

Statutory Energy Efficiency and Conservation **Provisions in Virginia**

Energy and Operational Efficiency Performance-Based Contracting Act (§ 11-34.1 et seq.)

- Authorizes public bodies to solicit performance-based contracts to reduce the amount of energy consumed, reduce long-term operational costs and produce immediate and long-term savings for the public body.
- Cost savings must exceed the cost of the contract within 20 years and the contractor must guarantee the cost savings.
- Energy conservation measures and facility technology infrastructure implemented by a contract includes the methods, techniques, application of knowledge, installation of devices, including an alteration or betterment to an existing facility, that reduce energy consumption or operating costs. Examples:
 - Insulation;
 - Storm windows and doors, caulking or weatherstripping, multiglazed windows and doors;
 - Automatic energy control systems including related software;
 - Heating, ventilating, or air-conditioning system modifications or replacements.
 - Efficient lighting;
 - Cogeneration equipment;
 - Renewable energy systems, such as solar, biomass, and wind.

Conservation, energy efficiency and demand response (SB 1416, 2007)

- The Commonwealth shall have a stated goal of reducing the consumption of electric energy by 10% by the year 2022. The State Corporation Commission conducted a proceeding to study this goal and make recommendations for its achievement. The report was presented to the Governor and General Assembly on December 14, 2007.

Green Schools Program (§ 22.1-212.1:2)

- Permits the Board of Education to develop and local school boards to adopt a green schools program that focuses on waste reduction and resource efficiency.

Home Energy Assistance Program (§ 63.2-805)

- Awards grants to supplement federal monies appropriated in the federal Low-Income Home Energy Assistance Program and the Weatherization Assistance Program.
- The fund is administered by the Department of Social Services.
- The Department has the following responsibilities:
 - Administer distributions from the Fund;
 - Lead and facilitate meetings with DHCD, DMME, and other agencies for the purpose of sharing information directed at alleviating the seasonal

energy needs of low-income Virginians, including needs for weatherization assistance services;

- Collecting and analyzing data regarding the amounts of energy assistance provided through the Department, categorized by fuel type in order to identify the unmet need for energy assistance in the Commonwealth;
- Developing and maintaining a statewide list of available private and governmental resources for low-income Virginians in need of energy assistance; and
- Reporting biennially to the Governor and the General Assembly on the effectiveness of low-income energy assistance programs in meeting the needs of low-income Virginians.

Virginia Resources Authority (§ 62.1-197 et seq.)

- The VRA offers below interest rate loans to local governments and other public bodies for various infrastructure improvements including energy conservation and energy efficiency projects.
- "Energy conservation and energy efficiency projects" are listed as eligible projects.
- Since its inception in 1984, the VRA has funded more than 875 critical projects across the Commonwealth exceeding \$4.2 billion of investment in Virginia's communities.

Loans to install of energy-saving devices (§ 36-55.31:1)

- Loan program controlled by the VHDA to finance the purchase and installation of insulation, storm windows and doors and solar or other alternative energy sources for:
 - Public or nonprofit buildings or facilities, or
 - Dwellings occupied by persons or families of low or moderate income.

The Virginia Uniform Statewide Building Code (§ 36-97 et seq.)

- Statewide minimum requirement that local jurisdictions cannot amend. The code is applicable to all new buildings in the Commonwealth. DHCD commenced the 2009 USBC regulatory process in March 2009 and plans to adopt the 2009 IECC and 90.1-2007 and proposes a projected implementation date of September 2010.

Exemption from automobile emissions inspection (§ 46.2-1178)

- Exempts hybrid vehicles that obtain a rating from the EPA of at least 50 mpg from mandatory emissions inspection programs.

Natural Gas Conservation and Ratemaking Efficiency Act (§ 56-600 et seq.)

- Authorizes any natural gas utility to file a conservation and ratemaking efficiency plan that includes (i) a normalization component that removes the effect of weather from the determination of conservation and energy efficiency results, (ii) a decoupling mechanism, (iii) cost-effective conservation and energy efficiency programs, (iv) provisions to address the needs of low-income or low-usage residential consumers, and (v) provisions to ensure that the rates and service to

nonparticipating classes of customers are not adversely impacted. Such plans may include one or more residential, small commercial, or small general service classes, but shall not apply to large commercial or large industrial customer classes.

- The State Corporation Commission (SCC) is required to allow a utility that implements a plan to recover, through its regulated rates, its costs, together with a return thereon, associated with cost-effective conservation and energy efficiency programs.
- Utilities that demonstrate certain reductions in annualized, weather-normalized usage per customer will receive the opportunity to earn an incentive of up to 15 percent share of the independently verified net economic benefits created by the conservation and energy efficiency programs.
- The SCC is prohibited from reducing a utility's profit as a result of the implementation of a natural gas conservation and ratemaking efficiency plan. The SCC is required to report annually on the implementation of the measure.

Education for electric energy consumers (§ 56-592 et seq.)

- Virginia Energy Sense is the Commonwealth's statewide five-year consumer education and outreach program under the guidance of the State Corporation Commission to encourage electric energy efficiency and conservation in Virginia households, businesses, and institutions.

Energy efficiency program rate adjustments (§ 56-585.1)

- Authorizes investor owned electric utilities to implement DSM energy efficiency programs and seek a rate increase to recover the costs of such programs.
- HB 2506 (2009)

Rate incentives for green roof construction (§ 15.2-977)

- Any locality may establish a (water and sewer connective fee) rate incentive program designed to encourage the use of green roofs in the construction and remodeling of residential and commercial buildings. The incentives shall be based on the percentage of stormwater runoff reduction the green roof provides.
- HB 1828 (2009).

Clean Energy Financing Program (§ 15.2-958.3)

- Grants localities the authority to authorize, by ordinance, contracts to provide loans for the initial acquisition and installation of clean energy improvements.
- The amount borrowed is repaid through an increased property tax assessment over a period of years.
- Local governments must hold a public hearing to solicit public feedback prior to adopting an ordinance establishing such a program. Participating local governments may determine funding sources, and establish interest rates and loan terms. Private lenders may participate. The local government may collect property owners' loan re-payments via water or sewer bills, real property tax assessments, or other bills.
- SB 1212 (2009)

Energy Efficiency and Conservation Tax Provisions

Tax credit for fuel cells and energy efficient appliances (§ 58.1-322)

- Individuals may receive an income tax credit of up to \$500 per year for 20% of the cost of the following energy efficient appliances and fuel cells:
 - Any clothes washers, room air conditioners, dishwashers, and standard size refrigerators that meet or exceed the applicable Energy Star efficiency requirements developed by the United States Environmental Protection Agency and the United States Department of Energy;
 - Any fuel cell that (a) generates electricity using an electrochemical process, (b) has an electricity-only generation efficiency greater than 35%, and (c) has a generating capacity of at least two kilowatts;
 - Any gas heat pump that has a coefficient of performance of at least 1.25 for heating and at least 0.70 for cooling;
 - Any electric heat pump hot water heater that yields an energy factor of at least 1.7;
 - Any electric heat pump that has a heating system performance factor of at least 8.0 and a cooling seasonal energy efficiency ratio of at least 13.0;
 - Any central air conditioner that has a cooling seasonal energy efficiency ratio of at least 13.5;
 - Any advanced gas or oil water heater that has an energy factor of at least 0.65;
 - Any advanced oil-fired boiler with a minimum annual fuel-utilization rating of 85;
 - Any advanced oil-fired furnace with a minimum annual fuel-utilization rating of 85; and
 - Programmable thermostats.

Sales and use tax exemption for energy and water efficient appliances (§ 58.1-609.1)

- Sales and use taxes shall not apply during a 4-day tax holiday to qualified products designated as Energy Star or WaterSense with a sales price of \$2,500 or less per product purchased for noncommercial home or personal use.
- Examples include any dishwasher, clothes washer, air conditioner, ceiling fan, compact fluorescent light bulb, dehumidifier, programmable thermostat or refrigerator designated by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) as meeting or exceeding requirements under the federal Energy Star program.
- WaterSense qualified products are those that have been recognized as being water efficient by the WaterSense program sponsored by the U.S. Environmental Protection Agency as indicated by a WaterSense label.
- Effective until July 1, 2012

Energy-efficient buildings (§ 58.1-3221.2)

- Any locality may levy a tax on the value of qualified energy efficient buildings at a lower rate from that of tax levied on other real property.

- An energy-efficient building is defined as any building that exceeds the energy efficiency standards prescribed in the Virginia Uniform Statewide Building Code by 30 percent.
- An energy-efficient building may also be any building that:
 - Meets or exceeds performance standards of the Green Globes Green Building Rating System of the Green Building Initiative,
 - Meets or exceeds performance standards of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System of the U.S. Green Building Council,
 - Meets or exceeds performance standards or guidelines under the EarthCraft House Program, or
 - Is an Energy Star qualified home, the energy efficiency of which meets or exceeds performance guidelines for energy efficiency under the Energy Star program developed by the United States Environmental Protection Agency.
- Communities that have enacted an ordinance implementing this law include the City of Charlottesville and the County of Spotsylvania

Classification of property for rate purposes; electric vehicles (§ 58.1-3506)

- Creates as a separate class of property for rate purposes, motor vehicles powered solely by electricity.
- HB 2592 (2009).

Executive Orders

Energy Efficiency in State Government (Executive Order 48)

- Executive branch agencies and institutions to reduce the annual cost of non-renewable energy purchases by at least 20% by 2010.
- Certain new and renovated facilities to be designed and constructed consistent with the energy performance standards at least as stringent as the U.S. Green Building Council's LEED rating system or the EPA/DOE's "Energy Star" rating.

Greening of State Government (Executive Order 82)

- All state agencies and institutions constructing state-owned facilities over 5,000 gross square feet in size, and renovations of such buildings valued at 50% of the assessed building value, shall be designed and constructed consistent with energy performance standards at least as stringent as LEED Silver or Green Globes 2 Globes Standard.
- Agencies and institutions are instructed to purchase or lease Energy Star-rated appliances and equipment, if Energy Star is available for the category of equipment/appliance.
- The order instructs the Commonwealth to encourage the private sector to adopt energy-efficient building standards by giving preference when leasing facilities for state use to those meeting LEED Silver or Green Globes Two Globes standards.

ARRA Funding

The Commonwealth of Virginia submitted its application to the U.S. Department of Energy for \$16.1 million under the American Recovery and Reinvestment Act of 2009 for the Energy Efficiency and Conservation Block Grant (EECBG) Program. Virginia proposes to spend the EECBG Recovery Act funds in three program areas to be administered by Department of Mines, Minerals and Energy (DMME):

- \$9.7 million in sub-grants to nearly 300 eligible local governments for community energy planning, energy efficiency and conservation projects.
- \$5.3 million in grants for renewable energy systems for local government and public school facilities. (This will be supplemented with \$4.1 million in State Energy Program Recovery Act funds.)
- \$0.7 million to provide technical assistance to local governments to use energy saving performance contracting to improve energy efficiency and reduce utility costs.
- \$0.47 million in administration costs

Other ARRA Funds:

- \$45 million in ARRA EECBG grants paid directly to 28 large localities in VA. Some localities in both groups are trying to implement community-based energy conservation programs that include financing enabled by SB1212.
- \$94 million for the Weatherization Assistance Program for low-income families.

Other Energy Efficiency and Conservation Efforts

HB 2531 (2009) / PUE-2009-00023

- Through HB 2531 the Virginia General Assembly directed the State Corporation Commission to hold a hearing and report to the Governor and General Assembly by November 2009 on achievable, cost-effective energy conservation and demand response targets that can realistically be accomplished in the Commonwealth through demand-side management portfolios administered by each generating electric utility in the Commonwealth. The legislation also directed that the State Air Pollution Control Board, in consultation with the State Corporation Commission and the Department of Mines, Minerals and Energy, shall adopt an air general permit or permits for the construction, installation, and operation of distillate oil, natural gas, liquid propane gas, and bio-diesel fired electric generating facilities that participate in a voluntary demand response program (i.e., load curtailment, demand response, peak shaving or like program) and that qualify as non major facilities under the Clean Air Act Amendments of 1990.

The Virginia Tobacco Indemnification and Community Revitalization Commission

- Agreed to fund \$36 million for the construction of five energy R&D centers, including: the Sustainable Energy Technology Center in Danville and the Southwest Virginia Clean Energy R&D Center in Abingdon. The Tobacco Commission will consider applications for funding of initial operations for the five R&D centers in mid-June. Funded by tobacco settlement funds.