



VIRGINIA EXECUTIVE DIRECTIVE 11 AND PROPOSED VIRGINIA CARBON DIOXIDE TRADING RULE

**Presentation for the Regional Greenhouse Gas
Initiative Stakeholder Meeting**

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January 26, 2018**

EXECUTIVE ORDER NO. 57

- In June 2016, Governor McAuliffe's issued EO-57 directing the Secretary of Natural Resources to convene a Work Group to develop recommendations to reduce Virginia's carbon emissions under existing state authority
- Work Group membership included
 - Secretaries of Natural Resources and Trade, DEQ and DMME Directors Paylor, and a Deputy AG
- The Work Group held 6 meetings and a three month public comment period
 - 40 presentations and over 8,000 written comments

WORK GROUP RECOMMENDATIONS

- The Work Group's Report to the Governor was issued May 12
- The Report's first recommendation was to establish "via a regulatory process a 'trading-ready' carbon emissions reduction program for fossil fuel fired electric generating facilities that will enable participation in a broader, established multi-state carbon market."
 - The Report said, "there was tremendous public interest in this particular recommendation.... [T]he Work Group believes that it is important and necessary that Virginia work through a regional model, *like the established and successful RGGI*, . . . in order to both achieve lower compliance costs and address the interstate nature of the electric grid

EXECUTIVE DIRECTIVE 11

- On May 16, Governor McAuliffe issued ED-11 directing the Department of Environmental Quality (DEQ), by no later than December 31, to develop a proposed regulation *under existing state law* for the [SAPCB's] consideration to abate, control, or limit carbon dioxide emissions from electric power facilities that:
 - Included provisions to ensure that Virginia's regulation is "trading-ready" to allow for the use of market-based mechanisms and the trading of carbon dioxide allowances through a multi-state trading program
- *RGGI only trading-ready game in town*

TRADING-READY, RGGI LINKABLE PROPOSED RULE

- Following extensive public process and discussions with RGGI states, DEQ submitted a draft proposed RGGI-linkable carbon trading rule for new and existing fossil-fuel electric generating facilities to the State Air Pollution Control Board at its November meeting
- Based on August 2017 RGGI model rule, including
 - 3% annual declining cap beginning in 2020 (30% by 2030)
 - CCR
 - ECR
 - Bank adjustment
- But with allocation to regulated sources and likely consignment auction
- 5% Energy Efficiency set aside

CONSIGNMENT AUCTION APPROACH

- Conditional Allowances are consigned by CO₂ Budget Sources and holders of public contracts with DMME to the RGGI auctions
 - Auctions managed by RGGI, Inc.
 - Anyone can buy allowances at RGGI auctions
- Cost of allowances determined by auction clearing price
- Sources cannot use Conditional Allowances for compliance
- Revenue is returned to CO₂ Budget Sources and entities designated by DMME by auctioneer for consigned Conditional Allowances sold at auction
- Revenue received by CO₂ Budget Sources owned by regulated electric utilities flow to rate payers pursuant to State Corporation Commission (SCC) requirements

PROCESS FORWARD

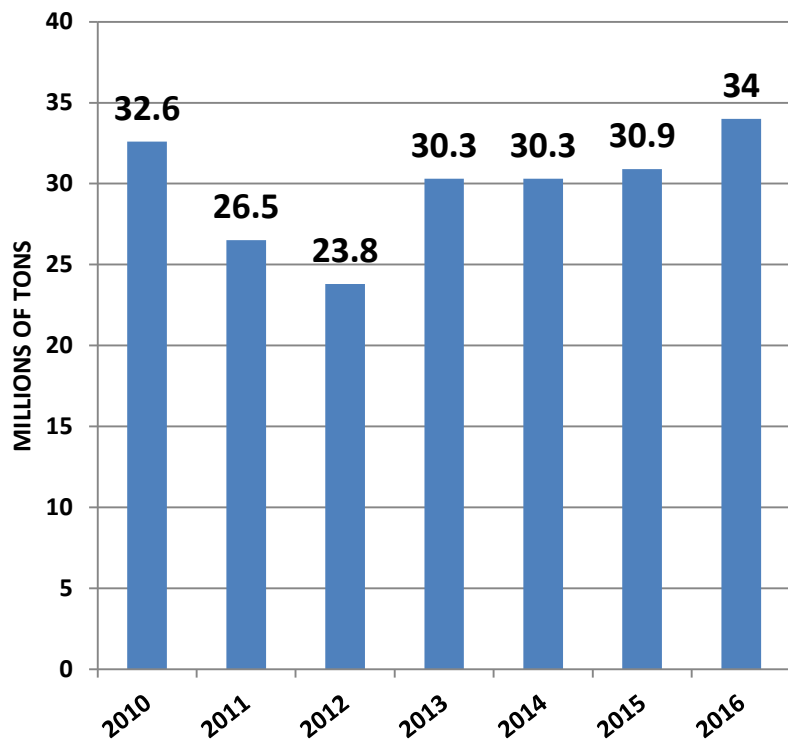
- SAPCB approved the proposed rule for public comment at its November meeting
- Formal 90 day public comment period commenced January 8
- Key remaining issues
 - Initial 2020 CO2 budget
 - Industrial exemption
 - Biomass
 - RGGI program conforming revisions (talks with RGGI continue)
- DEQ will present a final rule the SAPCB for consideration later in 2018
- Further information
 - <http://www.townhall.virginia.gov/L/ViewStage.cfm?stageid=8130>
 - <http://deq.virginia.gov/Programs/Air/GreenhouseGasPlan.aspx>

VIRGINIA AND RGGI PRELIMINARY ASSESSMENT

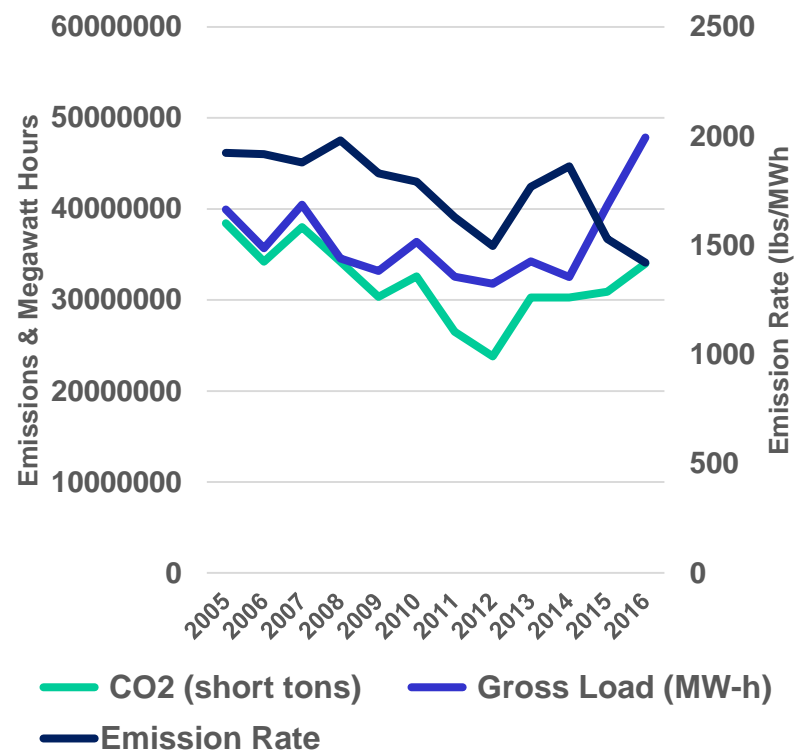
- Initial analysis of source/unit applicability:
 - 33 sources/123 units
 - Industrial sources are exempted in the proposed rule
- This represents about 23,000 Megawatts of generation
- VA Power Sector CO₂ emissions was 38 million tons in 2005
- Steady shift from coal to natural gas generation
- Emissions dropped to a low of 24 million tons in 2012
- Emissions then increased again to 34 millions tons in 2016 as instate generation also increased
- VA has a small but growing renewable energy sector
 - Over 600 MW of permitted renewable projects with potential of over 3,200 MW total in the pipeline

VIRGINIA POWER SECTOR PROFILE

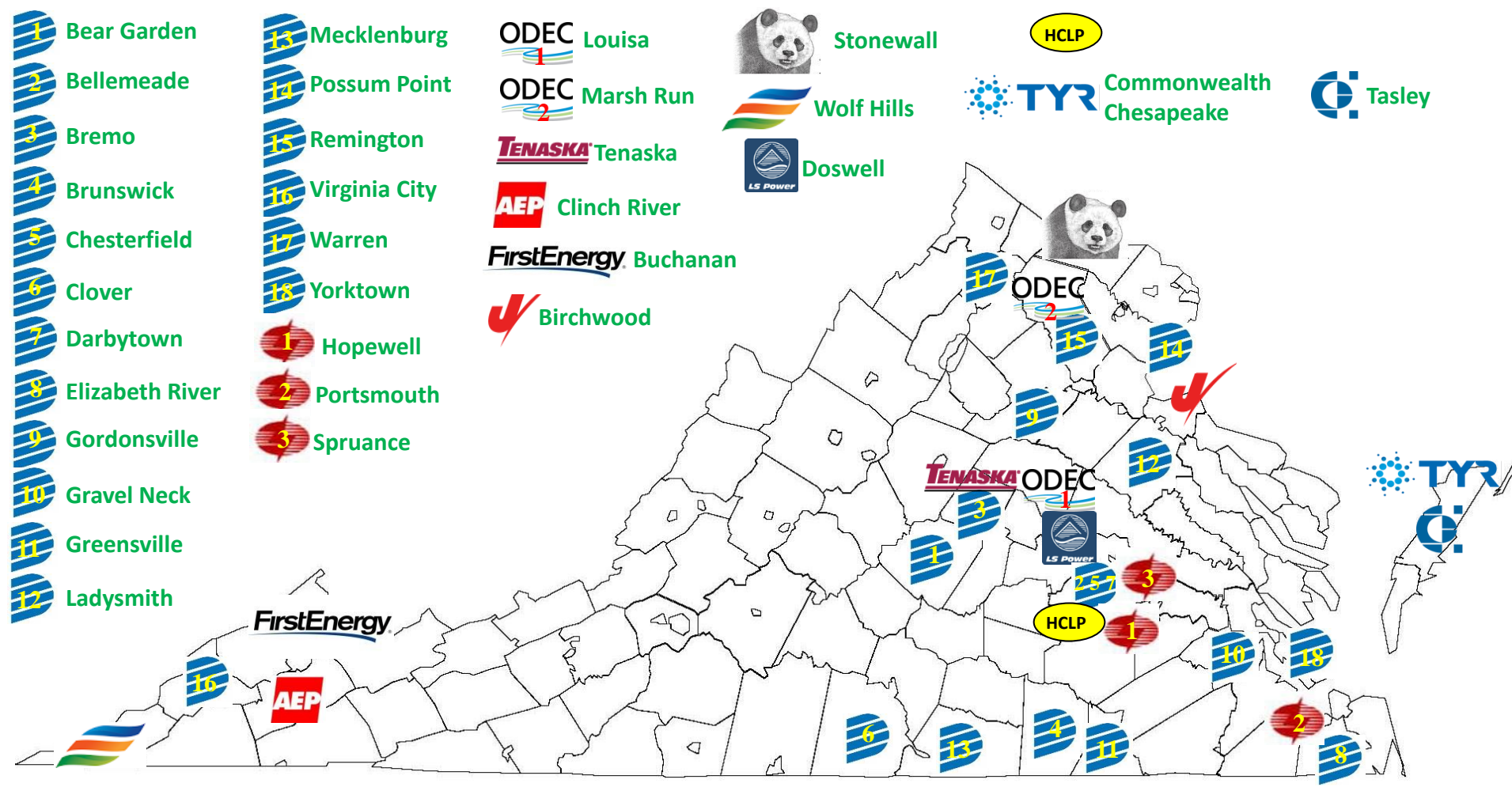
VIRGINIA POWER SECTOR CO2 EMISSIONS



VIRGINIA POWER SECTOR TRENDS



AFFECTED SOURCES IN VIRGINIA



**Fossil fuel-fired electric generating units
with ≥ 25 MW capacity**