

**STACEY
ABRAMS**
GOVERNOR

ADVANCED ENERGY

JOBS PLAN



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Paid for by Stacey Abrams for Governor

THE ADVANCED ENERGY JOBS PLAN

1. **Grow Advanced Energy Jobs:** *Train and Retrain Our Advanced Energy Workers*

- Foster Long-Term Careers
- Improve Workforce Development
- Expand Partnerships with Educational Institutions
- Expand Apprenticeships

2. **Increase Advanced Energy Generation:** *Target Economic Development Dollars to Advanced Energy Expansion, Green Building Retrofits and New Construction and Exports*

- Create Georgia Green Bank
- Expand Energy Tax Incentive Accountability
- Fund Advanced Energy Technologies
- Adopt Renewable Portfolio Standards

3. **Increase Coordinated Action:** *Coordinate with Counties, Municipalities and Public-Private Partnerships for Greater Impact*

- Expand Advanced Energy Implementation
- Deepen Investment in Solar Power
- Encourage Usage of PACE
- Benchmark Ordinances for Expanded Local Penetration

4. **Improve Energy Efficiency to Lower Costs:** *Green Government Georgia*

- Encourage Green Building
- Examine Fleet Operations
- Initiate Grid Retrofits



Dear Fellow Georgians:

We deserve an economy that works in every county, for every Georgian, and helps families thrive — not just survive.

Parts of our state enjoy a strong economy, but too many families and communities are left out of economic success. Despite a reputation for a robust business environment, Georgia is losing middle income households,¹ and it remains one of the top ten states for income inequality and poverty.² Nearly a quarter of a million Georgians are unemployed and searching for work their towns cannot produce without partnership from an effective state government.

For too long, the solution has been to promote temporary or potentially unstable job creation in a handful of counties through tax incentives for large corporations. These announcements deliver headlines, but these projects do not always deliver consistent, good-paying jobs. Businesses may add to their bottom lines, but these investments bypass far too many of our economically-depressed Georgia counties and struggling neighborhoods.

Georgia must have a bold and comprehensive economic vision to (1) ensure no person has to work more than one full-time job to make ends meet and (2) catalyze the creation of good-paying jobs in all 159 counties, at all skill levels. As a successful entrepreneur who has worked in infrastructure, capital investment and manufacturing, I understand how critical a diverse and thriving economy is to our families — and how we must leverage our natural resources and assets, working together across sectors, to build an economy for every worker.

Our proposal outlines the first in a series of economic development priorities I will spearhead as Georgia's next governor: **Georgia's Advanced Energy Jobs Plan**. Georgia can deliver high-quality employment for our state by creating an economy that leads the nation in advanced energy jobs and local innovation — using our people, our climate and our ingenuity to expand the path to prosperity for Georgians everywhere.

Advanced energy has become a stable but under-utilized source of economic growth for Georgia. In 2015, Georgia's solar market alone contributed nearly \$1 billion to communities across the state.³ Biomass, hydro and wind have also become part of our state's energy production. Farmers have leased land for solar, and Georgia grows 30% more pine than is harvested, leading to a growing biomass industry.⁴

Georgia's economic future demands bold action. Through our Advanced Energy Jobs Plan, we will lead the South as a state where advanced energy innovation is a core component of our economic expansion. Georgia deserves a leader who sees clean, advanced energy as a stable source of economic development, a public health necessity, and an environmental justice imperative. **As governor, I will set us on a course for 25,000 to 45,000 sustainable jobs in advanced energy** to create opportunity for working families for years to come.⁵



(Continued)

As Georgia House Minority Leader, I championed more oversight, accountability, and participation in energy projects and fought for advanced energy expansion. I have always stood squarely on the side of working families by advocating workers should be compensated a living wage, classified appropriately to receive earned benefits and protections, work in a safe environment, and enjoy a secure retirement. Through my businesses, I invested in small companies delivering innovative solutions – helping grow and retain jobs in Georgia.

To continue this work, as governor, I will enact policies that will help build a fair and thriving economy in every county in Georgia. We will consistently invest in Georgia's home-grown businesses, fight for equality in the workplace, and promote a healthy workforce as essential components to lifting families out of poverty and strengthening the middle class. Georgia's transition to an advanced energy economy is a crucial component to achieving that reality.

From employing coders, truck drivers, machinists, construction workers, administrators and sales force employees, to monetizing solar on timberland or farmland, we will produce a wide range of opportunities by expanding our investment in advanced energy sectors.

The Advanced Energy Jobs Plan will (1) generate significant job growth through advanced energy generation, technology innovation and energy efficiency efforts; (2) train and retrain workers for well-paying advanced energy jobs; and (3) coordinate state and local action and develop public-private partnerships for greater impact across the state for implementation.

Growing Georgia's economy means we must diversify our jobs and support innovation across sectors. By championing advanced energy jobs – which will include construction, management, tech, trades and services – Georgia will be the leader in the South and create a thriving, modern economy across all of our regions. The work to make advanced energy policy a reality that uplifts local communities cannot be fulfilled without first having conversations with Georgians about how it will impact their daily lives. I look forward to traveling the state to share this vision with families and hear more about how we can best work together for our state's economic future. Please email askstacey@staceyabrams.com, tweet [@staceyabrams](https://twitter.com/staceyabrams) or visit my Facebook page to ask questions about the Advanced Energy Jobs Plan, and visit www.staceyabrams.com/advancedenergyjobs to share your thoughts.

Sincerely,



THE ADVANCED ENERGY JOBS PLAN

The Governor of Georgia has a tremendous capacity to promote advanced energy jobs, spearhead the delivery of advanced energy sources and foster technology innovations across the state.

The delivery of renewable energy will be accomplished via investment in advanced energy sources, particularly solar, biomass and wind energy. Job creation will also be spurred by green building, sustainability initiatives and energy efficiency.

With the right policies, Georgia can gain **25,000 to 45,000** sustainable good-paying advanced energy jobs in the fields of manufacturing, installation, construction, coding and operations.⁶ We can accomplish this through:

1. ADVANCED ENERGY JOB GROWTH: *Train and Retrain Our Advanced Energy Workers*

- **Foster Long-Term Careers:** Georgia will expand access to high-paying careers in manufacturing, system design, project development, construction, and installation and operations – all critical to a clean, advanced energy economy. Advanced energy creates career pathways from the entry-level to high-skilled, within a particular sector and across fields. Research has shown that the environmental industry is more manufacturing-intensive than other industries.⁷ These facilities and operations come with not simply engineers, machinists, coders and installers, but also accountants, truck drivers, sales force, and a range of other occupations that contribute to this industry.
- **Improve Workforce Development:** Advanced energy jobs allow Georgia to build skills not only for today but for the long-term for our workers and new hires. By leveraging existing institutions and making smart, strategic investments in existing worker retraining, Georgia can invest in every county. Advanced energy jobs can exist across the state, restoring manufacturing as a long-term job prospect and creating micro-economies to support struggling communities.
- **Expand Partnerships with Educational Institutions:** Georgia will work with our colleges and universities, technical colleges, and Historically Black Colleges and Universities to develop training programs for advanced energy workers. These career paths will be prioritized for student financial assistance through the strategic industries program at the state's technical colleges. Just as Georgia has sparked the growth of the film industry and built the infrastructure to supply a local workforce, we must launch advanced energy workforce development as a prominent feature within our higher education system.
- **Expand Apprenticeships:** Apprenticeship programs will be vital to training and implementation, and we will work with our partners in labor and business to incentivize opportunities for skill development. These training programs will focus statewide and ensure pathways exist for all workers. With broad investment, we can target struggling communities, disadvantaged populations and also “Pink to Green” best practices to ensure women gain representation in these non-traditional occupations for women.



2. Increase Advanced Energy Generation: *Target Economic Development Dollars to Advanced Energy Expansion, Green Building Retrofits and New Construction and Exports*

- **Georgia Green Bank:** Georgia will incentivize advanced energy through a revolving low-interest loan program. Georgia has existing loan financing programs for energy generation for local governments, which will be expanded and streamlined to afford advanced energy opportunities for businesses and homeowners. The Georgia Green Bank will encourage more public-private partnership by extending incentives to the private sector. A Green Bank leverages private capital to match and exceed the public investment. Georgia will initially invest \$40 million annually in its Green Bank to spur between \$200 and \$250 million in private capital financing while also encouraging matching funds from foundations. This level of investment will mirror Connecticut's efforts which spurred 4,400 jobs in one year.⁸ Georgia will work with the private sector to fairly award low-interest loans in partnership with the legislature to ensure compliance with the Georgia Constitution's gratuities clause.
- **Energy Tax Incentive Accountability:** We will examine existing business tax credits for effectiveness and redirect dollars towards advanced energy generation and development or those businesses employing energy efficiency upgrades.
- **Funding for Advanced Energy Technologies:** We will leverage existing angel investor rules and state-sponsored venture capital funding mechanisms to support new and improved advanced energy technologies. From research at Georgia's universities to financing for start-up and early-stage companies, Georgia can invest its capital in moving ideas to market and growing them to scale to create a Green Silicon Valley of the South in Georgia. With our diverse access to advanced energy solutions (solar, wind, biomass and hydro), we can support innovations that do not have to leave Georgia to become reality.
- **Adoption of Renewable Portfolio Standards:** The South trails in adopting renewable portfolio standards (RPS), which set targets for clean energy as part of utilities' portfolios. North Carolina now has RPS, while South Carolina has a voluntary renewable energy target. We will lead an effort to set reasonable goals for the share of renewable energy among our utility providers, while protecting ratepayers. The Georgia Public Service Commission approved 210 MW and then 525 MW more in solar capacity for Georgia Power. This commitment is an important start, and we can and will do more. Georgia will look to other states and work with instate partners to inform and develop appropriate RPS standards.

3. Increase Coordinated Action: Coordinate with Counties, Municipalities and Public-Private Partnerships for Greater Impact

- **Expanded Implementation:** Advanced energy jobs can be encouraged by state and local leaders. Cities and counties permit solar installation, decide property assessment financing opportunities, and regulate and oversee energy efficiency ordinances. The governor's office will work with and support local leaders as they adopt policies and programs that spur clean energy jobs.



- **Deepen Investment in Solar Power:** Solar energy has the capacity to create long term jobs and has a strong economic impact in the communities where energy is generated. For solar power, Georgia has made gains in solar adoption, yet the experience of solar installation is not consistent across the state.⁹ Georgia has a patchwork of permitting procedures that slows the adoption of solar. We will aid local communities in accelerating solar permitting and explore policies to allow community solar access across Georgia. Georgia will increase ease of adoption of solar and clean energy sources, which can lower the cost of utilities for the average user. Public-private partnerships to encourage and support adoption will be given priority for evaluation and investment.
- **Encourage Usage of PACE:** By state law, Georgia allows Property Assessed Clean Energy (PACE) financing through which a property owner can use a loan for energy efficiency improvements and make payments on the loan through property tax assessments. The law is in place, but the implementation has lagged. We will work with local governments to implement PACE and thereby increase the energy efficiency opportunities for Georgians.
- **Benchmark Local Ordinances:** The City of Atlanta has made great strides in energy efficiency through its benchmarking ordinance. Metro Atlanta is now home to a cluster of smart building firms due to the City's leadership.¹⁰ We must ensure the rest of the state receives the economic benefits from job growth and bill reductions as well. As governor, I will direct my office to aid local leaders in the adoption of energy efficiency ordinances.

4. Improve Energy Efficiency to Lower Costs: *Green Government Georgia*

- **Encourage Green Building:** Building efficiency is the largest of the advanced energy sectors in Georgia in both firms and jobs.¹¹ Investments in energy efficiency will produce jobs, reduce waste, and generate savings for taxpayers. Georgia has an Energy Challenge through 2020 that seeks to reduce energy consumption in state buildings by 15 percent. We need to set our goals beyond that date and those facilities. Georgia will encourage energy efficiency among public facilities by offering state-funded incentives and championing updated building codes.
- **Examine Fleet Operations:** Georgia's vehicle fleet should meet the highest energy efficiency standards, which reduces pollution, saves taxpayer dollars and creates opportunities for small business development for charging stations across the state. A number of states have set mandatory efficiency requirements and have already seen cost-savings.¹² Tennessee has a goal of all new state vehicle purchases to be energy efficient and alternative fuel, which has transformed its fleet of 508 cars to include 372 flex fuel, 72 hybrid, and 5 electric vehicles.¹³
- **Initiate Grid Retrofits:** Georgia will work with the state's utilities to examine the efficiency and effectiveness of our state's power grid. 21st Century jobs will rely on a stable, high-usage power grid that efficiently leverages all energy sources. The upgrades to our grid will improve business competitiveness, create new jobs in construction and coding and bring new opportunities for technology development. In the first half of 2017, 37 states took a combined 329 actions on grid modernization.¹⁴ Georgia was not among them, costing jobs and opportunities.



STACEY ABRAMS' RECORD:

Stacey Abrams has championed economic security and environmental justice throughout her career.

- ▶ **Policy Leadership:** Stacey Abrams has built a strong portfolio of leadership on environmental issues both as Deputy City Attorney for Atlanta and as a state legislator. As Deputy City Attorney, she oversaw the infrastructure legal team for the City, including the Department of Watershed Management, drafting the legislation to implement the strongest water conservation laws among municipalities. She created the quasi-governmental structure that is the Atlanta Beltline Inc., to spur public-private partnership in the acquisition and construction of the Beltline, and she negotiated the Beltline acquisition of the Vulcan Quarry site, which is set to become Atlanta's largest park and reservoir at Bellwood Quarry.
- ▶ **Business Leadership:** As an entrepreneur, Abrams co-founded Insomnia Consulting to specialize in development, investment and consulting for complex infrastructure projects, including transportation, energy, facilities and water. Projects included developing a plan for infill transit stations, proposed redevelopment of a closed landfill site in an urban community for mixed use, sourcing projects and partnerships for a major Native Alaskan Corporation to leverage 8A status in key joint ventures to protect native habitats and creating a mitigation credit plan for water use to solve for capacity issues in a densely populated region, acquiring property and developing a large reservoir in Florida. Through NOW Corp., a fintech company, Abrams and her co-founders have invested in small businesses to create and retain thousands of jobs across the state, and her experience will be a critical part of expanding employment opportunities. Abrams understands the capital markets, the tech investment space and public finance rules – a combination that will serve Georgia well as it leads the way.



STACEY ABRAMS' RECORD: *(Continued)*

LEGISLATIVE STATEWIDE LEADERSHIP

As Minority Leader, Stacey Abrams consistently led on advanced energy initiatives:

- ▶ Abrams co-sponsored House Bill (HB) 238 to promote clean energy. The bill expands solar power by exempting conservation use fees as landowners put their property to use for renewable energy production. The bill passed and became law in 2017. In prior years, she co-sponsored legislation to encourage renewable energy credits (HB 515 and HB 516) and extending a clean energy property tax credit (HB 1074).
- ▶ Abrams supported HB 57, which allows solar leasing and power purchasing agreements and accelerates Georgia's path to becoming a leader in solar power.
- ▶ Abrams co-sponsored the bi-partisan HB 1028 to address coal ash that threatens our drinking water and public health. HB 1028 was signed into law last year and requires landfills to alert the public when there is a leak. Public notice of a leak is an important first step, but we need additional measures to ensure the highest standards in monitoring, disposal, and treatment.
- ▶ Abrams has worked across the aisle to regulate pipelines traversing Georgia, which place our state's natural resources at risk. She worked with the Majority Leader to impose a moratorium on the proposed Palmetto Pipeline, which would have run next to Savannah and our storied coastline. Abrams voted yes to placing more oversight on petroleum pipelines through HB 413, which was signed into law this year.
- ▶ Abrams negotiated unprecedented state funding for investment in and expansion of public transit in the massive transportation bill, HB 170. Unfortunately, HB 170 also removed the tax credit for ZEV and imposed a \$200 fee on ZEV buyers. In response, Abrams co-sponsored HB 220 to make up for this loss by extending a tax credit to encourage the purchase of hybrids and ZEVs. The bill unfortunately failed, but Abrams' resolve has not.



As governor, Abrams will build on an unmatched record of experience and achievement to deliver advanced energy jobs and a brighter future for Georgia.



ENDNOTES:

1. http://csf.gsu.edu/files/2017/04/The-Loss-of-the-Middle-Class_April-2017.pdf
2. U.S. Census Bureau, American Community Survey.
3. <https://www.gasolar.org/solar-for-policymakers>
4. <https://www.gabiomass.com/sustainable-products/>
5. Calculation based on 1) Stanford University and The Solutions Project estimate of 220,016 construction and operations jobs over 40 years for 100% clean energy portfolio and 2) Georgia Institute of Technology and American Jobs Project estimate of 360,000 manufacturing job-years over 15 years for solar and smart building expansion. The Solutions Project methodology assumes 100% clean energy across all sectors, thus this plan's focus on renewable energy and energy efficiency affects some 20% of that amount. The American Jobs Project estimate counts each job every year (i.e. job-year) for 15 years based on Georgia growing its share of the clean energy market nationally through manufacturing. Thus, the 25,000 to 45,000 job range combines manufacturing, construction, installation, and operations as long-term, sustainable jobs, rather than measured in job-years. Additional information on their estimates can be found at: <http://thesolutionsproject.org/infographic/#ga> and <http://americanjobsproject.us/wp-content/uploads/2016/04/GA-Jobs-Project-Full-Update.pdf>.
6. Calculation based on 1) Stanford University and The Solutions Project estimate of 220,016 construction and operations jobs over 40 years for 100% clean energy portfolio and 2) Georgia Institute of Technology and American Jobs Project estimate of 360,000 manufacturing job-years over 15 years for solar and smart building expansion. The Solutions Project methodology assumes 100% clean energy across all sectors, thus this plan's focus on renewable energy and energy efficiency affects some 20% of that amount. The American Jobs Project estimate counts each job every year (i.e. job-year) for 15 years based on Georgia growing its share of the clean energy market nationally through manufacturing. Thus, the 25,000 to 45,000 job range combines manufacturing, construction, installation, and operations as long-term, sustainable jobs, rather than measured in job-years. Additional information on their estimates can be found at: <http://thesolutionsproject.org/infographic/#ga> and <http://americanjobsproject.us/wp-content/uploads/2016/04/GA-Jobs-Project-Full-Update.pdf>.
7. Bezdek, R.H. et al. (2008) "Environmental protection, the economy, and jobs: National and regional analyses." *Journal of Environmental Management* (86), 63-79.
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