

# Virginia Energy Plan

## Status of Recommendations

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### Commission on Coal and Energy

Thursday, December 3, 2009, 1:00 p.m.  
House Room D, General Assembly Building  
Richmond, Virginia

# Virginia Energy Policy

## Code of Virginia, Title 67

### Summary: Energy Policy & Objectives

- Ensure availability of reliable energy reasonable costs
- Establish sufficient infrastructure
- Use resources efficiently & facilitate conservation
- Facilitate development of Virginia's low cost resources, including clean coal and natural gas
- Facilitate development of less polluting energy sources
- Foster energy R&D
- Address environmental protection with energy facilities

# Virginia Energy Plan

## Outline

1. Introduction and Executive Summary
2. Virginia Energy Resources & Consumption
3. Energy Efficiency & Conservation
4. Energy Infrastructure
5. Energy and the Environment
6. Energy Research & Development
7. Recommendations

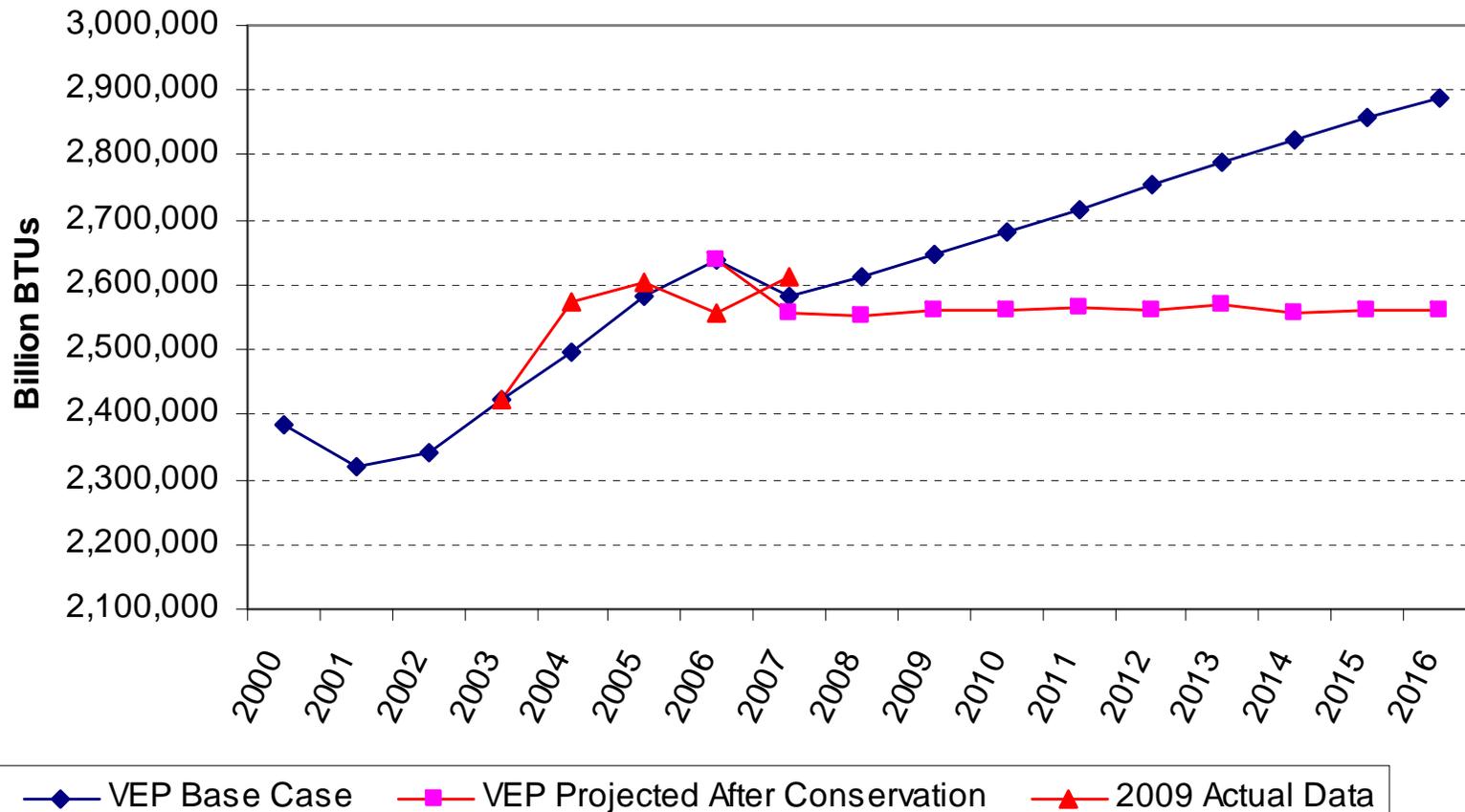
# Virginia Energy Plan Goals

- **Increase energy independence**
  - 40% reduction in rate of energy growth base case
  - 20% increase in in-state energy production base case
- **Expand consumer energy education**
  - Overcome barriers to consumer action
- **Climate change**
  - 2000 GHG emission levels by 2025;  $\approx$  30% from BAU
- **R & D / economic development**
  - Alternative fuels, nuclear technologies, coastal energy, carbon capture & storage

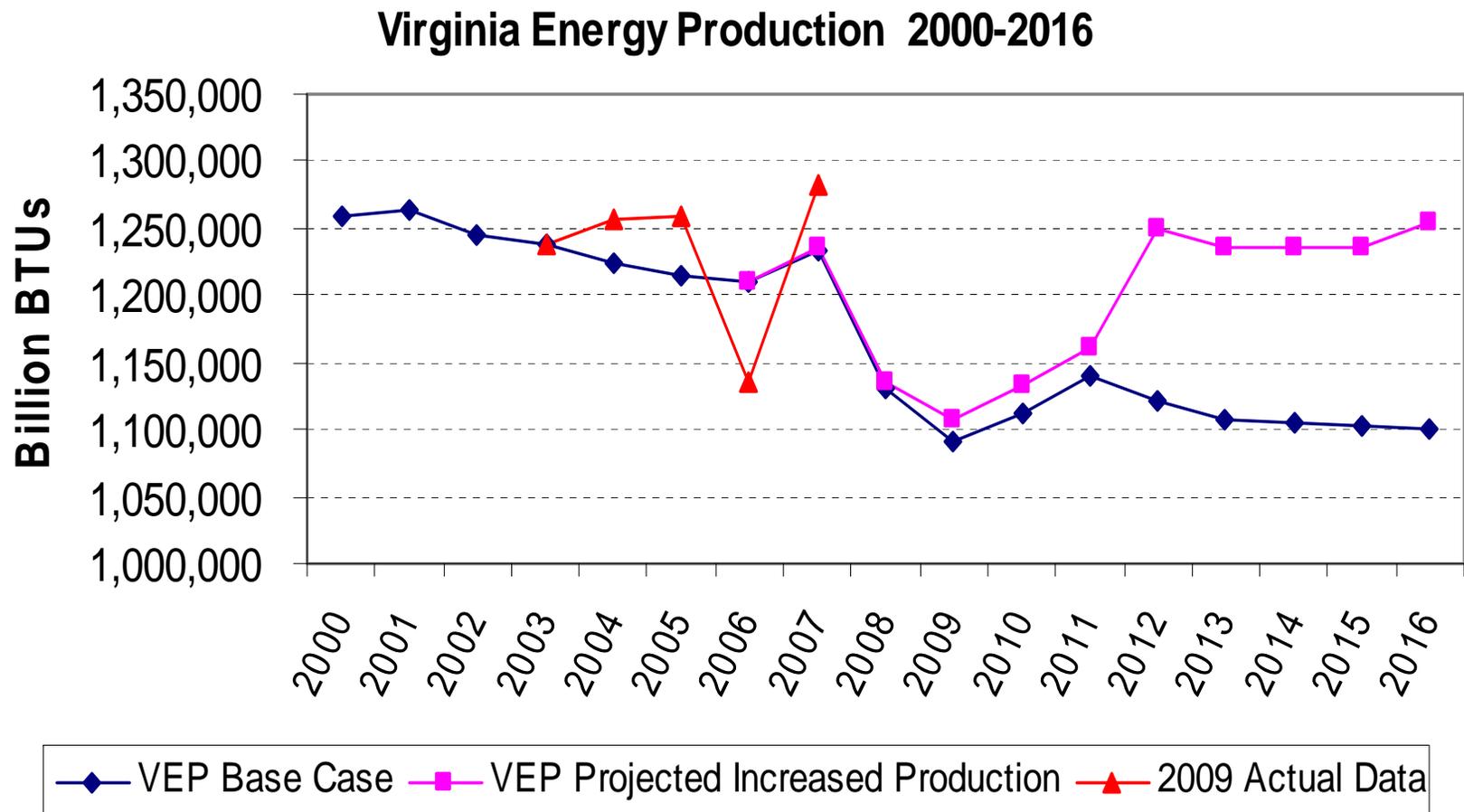
<http://www.dmme.virginia.gov>

# Goal 1 – Reduce Energy Consumption

## Virginia Energy Consumption 2000-2016



# Goal 1 – Increase Energy Production



# Goal 1 Recommendations

- **Increase efficiency incentives**
  - Federal income tax incentives expanded in ARRA
  - Two October Energy Star state sales tax holidays
  - \$15 million State Energy Program ARRA rebates
- **Utility efficiency programs**
  - 2008 natural gas conservation/decoupling – Virginia Natural Gas and Columbia Gas of Virginia
  - 2009 electric utility – level playing field with generation – Dominion portfolio of programs filed with SCC
  - Electric cooperatives demand response and conservation programs
  - Dominion, coops, municipal smart grid investments

# Goal 1 Recommendations

- **Weatherization Assistance Program**
  - Double formula funding
  - \$94 million ARRA
- **Policies to improve building stock**
  - 2009 model code implementation; 2012 planning
  - VHEN builder and energy auditor training
  - Home Builders Association – Earth Craft Homes
  - Executive Order 82 – New State LEED/Green Globes

# Goal 1 Recommendations

- Residential, commercial, industrial consumers
  - Expanded federal income tax credits
  - \$15 million State Energy Program ARRA efficiency rebates
  - SE industrial efficiency program
- Deploy new technologies
  - \$5 million State Energy Program ARRA for new jobs in clean energy technology commercialization

# Goal 1 Recommendations

- **Lead by example**
  - Executive Order 82 – Energy savings performance contracts; demand response; natural gas and heating oil purchasing; energy manager training
  - Local government climate and sustainability plans; EECBG ARRA efficiency investments
- **Transportation systems**
  - Increased transit funding – Norfolk light rail construction; Dulles Metro expansion
  - Northern Virginia HOT lanes
  - Executive Order 82 – 2% biodiesel after July 1, 2010

# Goal 1 Recommendations

- **Expanded renewable production**
  - Expanded RPS
  - VCERC offshore wind R&D
  - DEQ permit by rule for small renewable systems
  - \$38 million State Energy Program ARRA funding for solar/wind
  - Highland New Wind under construction; expanded landfill gas generation
- **Energy infrastructure investments**
  - Electric transmission and distribution lines
  - HRX natural gas pipeline crossing
  - MMS OCS oil and gas lease sale 220
  - Biofuels production and pipeline shipment

## Goals 2 Recommendations

- Expanded energy education
  - SCC Consumer Education Plan

# Goals 3 Recommendations

- Energy and environment
  - Governor's Commission on Climate Change
  - No state GHG reporting; EPA rule development
  - Land use – transportation standards
    - Secondary roads
    - High growth area
      - Urban development areas
      - Transportation impact fees
      - Transportation service districts
    - CTB transportation and land use performance measures
  - SW VA carbon capture and storage test

# Goal 4 Recommendations

- **Reliable investments in energy RD&D**
  - Tobacco Commission RD&D investments
    - \$40 million in 5 energy technology centers
    - Up to \$100 million in energy commercialization deployment
  - VCERC investments – algae and offshore wind
  - VT Center for Coal and Energy Research
  - State university internal fund investments
  - CIT SBIR/STTR assistance
  - Difficulties in matching federal funds

## Goal 4 Recommendations

- Interagency Task Force for Energy Project Recruitment
- \$5 million State Energy Plan ARRA planned for new jobs in clean energy businesses
- Nuclear support – AREVA, Babcock & Wilcox, Northrop Grumman
  - Lynchburg and Campbell County facilities
  - Newport News reactor component manufacturing
- Coal and Energy Commission uranium mining study