BLUEGREEN ALLIANCE

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

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Thank you, Chair Smith, Ranking Member Neal, and distinguished members of the committee. My name is Ben Beachy, and I am the Vice President of Manufacturing and Industrial Policy with the BlueGreen Alliance, a national partnership of labor unions and environmental organizations. The BlueGreen Alliance unites the nation's labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a stronger, fairer economy.

At BGA, it's our belief that we shouldn't have to choose between good jobs, a livable climate, and a fairer economy—we can and must secure each of these. The Inflation Reduction Act's landmark investments can help to turn this belief into reality. With strong implementation, the law will reduce climate pollution up to 42% by 2030, support cleaner air and water, create the good-paying, union jobs that workers need for economic security, and advance economic, racial, and environmental equity.[i]

Over the last decade, our communities have experienced worsening droughts, storms, wildfires, floods, heatwaves, and other climate impacts. Lower-income communities and communities of color are hit the hardest and have fewer resources to deal with the damage. To avoid the catastrophic consequences of climate change, we must rapidly reduce greenhouse gas emissions—based on the latest science and in line with our fair share—to put the United States on a pathway of reducing its climate pollution to net zero emissions by 2050, and to ensure we are solidly on that path by 2030.

Meanwhile, we also must reduce local air and water pollution and exposure to toxins to redress environmental and health burdens, which also disproportionately impact communities of color and low-income communities. For example, due to decades of environmental injustice, predominantly Black neighborhoods bear twice as much cancer risk from industrial air pollution as primarily white neighborhoods.[ii]

While grappling with climate change and environmental injustice, our nation continues to face the interwoven crises of deep economic and racial inequality. According to the Economic Policy Institute, wages from 1979 to 2018 increased by just 24% for the bottom 90% of the U.S. workforce, while the top 1% saw wage growth of 158%.[iii] There is a direct

correlation with the decrease of worker power over this time, as the share of workers in a union fell from 27% in 1979 to under 12% in 2019.[iv]

Structural racism also contributes to the high level of economic inequality, just as it is knotted into virtually all of the challenges we must face to build a clean, healthy, and thriving economy for all. Workers of color have endured particularly slow wage growth, given persistent racial disparities in pay.[v] From 1979 to 2020, while white workers saw a more than 30% increase in wages, Black and Latino workers saw wage growth of less than 19% and 17%, respectively. The median Black worker in 2019 earned 24% less than the median white worker.[vi]

In these interconnected challenges lies an opportunity for intersecting wins: using public investments to support climate action, good jobs, and greater equity at the same time. The Inflation Reduction Act is the nation's most full-throated embrace to date of an essential truth: addressing climate change requires us to build a clean economy, and that offers real opportunities to expand access to good jobs, clean air, and economic security for hard-hit workers and communities. This win-win approach to climate change—a new U.S. industrial policy that knits together climate, jobs, and justice—is long overdue. After decades in which many considered "industrial policy" a four-letter word, the Inflation Reduction Act offers a historic course correction by investing in industries that are strategically imperative for not only a livable climate, but also a thriving and more just economy.

The Inflation Reduction Act includes more than 100 programs that will invest more than $360 billion to expand access to clean energy and clean vehicles, make our homes more energy efficient, protect our natural resources, boost community resilience, and build a domestic manufacturing base for the clean economy.[vii] This testimony focuses on the clean energy and clean manufacturing provisions, and the benefits they offer for supporting access to good jobs and justice for hard-hit communities.

Jobs: Creating Millions of Jobs While Increasing Job Quality and Access

How many jobs will the Inflation Reduction Act create? Analysis from the Political Economy Research Institute at the University of Massachusetts Amherst, commissioned by the BlueGreen Alliance, finds that the law's climate, energy, and environmental investments *will create more than 9 million jobs over the next decade*—an average of nearly 1 million jobs each year (see Table 1).[viii] Few laws this century have come close to such sweeping potential for good job creation.

Table 1: Job Creation Estimates from Investments in the Inflation Reduction Act

Policy Area	Job Creation Potential over 10 Years
Clean Energy Investments	5,000,000
Clean Manufacturing Supply Chains	900,000
Electric Vehicles and Clean Transportation	400,000
Energy Efficient Homes and Offices	900,000
Environmental Justice and Climate Resilience	150,000
Natural Infrastructure	600,000

Political Economy Research Institute at the University of Massachusetts Amherst.

Job quality is just as important as job quantity. Access to unions has been one of the most consistent means of ensuring high-quality jobs. On the whole, union jobs pay better, have better benefits, and are safer than non-union jobs. Across all relevant industries and occupations, workers who are members of or are represented by a union earn significantly more than those who are not, with especially pronounced benefits for low-wage workers, workers of color, and women.[ix] While white union members earn on average 18% more than their non-union counterparts, Black union members earn 20% more and Latino union members earn 35% more. Female union members earn 23% more than non-union female workers. In addition, research has shown that through the collective bargaining power of unions, workers are able to get more and better benefits such as health insurance and pensions, and are able to fight for more enforcement of the labor protections they have a right to under the law, such as enforcement of overtime, safety, and health regulations.[x]

While we work to grow clean energy jobs, we must ensure that these are not only good jobs, but also *accessible* jobs. This effort includes supporting and growing pathways into good union jobs for workers of color, women, and others historically left out of such jobs. One mechanism for building career pathways and increasing access is through registered apprenticeship, pre-apprenticeship, and other union-affiliated training programs. Registered apprenticeships and other labor-management training programs offer workers a combination of classroom and on-the-job skills training. Pre-apprenticeship programs, meanwhile, are a tool for improving equitable access to jobs by offering underrepresented workers on-ramps to apprenticeship and other training programs.

Community Benefits Agreements are another key opportunity to expand access to quality jobs, while ensuring that federally funded projects deliver tangible economic, environmental, and health benefits to workers and communities alike. These are collective bargaining agreements that businesses negotiate with both union and community partners. Done right, these agreements include early and meaningful worker and community involvement in a project's design and the negotiation of a legally-binding commitment for the company to deliver specific benefits in exchange for worker and community support.

Such benefits can include local hire provisions; targeted hire of low-income workers, workers of color, women, or other underrepresented workers; the creation of pre-apprenticeship pathways for careers; labor standards to guarantee good pay and benefits; reductions in local pollution; health and safety standards; and payments from a business into a fund that a community manages for its own development.

The Inflation Reduction Act helps to advance job quality and job access in critical clean energy sectors by tying clean energy incentives to high-road labor standards, as described below. In addition, federal agencies are starting to produce guidance for many of the law's programs—including several of the clean manufacturing programs outlined below—that explicitly prioritize funding for projects that include high-road labor practices, investment in disadvantaged communities, and Community Benefits Agreements that enable local workers and communities to secure economic and environmental benefits.

Justice: Investing in Hard-Hit Communities

To ensure that new policies like the Inflation Reduction Act help dismantle structural racism and direct federal resources to the workers and communities that need them most, President Biden established the Justice40 Initiative. Justice40 aims to ensure that at least 40% of the benefits from federal investments for climate and clean energy support disadvantaged communities. Disadvantaged communities include those enduring a combination of:

- Environmental injustice from disproportionate exposure to air, water, and land pollution;
- Disproportionate risks from storms, droughts, flooding, and other climate impacts;
- Low income, job insecurity, barriers to basic needs, and other forms of economic injustice due to deindustrialization, energy transitions, divestment, and status quo policies favoring the wealthy; and
- Structural racism that disproportionately exposes Black, Latino, Native American, and other people of color to higher levels of all of the above burdens.

The application of Justice40 to the Inflation Reduction Act varies by program. Some programs include funding explicitly set aside for disadvantaged communities. Other grant and loan programs include guidance that states funding will prioritize projects that invest in disadvantaged communities and/or uphold the goals of Justice40. The Council on Environmental Quality has created a mapping tool to help identify "disadvantaged communities" for the purposes of fulfilling the goals of Justice40.[xi]

The Inflation Reduction Act also includes funding allocations and incentives for communities facing energy transition.[xii] Working people have too often felt the pain of shifts in technology. We can't leave workers or communities behind as necessary climate action spurs changes in our economy. The law rightly recognizes that an energy transition that is fair for workers and communities needs to be a deliberate policy choice.

The Inflation Reduction Act includes several provisions to drive investments into communities impacted by energy transition, including the following:

- The law's clean energy tax credits, as described below, include a 10% bonus credit for clean energy investments in energy communities, including those that have experienced a recent closure of a coal mine or coal-fired power plant.

- The law expands the 48C manufacturing tax credit, as described below, with $4 billion for communities experiencing coal mine or plant closures. This investment will help establish, expand, or retool clean technology factories in regions that have faced job losses and economic hardship due to the decline of coal.

- The law creates a new Energy Infrastructure Reinvestment program to help retool existing energy infrastructure for the clean economy. With $5 billion in funding and $250 billion in loan authority, the program will offer loans for projects that redevelop energy facilities for new purposes—which could support economic redevelopment in communities impacted by energy transition.

Energy: Boosting Clean Energy Projects that Support Good Jobs and Greater Equity

The Inflation Reduction Act delivers robust investments in clean energy that will create nearly 5 million jobs, particularly in hard-hit communities, while helping us reach our climate goals and reduce local pollution. The law strengthens and establishes durable tax credits for clean energy, which will not only help dramatically reduce emissions, but also boost job quality and job access for clean energy workers.[xiii]

The law extends and establishes clean energy tax credits for various clean energy technologies, including onshore and offshore wind, solar, geothermal, and battery storage. For the first time ever, the law pairs high-road labor standards with clean energy deployment. To receive the full value of the tax credits, developers will have to pay a prevailing wage and use a certain percentage of registered apprentices in the projects.

By incentivizing clean energy investments that support good wages and workforce development pathways, this law will help:

- Grow and diversify the middle class;

- Eliminate disparities in job quality between clean and traditional energy sectors;

- Increase diversity in the construction workforce by expanding access to women, people of color, veterans, and formerly incarcerated people;

- Equip the construction workforce with the skills needed to build clean energy; and

- Promote hiring of local workers to build projects in their communities.

The empirical data show that the inclusion of these high-road labor standards will not deter clean energy deployment. Researchers from Princeton University find that increasing wages for workers in the clean energy sector by 20% would only increase the capital costs of solar and wind projects by 2-4% and operations and maintenance costs by about 3-6%.[xiv] The researchers conclude that these costs would have no recognizable impact on the deployment of clean energy. They would, however, offer increased economic security for tens of thousands of clean energy workers and a stronger link between good jobs and climate action.

The clean energy tax credits will also help address racial and economic inequality through two separate "bonus" tax credits. The Low Income Communities Credit provides a bonus tax credit for projects located in low-income housing projects or communities that have a significant share of the population below the poverty line. The Energy Communities Credit provides a bonus tax credit for projects located in communities that have a brownfield site, significant fossil fuel dependency and unemployment, or recent closures of coal mines or coal-fired power plants.

With these investments, we can meet our clean energy and climate goals while also ensuring that workers are paid fair wages and that hard-hit communities benefit from cleaner air, access to affordable energy, and increased economic security.

Manufacturing: Building Reliable and Equitable Supply Chains for the Clean Economy

The Inflation Reduction Act invests an unprecedented more than $50 billion to revitalize manufacturing, which will create more than 900,000 jobs over the next decade. That includes investments to ramp up manufacturing of clean technology—the nuts and bolts of the growing clean energy economy.[xv] These investments will help to build out more reliable, equitable, clean, job-creating domestic supply chains for solar panels, wind turbines, electric vehicle batteries, and other technologies that are powering our clean energy future. See below for six reasons we need to onshore clean technology manufacturing.[xvi]

The law also includes historic investments to reduce emissions from aluminum, steel, cement, and other energy-intensive materials that form the backbone of our economy. These mark the first major investments in cutting U.S. industrial emissions. The industrial sector produces nearly a third of U.S. climate pollution, when accounting for electricity use.[xvii] Without transformative changes, government estimates project industrial emissions will remain essentially flat through 2050—the date by which we must achieve a net-zero emissions economy to avoid the worst consequences of climate change.[xviii] Industry is also responsible for toxic air pollution that exposes a quarter million people to elevated cancer risks each year, primarily in Black communities.[xix] Yet, policy measures to meaningfully reduce industrial emissions have been sparse, until now. The Inflation Reduction Act invests billions to cut industrial emissions while supporting good manufacturing jobs and increased global competitiveness in fundamental industries.

The law strategically includes both supply-side measures, which directly invest in clean manufacturing facilities, and demand-side measures, which create a market for the goods those facilities produce. By marrying a supply-side "push" with a demand-side "pull," the law boosts our capacity to revitalize our manufacturing base.

Supply-side investments include grants, loans, and tax credits that are directly available to the factories that make solar, wind, battery, and other clean technologies and the materials that go into them. These investments include:

- A new 45X manufacturing production tax credit, worth more than $30 billion, to fill critical supply chain gaps by supporting the expansion of solar, wind, and battery manufacturing and critical minerals processing. This credit will create an estimated 560,000 jobs over the next decade.

- A $10 billion expansion of the 48C tax credit to support manufacturing of a wide array of clean technologies, of which $4 billion is reserved for investments to boost job growth in communities facing economic hardship from energy transition. The law also makes the tax credit available—for the first time—for manufacturers to install equipment that achieves an at least 20% reduction in climate pollution. This expanded credit will create about 110,000 jobs over the next decade and cut an estimated 7 million metric tons of annual climate pollution— equivalent to the yearly emissions of about 1.5 million gasoline-powered vehicles.

- A new, nearly $6 billion program to help manufacturers carry out emissions-reducing upgrades at steel, aluminum, cement, and other energy-intensive industrial facilities. This program will create nearly 120,000 jobs over five years and cut nearly 70 million metric tons of annual climate pollution—the equivalent of running over 18,000 wind turbines for a year.

- A $3 billion expansion of the Advanced Technology Vehicle Manufacturing program, which has a proven record of creating and protecting good auto manufacturing jobs by offering loans to facilities that manufacture clean vehicles. This investment will create nearly 50,000 jobs over the next decade.

- A $2 billion expansion of the Domestic Manufacturing Conversion Grants Program, which provides grants to recently closed or at-risk auto manufacturing facilities to transform production lines that once built gasoline-powered vehicles so that they build the clean vehicles of the future. This investment will create more than 30,000 jobs over the next 10 years.

The law's demand-side measures include funding and incentives to expand the market for clean, domestic manufacturing of solar panels, wind turbines, and electric vehicles, and of aluminum, steel, and other energy-intensive materials. These provisions include:

- More than $4 billion in new investments to support the Biden administration's Buy Clean initiative, which will use the U.S. government's vast purchasing power to drive demand for low-emissions manufacturing of construction materials, such as by buying clean steel and cement for public buildings and bridges.[xx]

- A bonus 10% domestic content tax credit that clean energy developers can add on to the law's clean energy tax credits if they use domestically made iron and steel and manufactured components in which U.S. production accounts for roughly half of the value. As the tax credits propel expanded clean energy deployment, this bonus will stimulate parallel growth in U.S. manufacturing of clean technology parts and materials.

- A more than $7 billion expansion and update of a tax credit for new clean vehicles, with standards to catalyze North American manufacturing of electric and fuel cell vehicles and their components.[xxi] The credit will reduce the cost of new electric vehicles by up to $7,500, while incentivizing the establishment of a resilient supply chain in North America for essential electric vehicle battery components. It also will help to ensure the critical minerals that comprise these batteries are not sourced from countries relying on child and forced labor or countries where supply chain disruptions threaten the electric vehicle transition.

Why Investments in U.S. Clean Technology Manufacturing Are Important

The Inflation Reduction Act's push to onshore clean energy manufacturing is an about-face from decades of unfair policies that saw the outsourcing of factories as good for efficiency. That ill-advised logic *detached* clean energy expansion from manufacturing job growth while *attaching* clean energy to vulnerable imports made with exploitation and high pollution.

We cannot and need not hitch our climate goals to overseas production that is marred by labor abuses, pollution, and shipping bottlenecks. Years from now, we may look back on the investments in this law as the moment we started building more reliable clean manufacturing supply chains to equitably create good jobs.

The Inflation Reduction Act's manufacturing investments help to advance economic, environmental, and equity goals. Here are three ways that these investments support increased economic security and equity:

- **High-paying jobs:** By investing in our economy's clean energy manufacturing capacity, we can finally link climate progress with growth in manufacturing jobs. The law's clean manufacturing investments will create an estimated 900,000 jobs over the next decade. Manufacturing jobs tend to offer above-average wages, benefits, and union access. With equitable targeting, these jobs could boost economic security in deindustrialized communities that have been hollowed out by factory closings, job cuts, and lost tax revenue. By offering opportunities for hard-hit workers and communities to reap the economic gains of climate action, these

investments also could expand public support for further climate policies.[xxii]

- **Racial and economic equity:** These manufacturing investments could put a dent in racial and income inequality if we ensure equitable access to the new jobs and use strong labor standards to ensure they are good union jobs. Numerous studies have found that the decline in U.S. manufacturing has exacerbated U.S. income inequality.[xxiii] Laid-off manufacturing workers have been forced to compete for lower-paying service sector jobs, putting downward pressure on middle class wages across the economy. Less well known is that this decline has contributed to racial inequality, as Black workers have endured some of the biggest manufacturing job losses.[xxiv] Black manufacturing employment has fallen more than 30% since the late 1990s. If we grow clean manufacturing in an equitable way, it can help to reverse these trends as part of a strategy to build a more just economy.

- **Labor rights:** By boosting U.S. clean technology manufacturing, these investments will cut our dependency on clean energy components made overseas with labor abuses. From forced labor in China to child labor in the Democratic Republic of the Congo, major overseas clean energy supply chains are currently plagued with labor and human rights violations.[xxv,xxvi] The clean energy economy cannot be built on the backs of exploited workers abroad. By onshoring clean energy manufacturing, we can stop feeding such labor abuses and start to counter them.

The onshoring of clean technology manufacturing also supports our climate goals. Here are three ways that the Inflation Reduction Act's investments in domestic clean technology manufacturing offer a better recipe for climate progress than continuing to heavily depend on imports:

- **Long-term price stability:** Right now, 97% of the world's wafers for solar panels are made in China.[xxvii] China also makes about three out of every four of the world's electric vehicle batteries.[xxviii] The list goes on. Just like a corporate monopoly, when one country controls most of the supply of a critical clean energy good, they gain the power to increase the price of that good. We should not pin our climate goals on trust that the world's monopoly producers will maintain low prices. Instead, growth of clean energy manufacturing in multiple countries, including the United States, helps to promote global competition and innovation, which are needed to continue driving down clean energy costs. The Inflation Reduction Act's domestic manufacturing investments and incentives are an important step towards that goal.

- **Reliable supply chains:** The status quo of extreme supply chain concentration also exposes our climate goals to shipping bottlenecks and geopolitical conflict. The COVID-19 pandemic and the war in Ukraine have spotlighted the risks of deep dependency on imports for essential goods. That is as true for clean energy as it was for N95 masks. The Inflation Reduction Act's onshoring incentives rightly recognize that ensuring access to clean energy means making more of the nuts and bolts here

at home.

- **Reduced industrial emissions:** Making clean energy components at home also helps to reduce global industrial emissions, the world's largest source of climate pollution when accounting for electricity use.[xxix] Overseas corporations tend to be more emissions-intensive than U.S. factories in producing the aluminum and steel that goes into solar panels, wind turbines, and other clean energy goods. Solar panels, for example, are at least 85% aluminum.[xxx] Producing the average ton of aluminum in China causes about 65% more climate pollution than in the U.S.[xxxi] As we expand solar power to achieve our climate goals, we cannot afford to depend on highly-polluting aluminum production overseas that moves us in exactly the opposite direction. Onshoring the solar supply chain, with support from Inflation Reduction Act incentives, will help to reduce these emissions. Meanwhile, the law's investments will also directly support further emissions reductions in U.S. factories.

Conclusion

Within six months of President Biden's signature on the Inflation Reduction Act, companies announced a wave of solar, battery, and other clean technology manufacturing investments that will create more than 100,000 jobs across 31 states to make the nuts and bolts of a clean energy economy.[xxxii] Many of the job openings will be in communities that have endured decades of divestment, deindustrialization, and economic insecurity.

That response to the Inflation Reduction Act's unprecedented federal funding is faster than anyone predicted. It offers an early validation of the strategy behind the law: to wield public investments to support climate action, good jobs, and greater equity at the same time. With strong implementation, the benefits of this win-win strategy will continue to grow as new investments arrive in communities in the months and years to come.

And those wins matter—for the workers now taking good union jobs, the hard-hit communities seeing investments for the first time in decades, and all of us who seek a livable climate.

Thank you again for the opportunity to speak today.

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