# Virginia Commission on Coal and Energy

#### Implementation of the Virginia Energy Plan

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August 7, 2008

## Virginia Energy Plan Goals

- Increase energy independence
  - 40% reduction in rate of growth energy efficiency
  - 20% increase in in-state energy production
- Energy education
- Climate change
  - 2000 GHG emission levels 30% below BAU by 2025
- R & D / economic development
  - Alternate fuels, nuclear technologies, coastal energy, carbon capture & storage
- <u>http://www.dmme.virginia.gov</u>

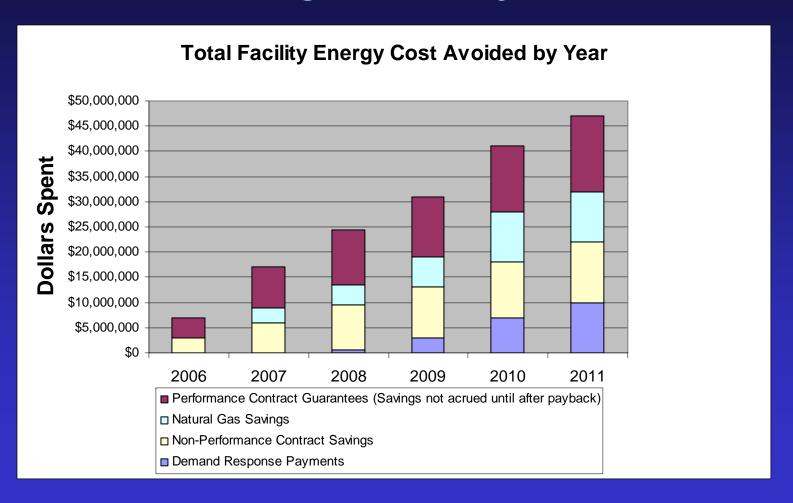
## Energy Efficiency Results

- Electric utility efficiency pilots & new plans
- Natural gas rate decoupling & efficiency programs
- Energy Star sales tax holiday expand to Water Sense products this fall
- Government lead by example
  - Virginia Energy Management Program tools
  - LEED buildings state universities, VDOT
  - Local examples projects, tax incentives, VML Go Green
- CAFE increases and other federal actions
- 2006 energy building code update
- Net metering at + 400 kW
- Virginia Resources Authority expanded role

## **Energy Efficiency Results**

- Government actions Lead by example
  - State government
    - State Executive Order 48
    - Virginia Energy Management Program
    - Telework goal 20 % eligible employees; once per week
    - LEED/Energy Star for new facilities, renovations, leases
    - Energy Star equipment purchases
    - Alternate fuels and vehicle efficiency consideration
  - Local governments
    - Cool Cities, Cool Counties, VML Go Green Virginia
    - LEED/Energy Star/Green Globe buildings Property tax incentives, density increases, reduced fees & permit prioritization
    - Other tax incentives hybrid vehicles, solar systems
    - Account for energy in regulation of development

## State Progress & Projection



## Energy Supply & Infrastructure Results

- Electric utility integrated resource planning
- Green power tariffs
- Virginia City Power Plant
- Renewable portfolio standard announced projects & plans
- Wind
- Electric transmission lines
- HRX pipeline
- Expanded Yorktown refinery capacity
- New biodiesel plants; biodiesel/green diesel tax credit
- Switchgrass at Piedmont Geriatric Hospital
- Norfolk light rail
- DC Metro Dulles extension progress

#### **Energy Education Results**

- Energy Conservation Awareness Week First week in October
- Electric energy efficiency consumer education
  - SCC to develop; funded through SCC fees
- Hydrogen education at middle schools (with NEED)
- Solar-Wind rating system for localities
- Farmer biofuel production training; permitting guide
- COVES & other conference/presentations
- State Fair
- State wind conference

#### Energy and the Environment Results

- Governor's Commission on Climate Change
  - Action plan by December 15, 2008
    - Calculate size & contributors to carbon footprint
    - Effects of increased GHG emission on state
    - Needs to prepare for likely consequences
    - Actions in other states and regions
    - Actions needed in Virginia to meet goal
  - Work phases
    - Background knowledge, workgroups, recommendations & report

http://www.deq.virginia.gov/info/climatemembers.html

## Research & Development Results

- Tobacco Commission energy R&D park funding
  - Fund five centers, continue one project
- Virginia Coastal Energy Research Consortium
  - Algae to biodiesel; offshore wind
- Commonwealth Technology Research Fund
- Center for Coal and Energy Research
  - Carbon sequestration phase II-b
- Ongoing university energy research
  - Biofuels, fuel cells, conservation, other
- New business development

## Ongoing Implementation

- Energy efficiency & supply
  - Raising costs promote conservation; low/fixed income impact; production increases
  - Utility efficiency plans
    - To meet 10% electric savings goal
    - Natural gas decoupling/energy efficiency
  - Efficiency for other fuel users
    - Fuel oil, propane, other
  - Funding challenges
    - DOE State Energy Plan cuts; state budget
    - Federal special topical grants
    - Expanded use of ESCO model
    - VRA opportunities to partner with localities

## Ongoing Implementation

- Energy efficiency & supply
  - Building energy code updates 2009 and 2012
  - Transportation
    - Adequate support for transit, rail, & roads
    - Sustainability of transit demand growth
  - Electric integrated resource planning supply and demand balance
  - Power plant/pipeline construction
  - NIETC and transmission need study
  - Biofuels
    - Food vs. fuel
    - Biofuels and the Bay
    - Project development & local acceptance

## Ongoing Implementation

- Energy efficiency & supply
  - OCS Minerals Management Service actions
    - Natural gas and petroleum exploration and drilling
    - Renewable resources
- Energy education
  - SCC energy efficiency consumer ed plan; RFP for partnering
  - COVES, ARC/AWEA wind symposium/other
  - Energy Star sales tax holiday dates & coverage
- Energy and environment
  - Climate Change Commission recommendations
    - Adaptation
    - Reduce GHG emissions
- Energy R&D
  - Reliable, long-term funding for R&D operations