



“More Energy, More Jobs”

“Let’s put ideology aside and be comprehensive when it comes to our energy future. Yes, we must develop new technologies for wind, solar, biomass, and other renewables. But we also need oil and natural gas, and to speed up the approval and permitting process for nuclear and clean-coal plants. I will be a Governor who develops all of Virginia’s energy resources to make life better for all of our citizens. “

- Former Attorney General and Republican Gubernatorial candidate Bob McDonnell

## Making Virginia the Energy Capital of the East Coast

The cornerstone of the McDonnell administration will be to create new jobs and opportunities for all Virginians. We cannot do this without a reliable and self-reliant energy system through the use of both traditional and renewable forms of energy.

Bob McDonnell understands this and has a strong record of supporting Virginia’s diverse energy needs. As a member of the Virginia House of Delegates, McDonnell was the chief sponsor of legislation creating the Virginia Hydrogen Energy Plan to add hydrogen to the Virginia energy portfolio. Building on the hydrogen educational forum of 2002, the Virginia Hydrogen Economy Roundtable was established and now consists of over thirty representatives of energy-related and transportation industries, federal and state government agencies, academic institutions, and non-governmental organizations. As a Delegate, McDonnell also supported grant programs for solar photovoltaic manufacturing, tax exemptions for solar energy and recycling property, and tax credits for solar energy equipment.

As Attorney General, McDonnell worked to implement natural gas decoupling in order to encourage customers to conserve energy and become more efficient energy consumers. An ongoing Advisory Council - the first of its kind in the nation - includes citizen input even after the programs have been implemented to ensure the quality and success of the program in addressing these energy needs.

In order to protect Virginia's citizens from the skyrocketing wholesale prices of electricity seen in other states, McDonnell brought together all the necessary stake holders to re-regulate electricity in Virginia. That legislation included Renewable Portfolio Standard goals, finding them to be in the public interest, and offered financial incentives for achieving them. In addition, it encourages Virginia’s utilities to construct new generation projects, including renewable projects in Virginia, to serve Virginians and create Virginia jobs. It also provides incentives for clean coal powered generation as well as nuclear power generation.

As we look at ways to improve and expand our energy supply in Virginia, we must be aware of our current energy mix. According to a Wall Street Journal article on March 4, 2009 by Robert Bryce, editor of Energy Tribune, solar and wind produce about 1.1% of American’s total electricity consumption. In Virginia the situation is slightly better, with about 2.7% of our net electricity generated by renewables. The reality is that coal-fire energy leads the way with 43%, followed by nuclear at 33.5%, natural gas at 13.6%, petroleum-fired at 6.3% and hydroelectric at 1.8% of our net electricity generation.

Currently, Virginia is the second largest importer of electricity behind California. This is unacceptable. While we have made great strides in the Commonwealth to form a comprehensive energy plan – we are in the infancy stage of creating a plan to provide affordable renewable energy in the future. Green energy must be cultivated to make it commercially practical and affordable. Renewables will certainly play an integral role in our energy future, but now we must take a comprehensive approach. We must create an environment to keep a ready supply of low cost energy. Our economy and quality of life depend on it.

Bob McDonnell's plan for "More energy, More Jobs" takes an "all of the above" approach to solving our energy crisis. His administration will continue to support the traditional sources of energy that provide thousands of jobs to Virginians and help keep our electricity costs fairly low. He will also expand investments in renewable energy sources and incentivize green job creation so that the future of Virginia remains bright.

## More Energy -- NOW

It is imperative that we use all of Virginia's available resources to help achieve energy independence and to promote national security. Virginia has great natural resources in natural gas and coal in Southwest Virginia, and one of the few new nuclear reactors in the U.S. expected to be built at Lake Anna.

### Safe Offshore exploration and drilling of oil and natural gas

Faced with the reality that the United States imports nearly twice as much crude oil as we produce and that our energy demands will only continue to increase, we must explore every option for alternative sources of energy and reduce our reliance on foreign sources of oil. Bob McDonnell supports the safe offshore exploration and drilling for oil and natural gas 50 miles off the coast of Virginia. This is not only an issue of energy independence and national security, but the development of Virginia's offshore energy reserves will mean thousands of new jobs, billions of dollars in new investment, and hundreds of millions in new tax revenue to the Commonwealth.

In a 2005 study by a professor at Old Dominion University, it was estimated that offshore natural gas production alone could over a 10-year period, create 2,578 new jobs, induce capital investment of \$7.84 billion, yield \$644 million in direct and indirect payroll, and result in \$271 million in state and local taxes. According to a recent report by the American Energy Alliance, offshore activities stand to contribute \$3.2 billion to the economy of Virginia and more than 15,000 well-paying jobs. While Virginia would still need to negotiate the share with the federal government, if the 37.5% royalty revenue share was extended to Virginia, like it is to states near the Gulf of Mexico, the Commonwealth could bring in nearly \$5 billion in non-tax revenue over the next 30 years, as reported by the Southeast Energy Alliance.

The leasing of exploration and development rights off the Virginia coast is currently scheduled by the federal government for 2011, giving Virginia an extremely valuable advantage over other states along the Eastern Seaboard as the first state to explore and drill, for oil and natural gas. Bob McDonnell has called on Secretary of the Interior Ken Salazar to continue the lease sale as scheduled, while Governor Kaine has unfortunately asked for more delay.

Bob will establish a Regional Energy Advisory Council to facilitate discussion amongst stakeholders to put strong policies in place before drilling begins. This will include the Navy, representatives from oil and gas companies, NASA, universities involved with research and development and legislators.

Given the vast economic benefit to the Commonwealth that will come with offshore exploration, Bob McDonnell will use a percentage of the revenue we receive from the lease sale and the estimated royalties to invest in getting more renewable energy programs online now, and increase investments in university based research and development of energy technology.

### Support Virginia's coal and nuclear industry to ensure affordable, reliable energy now

Coal - In 2006, the economic impact of the coal mining industry in Virginia was nearly \$2.4 billion, creating 11,082 jobs, 8,884 of which are located in Southwest Virginia. Bob McDonnell will continue to support Virginia's coal plants that use modern technology to offer a balance between cost, reliability and environmental impact.

There has also been great progress made toward carbon capture and storage (CCS) technology for our coal mines. Carbon capture and storage technologies are a method of reducing greenhouse gas emissions by capturing and injecting underground the carbon dioxide emitted from electricity generation plants that use fossil fuels. Dominion is currently partnering with Virginia Tech and the Virginia Center for Coal and Energy Research to study the potential for carbon storage in coal seams in Southwest Virginia. The Department of Energy and regional partners recently completed injection of 1,000 metric tons of CO<sub>2</sub> and are currently performing post-injection monitoring.

The federal stimulus package includes funding for potential carbon capture and storage projects. We need to make sure these funds are leveraged correctly so that our university-based research can capitalize on this great opportunity.

Nuclear – Bob McDonnell strongly supports the North Anna Unit 3 nuclear power plant development. As a reliable provider of more than 20 percent of Virginia's electricity, the North Anna Power Station generates more than \$710 million in economic benefits to the state. The direct economic benefit of electricity production at North Anna's two reactors is

\$600 million. The secondary economic benefits to the state are another \$111 million, according to the Nuclear Energy Institute. The power station is an integral part of the local economy, employing nearly 1,000 people. The direct and indirect compensation from the power plant – in the form of employee compensation and labor income for other workers within the state – totals more than \$150 million annually. A third unit at North Anna would benefit the state and local economies by creating well-paying jobs, approximately 4,000 to 5,000 jobs during construction and approximately 700 permanent positions once in operation.

## Expedite Permitting and Approval Processes for Energy Facilities

Bringing new energy sources online takes too much time. While it is vital that all parties have an opportunity to provide their input and to ensure the project is environmentally sound, the state permitting process should not be an obstacle to new energy sources, whether it be nuclear, coal, wind, solar, biomass or other energy sources.

This year, Republicans led the effort to develop permits by rule for the construction and operation of small renewable energy projects. This speeds up the permitting process for projects with a maximum capacity of 100 megawatts if they generate electricity from sunlight, wind, or falling water, wave motion, tides, or geothermal power, or 20 megawatts if they generate electricity from biomass, energy from waste, or municipal solid waste. We should use this model to expedite permitting for larger facilities.

In addition, Bob McDonnell will urge the cooperation of federal and state agencies to establish joint permitting application processes to increase the efficiency and timeliness for approval and citing of new energy facilities. He will also appoint representatives to approval boards who have technical experience so that the process is more efficient on the state level.

## Alternative and Renewable Forms of Energy and Creating Green Jobs

Bob McDonnell will establish Virginia as a “Green Jobs Zone” to incentivize companies to create quality green jobs. Qualified businesses would be eligible to receive an income tax credit equal to \$500 per position created per year for the first five years (up to 350 jobs annually). If the position is created within Virginia’s enterprise zone, the business will qualify for the current enterprise zone grant in addition to the new \$500 income tax credit. The existing requirements pertaining to Enterprise Job Creation Grants will also apply. Qualifying businesses could include suppliers, manufacturers, installers and construction contractors for solar, wind, or biomass products and services, energy-efficiency products and services, pollution management systems and production of alternative transportation fuels.

Bob McDonnell will continue his work toward alternative energy that is renewable and sustainable, building on his energy record, including support for hydrogen energy. We must foster innovation by encouraging partnerships between Virginia Universities and private industry that will lead to new technologies and jobs in this field.

While there are several federal tax incentives for alternative fuel vehicles and alternative fuel infrastructure, Virginia lags behind. The Virginia Alternative Fuels Revolving Fund was established to assist local governments that convert to alternative fuel systems, but no funds have been allocated for its use. As Governor, Bob McDonnell will expand the purpose of this fund to include infrastructure such as refueling stations, provide seed money and aggressively pursue additional grants.

## Transform Southside and Southwest Virginia into America’s Energy Corridor

In cooperation with the Virginia Tobacco Commission, private sector energy leaders, our community colleges and our major research universities, Bob McDonnell will make Southwest and Southside Virginia the nation’s hub for traditional and alternative energy research and development. When the technology transformation of the economy took place in the 1990’s, Virginia was at the vanguard – Virginia needs to lead again when it comes to energy. Just as Northern Virginia is recognized as the leading technology corridor in the nation, the new energy corridor on the east coast will be Southside and Southwest Virginia.

The Tobacco Commission has established 5 key research and economic development centers in the tobacco footprint of Virginia. Bob McDonnell will leverage the \$100 million in funding made available through the Tobacco Commission by attracting private sector investment, seeking federal stimulus money and coordinating grant opportunities with our universities and community colleges.

A new Virginia Energy Institute will bring together the academic research capabilities of our major research universities under one canopy to help focus efforts on developing energy technologies for the 21<sup>st</sup> century. To assist with the attraction, building and operation of major energy facilities in Southside and Southwest Virginia, we will also support the

establishment of the Center for Energy. The Center for Energy would be part of the Virginia Economic Development Partnership, and its purpose would be to work with local economic development organizations and Industrial Development Authorities to make certain that we maximize the potential for energy related investment in Southside and Southwest Virginia.

Not only will this mean more jobs and investment for Southside and Southwest Virginia, it will make Virginia the leader when it comes to policy guidance, research, and development on the harnessing and use of renewable energy, smart grid technology, carbon capture and sequestration, clean coal, oil, refining capacity, electricity, natural gas, energy infrastructure, and alternatives.

## Global Leader in University Based Energy Research and Development

Virginia universities are leading the way in areas such as harnessing wind and solar energy, turning algae into biodiesel fuel, improving photovoltaics, improving efficiency in homes and businesses, and developing electric cars. Many of the projects have been going on for years, but increased funding will help advance this research from theory to practice. We need to help these projects gain access to money included in the federal stimulus package so they spend more time developing and researching than chasing grants.

To help Virginia universities gain access to federal stimulus money, as Governor, Bob McDonnell will establish the Virginia Universities Clean Energy Development and Economic Stimulus Foundation to identify, obtain, disburse and administer funding for: research and development of alternative fuels, clean energy production, and related technologies; support of economic development projects in disadvantaged rural areas; and assistance in the commercialization of alternative fuels and clean energy technologies. The Foundation will operate as a non-profit corporation.

McDonnell will also work with the Virginia Coastal Energy Research Consortium to move forward with a pilot program to study offshore wind energy potential.

## Affordable Energy Efficiency Improvements and Conservation

An effective energy plan cannot just rely on a variety of energy sources and research and development; it must address the core issue of what we can do to reduce our energy demand and improve efficiency.

Energy audits are an effective tool for businesses, government and individuals to use to pinpoint areas where they can improve their energy efficiency. As Governor, Bob McDonnell will leverage stimulus funding to incentivize individuals and businesses to conduct energy audits and encourage public private partnerships between small businesses and government. Through the federal stimulus funding, Virginia will receive an estimated \$94 million in funds to assist with energy audits and weatherization of citizens' homes over the next several years. According to the Department of Energy, for every \$1 million invested, weatherization creates 52 direct jobs and 23 indirect jobs. As Governor, Bob McDonnell will ensure that we use the dollars to stimulate the economy by employing small businesses that provide energy audits and home improvements to perform the work and help them make it through these hard times. This will also allow us to reach more homes and ensure homeowners are in a position to save on energy costs.

Energy Savings Performance Contracting is a new tool that the private sector is using to update facilities with more energy-efficient products and materials. The basis for performance contracts is that the energy services company pays the upfront cost of purchasing and installing new equipment, and the customer repays the company over the life of the contract from the cost savings resulting from the project.

Although Executive Orders requiring state agencies to reduce energy use exist, some Virginia agencies have been hesitant to engage in performance contracting as a means to implement no-cost facility upgrades/improvements and reduce energy consumption and cost. As Governor, Bob McDonnell will examine state agencies top to bottom and require state agencies to partner with Energy Savings Performance Contracting companies. One example of this already occurring is the Department of Corrections, which has implemented three such contracts addressing nearly \$30 million in needs, without capital or increased funding. This is a model that should be replicated throughout all state agencies.

Bob McDonnell applauds Governor Kaine's leadership by including LEED standards for new state-owned facilities over 5,000 gross square feet. As governor, Bob McDonnell will look to expand implementation of LEED standards as a model for new construction for public facilities.

As Attorney General, Bob McDonnell worked with major utility companies to promote conservation measures. He will take this experience with him to the Governor's office and continue to work with other utility companies to do the same. Bob worked with Virginia Natural Gas (VNG) to develop an energy conservation program that is accessible to a broad base of

VNG customers and truly help educate citizens to philosophically change the way they think about their energy use. The VNG agreement permitted decoupling of rates in order to remove any disincentive for the company to encourage its customers to conserve energy and become more efficient energy consumers. Through this agreement, a Community Outreach and Customer Education Program educates consumers through a variety of media regarding energy efficiency and conservation information. In addition, VNG provides \$4 discount coupons for replacement air filters, a program to make programmable thermostats available to their customers at wholesale prices, and offers monetary incentives for customers to install tank-less water heaters, conduct seasonal efficiency check-ups, and for certain individuals to weatherize their homes. He also suggested the creation of an Advisory Group to meet with VNG after the programs were put into place to provide ongoing input and feedback to help the success and reach of the programs. The State Corporation Commission adopted this idea and now Virginia has the first Advisory Group for a utility-based conservation plan that includes citizen input even after the programs are being implemented.

## SMART Grids and SMART Buildings to Improve Energy Reliability & Affordability

The current electric grid is aging. It needs to be expanded and upgraded so that it can accommodate Smart Grid technology that will increase energy efficiency, allow better use of renewable energy and stimulate economic growth.

Smart Grid technology can help Virginia reach its electrical conservation goal of 10 percent by 2022. Besides being more efficient, SMART grids are more reliable, self-healing and less vulnerable to natural and man-made attacks on the system. In addition, they reduce carbon emissions and cost to consumers by giving them more control over their energy spending.

A well designed Smart Grid can also support Smart buildings. In the U.S., buildings account for 39% of total energy used and 71% of electricity consumed. Virginia businesses should have a tax incentive to partner with demand response companies, use LEED standards as a model, and to build SMART buildings to reduce their energy consumption during peak times.

Authorized by Bob McDonnell. Paid for by McDonnell for Governor.