Reinhold Environmental Ltd.

2008 NOx-Combustion Round Table & Expo Presentation

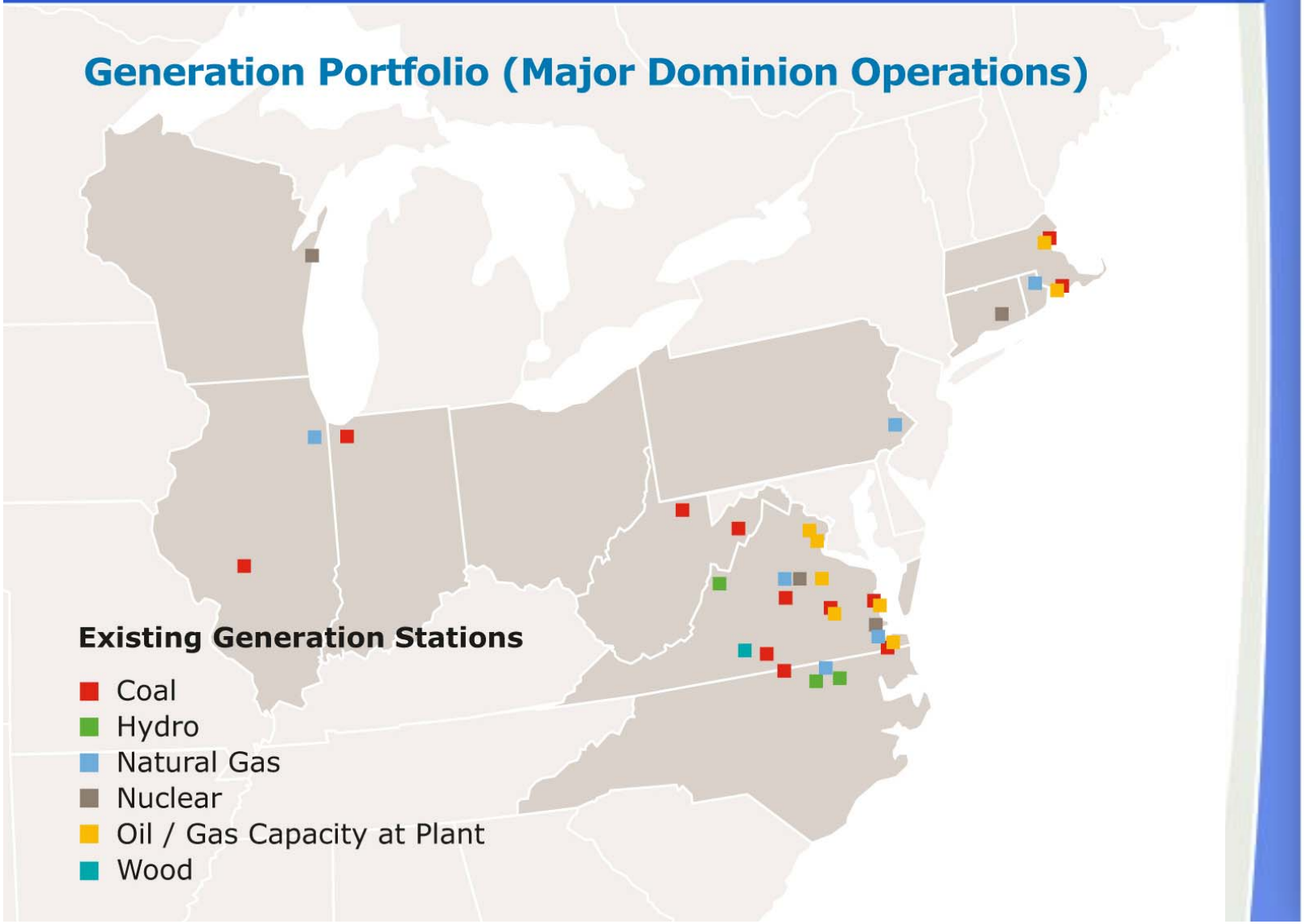
February 4-5, 2008 in Richmond, VA

Dominion:
Meeting the Carbon Challenge While Serving Our Customers

David Heacock
President, Dominion Virginia Power
February 4, 2008

Dominion
It all starts here.

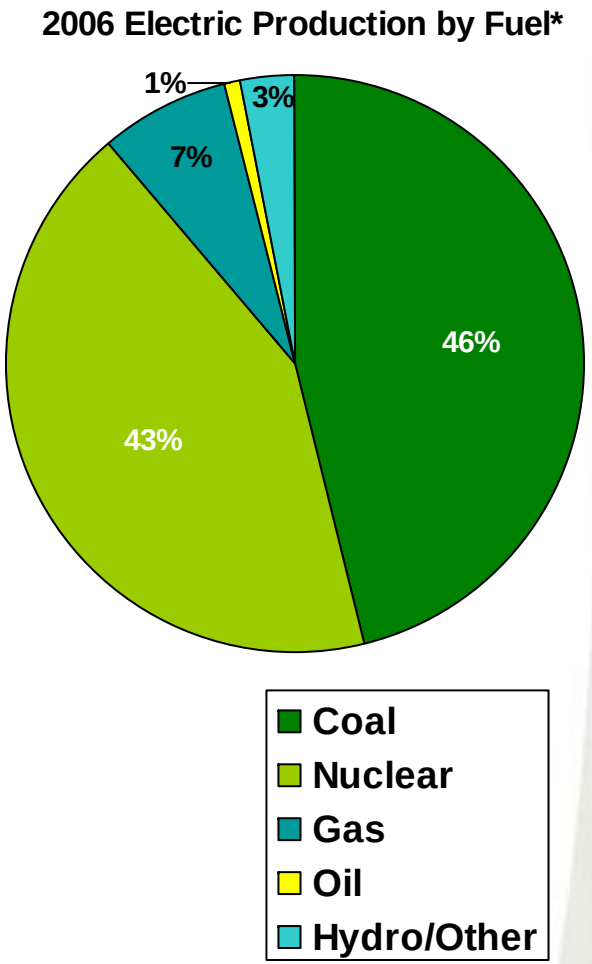
Dominion's Generation Portfolio: More than 26,500 MW of Capacity



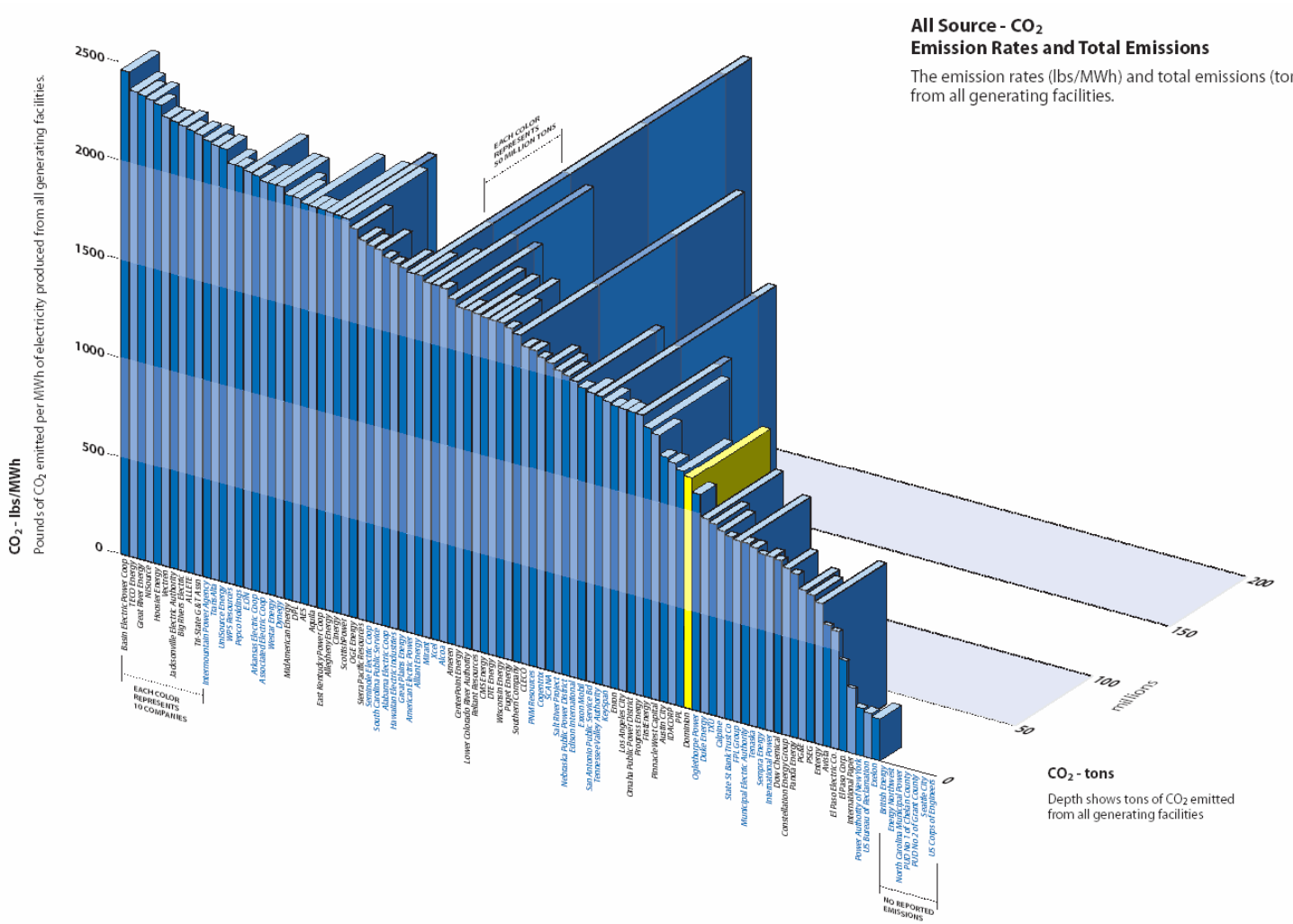
Dominion's Diverse Generation Fleet: A Diverse Mix of Fuel Sources

- Diverse power generation fleet: a solid foundation for meeting growing energy needs – in environmentally responsible ways.

- Dominion in top 1/3rd of U.S. utilities in minimizing carbon intensity per megawatt-hour.



Dominion's CO_2 Competitive Advantage



Current CO_2 Plan Concerns

- The votes per ton of GHG equivalent probably has something to do with who is getting the most heat in proposed legislation.

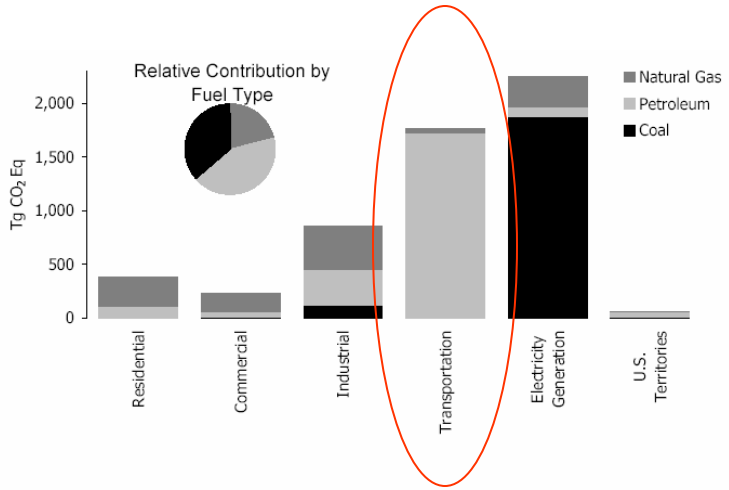


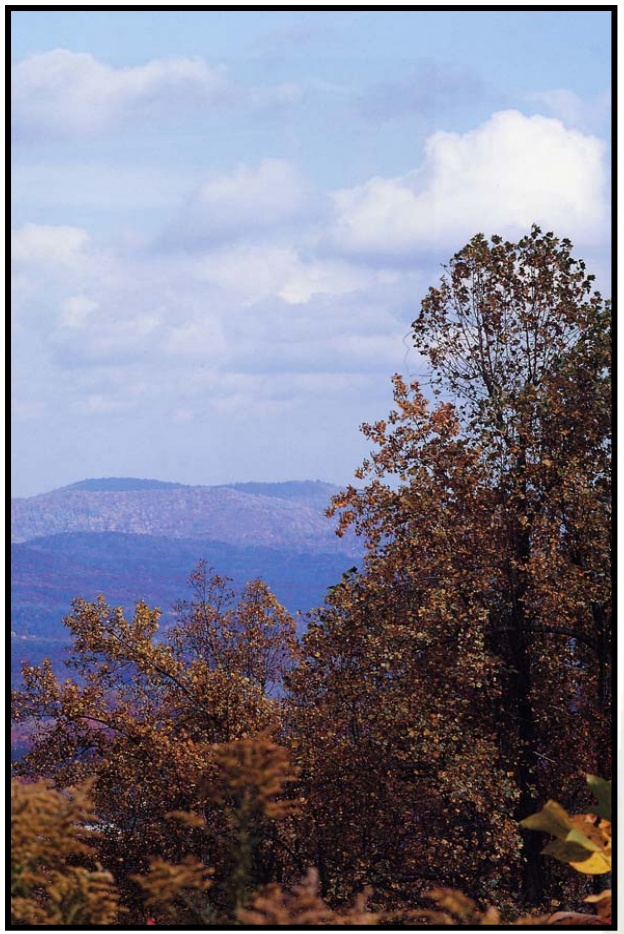
Figure ES-6: 2003 CO_2 Emissions from Fossil Fuel Combustion by Sector and Fuel Type
Note: Electricity generation also includes emissions of less than 1 Tg CO_2 Eq. from geothermal-based electricity generation.

- 60% of this sector's CO_2 emissions come from personal use vehicles.
- The rest comes from busses, planes, trains and trucking.

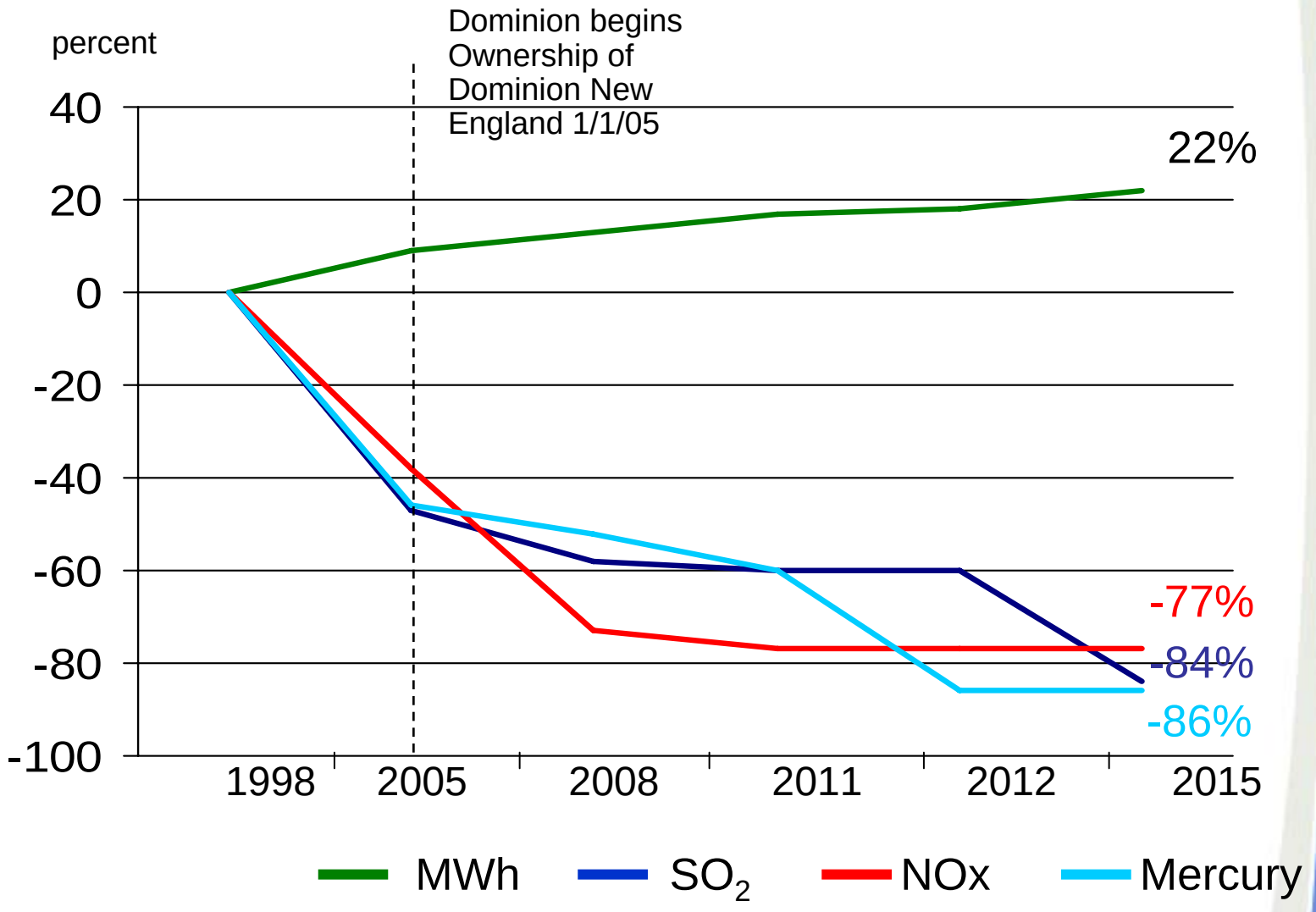
Dominion's Environmental Commitment

- By 2015, Dominion will have spent **$3.4 billion** on environmental projects company wide.

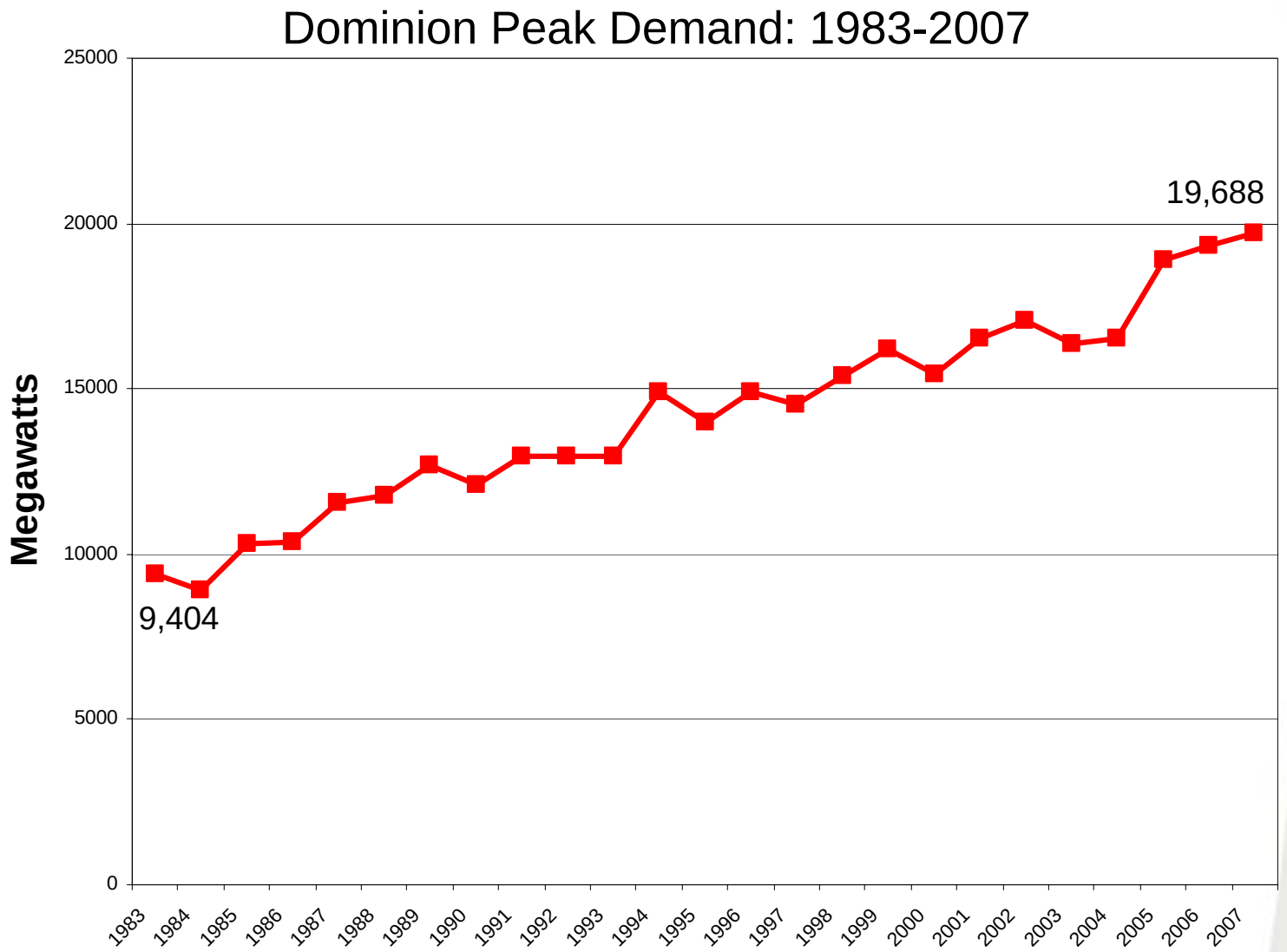
- Improvements include:
  - Scrubbers on coal stations.
  - Systems to reduce smog and ozone pollution.
  - Converting some generating units from coal to cleaner-burning natural gas.
  - Retired some coal units.



Cleaner Air in New England



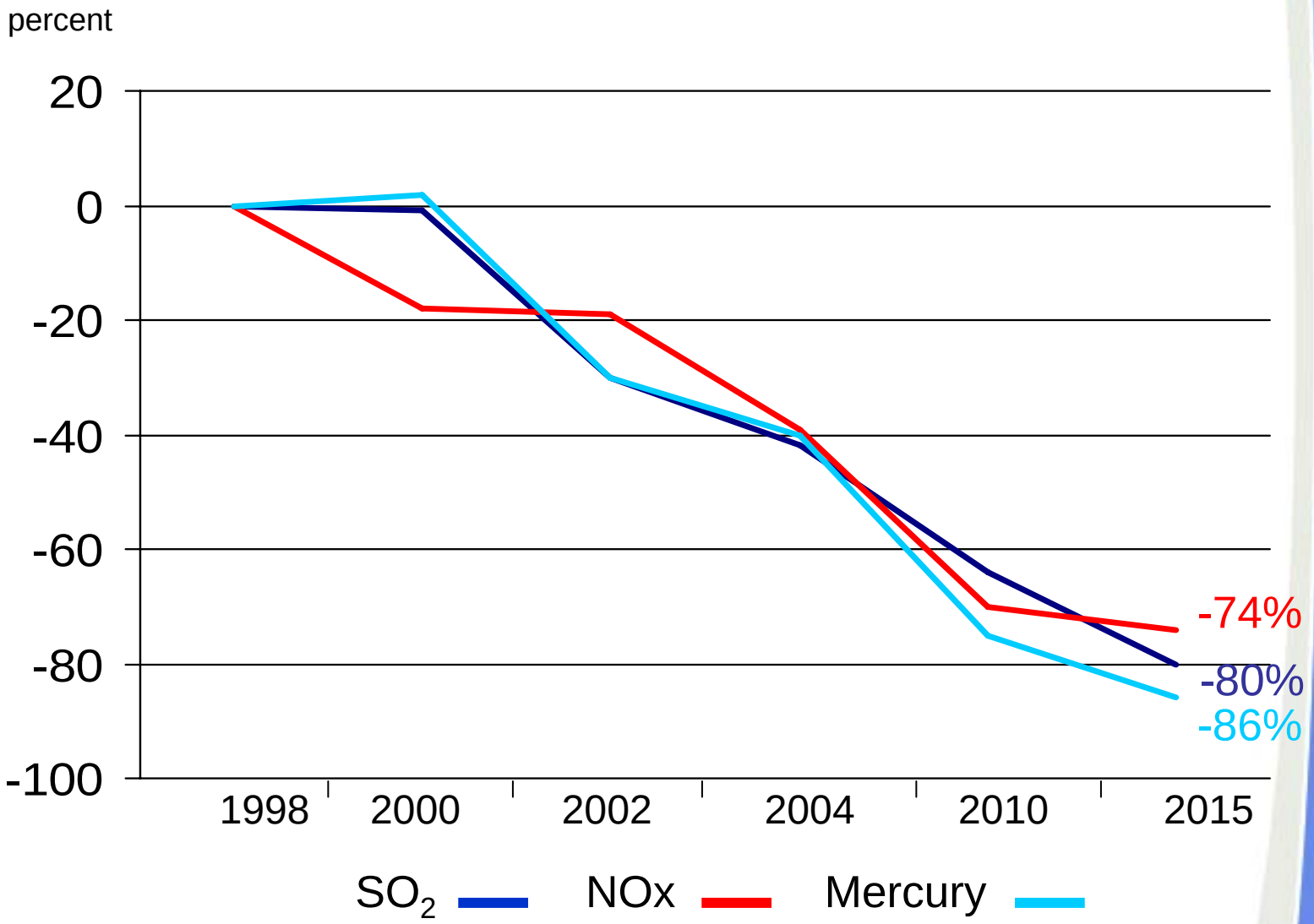
Big Reductions in Emissions – As Virginia's Demand Increases



Rising Demand for Electricity in Virginia

- PJM Forecast January 2008:
  - Annual peak demand growth rate of 1.8 percent for Dominion's service area during the next decade.
  - Highest growth rate in PJM's 13-state footprint.
- Dominion served all-time peak load on August 8 (19,688 MW).
  - Exceeded 2006 peak by 300MW, 2005 peak by 800 MW.
- Growth fueled by population increase, strong business growth.

Dramatic Improvements in Virginia Air Quality



Rising Demand Creates New Challenge

Dominion's challenge:

- Providing reliable, affordable energy for our customers - while curtailing greenhouse gas emissions.

Dominion's integrated strategy:

- Meeting the need with three major tools:
  - Conservation and efficiency
  - Renewable generation
  - Traditional generation development (nuclear, gas, clean coal)

Conservation: Critical to Our Future

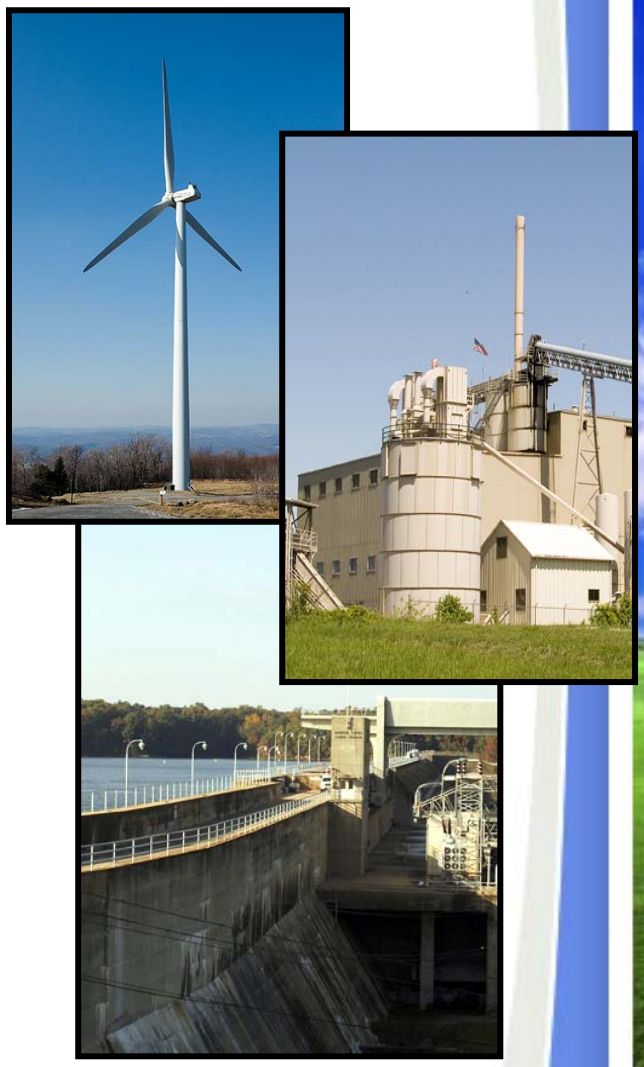
New programs include:

- **Energy efficient lighting promotion**
  - Discounts on 2.25 million CFLs in 2008

- **Pilot programs:**
  - Air conditioner control
  - Energy audits (residential and small commercial)
  - Efficiency kits
  - Programmable thermostats
  - Program cost monitor
  - Distributed generation (commercial)

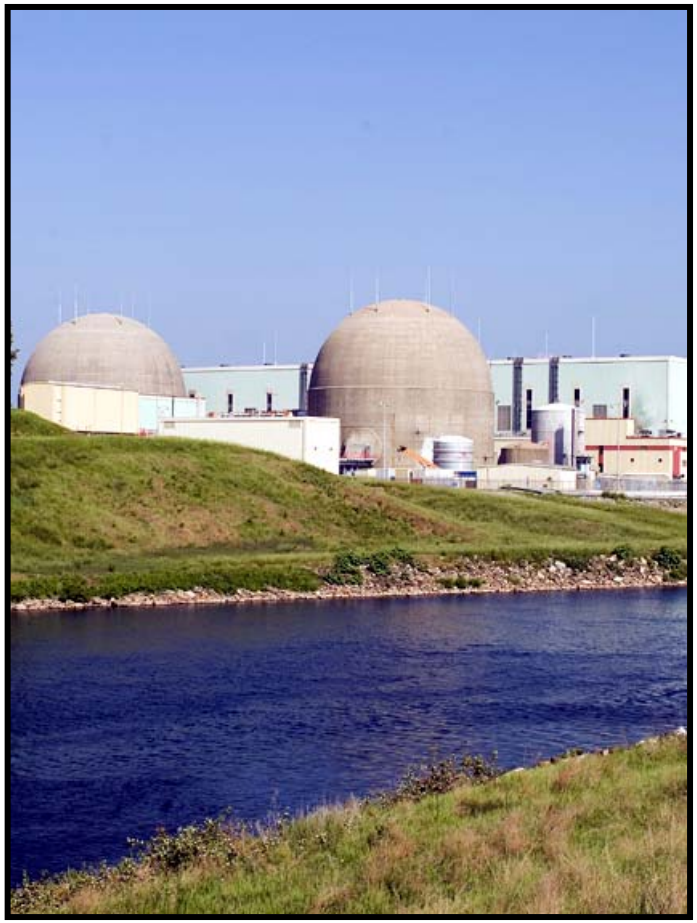
Renewable Green Energy – Wind, Biomass and Water

- **Wind Farms**
  - Fowler Ridge
  - Mt. Storm
- **Wood waste at two VA power stations**
- **Existing hydroelectric in Virginia and North Carolina**
  - Uprate of the Bath County Pumped Storage facility, Dominion owns 10% of U.S. pumped storage, critical to making renewable energy available 24/7.
- **Green power option for all Virginia customers in 2008**
- **Dominion committed to meeting Virginia's aggressive goal of 12% renewable power by 2022**



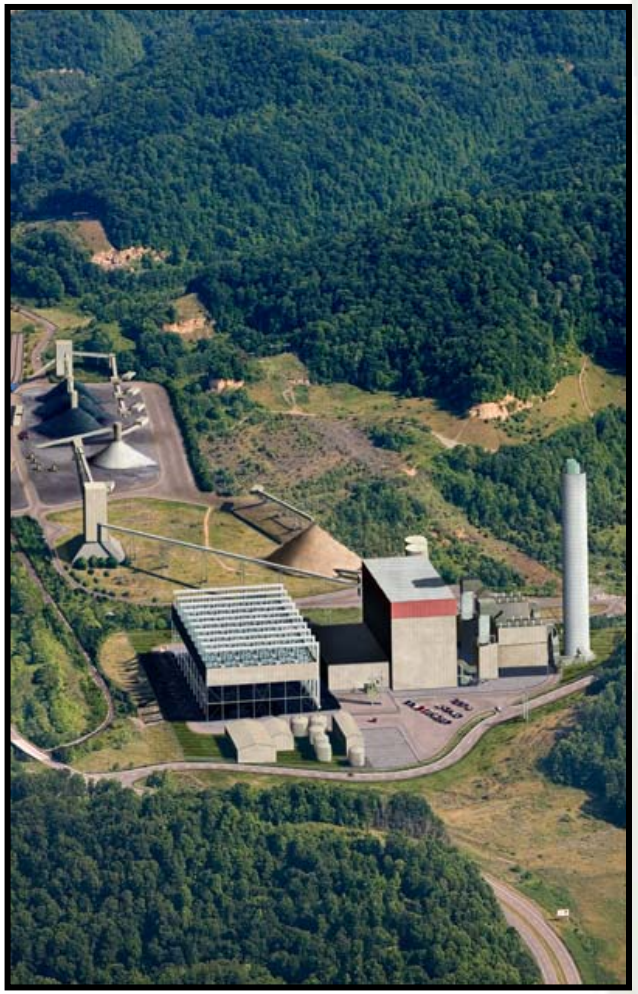
Advanced Emissions-Free Nuclear Power

- Considering 3rd unit at North Anna.
- Advanced design.
- Could serve 375,000 homes.
- No air emissions, including carbon.
- NRC approval of early site permit and COL filed November 2007.



Clean Coal Technology:
Virginia City Hybrid Energy Center

- Electricity to serve 146,000 homes.
- Will use advanced clean-coal technology to control emissions.
- Plans for biomass as fuel source.
- Low, stable fuel costs based on local supply.
- Carbon capture compatible.
- Partnering with Virginia Tech on carbon storage technology.



*Artist's rendering

Carbon Capture and Transport

- Dominion is actively pursuing carbon capture technology.
- Dominion provided test site for pilot research at its Brayton Point Power Station related to carbon capture.
- Dominion is one of the leading natural gas transport companies in the world.
- Dominion owns and operates the nation's largest underground natural gas storage system.

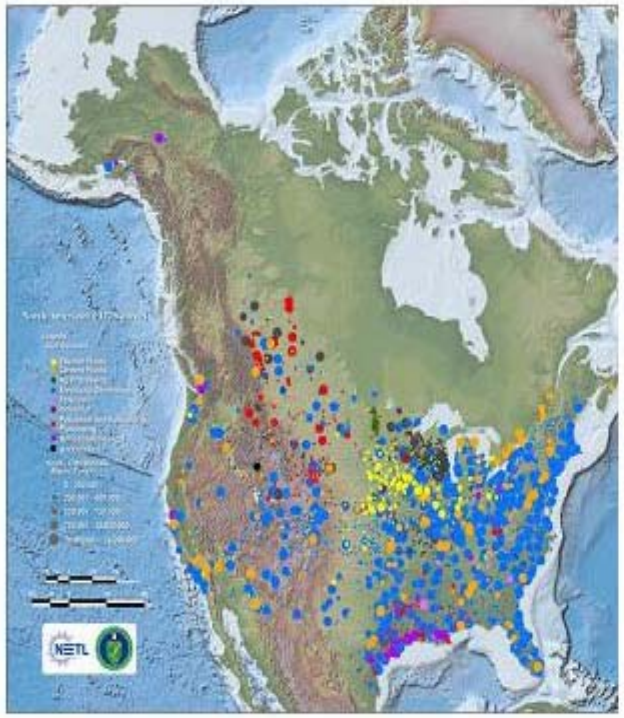
Carbon Storage

- Dominion is a major sponsor ($500,000) of research at the Virginia Center for Coal and Energy Research at Virginia Tech focused on the viability of regional carbon sequestration in unmineable coal seams.
- Dominion's support makes it possible for Virginia Tech to qualify for funding from the U.S. Department of Energy.
- The Virginia Center for Coal and Energy Research at Virginia Tech is planning a large-scale demonstration of carbon storage.
- Dominion is a member of Southeast Regional Carbon Sequestration Partnership and is also supporting the Midwest Carbon Sequestration Partnership.

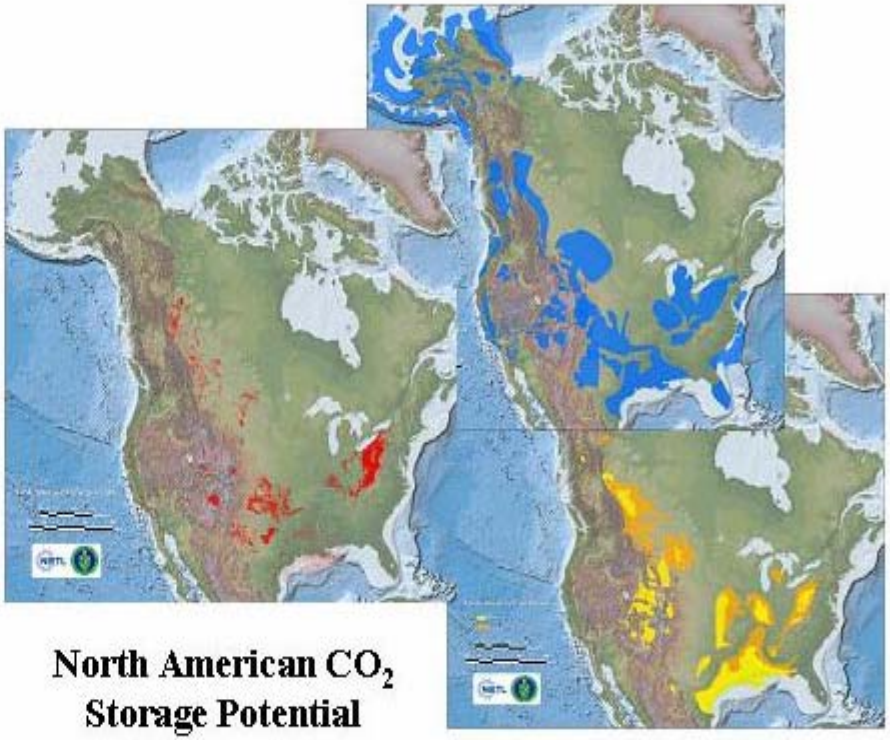
Adequate Storage Projected, National Atlas Highlights

CO_2 Sources Documented in NatCarb

	CO_2 Emission (Million Tons)	Number of Facilities
CO_2 Sources	3,809	4365



U.S. ~ 6 GT CO_2 / yr all sources

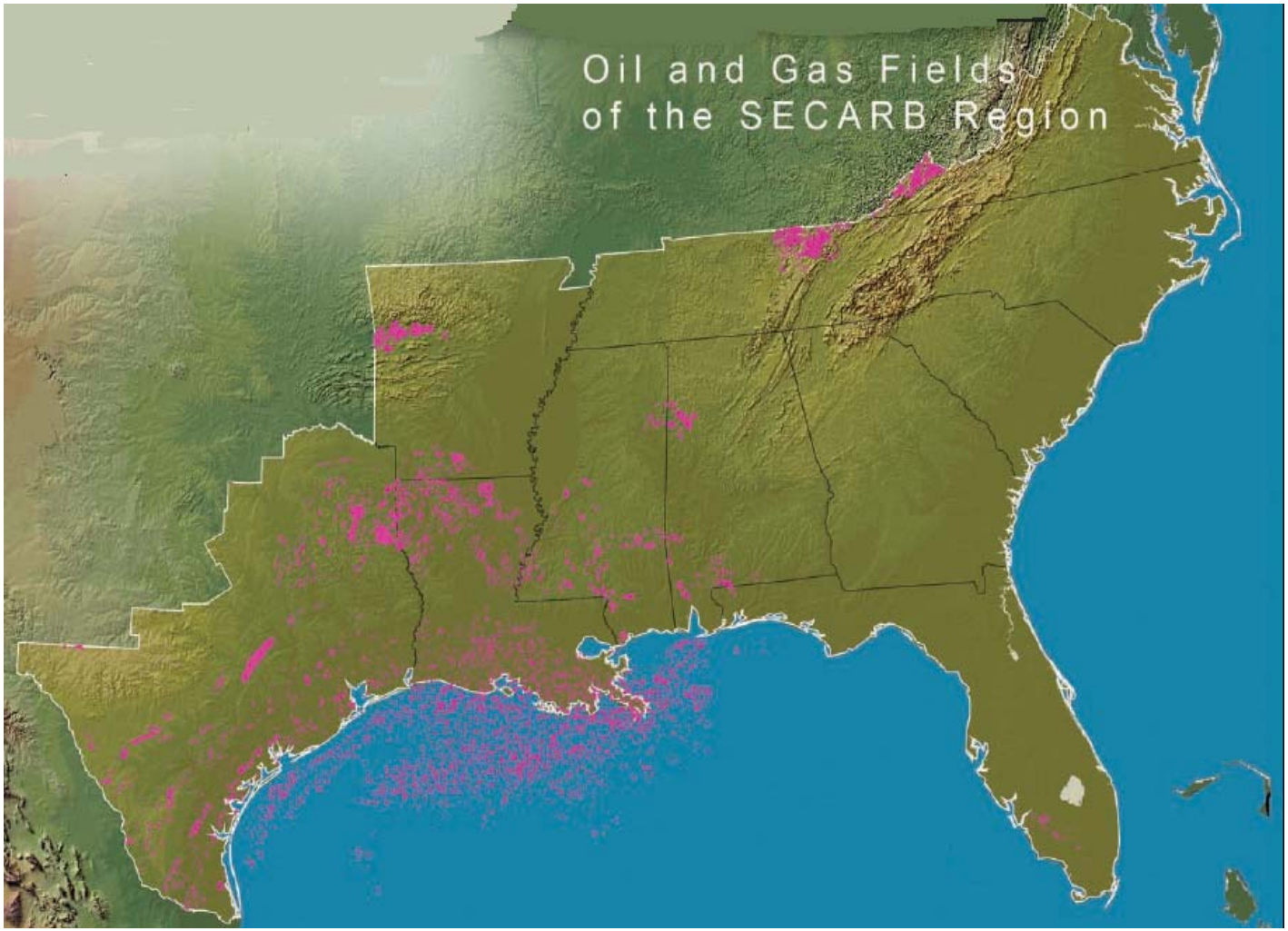


North American CO_2 Storage Potential (Gigatonnes)

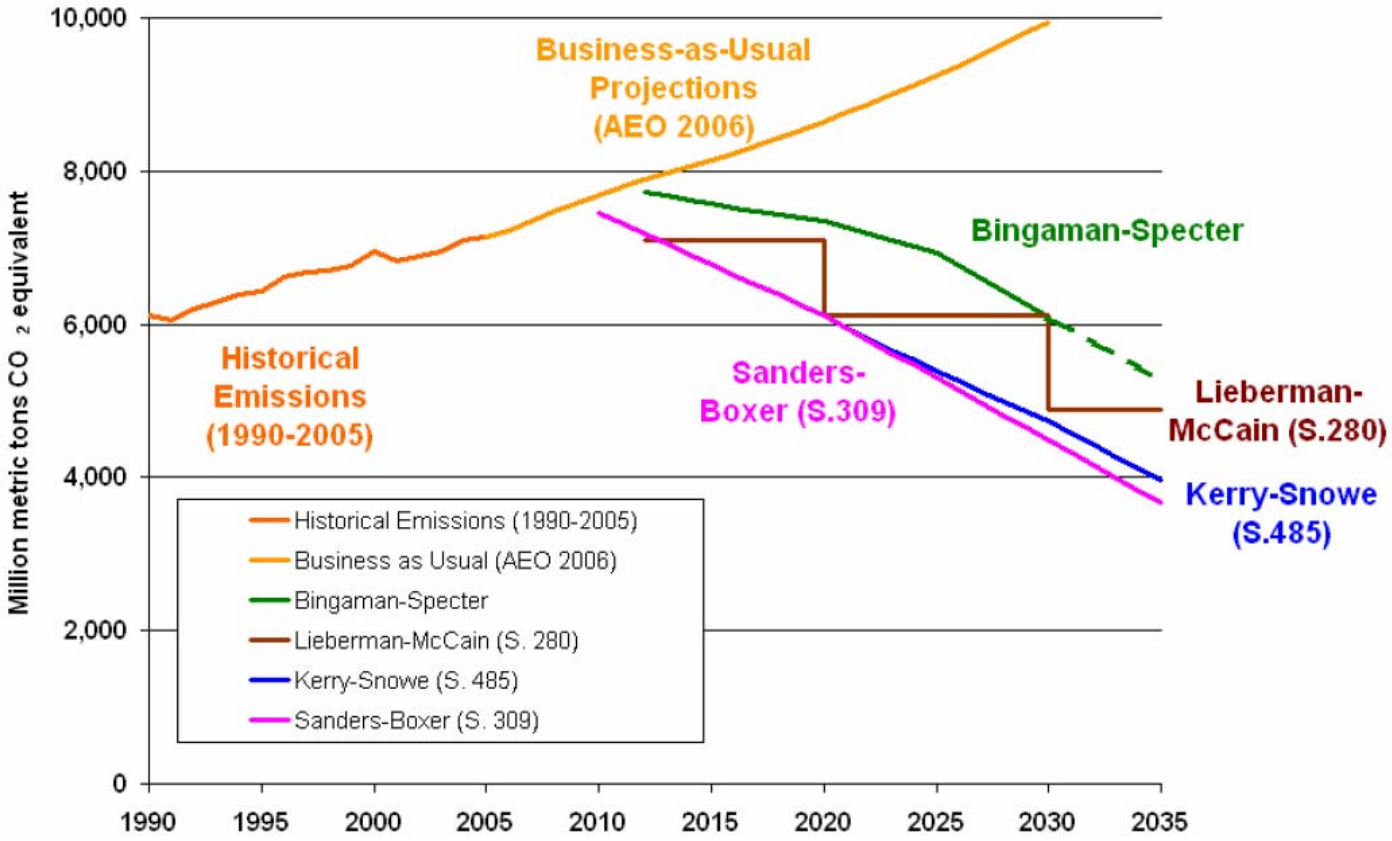
Sink Type	Low	High
Saline	919	3,378
Unmineable Coal Seams	156	184
Oil and Gas Fields	82	91

Source: C. Bauer, CarbSeq, 05/09/2007

Southwest Virginia Oil and Gas Fields

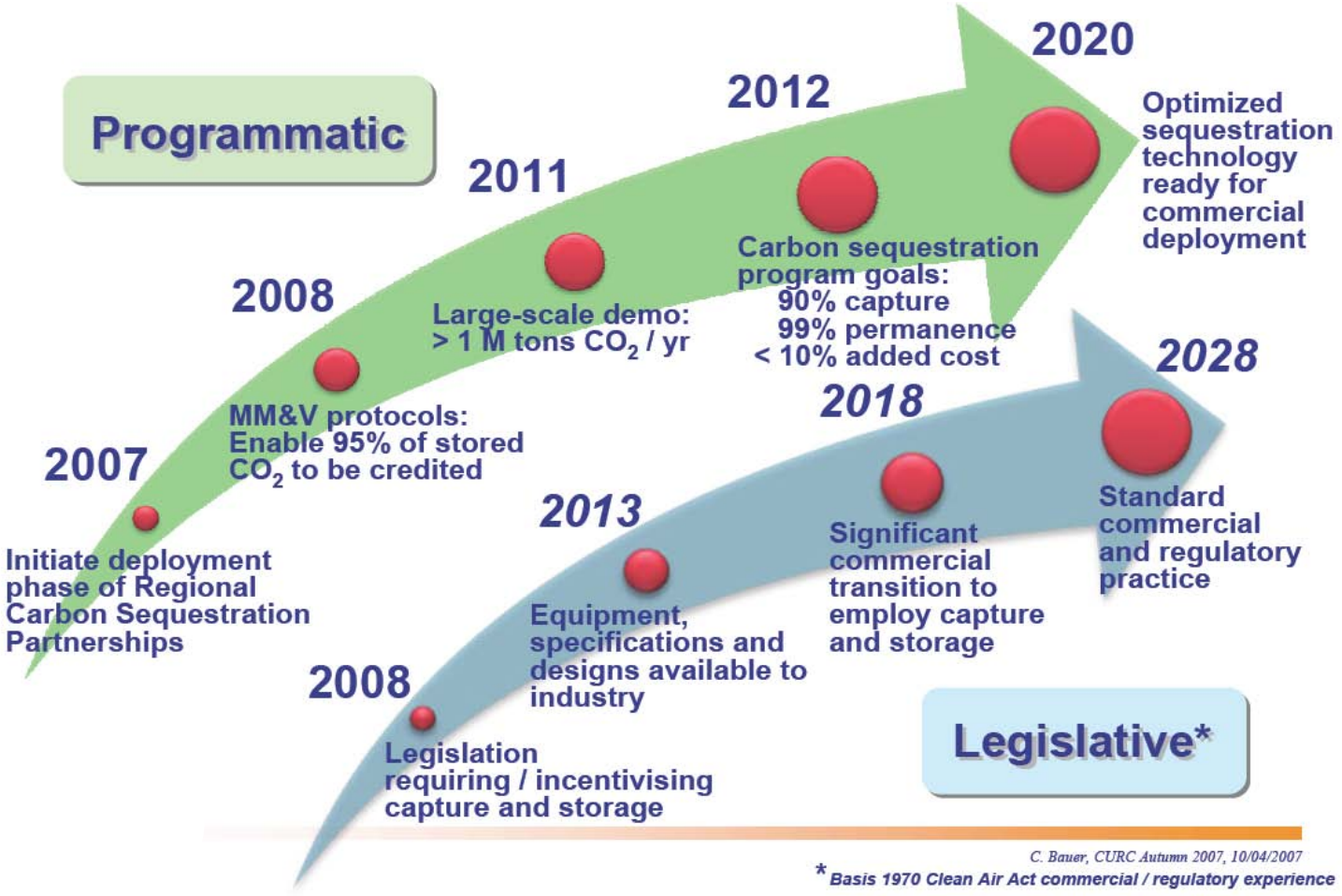


Greenhouse Gas Emissions Target



As of October 2007.

CO_2 Sequestration Time Lines



Federal Climate Change Legislation

- Lieberman-Warner bill approved 11-8 by Senate Environment and Public Works Committee Dec. 5.
  - Would reduce greenhouse gas emissions by 70% below 2005 levels by 2050.
  - Lieberman-Warner will be Senate vehicle for climate change legislation; prospects for passage during this Congress uncertain.
- Dominion supports Bingaman-Specter bill:
  - Would reduce emissions by 60% below 2006 levels by 2050.
  - Provides more realistic reduction schedule, based on expected technology development.
  - Better embodies “slow, stop, reduce” approach.

Bingaman-Specter Bill

- Economy wide cap-and-trade approach.
- Emissions-based allowance allocations.
- Targets:
  - Beginning in 2012, reduce greenhouse gas emissions to 2006 levels by 2020
  - Reduce to 1990 levels by 2030
  - Reduce to 60% below 2006 levels by 2050
- Safety valve mechanism.
  - Starting at $12/metric ton in 2012 and increasing thereafter
- Significant support from labor (AFL-CIO, IBEW, UAW); utility companies (Allegheny, Duke, Exelon, NGR); and wildlife/conservation groups (Trout Unlimited, Ducks Unlimited, Association of Fish and Wildlife Agencies).

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