



# Climate Change - DuPont's Commitment and Actions

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## Sustainable Growth Defined

**The Creation of Shareholder and Societal Value *while* Decreasing Environmental Footprint\*  
*along the value chains in which we operate.***

\* Footprint = injuries, illnesses, incidents, waste, emissions, and depletable forms of raw materials and energy

# 2010 Energy/Environment Goals

## Energy Efficiency

- Hold total energy use flat, 1990 through 2010

## Greenhouse Gas (GHG) Emissions

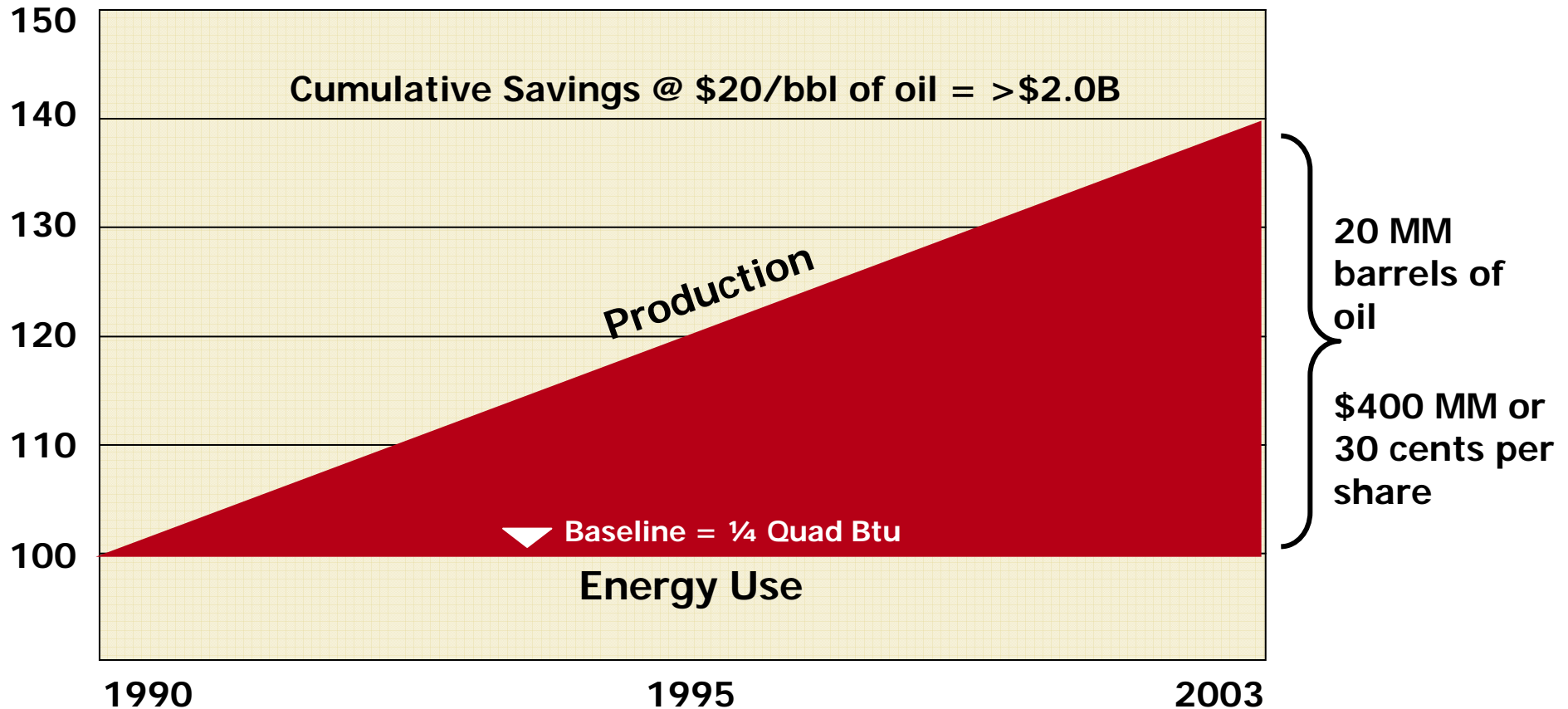
- Reduce GHG emissions by 65% (CO<sub>2</sub> equivalent basis) by 2010 vs. base year of 1990

## Renewable Energy

- Supply 10% of total DuPont energy needs from renewable resources at a cost competitive with best available fossil derived alternatives

# “Flat” Energy has Saved Real Money

In the decade of the 90’s, production grew by 35% while energy use remained flat



Energy efficiency improved due to portfolio changes, cogeneration, yield improvements, capacity utilization, better uptime and conservation measures.



# Good for Business

Energy costs saved > \$2.0 Billion

Waste and remediation costs reduced >\$250 Million per year

“Hidden” Capacity = hundreds of \$ Millions in reduced investment

Waste reduced = product sold

# Why the Focus on Energy Efficiency?

All sites will have energy efficiency opportunities

Energy efficiency opportunities will provide the greatest cost savings to DuPont among global warming initiatives

Energy use is the major driver of CO<sub>2</sub> emissions, NO<sub>x</sub>, SO<sub>x</sub> and CO

Our greatest need is to establish teams, goals, and COT's for energy efficiency at the SBU and site level

- Only a few sites will have GHG issues that are based on gases other than energy-related CO<sub>2</sub> (e.g., N<sub>2</sub>O and HFC's)

# What is the Challenge of “Flat” Absolute Energy Use?

Commitment is for flat energy use corporately

- Individual SBU use will vary but net use must be flat

Attaining the flat energy use goal will require energy efficiency improvements in **all** plants and businesses

This is a tough challenge because energy is broadly used and key to many of our businesses

However, we have some positive experience in improving energy efficiency over the last 10 years...

*The challenge is an attitude change - We must believe we can reduce energy consumption to help the environment and save money.*

# Energy Efficiency Goal

## Managing the Expectations of the SBU's

### SBU Benefits: Cost reduction and profitability

- In 2000, 60% of PO shortfall was due to higher gas prices
- Future price excursions are likely, with similar results
- 20% improvement in energy efficiency saves ~\$120MM/yr AT
- In the post-2010 decade, the savings from energy projects may increase by 25% due to reduced carbon fees

### Expectations of the SBU's for Energy Efficiency

- Drive site energy reduction programs through SBU COT's
- Report current energy use and forecast annual consumption through 2010 through the CEP process
- Participate in and leverage work through Corporate Asset Productivity and Energy Networks
- Identify and implement attractive energy efficiency projects using SBU capital or alternate funding mechanisms

# The Challenge Ahead

With 5 years to go, how are we doing?

Performance is currently on track (7% ahead today)

**Aggressive business growth targets over the next 5 years will challenge the flat energy use goal**

- One SBU forecasts production growth of 120% (2010 vs. 1990) **while holding energy growth to only 40%**
- A second SBU forecasts ~35% growth in energy use compared to 1990 if they maintain “business as usual”
- It is critical that all SBU’s develop equally valid forecasts of their production and energy use through 2010

**A critical question: Can we continue to grow without growing energy use?**

# Business Efforts on Energy Efficiency Goal

**The key to meeting the 2010 Energy Efficiency Goal will be to have strategies, performance commitments and leadership at the business (SBU) and site level**

- Sites are expected to drive energy efficiency improvements as an integral part of their business plan
- SBU's are expected to integrate energy goals with business planning and production forecasting

# DuPont's Public Commitment for Energy and Greenhouse Gas Reductions

- Announced in September, 1999 at the Pew Center Conference on Climate Change
- Reduce greenhouse gas emissions, CO<sub>2</sub> equivalent basis, by 65% by the year 2010 from a base year of 1990
- Hold energy flat on an absolute basis at 1990 levels through the year 2010.
- By the year 2010, provide 10% of global energy needs from renewable energy sources that are cost-competitive with fossil fuel alternatives.

# DuPont Engagement in Climate Change Initiatives

1994 – Partner, US EPA/DOE Climate Wise

1998 – Member, Pew Center on Global Climate Change

1998 – Contributor, WRI Greenhouse Gas Protocol

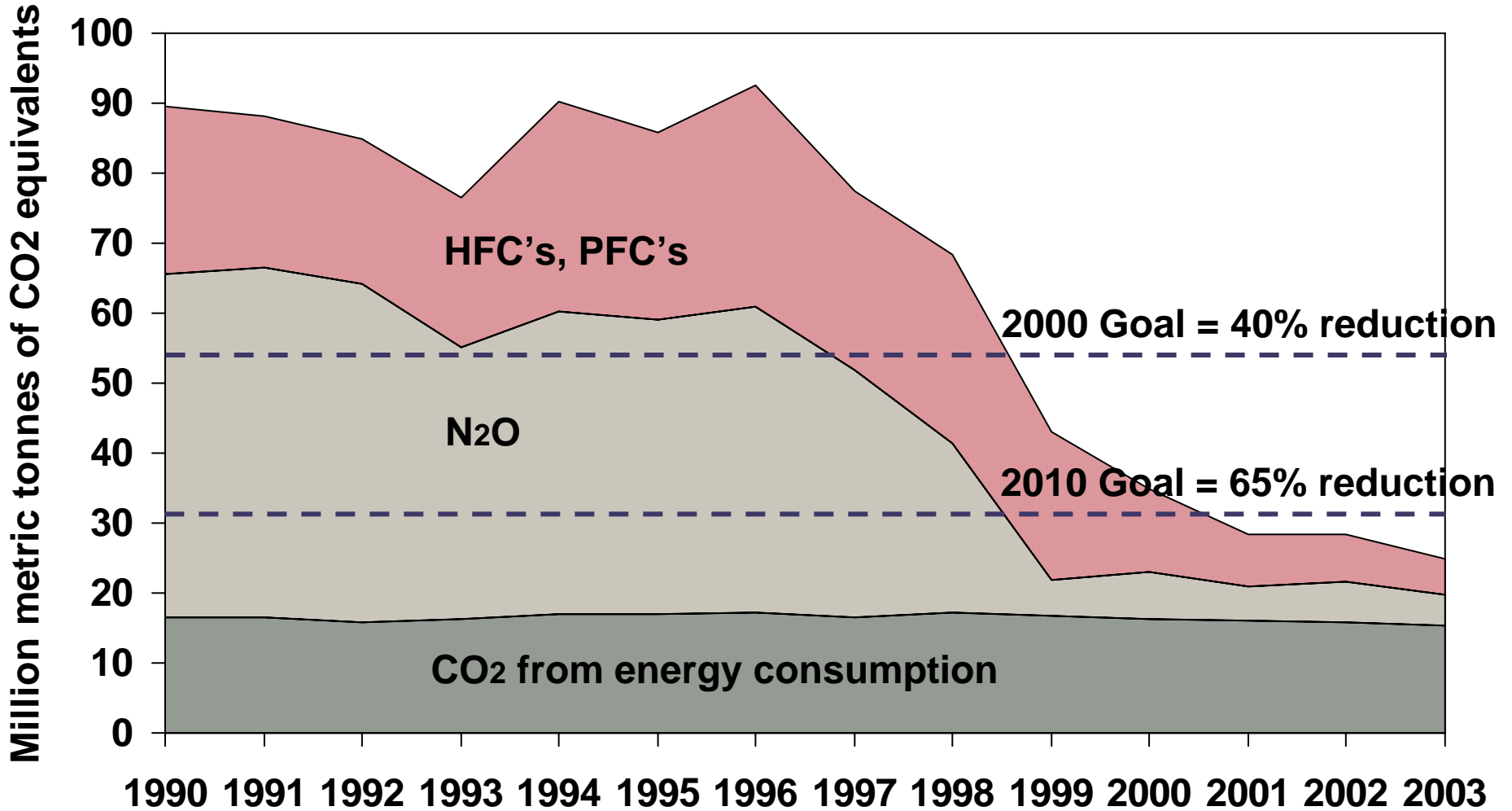
2000 – Member, ED Partnership for Climate Action

2000 – Member, WRI Green Power Market Development Group

2001 – Member, Business Roundtable Climate Resolve

2003 – Member, Chicago Climate Exchange

# Greenhouse Gas Reductions 1990 - 2003



## **DuPont Commitment: Reduce Greenhouse Gas Emissions 40% by 2000 from 1990 base**

**1990 baseline: 89 million tonnes CO<sub>2</sub> (globally)**

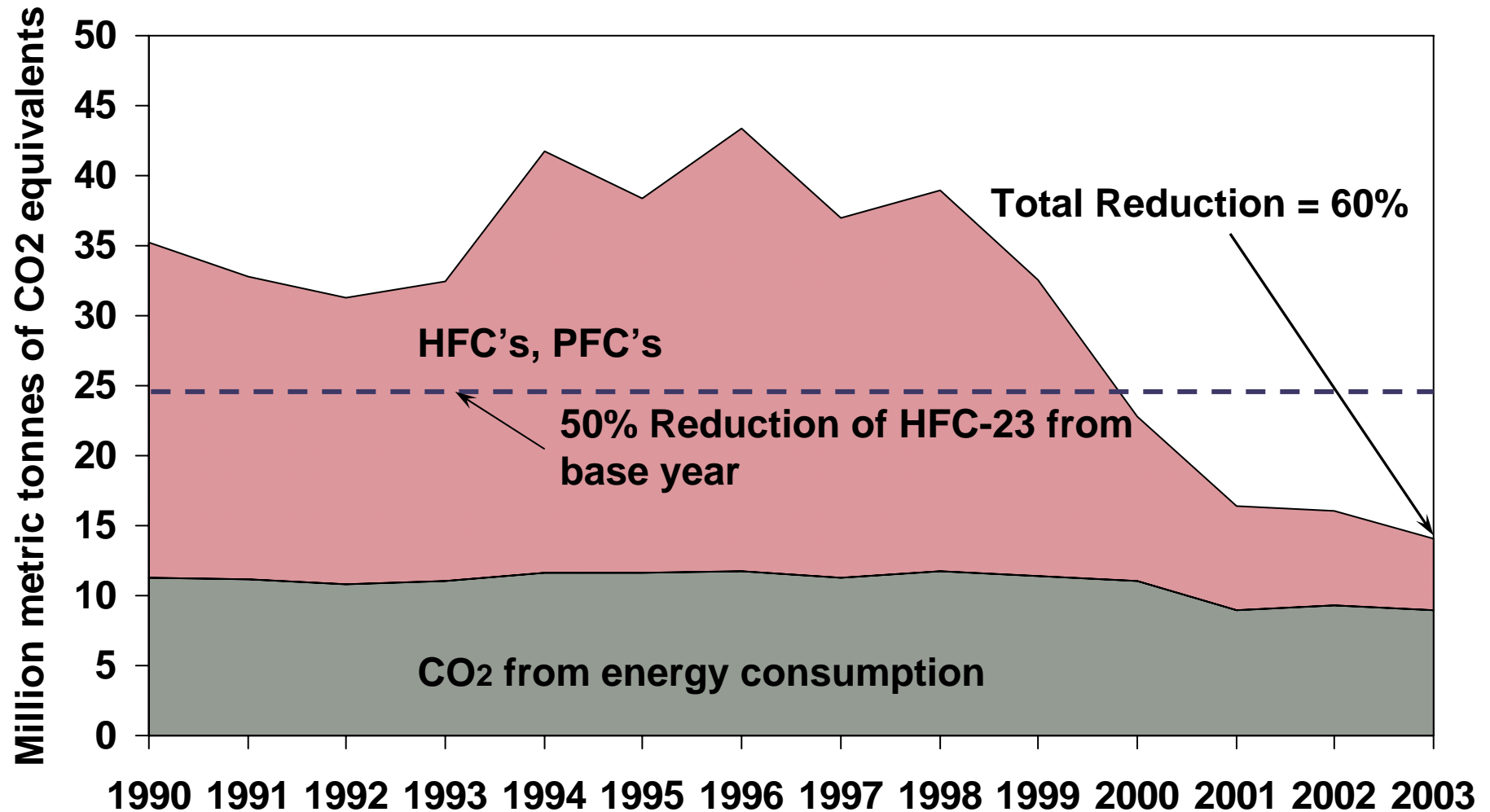
**2000 commitment: 54 million tonnes**

**2000 actual emissions: 35 million tonnes**

**2000 excess reductions: 19 million tonnes**

**2000 – 2003 excess reductions (beyond the 40% goal): 98 million tonnes**

# GHG Reductions ex-Invista 1990 - 2003



# **DuPont Commitment Recast ex-Invista as Global 50% Reduction of HFC-23 Emissions**

**1990 baseline: 35 million tonnes CO<sub>2</sub>**

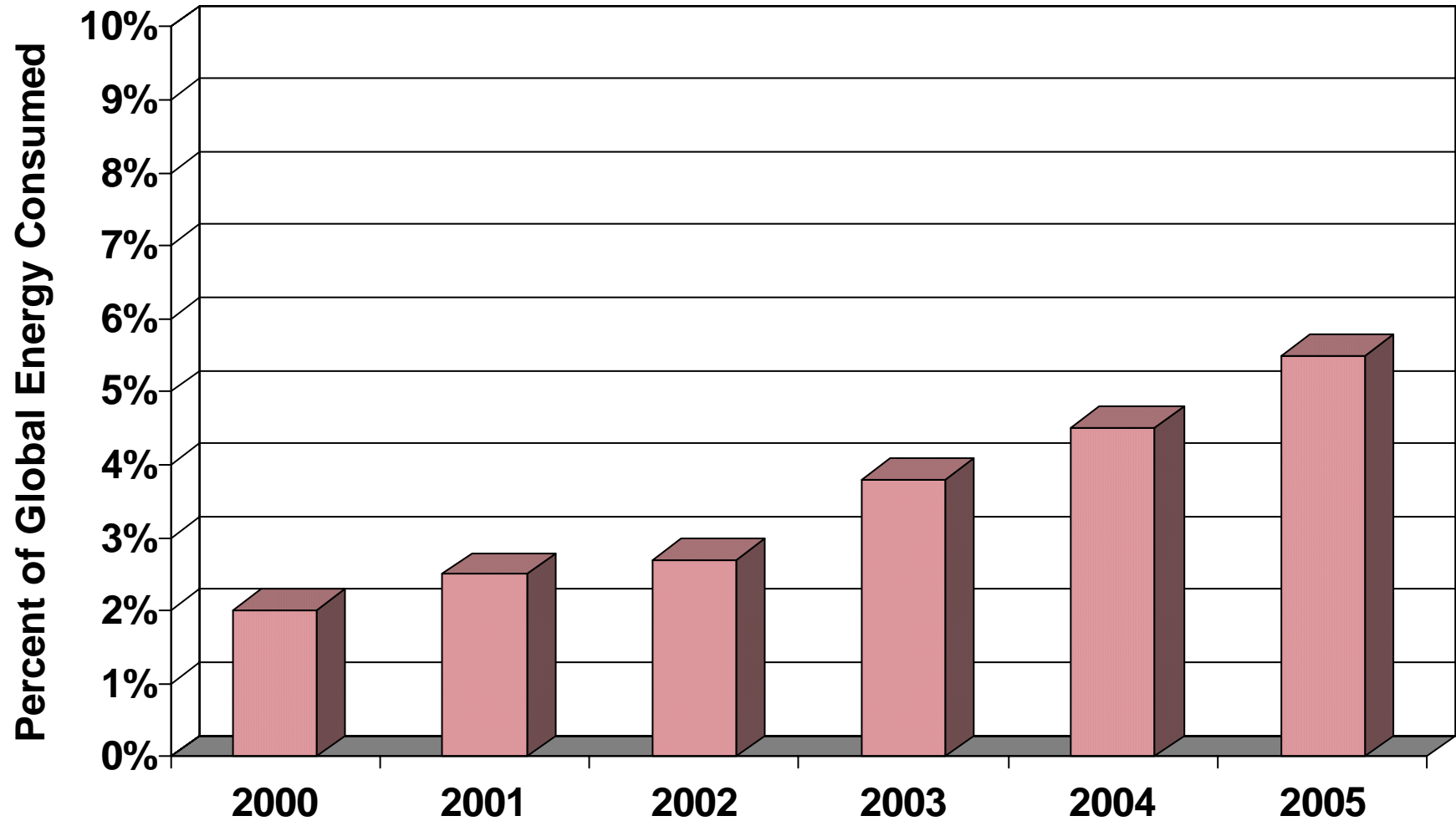
**2000 commitment: 25 million tonnes**

**2000 actual emissions: 23 million tonnes**

**2000 excess reductions: 2 million tonnes**

**2000 – 2003 excess reductions eligible for  
voluntary trading: 30 million tonnes**

# Progress on Renewables



# Key Renewables

- **Landfill Gas to direct use in boilers**
- **Biomass to steam energy**
- **Biogas from anaerobic digestion**
- **Renewable energy certificates from wind and biomass**

# Essential Policy Issues

- **Baseline Protection**
- **Emissions Registry and Verification**
- **Credit for Early Action**
- **Kyoto Basket of Gases**

# Final Thoughts....

Establish energy and GHG performance goals and share broadly

Measure the baseline and track progress

Focus on the business benefits

Develop and implement strategic alternatives at the business and site level

Leverage expertise and learnings through networks

Celebrate successes!

*The challenge is an attitude change - We must believe we can reduce energy consumption to help the environment and save money.*