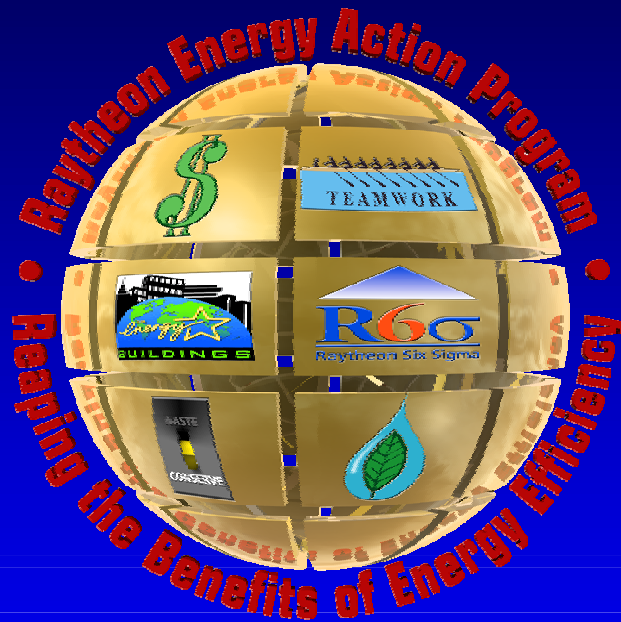


Raytheon's Energy Star Partnership



Climate Leaders Partner Meeting

Farmington, Connecticut

October 6, 2004

Raytheon's Vision

Be the most admired defense and aerospace systems supplier through world-class people and technology.



Raytheon ... Who We Serve

- U.S. Government
 - Defense
 - Commerce
 - Energy
 - State
 - Transportation
 - Education
 - Homeland Security
 - NASA
- Governments around the World
- NATO
- National Science Foundation



Superior Customer Solutions

Background

- Raytheon has had a strong energy program since the early 1970's
- Joined Energy Star Partnership in late 1999
 - C3I business pilot in 2000, company wide program in 2001
 - 2001 Honorable Mention Award
 - 2003 Partner of the Year Award
- Joined Climate Leaders Partnership in early 2003



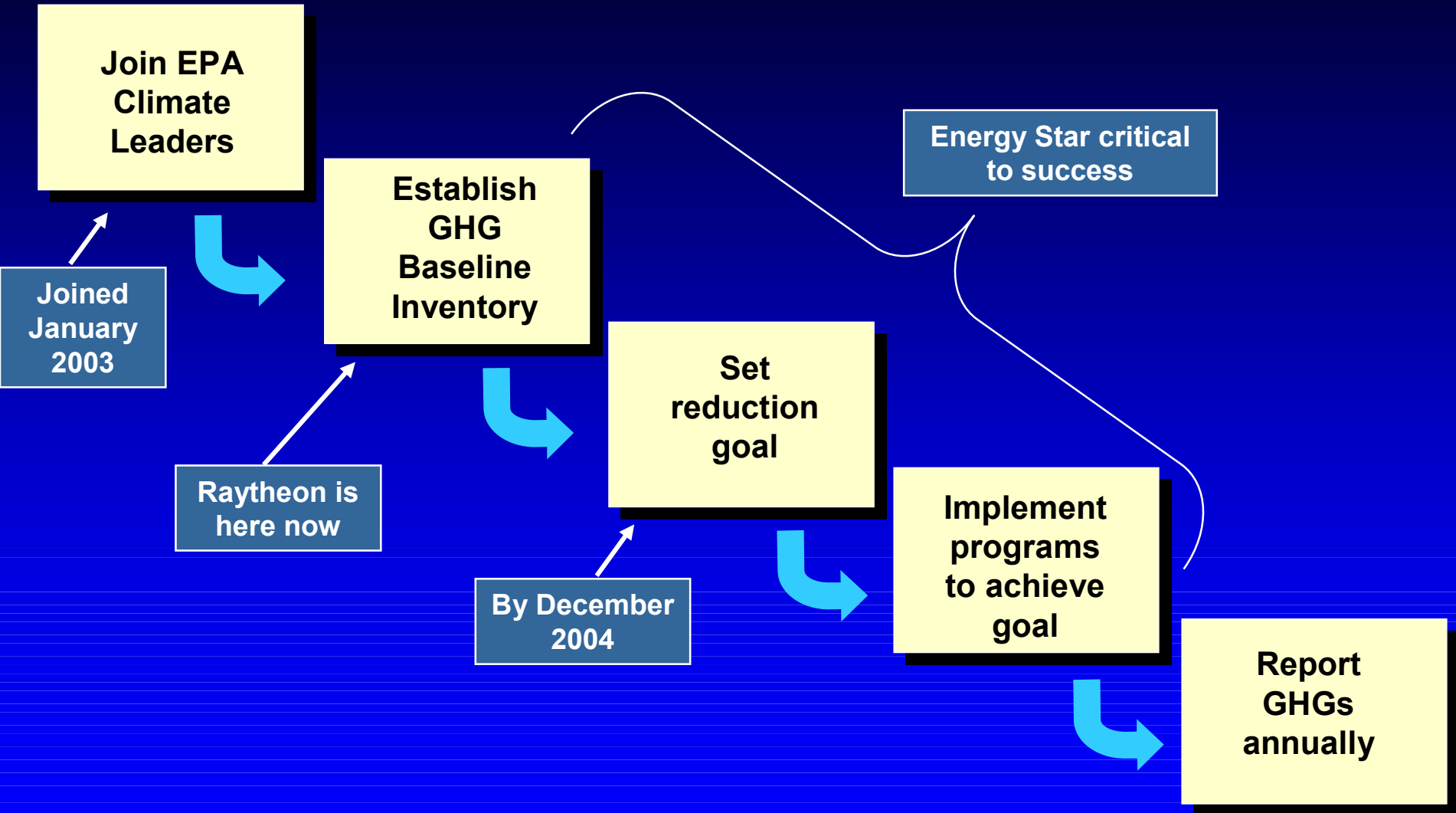
Managed by Raytheon's Facilities Leadership Council (FLC)



Managed by Raytheon's Environmental, Health and Safety (EHS) Organization

FLC and EHS work jointly to meet goals of both programs

Climate Leaders Program Steps



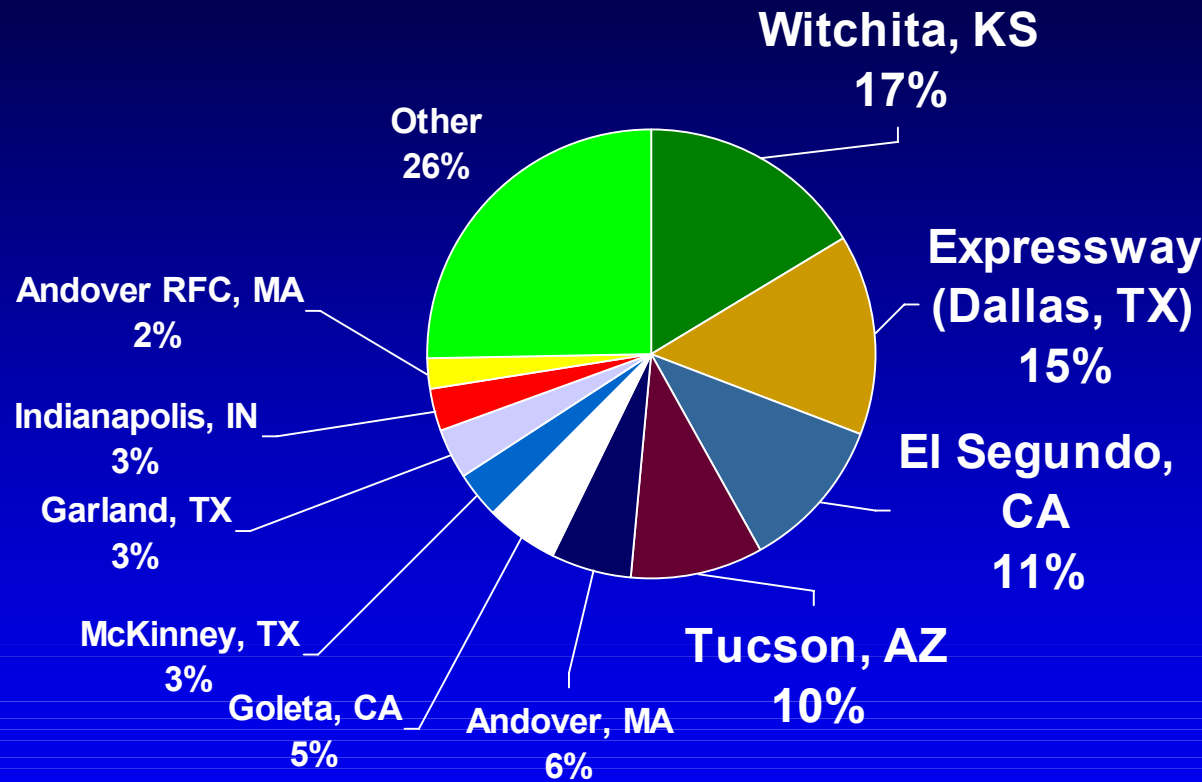
Objective: Reduce Greenhouse Gases

Sources of GHGs

GHG Sources	Estimated % of Raytheon's GHG inventory	
1. Electricity purchases	Approx. 75%	} 85% energy
2. On-site fuel consumption	Approx. 10%	
3. Mobile sources	Approx. 10%	
4. Industrial processes	Approx. 1 - 2%	} Not material
5. Air conditioning & refrigeration equipment	Approx. 1 - 2%	

Most of Raytheon's GHGs are From Energy

Top Energy-Using Sites



- 52% of energy generated by 4 sites
- 75% of energy generated by 10 sites

Five Year Goals



- Preliminary goal established in 2003: 10% reduction by 2007 (BTU per Square Feet)
- Each business unit evaluating individual goals
- Final goal will roll up business unit goals

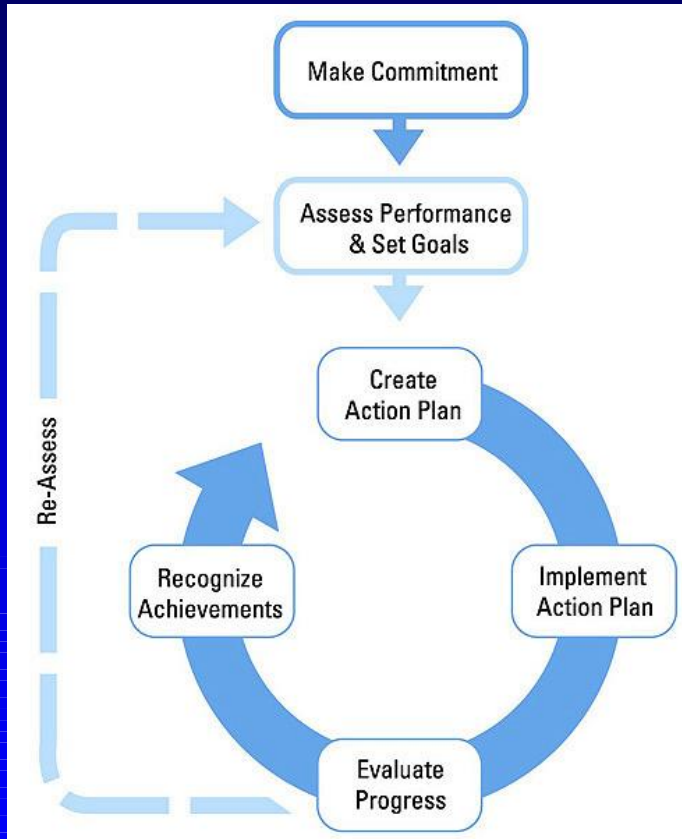


- 2002 baseline almost established (non-energy emissions data being compiled)
- Normalization factors being evaluated
- GHG goal to be submitted by end of 2004
 - *Energy accounts for 85% of GHG emissions*

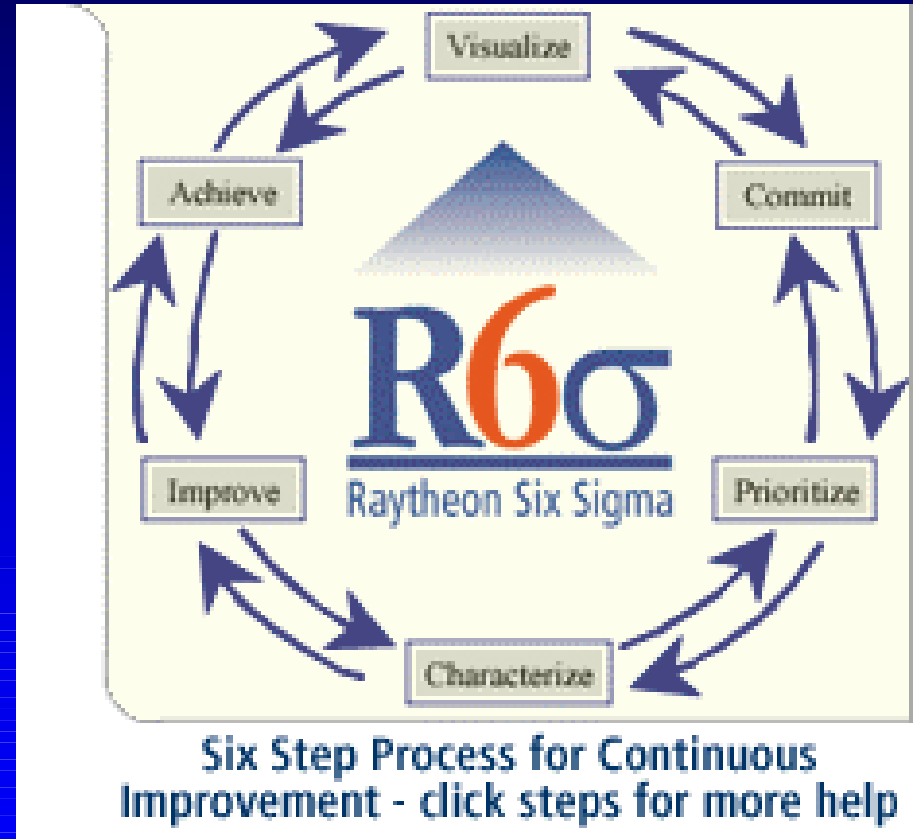
Goals of each program closely linked

REAP Strategy

Energy Star Guidelines



Raytheon Six Sigma




Continuous Improvement is the objective!

Results To Date

Energy Conservation Initiatives:

<u>Year</u>	<u>Savings (million KWH)</u>	<u>Avoided Emissions (tons)</u>
2000	4.9	14,000
2001	36.3	104,400
2002	26.1	83,000
<u>2003</u>	<u>23.7</u>	<u>70,500</u>
Total	91.3	271,900



Equal to
adding 11,531
Zero Emission
Vehicles to U.S.
roads

Five Year Goal - Initial results:

- 2002 Baseline: 200 kBTU per SF
- 2003 Result: 195 kBTU per SF
or 2.5% reduction from baseline

Good start towards long-term goal

Benchmarking

- Participate in annual Balderson & Guthrie, IFMA surveys
 - Portfolio of buildings varies widely, though mostly manufacturing
- Most Raytheon facilities are hybrids (office, lab, manufacturing)
 - Cannot receive Energy Star label since no category established
- Partner in voluntary EPA/DOE Labs 21 Initiative
 - Labs can be very energy intensive, particularly clean rooms
 - Attempting to group like industries
- Energy Star Leaders
 - Allows partners to benchmark facilities against self over time
 - Utilize Portfolio Manager, web based tool
- Best Practices – Another way to benchmark
 - Johnson & Johnson Best Practices spreadsheets
 - Workspace specific lighting
 - Retrocommissioning, building modeling

Lots of ways to keep up with competition

Lessons Learned

- **Start small, think big**
- **Need both top-down and bottoms-up approach to be successful**
- **Culture change needed to make significant impact (like recycling)**
- **Find normalization factors to help demonstrate accomplishments**
- **Facilities and EHS organizations must work closely together**

Questions?

Raytheon

Customer Success Is Our Mission

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