



Pfizer Inc

Climate Change and Energy Program

Christine M. Visnic
Director, Air Network and Interim
Director, Climate Change
and Energy
Pfizer Global EHS Operations

The 2007 New Jersey Clean
Energy Conference
New Brunswick, New Jersey
September 28, 2007

Overview of Presentation

- Pfizer Inc: Who We Are
- Why Pfizer Has a Climate Change and Energy Program
- What Pfizer is Doing: Our Program
- Opportunities to Drive More Energy Savings Measures and Technologies
- Challenges

Pfizer Inc - Background

Company Profile

- Founded 1849 in Brooklyn, New York
- Headquartered in New York City
- Nine (9) Pfizer drugs exceeding \$1 Billion in sales (2006)
- World's largest-selling medicine, Lipitor, to lower cholesterol
- Revenue \$48.4 billion (2006)

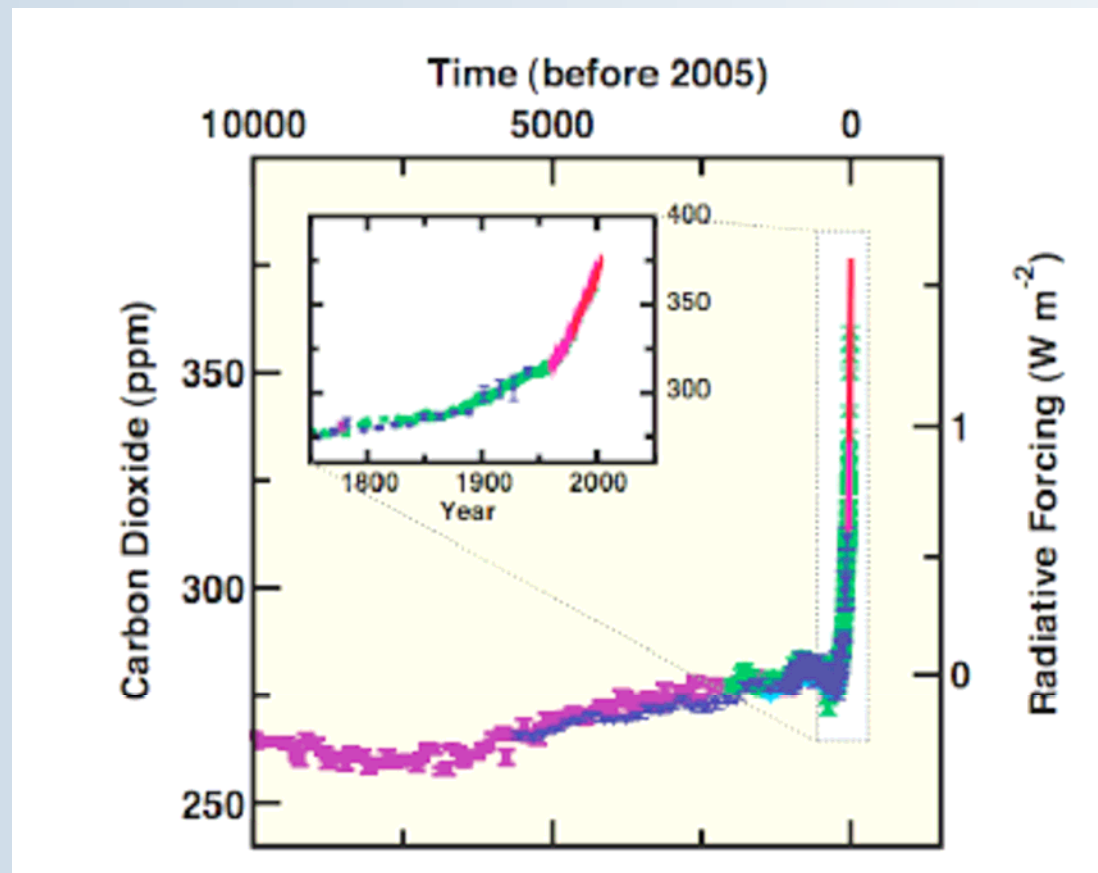
Global Scale

- World's largest pharmaceutical company
- Operations in 150 countries
- 106,000 employees worldwide (2005)
- 8 State-of-art R&D campuses
- \$7.6 billion in R&D (2006)
- 60 manufacturing facilities in 30 countries

Why Pfizer Has a Climate Change and Energy Program

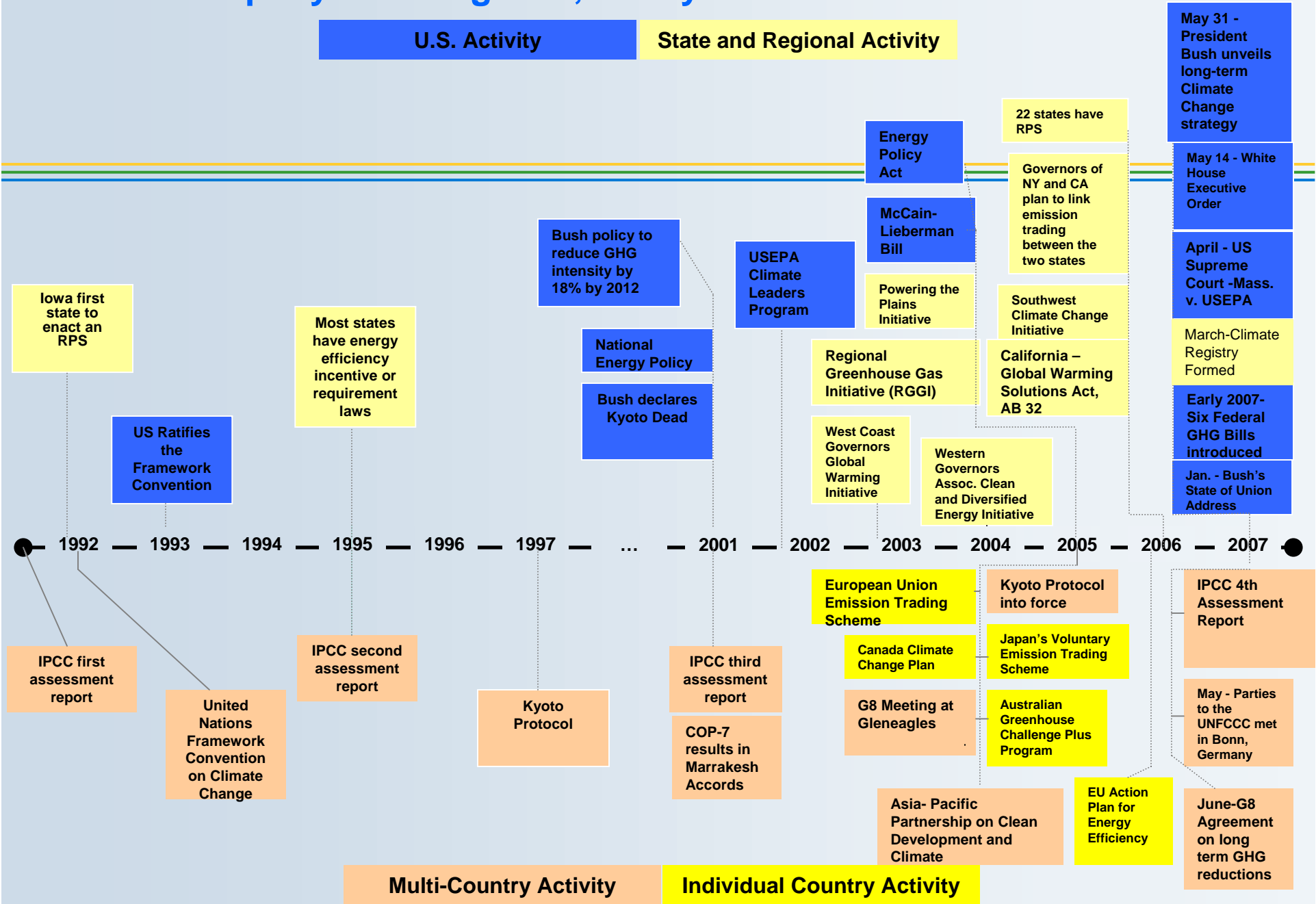
- Pfizer is a science-based company, and we recognize that man's activities are contributing to Climate Change
- As a leading health care company, we are concerned that Climate Change has the potential to adversely impact the health of hundreds of millions of people around the world
- The law in this area is evolving rapidly and presents both opportunities and risks
- Pfizer believes that energy efficiency improvements offer significant cost savings opportunities, which can be enhanced by factoring in the worth of carbon

Science: Changing Atmospheric CO₂ Concentrations



Source: IPCC, 2007

Rapidly Evolving Law, Policy and Initiatives



Pfizer's Climate Change and Energy Program - Program Objectives

- The **Program** is aimed at:
 - Reducing Pfizer's GHG emissions
 - Minimizing the cost and operational restrictions arising from a carbon constrained environment
 - Preparing for business and operational impacts resulting from physical changes caused by a warming global climate

Pfizer's Climate Change and Energy Program - Demand Side Management

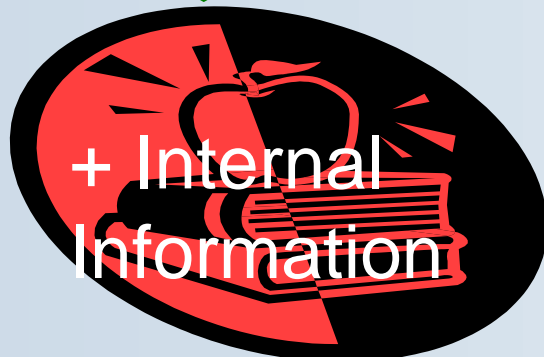
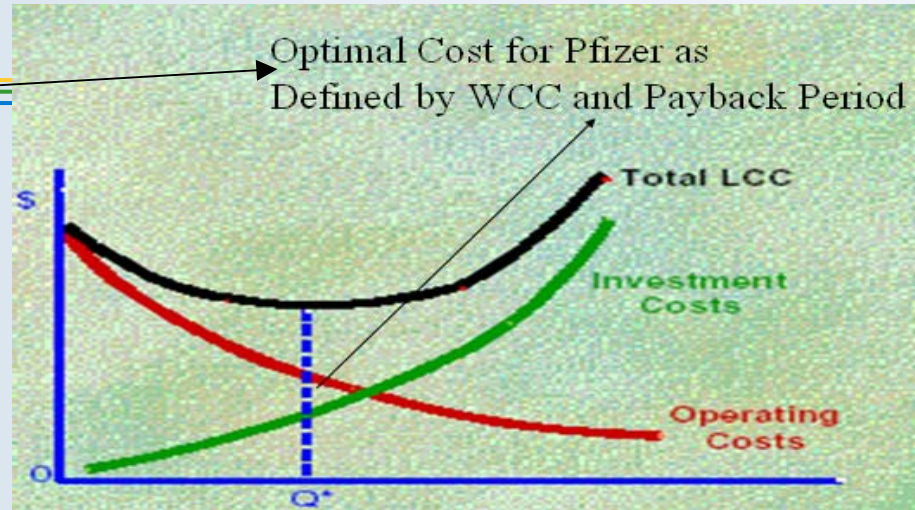
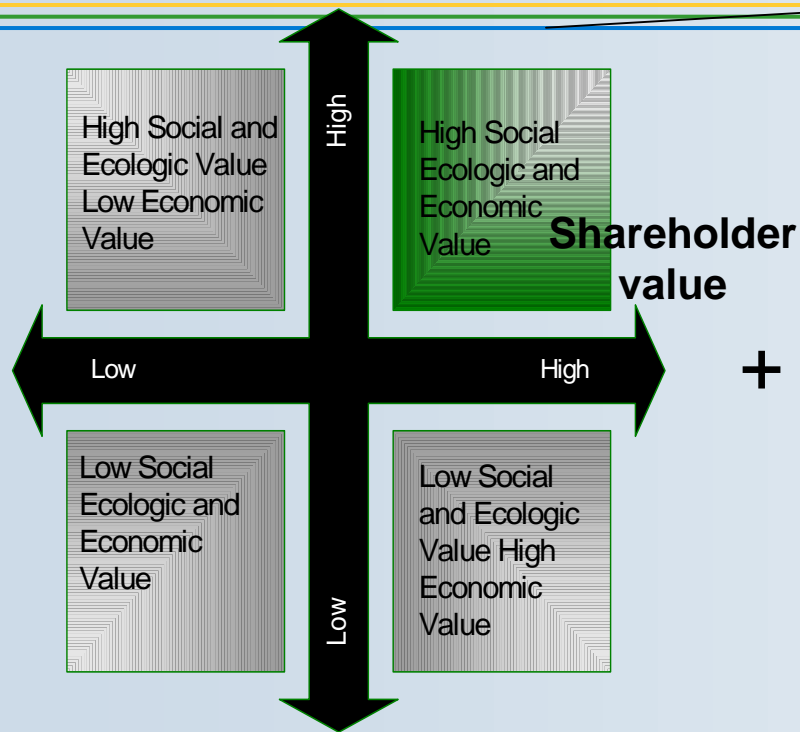
- Reduction of Energy Use through **Demand Side Management**:
 - Energy Conservation Guideline since 1996 with energy audits required and performed at most facilities
 - Guidance and tools for reducing demand provided on an internal climate change and energy website
 - Corporate support (Director of Climate Change and Energy) and coordination of regional energy teams and conservation projects
 - Worldwide tracking of energy use and GHG emissions (using WRI GHG Protocol)
 - Established corporate goal to reduce GHG emissions by 35% per million dollars of sales by 2007 from base year 2000.

Pfizer's Climate Change and Energy Program - Demand Side Projects

- Categories of Energy Projects
 - Green Building Program
 - Utility optimization
 - Re-lighting, HVAC optimization (significant effort in R&D labs and research space)
 - Process Optimization:
 - Lean Manufacturing and Continuous Processing
 - Green Chemistry

Internal Green Building Program

Social and ecological value



=



St Louis New Lab Base Case



Design Outcome

1st Cost:

**--\$905k avoidance
+250k optimization**

\$2.1 MM/ yr. Energy Cost

32,600 MT CO₂ GHG E/ yr.

**1,920,000 lbs of
Construction Waste**

623,350 gallons H₂O/yr

**Materials with high VOC
and low recycle content**

\$1.6 MM/ yr. Energy Cost

**25,754 MT CO₂ GHG E/ yr.
reduction = 878 households
of electricity not consumed or
1481 cars not driven annually**

**≤ 960,000 lbs of
Construction Waste**

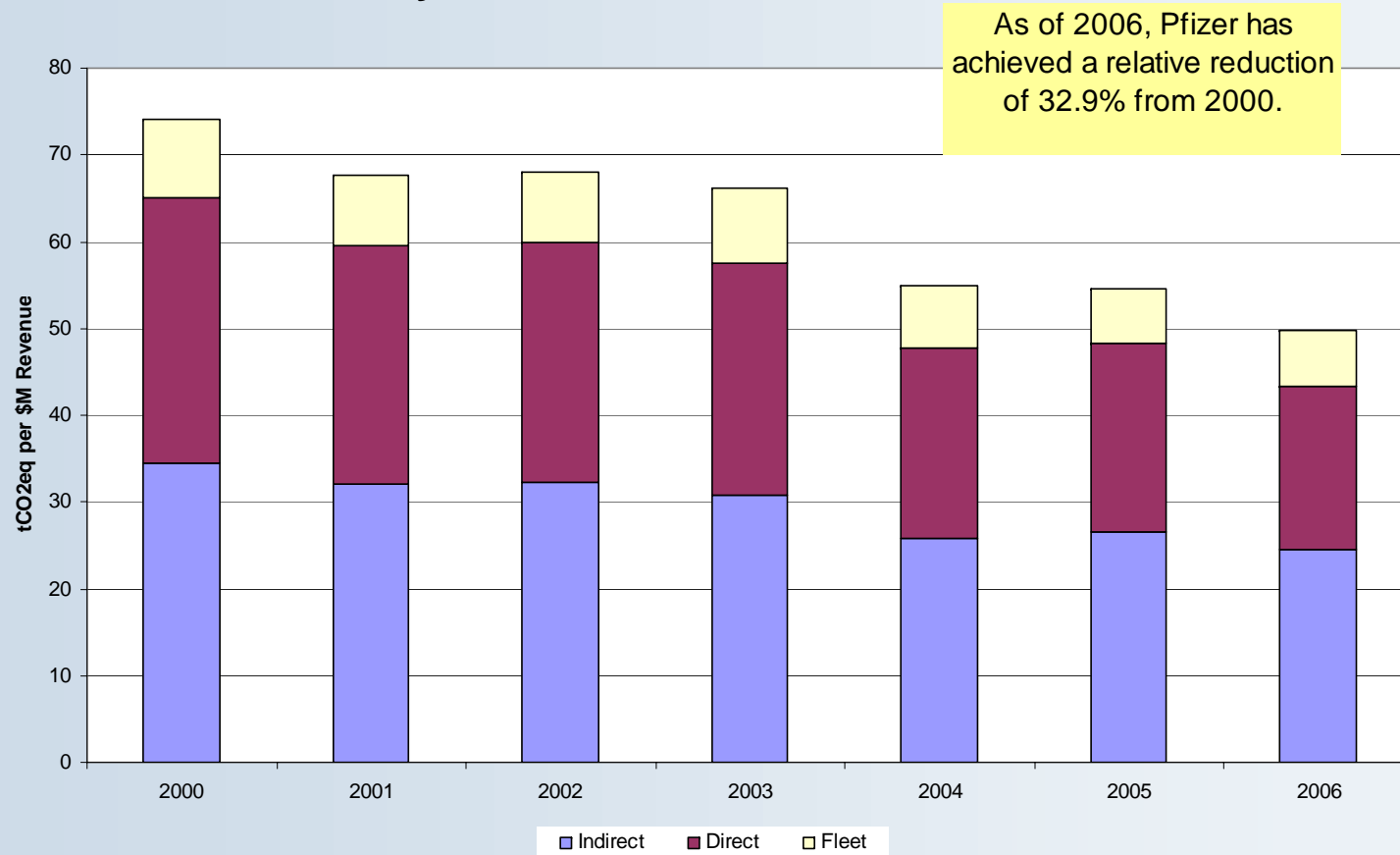
447,850 gallons H₂O/yr

**Materials with low VOC
and high recycle content**



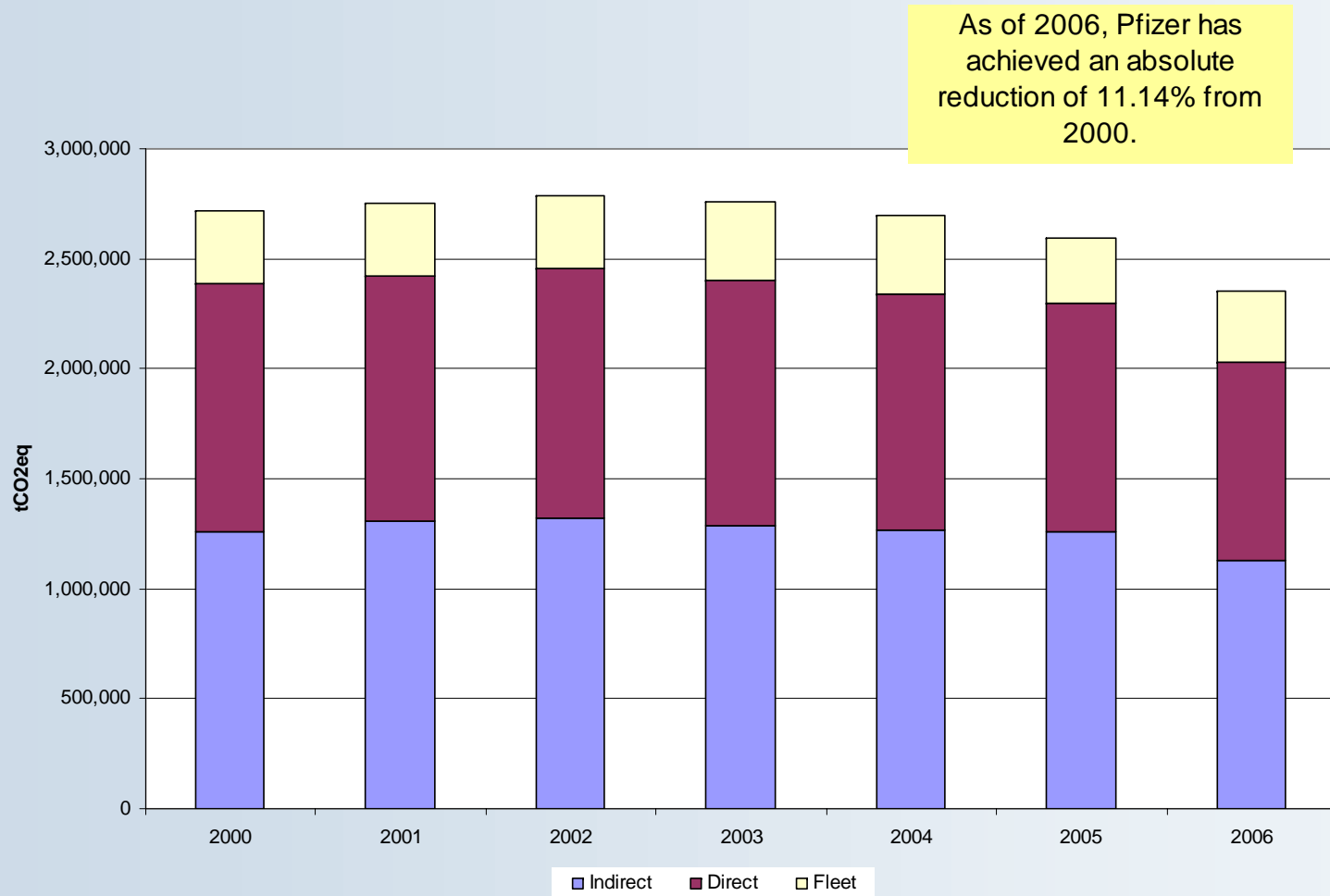
Pfizer's Climate Change and Energy Program - GHG Reduction Goal

Public Goal: To reduce GHG emissions by 35% per million a\$ of sales by 2007 from the baseline year 2000.



As of: 4-30-07

Pfizer's Climate Change and Energy Program- GHG Absolute Reductions

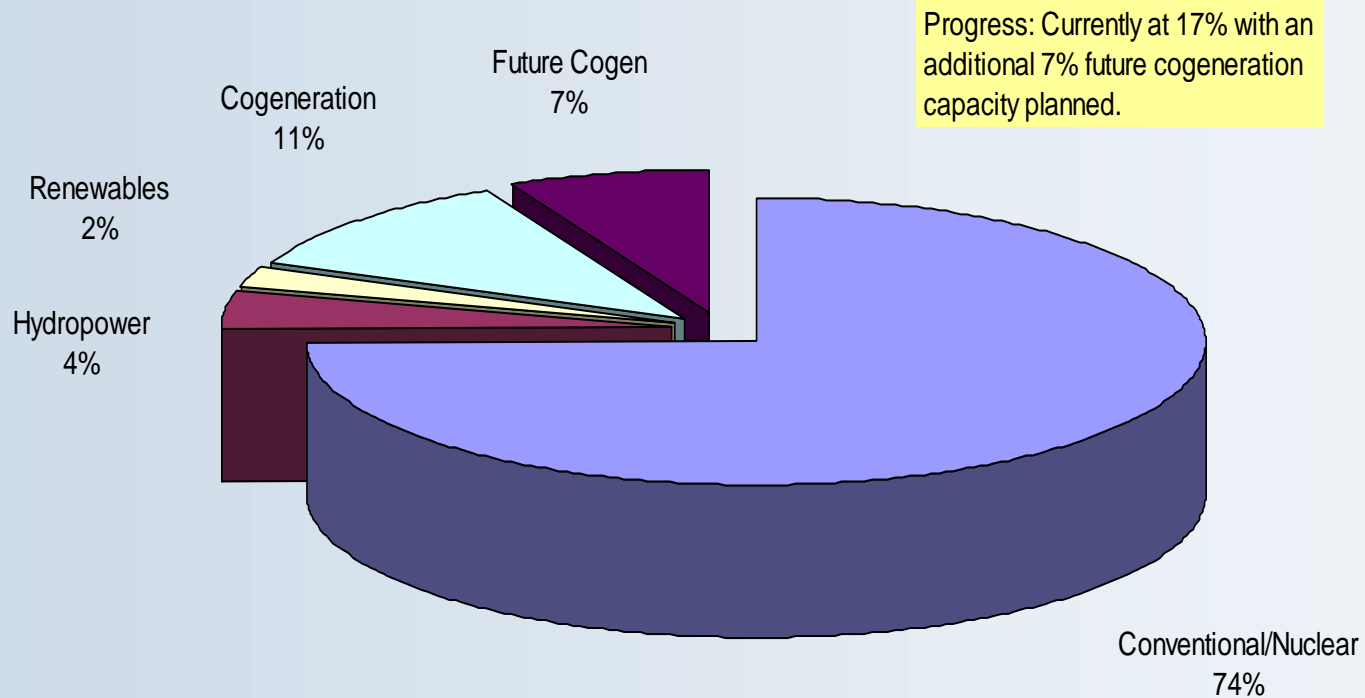


Pfizer's Climate Change and Energy Program - Supply Side Management

- Reduction of Energy from Fossil Fuels through **Supply Side Management:**
 - Development of guidance and tools for the procurement of clean energy
 - Support of clean energy projects at facilities including co-generation and photovoltaic cell use
 - Establishment of and monitoring progress of company wide goal to increase use of clean energy
 - Meet 35% of electricity needs by 2010 through the use of "clean" energy technologies, such as co-generation and wind power

Pfizer's Climate Change and Energy Program - Clean Energy Goal Progress

Public Goal: To meet 35% of our global electricity needs by 2010 through "clean" energy sources (e.g., cogeneration, solar, or wind power).



Pfizer's Climate Change and Energy Program - Supply Side Projects

Project	Peak output	Status	Annual CO ₂ saving (tons)	Energy generated (MWh/year)
La Jolla, CA PV	240 kW	Commissioning	250	400
Sandwich, UK Wind		Early design	3262	6897
Vega Baja, PR CHP improvements		Recommended	2204	4800
Singapore CHP	5 MW	Operating	18367	40000
Groton, CT CHP	10 MW	Recommended	37626	79980
Puurs, Belgium CHP	2 MW	Approved	7200	15680
Brown Field Green Energy		Early evaluation		

Pfizer's Climate Change and Energy Program - Other Reduction Opportunities

- **Fleet Program**

- Working to reduce the impacts of our nearly 27,000 automobiles in North America and Europe
- Emissions represents approximately 10% of our CO₂ emissions
- Conducting a pilot project this year utilizing hybrid sales vehicles

- **Business Travel**

- Completed analysis of our footprint resulting from business travel
- GHG emissions associated with business travel is approximately 231,000 MT CO₂ per year or approx. 8 % of Pfizer's total
- Information is being used to identify reduction opportunities

Pfizer's Climate Change and Energy Program - Carbon Credits

- Management of financial implications and opportunities associated with energy reduction and climate change
 - Generating and securing energy credits including:
 - credits for early reduction
 - energy efficiency credits
 - renewable energy credits
 - Evaluating emission trading opportunities

Pfizer's Climate Change and Energy Program - Accomplishments

- Pfizer has implemented approximately 1,130 energy projects from 2000 through 2006 achieving an ongoing cumulative annual reduction of approximately 235,000 MTs CO₂
- \$30 million in annual savings, a portion of which represents recurring annual savings over the life of the project
- In 2006 alone, 417 conservation projects completed resulting in 69,000 MTs CO₂ reduction
- On track to meeting our Climate Leader's Public GHG Reduction Goal

Opportunities Presented by Domestic Programs

- **Electrical Energy Credits (EECs)**
- Connecticut and some other states as part of their Renewable Portfolio Standards (RPS) to require electric suppliers to secure a percentage of their supply from renewable sources. Includes the electricity savings created from conservation and load management programs.
 - Pfizer generated and sold EECs associated with energy efficiency project in New London, CT
- Assessing other opportunities to generate and sell EECs which potentially could fund marginal energy projects

Other Domestic Opportunities

- **Energy Policy Act of 2005**
 - ***Energy Efficiency Project Incentives:***
 - Includes various tax deductions for commercial buildings. Up to \$1.80 per square foot of building floor area for buildings that achieve a 50% energy savings target.
 - ***Renewable Energy Incentives:***
 - Provides a federal solar tax credit, a business energy tax credit for installation and activation of solar systems between Jan. 1, 2006 and Dec. 31, 2007.

Some Potentially Available State Renewable Energy Incentives

- Connecticut
 - State grants for Clean Energy Projects (Public Act 98-28)
 - Property tax adjustments for property with solar energy systems (Conn. Gen. Stat. Section 12-81(52))
 - Recently enacted amendments to State Energy Act- additional grants and rebates for energy efficiency projects
- California
 - California Solar Initiative- incentives for solar energy systems
 - Emerging Renewables Rebate Program (ERRP)
- New York
 - Green Building Tax Credit (NY Tax Law Section 19 and 210(31))
 - Solar, wind energy system tax incentive (NY Real Property Tax Law Section 477a)
- New Jersey
 - Combine Heat and Power Program
 - Financing options

Challenges

- Carbon Trading Limitations – Carbon reductions at domestic facilities generally have little value because of limitations to trade with facilities in jurisdictions with trading schemes
- Many jurisdictions do not provide incentives for co-generation projects
- Patch-work of domestic requirements and initiatives is a huge internal human resource drain, and the complexity presented by multiple schemes inevitably leads to missed opportunities