

**elpaso**



a meaningful company  
doing meaningful work  
delivering meaningful results



## **Road to Climate Action Leader™: El Paso Pipeline Case Study**

**14th Annual Natural Gas STAR  
Implementation Workshop**

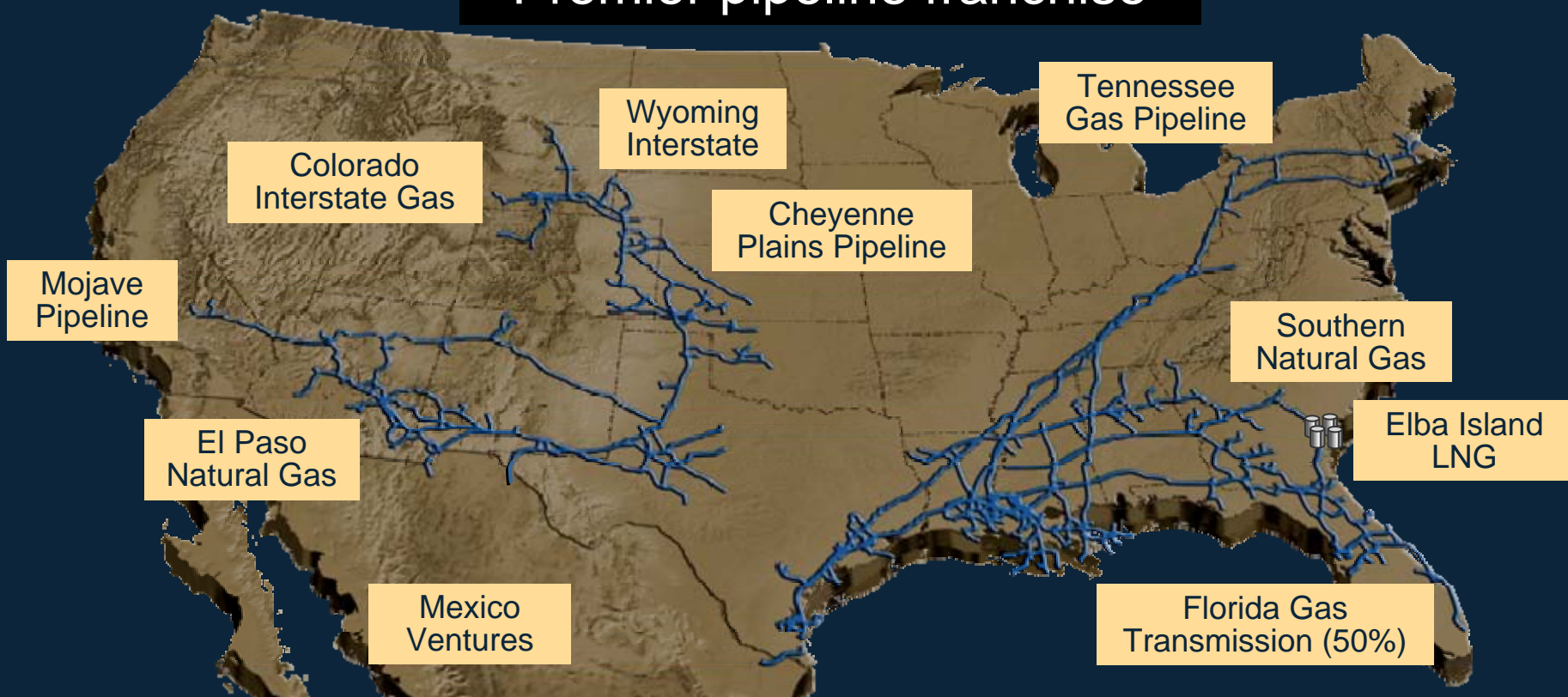
**Houston, Texas  
October 23, 2007**

# Defining Our Purpose

El Paso Corporation provides natural gas and related energy products in a safe, efficient, and dependable manner

# El Paso Pipeline System

## Premier pipeline franchise

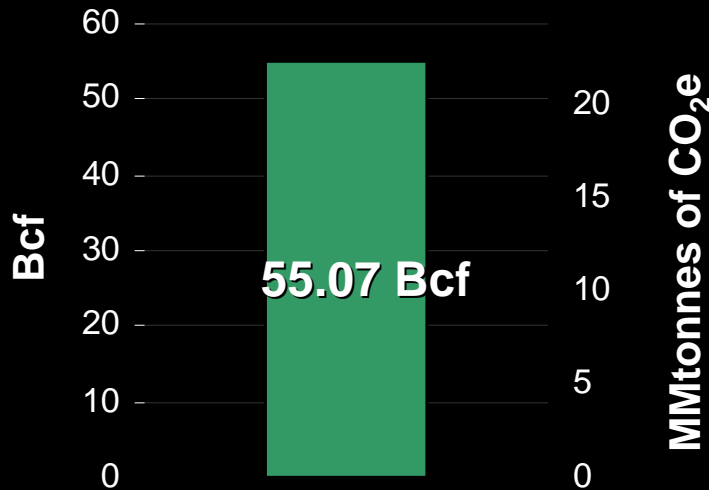


- 19% of total U.S. interstate pipeline mileage
- 23 Bcf/d capacity (16% of total U.S.)
- 16 Bcf/d throughput (28% of gas delivered to U.S. consumers)

# El Paso Pipeline Group—EPA STAR Program

- Participate in EPA Natural Gas STAR Program since 1993
- Best performer—Highest reported reductions compared to peers

## Cumulative Methane Reductions as of 2005



Carbon sequestered by 6,057,522 acres of forest for one year



Enough natural gas to heat 798,161 homes for one year



Removing 4,038,331 cars from the road for one year

Source for methane reductions: EPA Natural Gas Star, 2005 Reporting Summary & Benchmarking Report

# El Paso Corporate— Greenhouse Gas Commitment

- “Assess, Engage and Act”
  - Commitment statement  
<http://elpaso.com/profile/mainneighbor.shtm>
- Carbon Disclosure Project (CDP) 5 response
  - [http://www.cdproject.net/online\\_response\\_pf.asp?cid=558&year=2](http://www.cdproject.net/online_response_pf.asp?cid=558&year=2)
- California Climate Action Registry
  - First company in CCAR history to certify without significant errors
  - First company to achieve Climate Action Leader™ for 2007
  - First natural gas company to submit and certify
  - First natural gas company to join CCAR

# Road to Climate Action Leader™—The Vision

- Develop a Sustainable GHG Inventory Management Strategy
  - Certified inventory forms the bedrock of most GHG strategies
    - Basis for assessing risks and opportunities
    - Development of sustainable programs and processes
- Create Management Culture
  - Ensure sustainability of GHG efforts

# Road to Climate Action Leader™—Why CCAR?

- Reviewed several programs
  - Rigor
  - Credibility
  - Transparency
  - Flexibility
  - Advocacy and leadership opportunities
- Signed on to CCAR on August 3, 2007
  - Participate and lead regulatory, policy and technical discussions associated with T&D sector

# Road to Climate Action Leader™: Inventory Management Milestones



Established a process focused on continuous improvement



# Road to Climate Action Leader™— 2004 GHG Inventory

- 2004 GHG Emission Inventory
  - INGAA GHG Guidelines prepared simultaneously by IES
  - Direct and Indirect emissions from 5 El Paso pipelines
    - Operational Control
  - CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O
- Third party GAP Analysis against CCAR and ISO
  - Completeness
  - Accuracy
  - Transparency

Goal = develop a GHG Inventory



# Road to Climate Action Leader™— 2005 GHG Inventory

- Similar in scope to 2004
  - Developed internally
- Process Improvements
  - Enhanced spreadsheets
  - More comprehensive inventory of sources
  - Better Estimation
    - Vast improvement in activity data
  - Need for development of internal GHG database
- Third party pre-certification against CCAR

Goal = verifiable grade inventory

# Road to Climate Action Leader™— 2006 GHG Inventories

- 2006 GHG Emission Inventory (CA)
  - Comprised of CA assets
  - Based on CCAR guidelines & INGAA GHG Guidelines for industry specific emissions
  - CCAR Certification
- 2006 GHG Emission Inventory (US Operations)
  - To be submitted to DOE 1605(b)
  - Currently undergoing verification

Goals: (1) Achieve Climate Action Leader  
(2) Submit verified inventory to DoE 1605(b)

# Road to Climate Action Leader™ — Lessons Learned (Technical)

- Scope of GHG inventory is much broader than criteria pollutant inventory
- Expand knowledge base on emission estimation methodologies
- High uncertainty with fugitive emission factors
- No fugitive emission factors for LNG facilities

# Road to Climate Action Leader™ — Lessons Learned (Process)

- Efficient data management → GHG database
- Improve and/or establish internal processes for activity data needed for GHG inventory only
  - KW/hrs
  - Miles driven by vehicle fleet
  - Meter counts
  - Storage well data

# Road to Climate Action Leader™ — Lessons Learned (Management)

- Management support at Board and Executive Committee level is vital
  - Clear defined goals
    - Footprint? <<< Verifiable/Certifiable grade?
  - Level of effort is directly proportional to the goals chosen
- Communicate inventory goals and needs to Executives, mid-level management and other stakeholders
- Departmental/cross-functional team with a reporting structure and budget
- Inventory Management Plan and Technical Manual
  - Document policies, procedures, and estimation techniques
- GHG IMS or Not?
- Recognition of team efforts!



# Environmental



raised to the power of El Paso

# Questions?

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