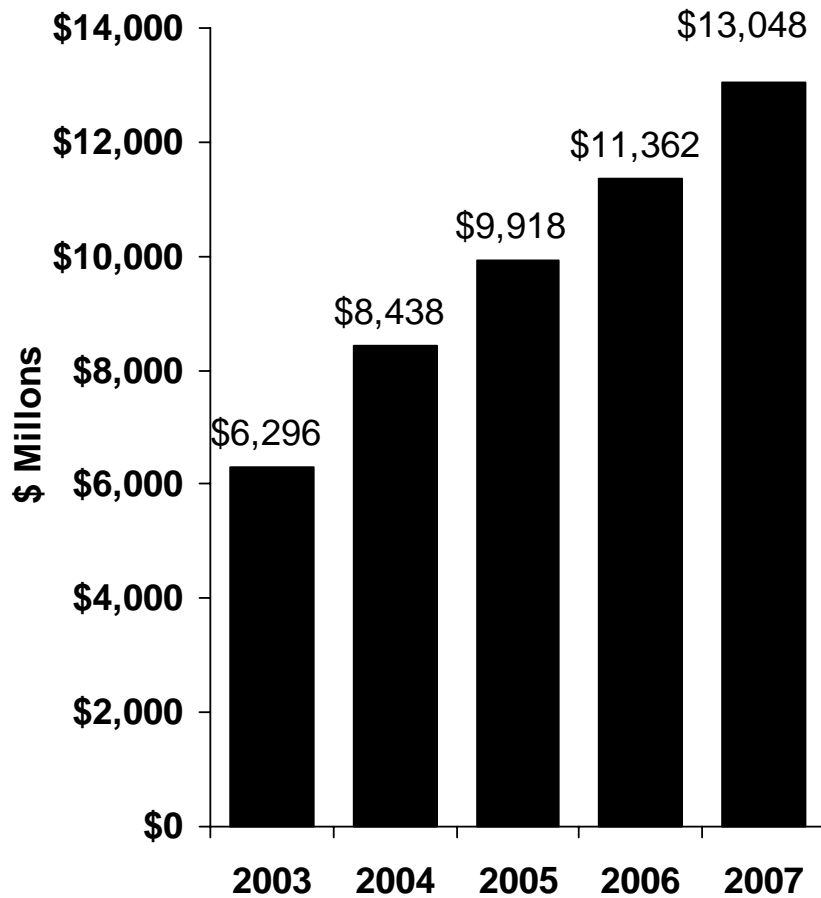


- 54% International, growing at double digit rates
- Major expansions and new plants underway in US, Mexico, Brazil, China, India, Russia, Europe

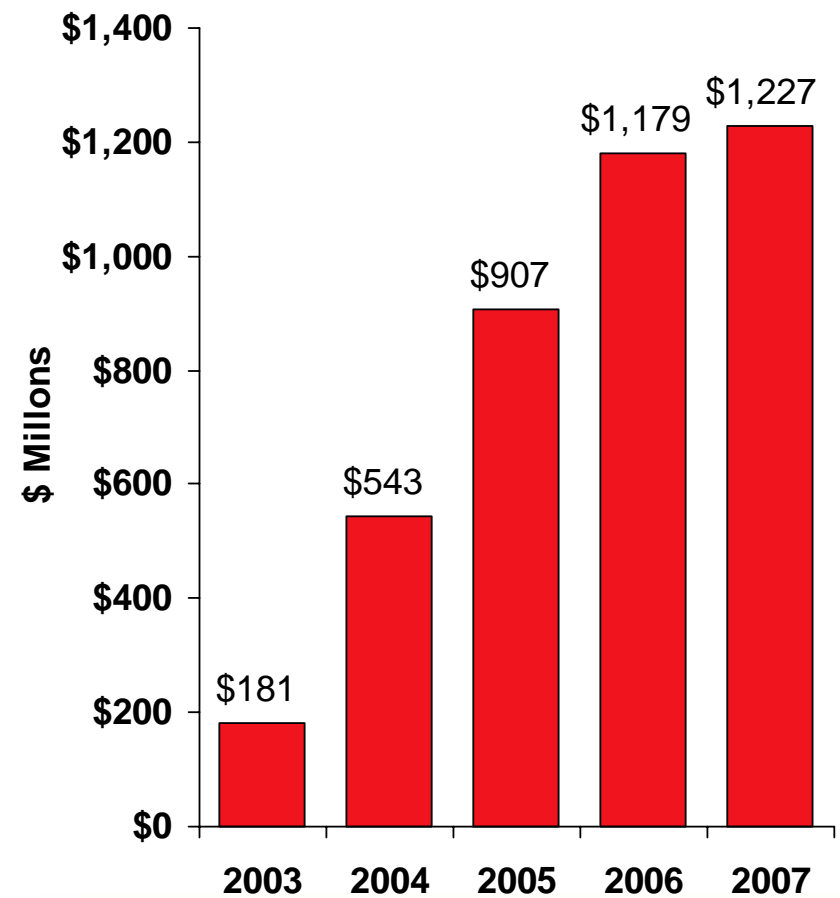


# A Performance Culture

## Sales



## EBIT



# Climate Stewardship for GHG reduction



# Our Vision / Mission

## Vision

Making people's lives better by unleashing the Power of Cummins.

## Mission

- **Demanding that everything we do leads to a cleaner, healthier, safer environment.**
- Motivating people to act like owners working together.
- Exceeding customers expectations by always being the first to market with the best products.
- Partnering with our customers to make sure they succeed.
- Creating wealth for all stakeholders.
- Making people's lives better by unleashing the Power of Cummins.





# Proud to join the EPA Climate Leaders Partners

# CLIMATE LEADERS



U.S. Environmental Protection Agency





# GHG Reduction Goal Setting



- Measure what we had already accomplished
  - 2.3% absolute and 20% intensity reduction 2000-2005
- Consideration for Climate Leaders requirement
  - A goal that is competitive among peers
  - Cummins in high growth mode - so selected an intensity goal as first commitment
  - Joined Climate Leaders Program in 2006 -> base year is 2005
- Pledged to reduce total global GHG emissions by 25 percent adjusted for sales by 2010.

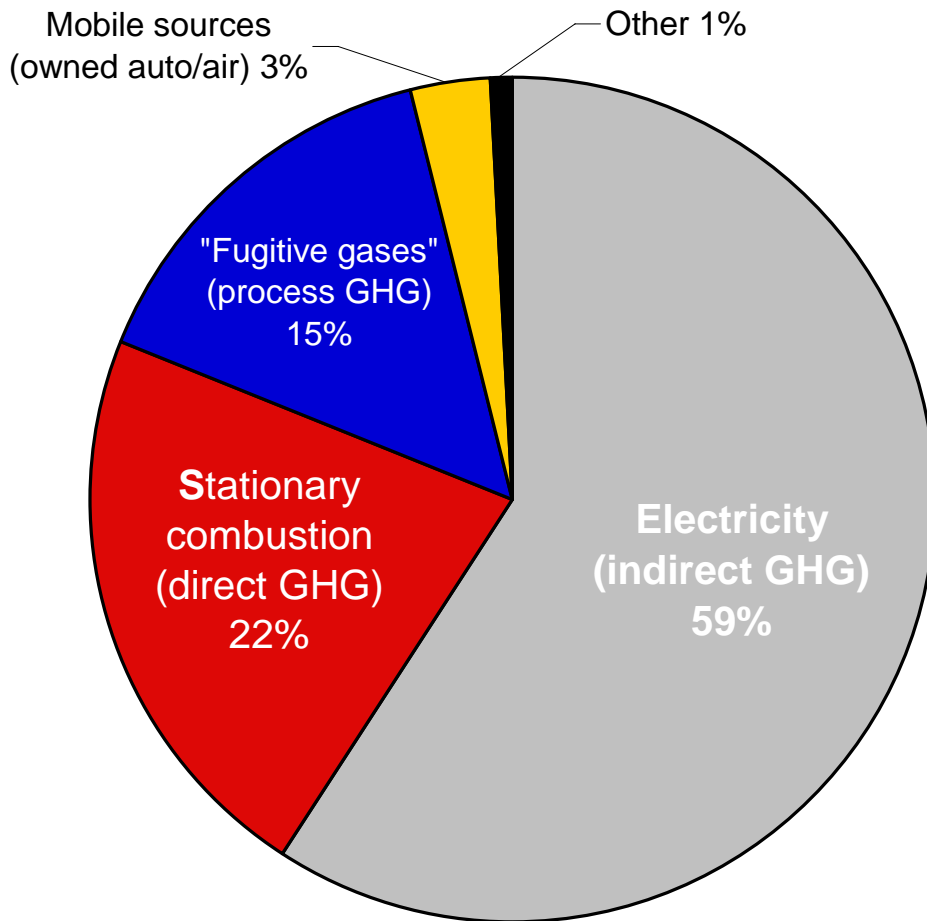
# Planning for Success



# Strategy for Teamwork

- Climate Policy Team formed - Jan 2007
  - Business case, scenarios and strategic plan developed
  - Senior leadership review, plan approved July 2007
- Energy Efficiency Team established August 2007
  - Teams chartered for new Building Standards and new Equipment Standards for Energy Efficiency
- Energy Solutions Providers – partnership agreements to conduct joint Energy Efficiency Assessments Q3
- Health, Safety & Environmental Council
  - completes GHG inventory Q4 2007
  - Independent EPA audit successfully passed, Q1 2008
- Cummins Facilities Improvement Council formed - Q1 2008

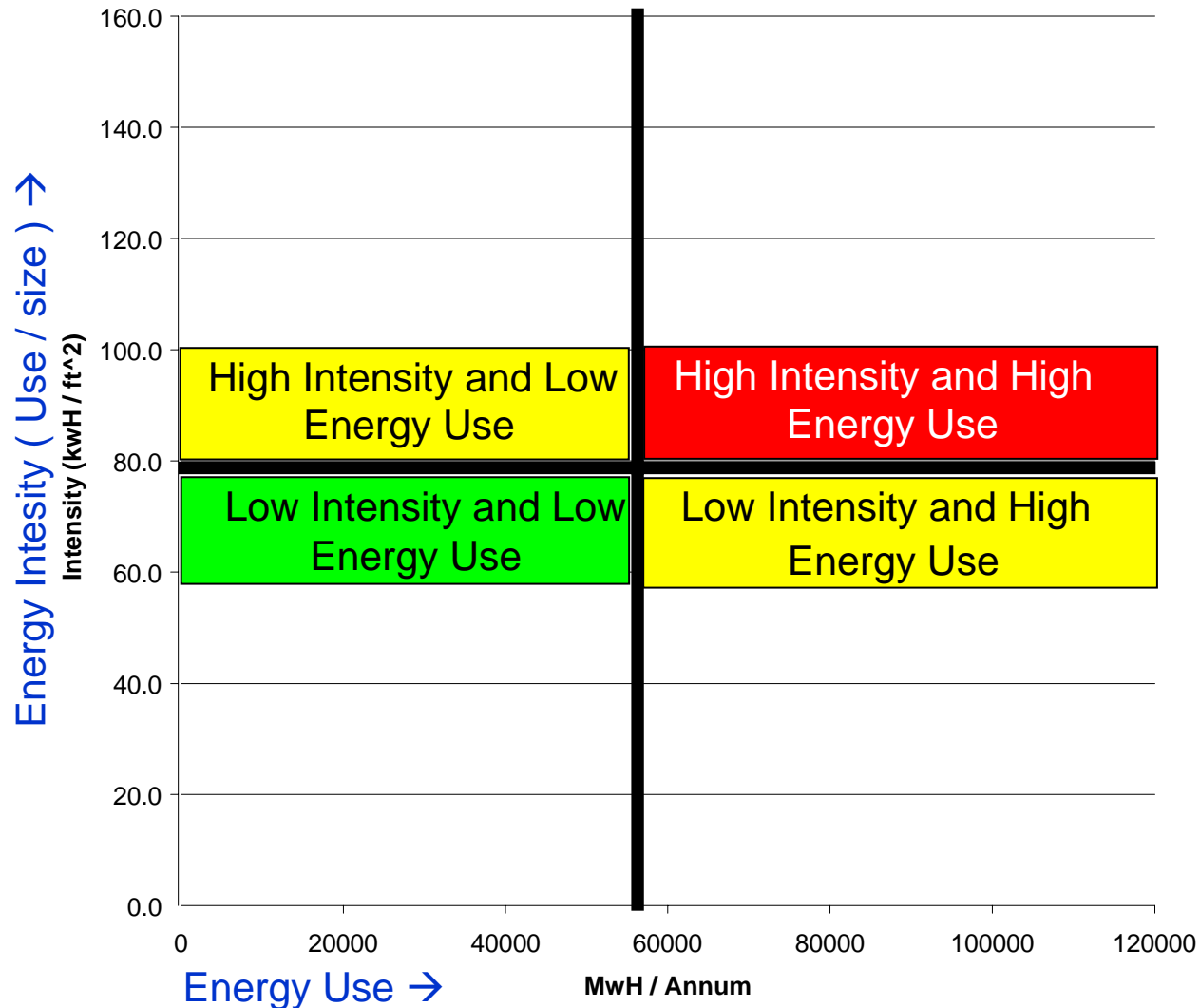
# Climate Leaders Commitment Achieved by Energy Efficiency



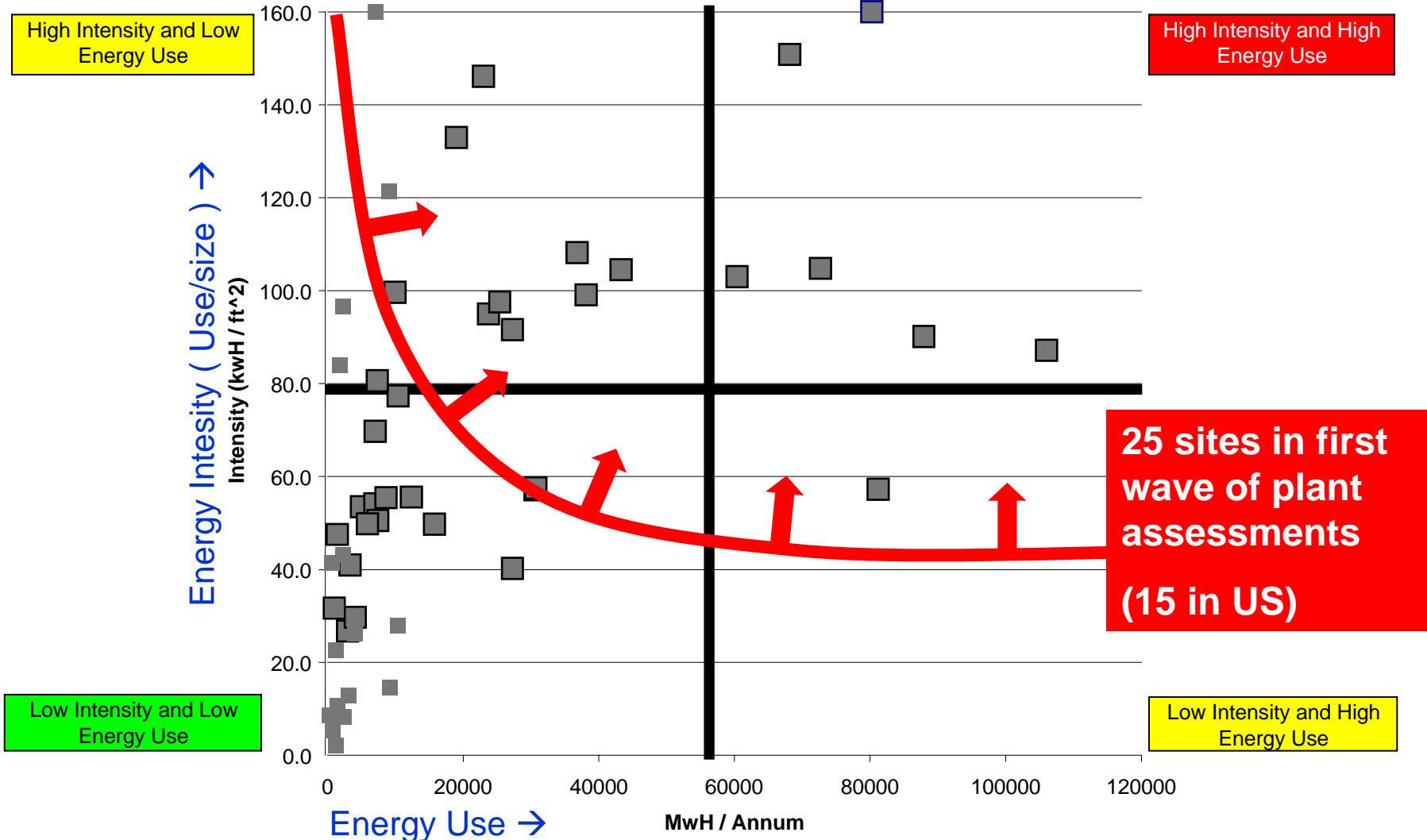
- 85% of our GHG emissions are from using energy
  - Indirect - generation of electricity
  - Direct - fuel we combust
  - Fugitive gases – focus to eliminate
- Achieving GHG reduction pays dividends of energy efficiency
  - Avoiding ~ \$20 million of annual utility spend



# Assessing Opportunities By Intensity vs Energy Use



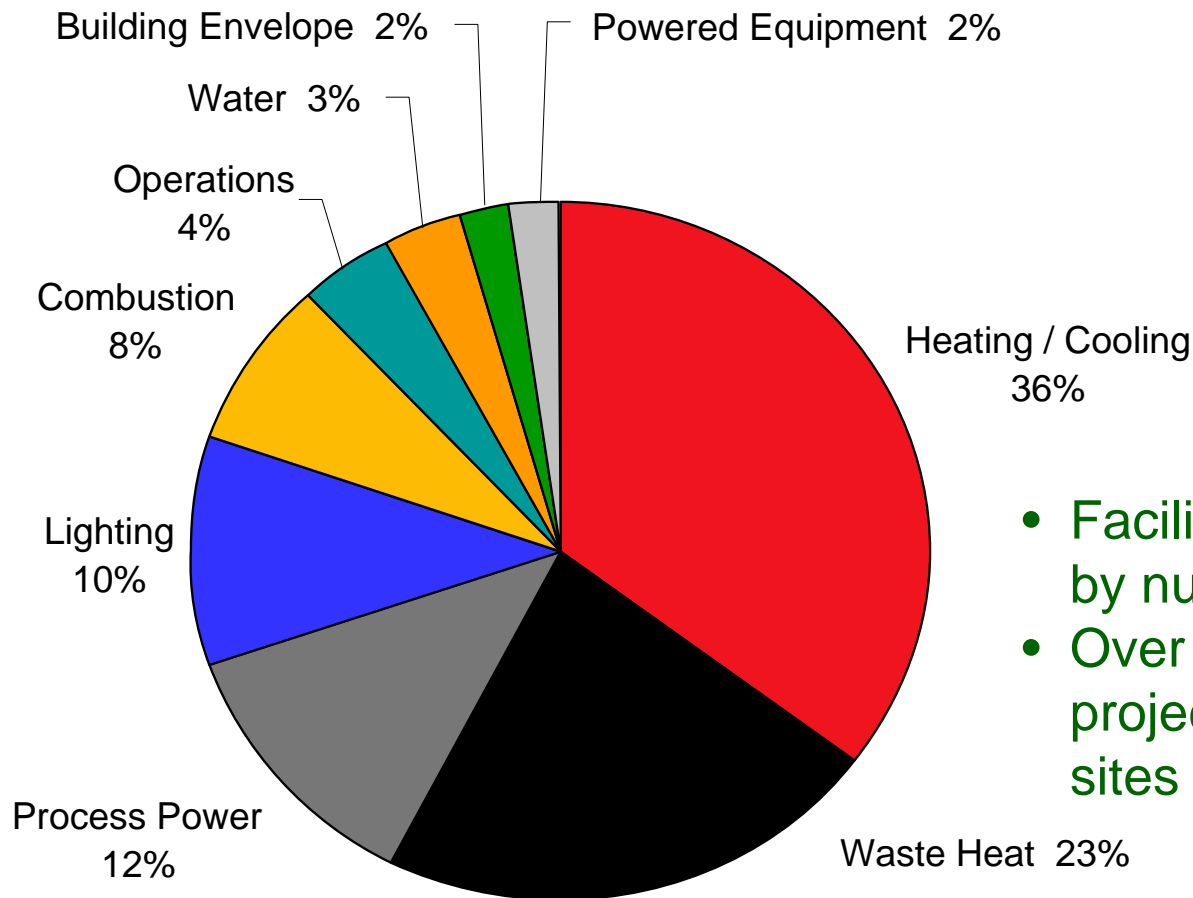
# Assessing Opportunities By Intensity vs Energy Use





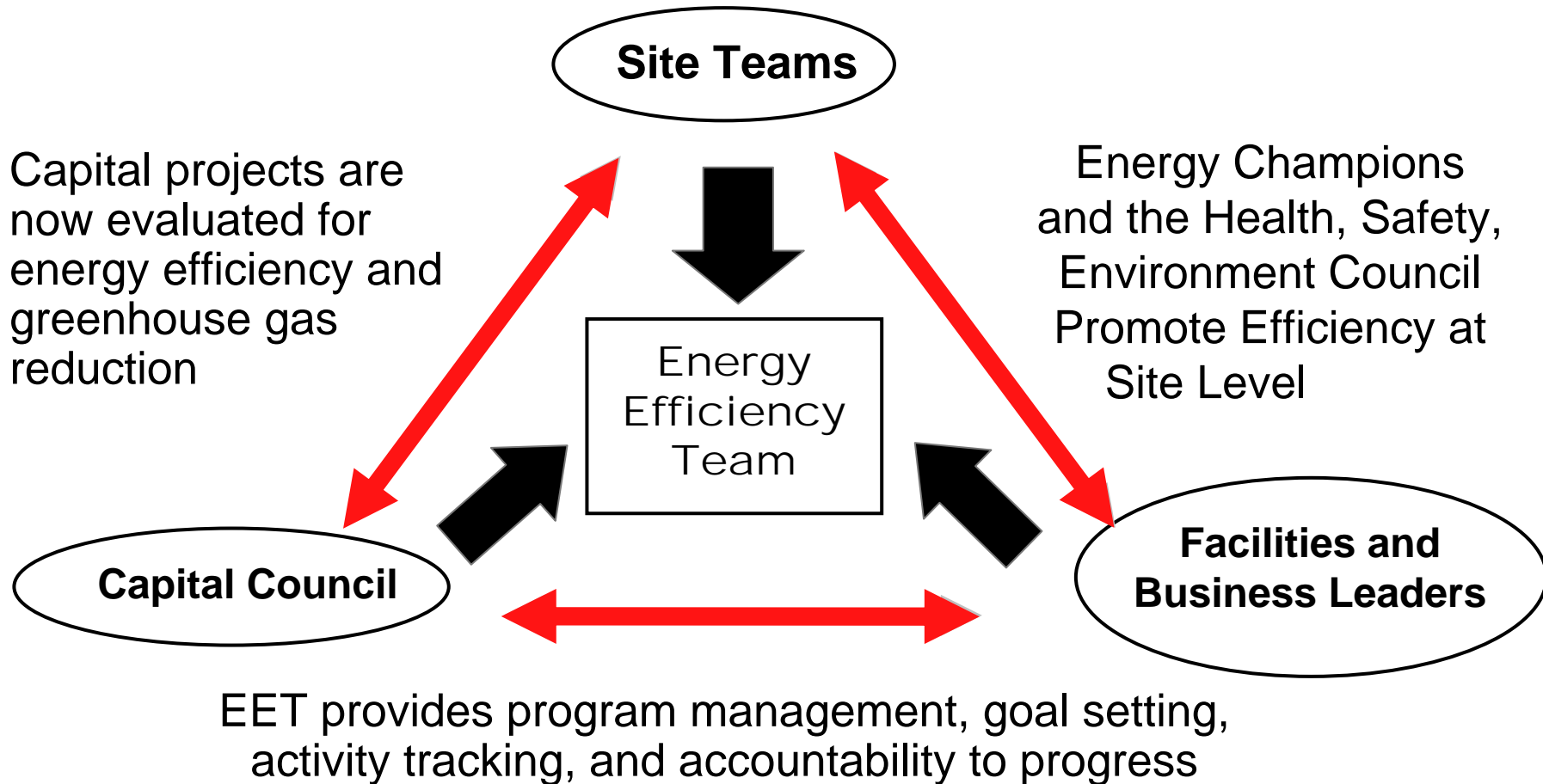
# Energy Efficiency Assessments

Create “hopper” of investment opportunities



- Facility infrastructure projects by number
- Over 1000 viable capital projects defined at largest 20 sites

# Teamwork for Energy Efficiency



Cummins Facilities Improvement Team (CFIT) is a new, active council  
Facilities developing and acting on three year strategic plan

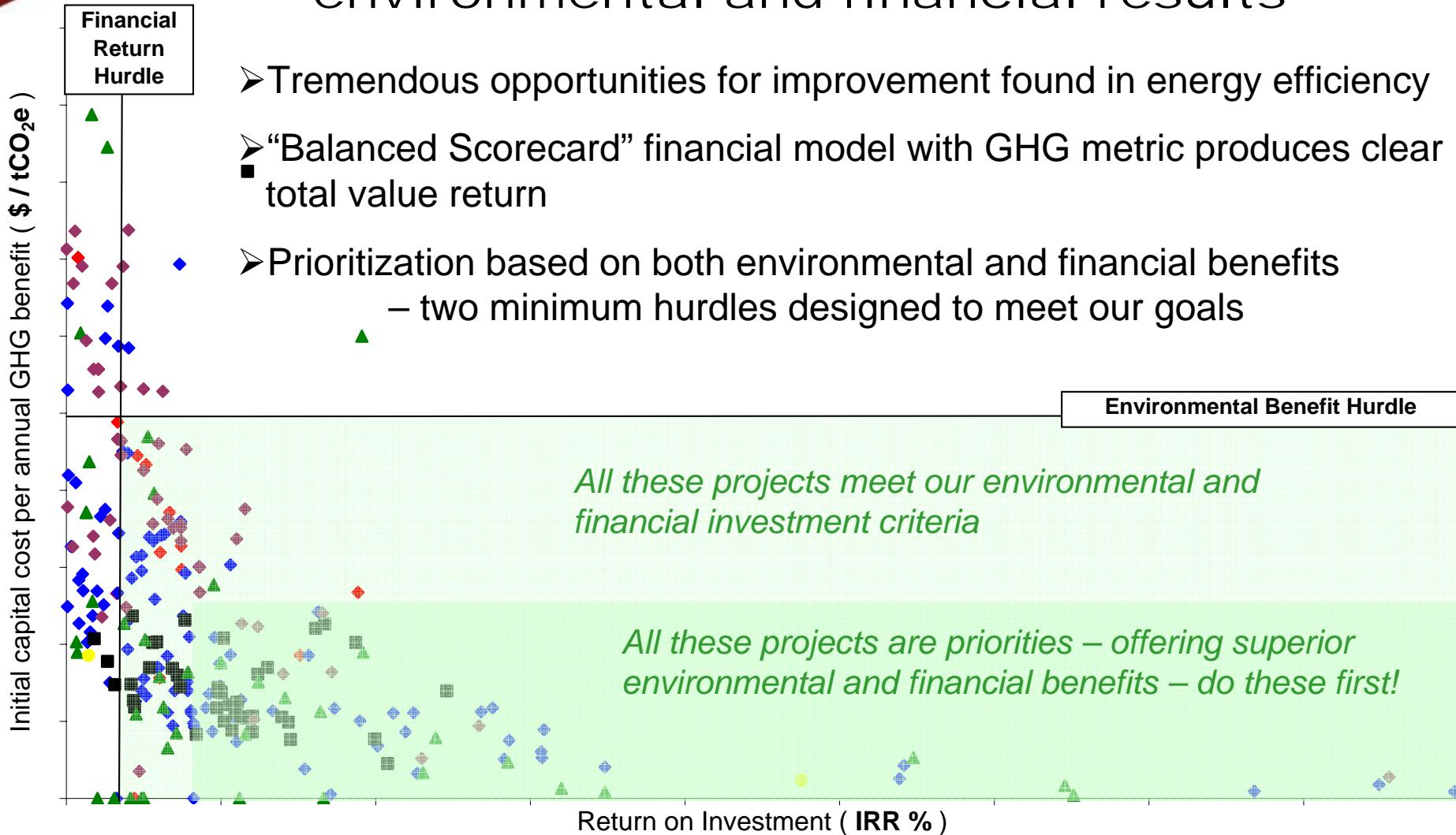


# Financial Valuation and Prioritization

- Cummins pioneers “sustainable capital planning”
  - Standard capital evaluation tool has “**Energy & Environment**” section added
  - Calculates energy use, costs, and GHG footprint for every investment
  - Includes financial valuation for CO<sub>2</sub> impact
  
- Tool enables our prioritization of energy efficiency investments
  - Prioritize by IRR and GHG cost/benefit
  - Investment rule for % return, initial \$ per annual CO<sub>2</sub>

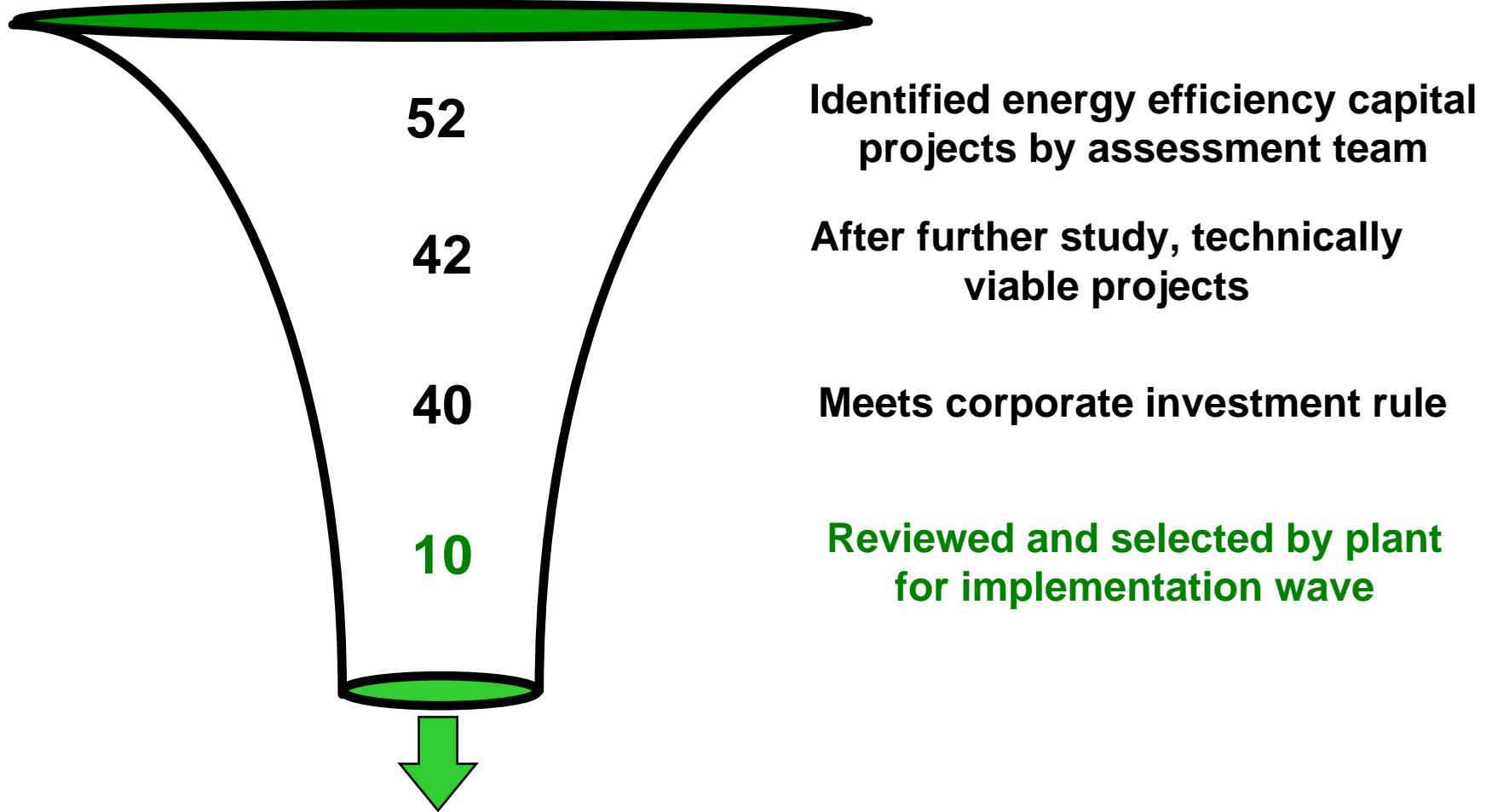
# Data Mining Assessments for best environmental and financial results

- Tremendous opportunities for improvement found in energy efficiency
- “Balanced Scorecard” financial model with GHG metric produces clear total value return
- Prioritization based on both environmental and financial benefits
  - two minimum hurdles designed to meet our goals



◆ COMBUST  
 ◆ HVAC  
 ■ LIGHT  
 ▲ PROC  
 ◆ WH  
 ● POWEQ

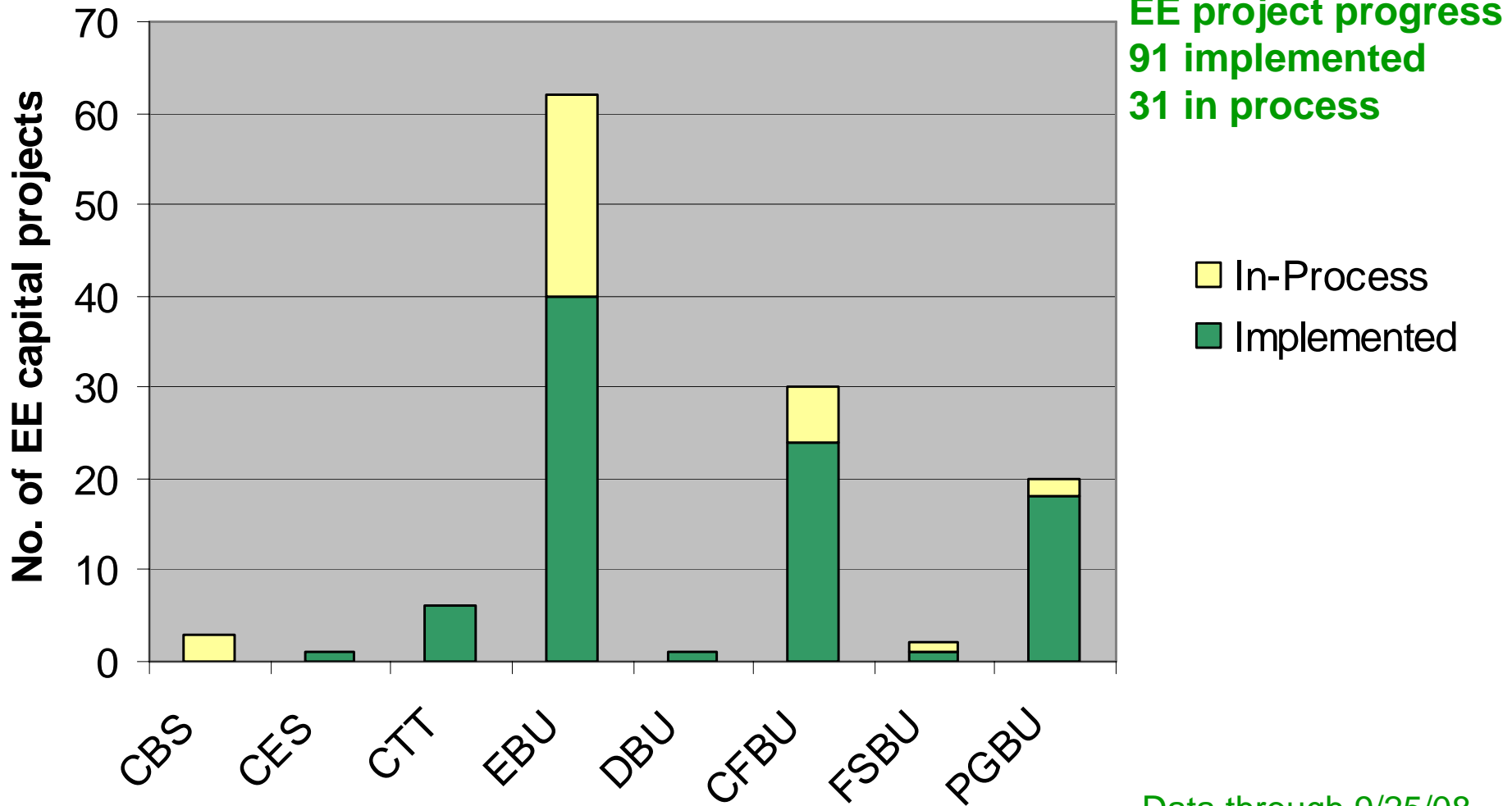
# Example Site Energy Efficiency Assessment/Prioritization



**Positive financial return, meeting 25% reduction goal**

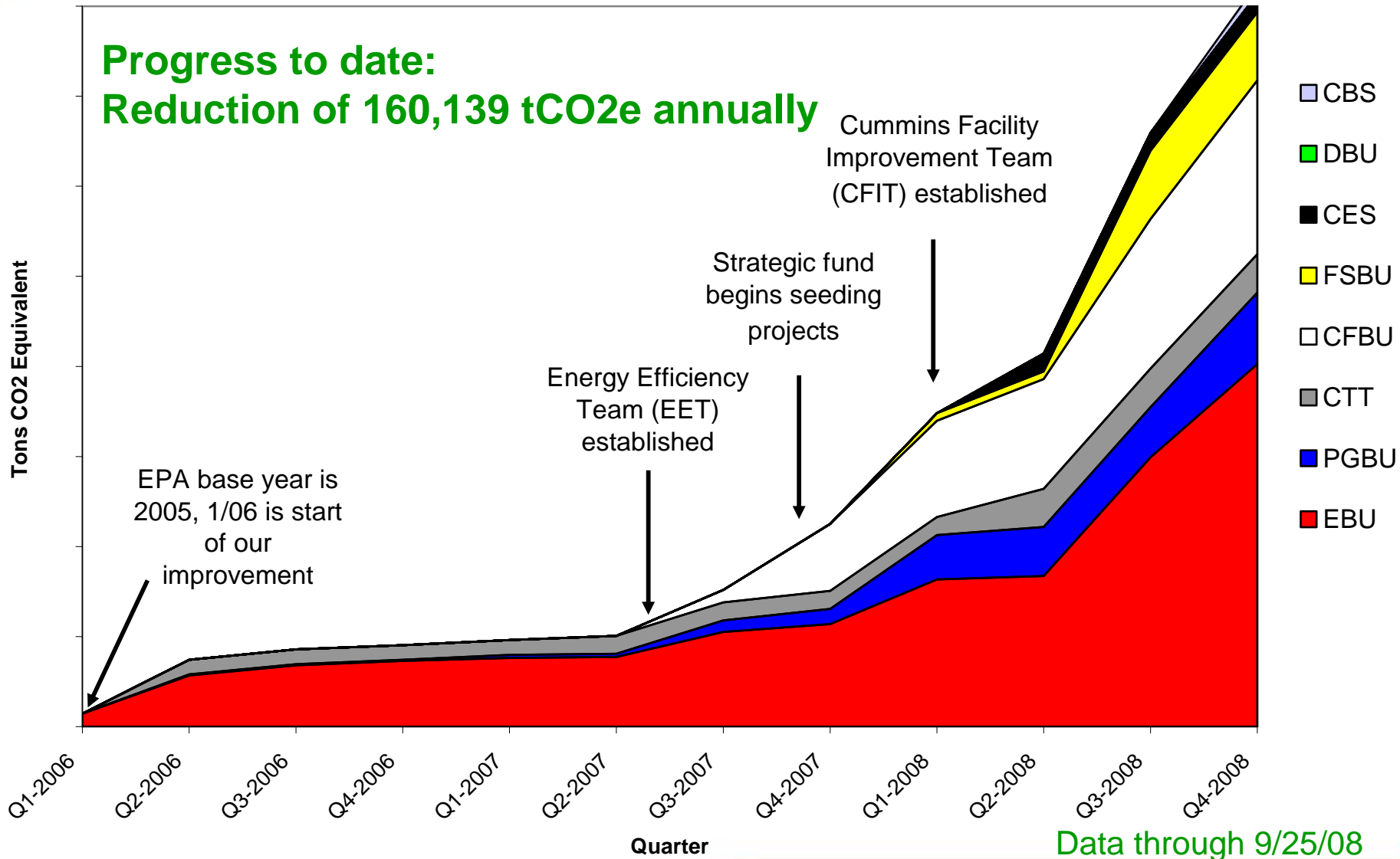


# EE projects by Business Area - numbers



Data through 9/25/08

# GHG Improvement from Energy Efficiency Projects



# Closing the Loop – Ongoing Environmental Metrics

EPA CLP performance based on total actual emissions

- Tracking improvements only gives part of story

Opportunity for Global Environmental Metrics System

- Automatic ongoing collection of Energy plus other HSE metrics
- Six Sigma project for Global Seamless web based system
- Collects/validates environmental metrics at all consolidated sites
- System automatically calculates metrics, reports results, provides online “dashboard” to our HSE and plant leaders

Cummins Enablon System implementation on track

- System operational Q4 2008, scope to be 233 sites worldwide reporting in 2007



**enablon**

Software Solutions for Governance, Risk and Compliance

# Organizational Development and Employee Engagement



# Energy Champion Site Role

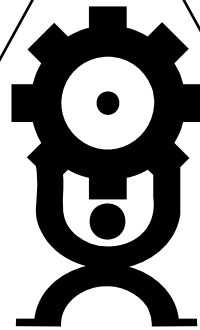
## Bridges Energy Efficiency Gap Between Facilities and Operations

### Energy Champion

Facility Leader supports and trains the site's Energy Leaders

One EC per site

Helps develop ideas and evangelizes them to facilities and capital improvement groups.



### Energy Leaders

Operations Team Member  
One on each Ops team  
(by area/shift)

Amended/new rep role

Educate local team on EE and sustainability

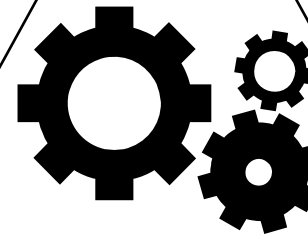
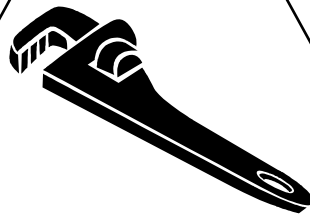
Lead low/no cost local projects

“power down” concept

Interface  
between CMI  
GHG Strategy  
Operations and  
Facilities

### Knowledge Base

Local Energy Provider,  
Energy Champion Training,  
BU Energy Leader,  
Finance, Manufacturing,  
Etc.





# The Cummins 7 Energy Themes



**Power  
Management**



**Lighting**



**Building  
Envelope**



**Heating &  
Cooling**



**Machinery &  
Equipment**



**Fuel Usage**



**Energy  
Recovery**





# First Chairman's Award for Energy Efficiency

“Daylight Harvesting” lighting and plant-wide EE improvements  
Cummins Parts & Service, San Luis Potosi, Mexico



Net savings of 570 tCO<sub>2</sub>e  
equivalent to removing 104 automobiles each year

# First Chairman's Award for Sustainable Building Practices



First site built to Cummins new building standards with many sustainable and energy efficient features  
Power Generation Plant, Ranjangaon, India



Green  
over ca

# Summary



**Climate Stewardship** - a Cummins core value

**GHG Reduction** - 25% intensity reduction by 2010

## **Planning for Success**

- GHG Inventory was journey of discovery
- Energy Efficiency assessments created three year investment plan
- Experience to date show high financial and environmental payback

## **Organizational Development and Employee Engagement**

- Broad network of people now involved, improvement efforts building
- Energy fairs, Energy Leader and Energy Champion training program to increase engagement company-wide

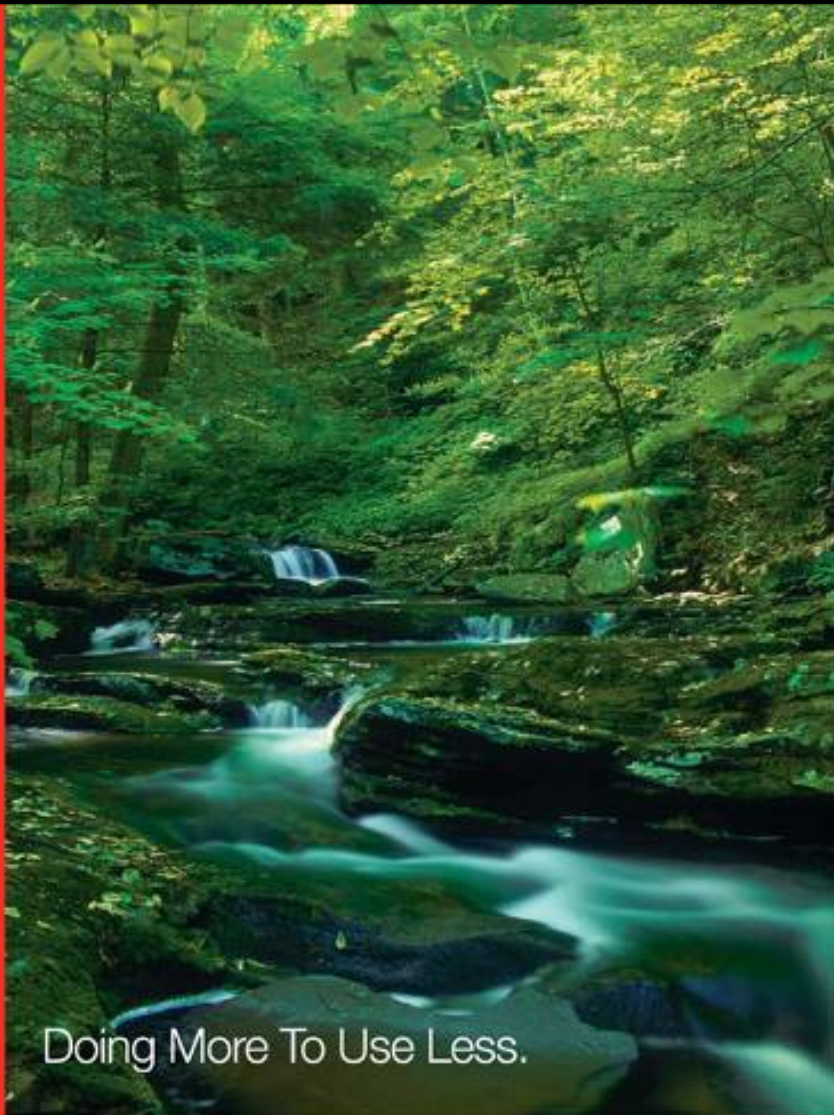
# Interested in Seeing More?



Attend the EPA Tour this afternoon at the **Chicago Museum of Science & Industry**, highlighting a **Cummins Combined Heat-and-Power (CHP)** system

- 1.75 MW cogeneration system featuring a Cummins Power Generation lean-burn gas generator set, heat recovery boiler and desiccant dehumidifier
- Provides the museum electricity, heating/cooling and domestic hot water
- High fuel efficiency, low emissions and high specific heat output





Doing More To Use Less.

Dependable.

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auctoritatibus invident doleat magna aliquam erat volutpat.



# Thank You!

