

# Incorporating Carbon Considerations in Business Decisions

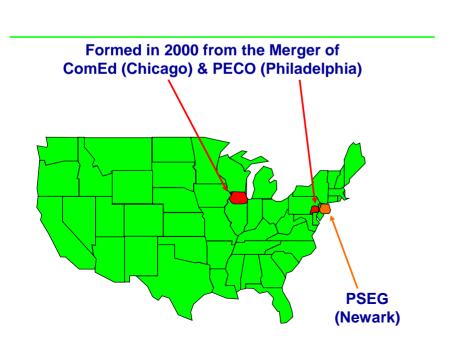
A Component of Exelon's Greenhouse Gas Reduction Strategy and Program

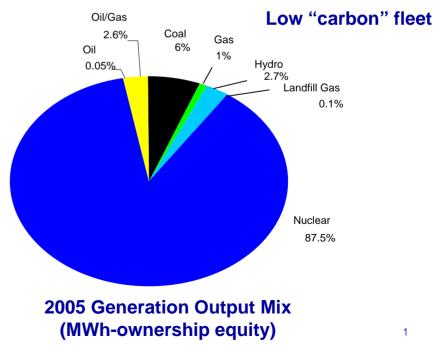
> US EPA Climate Leaders Partner Meeting Yolanda F. Pagano January 19, 2006

# Background on Exelon



- One of the nation's largest integrated electric utilities
  - NYSE Ticker: EXC
  - 2004 Total Assets: \$42 billion (approx.)
  - 2004 Revenues: \$14.5 billion
  - Employees: 17,500 (approx.)
  - Customers: 5.2 million electric, 460,000 gas
  - Generating Assets: 35,000 MW owned and controlled generation
- Announced merger with PSEG in December 2004





#### **EPA Climate Leaders Commitment**



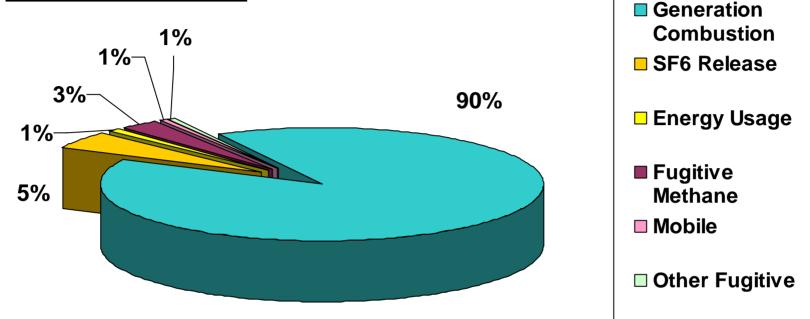


- 1. Exelon will achieve a reduction of 8% below its 2001 level of greenhouse gas (GHG) emissions by 2008.
  - ♦ 2001 GHG emissions of approximately 15.8M metric tonnes
  - ♦ 8% reduction equates to a 1.3M metric tonne reduction, exclusive of any growth in emissions due to increased output in 2008.
- 2. Commit to work with, and encourage, suppliers to commit to reduce their GHG emissions
- 3. Incorporate recognition of GHG emissions and the cost of emissions credits into future business case analyses and long range plans

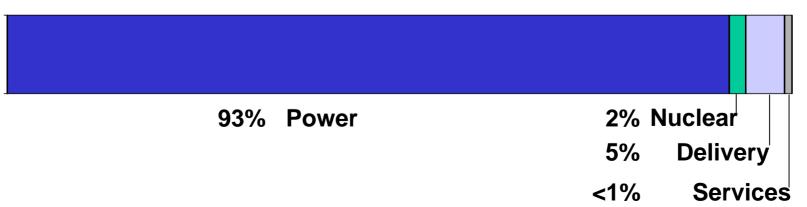
### **Baseline: GHG Emissions - 2001**







#### Emissions by Business Unit



## **Critical Elements for Success**



- Implement and support GHG-reducing programs
  - Support economic uprates at our non-GHG emitting nuclear, hydro, LFG plants
  - Support programs that reduce or offset GHG emissions, e.g., prairie grass sequestration
  - Identify new programs and leverage other business rationale to fund programs that reduce GHG emissions, e.g., SF6 leakage reduction, internal energy efficiency
- Measure progress towards goal
- Integrate cost of carbon into future business decisions
  - Include formal evaluation of GHG emissions created or offset in business analyses





- Recognize value of internal investment
- Reduce our climate footprint and improve our intensity metric
- Educate our workforce on the issue
- Begin to develop a price/cost curve of carbon to Exelon
- Document the business value of early action
- Utilize standard business process to capture environmental value

## **Program Development**



- Engage internal stakeholders
  - Environmental, Engineering, Financial, Trading and Risk Management
- Determine data requirements
  - Calculate emissions: consistency and level of granularity
  - Cost of emission reductions: Price to compare is GHG market, however, discovery/forecasting in illiquid GHG market is challenging
  - ♦ Risk sensitivity
- Identify business processes
  - ♦ Four key financial decision points
- Communicate program and provide training





Process	Purpose
Business Case Analysis	<ul> <li>✓ Ongoing investment decisions consider carbon impact</li> <li>✓ Educate workforce on source and cost of GHG emissions</li> <li>✓ Keeps goal top-of-mind for those making investment decisions</li> <li>✓ Begin to develop carbon cost curve</li> </ul>
Asset Optimization	<ul><li>✓ Quantify carbon risk of each facility</li><li>✓ Factor carbon risk into longer term investment decision</li></ul>
Long Range Plan	<ul> <li>✓ Track progress toward meeting commitment</li> <li>✓ Identify need for program modifications</li> <li>✓ Analyze consequences of new regulatory requirements</li> <li>(e.g., state and regional)</li> </ul>
Long Term Scenario	✓ Assess effects of potential future carbon regulation on electricity prices, fuel markets, unit retrofit decisions, and other industry impacts such as preferred new generation technologies, unit retirements and/or pollution control retrofits ✓ Determine potential impact on asset portfolio





- Develop mechanism to track cost per ton of emission reduction
- Ensure program achieves least-cost carbon mitigation