American Jobs Plan: Applications to Virginia

Due to the progress Virginia has made on climate action and clean energy over the past two years, the Commonwealth is well poised to take advantage of these historic investments to further grow our clean energy economy.

Investments through the AJP will also help the Commonwealth further ongoing efforts to electrify the transportation sector, safeguard water quality and our coast, retool the fossil fuel-dependent Southwest Virginia economy, and advance environmental justice.

Our proximity to our nation's Capital, and the large number of federal agencies, buildings, and military installations in Virginia, present a further opportunity to grow our economy in Virginia while addressing the climate crisis.

American Jobs Plan: Virginia Fact-Sheet

Offshore Wind:

In 2020, the first offshore wind project in federal waters – and only the second offshore wind farm in the U.S. – came online 27 miles off Virginia's coast. The Coastal Virginia Offshore Wind pilot project consists of two turbines generating 12MW - enough electricity to power roughly 3,000 homes. By 2026, at full buildout, this project is estimated to generate 2.6 GW (gigawatts), enough electricity to power up to 600,000 homes.

With plans already in motion, Virginia is a prime target for federal infrastructure investment to help facility economic growth and job creation.

<u>Early estimates predict</u> this project alone will support:

- 900 direct and indirect Virginia jobs annually (about 60 percent in Hampton Roads), with almost \$57 million in pay and benefits;
- \$143 million in economic output, generating almost \$2 million in revenues for local governments in the Hampton Roads area, and an additional \$3 million in Virginia state tax revenues.

This is just the start. With the help of a federal partner, Hampton Roads can emerge as a hub in the offshore wind energy supply chain, making this emerging industry a leading economic driver and job creator in Virginia and positioning us as a further East Coast leader on clean energy.

<u>Having already made commitments to expand offshore wind energy</u>, the AJP follows up on these goals by dedicating billions of dollars to revitalize American ports, boost domestic

manufacturers through tax credits and financing, and create a new office dedicated to monitoring domestic industrial capacity while also calling for billions in R&D funding for new energy technologies like floating offshore wind.

Clean Energy & Energy Efficiency:

With 2020's passage of the Virginia Clean Economy Act, the Commonwealth secured a pathway to 100 percent clean electricity by mid-century, along with mandatory, benchmarked standards for renewable energy and energy efficiency.

Policies like the VCEA have helped make Virginia one of the fastest growing markets in the nation for clean energy, which as of 2019, was responsible for more than 97,000 jobs in the Commonwealth.

Through smart tax credits for renewable energy alongside billions of dollars of investment in research and development and in jumpstarting clean energy production and manufacturing, the AJP has the potential to exponentially grow this industry as we work toward a clean energy future.

- \$5 billion increase in funding for climate-focused research
- \$15 billion in demonstration projects for climate R&D priorities and new technologies
- \$46 billion in federal procurement to jumpstart clean energy manufacturing
- A 10-year extension and phase down of an expanded direct-pay investment tax credit and production tax credit for clean energy generation and storage

The cleanest energy is the energy we don't use, and advancing energy efficiency measures also helps save Virginia households money. In Virginia, an average low-income family spends 6-8% of their income on home energy costs forcing tough choices between paying energy bills and buying food, medicine or other essentials.

The American Jobs Plan will upgrade low-income homes to make them more energy efficient through:

- \$40 billion to improve the infrastructure of the public housing system in America, including energy efficiency measures
- Upgrade homes through block grant programs, the Weatherization Assistance Program, and by extending and expanding home and commercial efficiency tax credits.
- Establish a \$27 billion Clean Energy and Sustainability Accelerator to mobilize private investment into distributed energy resources; retrofits of residential, commercial and municipal buildings; and clean transportation.

- Invest in cutting-edge, energy-efficient and electrified, resilient, and innovative school buildings
- \$10 billion in the modernization, sustainability, and resilience of federal buildings

Coalfields Transition:

Virginia's coal mines produced more than 45.9 million tons of coal in 1990, and by 2019, that annual figure fell to 12.4 million, according to federal data. As production fell, so did employment in the state's mines, from about 10,662 workers to 2,576 over the same 30-year period (Source: Bristol Herald Courier).

In <u>a recent report</u>, the federal Interagency Working Group on Coal and Power Plant Communities determined that Southwest Virginia is the fourth most coal-dependent region in the nation despite year after year declines in coal production and employment.

While there are many economic factors at play that have impacted the coal industry, the reality is that this downward trend will more than likely continue, resulting in further job losses, industry bankruptcies, shuttered and abandoned mines, and a legacy of left-behind pollution in Virginia's economically distressed coalfields.

A <u>recent report from the Ohio River Valley Institute</u> shows there are an estimated 50,400 acres of unreclaimed abandoned mine sites in Virginia, the seventh highest total of any coal-producing state in the nation. Cleaning up these sites just in Virginia will cost an estimated \$809 million.

The AJP recognizes the need to steer economic growth and investment to fossil-fuel dependent regions like Southwest Virginia.

- \$16 billion to plug oil and gas wells, and restore and reclaim abandoned coal, hardrock, and uranium mines.
- \$5 billion to remediate and redevelop Brownfield and Superfund sites, as well as related economic and workforce development
- Investing in the Economic Development Agency's Public Works program and in "Main Street" revitalization efforts through HUD and USDA.
- Targeted sustainable, economic development efforts through the Appalachian Regional Commission's POWER grant program
- Department of Energy retooling grants for idled factories
- Dedicated funding to support community-driven environmental justice efforts such as capacity and project grants to address legacy pollution and the cumulative impacts experienced by frontline and fenceline communities.

Transportation:

Carbon emissions from the transportation sector make up nearly half of Virginia's total carbon footprint, making it our largest contributor by far to climate change. In 2021, Virginia became the latest state to adopt the "California Clean Cars Standard," which will help boost sales of zero-emission and low-emission vehicles in Virginia. And while the legislature also passed a framework for up-front consumer rebates, they left this program unfunded. Investments in EV charging infrastructure will also be critical to ensuring the increasing electrification of our transportation sector.

The AJP invests \$174 billion to advance EVs, including:

- Funding to retool factories and boost domestic supply of materials for EVs
- Tax incentives for EV buyers
- Grant and incentive programs for EV charging infrastructure, with a goal of 500,000 chargers across the U.S. by 2030

And while putting more EVs on the road is necessary to combat the crisis, getting more people out of cars and into modern and efficient passenger rail and transit service is equally important, especially in Virginia's urban and suburban population centers plagued by congestion and pollution.

The AJP will help advance passenger rail and mass transit by investing \$185 billion to:

- Modernize existing transit and help agencies expand their systems to meet rider demand.
- Address Amtrak's repair backlog
- Modernize the high traffic Northeast Corridor
- Improve existing corridors and connect new city pairs
- Enhance grant and loan programs that support passenger and freight rail safety, efficiency, and electrification.
- Reconnect neighborhoods cut off by historic transportation investments
- Ensure new projects increase opportunity, advance racial equity and environmental justice, and promote affordable access.

Coastal Resiliency and Sea Level Rise:

As outlined in the recent Virginia Coastal Resilience Master Planning Framework, Virginia has the highest rate of sea level rise on the East Coast, making our coastal communities especially vulnerable:

- Virginia's coastal region covers 8,950 square miles, approximately one quarter of the state.
- More than 10,000 miles of tidally influenced shoreline only exacerbate the region's flood risk. Recent estimates show that 250,000 acres of land, 1,469 miles of roads, and property valued at \$17.4 billion lie less than five feet above the high tide line in Virginia.

 Virginia's coastal region lacks the degree of resilience needed to ensure that coastal localities can minimize loss of life and damage to private property and public infrastructure.

Researchers at Old Dominion University found that within the next two decades, 424 square miles of land in coastal Virginia will be at risk of permanent flooding from relative sea level rise. That area could rise to 649 square miles by 2080, with as many as 111,545 buildings at risk of being below the high tide line.

Virginia recently dedicated \$500 million to begin combatting sea level rise, funded by proceeds from the Regional Greenhouse Gas Initiative, but the need is far greater. In Virginia Beach alone, the cost of protecting the city from the impacts of sea level rise is estimated at \$1.7 to \$3.8 billion

The AJP dedicates \$50 billion to:

Safeguard critical infrastructure and services, and defend vulnerable communities

- FEMA's Building Resilient Infrastructure and Communities program
- HUD's Community Development Block Grant program
- New initiatives at the Department of Transportation
- A bipartisan tax credit to provide incentives to low- and middle-income families and to small businesses to invest in disaster resilience
- Transition and relocation assistance to support community-led transitions for the most vulnerable tribal communities.

Maximize the resilience of land and water resources to protect communities and the environment

- Protection from extreme wildfires
- Coastal resilience to sea-level rise and hurricanes
- Support for agricultural resources management and climate-smart technologies
- Protection and restoration of major land and water resources
- Funding for the western drought crisis, Tribal Water Settlements, and dam safety.

Water Quality:

As a frontline state on the Chesapeake Bay, Virginia has made big investments in improving water quality by addressing pollution from all its major sources: farm operations, urban stormwater runoff, and wastewater treatment plants, as part of the multi-state Bay cleanup effort.

While we've made progress, there's still much more work to do, especially in addressing aging infrastructure. In the cities of Richmond, Lynchburg and Alexandria, for example, heavy rainfalls send untreated sewage into Bay tributaries through antiquated "Combined Sewer Overflow" systems which discharge a mixture of stormwater and human waste into our waterways, threatening aquatic life and human health.

The prevalence of lead in our drinking water, especially from the private wells that rural communities depend on, is also a concern.

The 2016 USGS report "Assessing the Potential Corrosivity of U.S. Groundwater", identifies Virginia as having a "high prevalence" of potentially corrosive groundwater (based on a study of 20,000 wells nationwide). When this water comes into contact with plumbing materials that contain lead or copper, these metals can make their way into the water we drink.

According to the Virginia Department of Health, young children, infants, and fetuses are particularly vulnerable to lead because the physical and behavioral effects of lead occur at lower exposure levels in children than in adults. A dose of lead that would have little effect on an adult can have a significant effect on a child. In children, low levels of exposure have been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells.

The AJP invests in improving water quality by funding efforts to:

- Replace the nation's lead pipes and service lines (\$45 billion)
- Upgrade and modernize aging water systems (\$56 billion) by scaling up existing, successful programs like grants and low-cost flexible loans to states, Tribes, territories, and disadvantaged communities.
- Monitor and remediate PFAS (per- and polyfluoroalkyl substances) in drinking water and invest in rural small water systems and household well and wastewater systems, including drainage fields (\$10 billion)