



# Benchmark & Projection Years

Climate Change Steering  
Committee

Sept. 26, 2007



## CCSC Work Program Task

# Regional GHG Emissions Inventory

- A regional inventory will enable the region to evaluate impact of emissions reductions from programs being implemented.
- Deliverable:
  - Identify Baseline Year(s): July – Sept 2007
  - Identify Projection Year(s): July – Sept 2007



# GHG Emissions Work Group

- GHG Emissions Work Group was created in June as a technical working group
- Members include state and local government air and energy staff



# GHG Emissions Work Group Activities

- Reviewed methodologies for inventories
- Surveyed local jurisdictions having climate change goals
- Reviewed major climate change initiatives and agreements for dates, goals
- Recommended baseline year, target year for regional GHG emissions inventory
- Review Preliminary Regional GHG Emissions Inventory and Projections



# Approach to Regional GHG Emissions Inventory

- Top Down Approach:
  - Use state data, regional data if available, to estimate regional electricity consumption (EPA State Inventory Tool)
- Bottom Up Approach:
  - Use city and county activity data to develop inventory (ICLEI software)



# Approach to Establishing Base Year

- Basis for measuring progress
  - Has the base year been set by international or national agreement?
  - Is activity data available for fuel use, electricity consumption, and other activities?



# Approach to Establishing Target Years

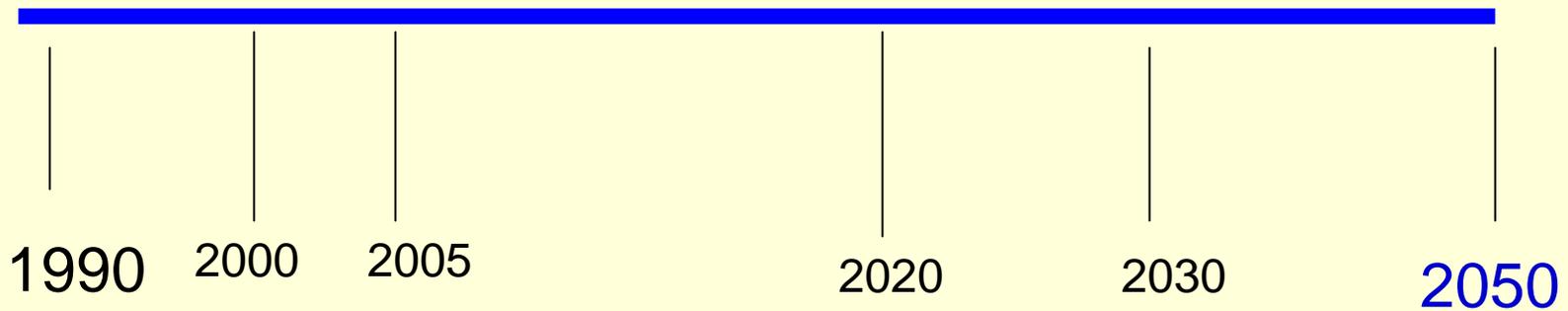
- Establish **short term goals** for practical accomplishments
- Establish **interim goals** to check progress
- Establish **long term goals** to establish significance & enormity of reductions needed
- Mechanism for tracking progress, enforcement need to be developed



# Base Year and Target Years

Base Year

Target  
Year



# Short-Term Targets

## 2012 - 2020

- Set minimum targets that we know can be reached with current technology
  - Alternative energy (wind farms)
  - Energy efficient products (appliances)
  - Cleaner vehicles (hybrid, alternative fuels)
  - More fuel-efficient cars
  - Smart growth development
  - Energy efficient “green” buildings
  - Tree planting



# Interim Targets 2020 - 2030

- Interim targets provide a reality check
- Measure accomplishment of programs adopted in the first ten years



# Long-Range Targets



- Long-range targets (2050) can be technology-forcing
  - Spur development of alternative energy sources on a commercial scale (solar, hydro-, wind, hydrogen)
  - Encourage advances in carbon sequestration technology, clean-coal use
  - Encourage high density development w/ increased public transit



# Target Years

- GHG Emissions Work Group recommends:
  - 2005 Base Year
  - 2020 - 2030 Interim Years
  - 2050 Out Year Target



# Reduction Goals

- GHG Emissions Work Group will consider reduction goals in October and November
- Work Group wants regional goals consistent with state goals
- MD Climate Change Report due in Nov
- VA Energy Plan sets goal of reducing GHG emissions 30% by 2025.

