

THE CLIMATE AND COMMUNITY INVESTMENT ACT: AN ENGINE FOR GOOD JOB CREATION



**AN ANALYSIS
BY NY RENEWS**

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EXECUTIVE SUMMARY

New York State has reached a fork in the road: do we attempt to recover from the Covid-19 economic crisis via top-heavy, top-down policies that lead to deadly air pollution, drinking water contamination, and the devastating loss of good, family-sustaining jobs in New York State and nationally? Or do we rebuild by investing in our communities, investing in our workers and our workforce, and investing in long-term solutions with policies that both tackle the climate crisis and create jobs?

For NY Renews, our hundreds of allied organizations, and tens of thousands of supporters statewide, the answer is clear: we rebuild our economy by jumpstarting the just transition to renewable energy and investing in our communities--especially disadvantaged communities hit first and worst by both Covid-19 and the climate crisis; we enact the Climate and Community Investment Act (CCIA) in New York and pass the Transform, Heal, and Renew by Investing in a Vibrant Economy (THRIVE) Act in Congress.

While we knew that these groundbreaking policies will create jobs, we set out to quantify how many.

In the first year alone, the CCIA will create 160,000 + jobs.

How? Directly, by investing in and hiring for infrastructure projects, building retrofits, energy efficiency projects, and more, funded by the Community Just Transition Fund and the Climate Jobs And Infrastructure Fund. And indirectly; these investments will have a multiplier effect, boosting the entire economy and putting money directly into New Yorkers' pockets.

NY Renews prepared this assessment based on the methodology in both the 2017 study we commissioned and the 2021 PERI study of New York State job creation from the THRIVE agenda. The CCIA is a key piece of both meeting the Climate Leadership and Community Protection Act goals and federal goals in line with the THRIVE act.

Economic and jobs modeling predicts that the CCIA will create over 160,000 jobs in the first year, and sustain that level over the first decade.

CCIA Program	Jobs Created
Community Just Transition Fund	50,554
Climate Jobs and Infrastructure Fund	45,009
Rebate program	54,540
Worker and Community Assurance programs	15,554
Total	165,657

Just as the CCIA will cut climate and air pollution, it will send ripples of investment throughout the economy. By supporting worker training, fueling small and large scale infrastructure projects, electrifying our state’s energy production, providing direct rebates to up to 60% of New Yorkers, and jump-starting community-driven climate solutions, the policy will invigorate many sectors of New York’s economy, including:

- agriculture, forestry, farming, and local food systems;
- the care economy, schools, and community infrastructure investments;
- clean renewable energy generation;
- energy efficiency & emission reduction;
- Ports, waterways, and logistics infrastructure;
- land use and pollution remediation;
- manufacturing and supply chain;
- professional services, civic participation and public administration; and
- mass transit, transportation upgrades, and vehicle emission reduction.

To be conservative in its estimates, this report analyzed two areas of the CCIA’s spending that will create significant calculable new jobs in New York either because they replace expenditures out of state for fossil fuel or because they replace or expand employment in more labor and value intensive sectors of the economy: the CCIA’s Climate Jobs and Infrastructure Fund and the Community Just Transition Fund. Additional details on the modelling are included in the appendixes.

Investing in our shared future

Investments that reduce climate changing emissions and air pollution are not just job creators; they have tremendous benefits across our society, especially for the most vulnerable - disadvantaged communities, environmentally burdened communities, children, elders, and those who are medically vulnerable.

We know that the climate crisis is increasing the number of days New Yorkers face extreme temperatures, both hot and cold. Extreme temperatures put the health of seniors, workers exposed to the elements, and others at significant increased risk; they damage our infrastructure, increase costs of maintenance, and create harmful working conditions. Extreme precipitation and heat are already harming New Yorkers, increasing the cost of maintaining infrastructure, and costing us jobs in industries like skiing and agriculture.

Jobs across New York depend on a stable and healthy environment. Industries like agriculture, fisheries and forestry, as well as tourism and pharmaceuticals, depend on climate stability. The investments driven by the CCIA not only reduce the climate crisis' impacts in the abstract, they directly benefit industries across NY State.

These investments mean:

- improved air;
- lives saved;
- reduced health care costs;
- reduced burden on social and physical infrastructure;
- protected jobs and industries; and
- avoiding some of the impact of climate disasters.

This is the moment

Right now there is a clear bipartisan consensus that government action needs to drive the economic recovery. Or to quote the Center for American Progress “there’s a long history that when unemployment rises, the government steps in to pave the way for job creation. And these policies have been effective. ... There is an empirically grounded body of literature documenting the effectiveness of fiscal expansion during recessions and the importance of economic multipliers in creating jobs above and beyond those directly created by one firm or one government project.”

New York can't do it alone

The just transition we need to quell the climate crisis requires all hands on deck, and while the CCIA is a key component, we need federal action. That's where the THRIVE: Transform, Heal, and Renew by Investing in a Vibrant Economy agenda comes in. The THRIVE Agenda presents a bold new vision to revive our economy while addressing these interlocking crises of climate change, racial injustice, public health, and economic inequity with a plan to create dignified jobs for millions of unemployed workers and support a better life for the millions more who remain vulnerable in this pivotal moment. When enacted, the THRIVE Agenda will add another 440,000 jobs per year to New York.

“JUST TRANSITION IS A PRINCIPLE, A PROCESS AND A PRACTICE.”

- JUST TRANSITION ALLIANCE

Supporting Workers and Communities in a Just Transition

The Climate and Community Investment Act will fuel a just transition. Baked into the policy are dedicated funds to directly support impacted communities and workers: the Worker and Community Assurance Program.

The Worker and Community Assurance Program:

- directs 7% of revenue generated by the greenhouse gas taxes--an estimated \$1,010,009,000 in the first year, to programs that will support both individuals and communities;
- establishes key supports and dedicated revenue streams for impacted and transitioning communities as well as a framework for social dialogue;
- offers guaranteed economic support to workers that are adversely affected or displaced because of the energy transition;
- provides fiscal support to retrain or re-equip workers to prevent layoffs. This includes guaranteeing pension contributions and income;
- supplies fiscal and policy support for communities to maintain fair funding for schools; replace lost payment in-lieu-of taxes (PILOT) and local tax revenue; facilitate the expansion of existing economic development; protect ratepayers & improve our environment and our public health;
- creates a Worker and Community Assurance Board to oversee the program, assess the impacts of the transition to a renewable economy, and create a broad social dialogue to ensure those most impacted have a say in designing the transition.





Building New York's clean energy infrastructure

The CCIA's Climate Jobs and Infrastructure Fund will invest in job creation in green manufacturing and renewables to jumpstart nascent industries in New York. Manufacturing operations like the offshore wind production at the Port of Albany and in the Green Manufacturing Hub in Brooklyn's Sunset Park could be supported. But we can go further to ensure that New York is a domestic leader in off-shore wind turbines in former manufacturing hubs like Schenectady, creating tens of thousands of jobs.

The investment model breaks the overall predicted revenue into several broad categories, and subcategories of investment and then assesses their job creation impact based on research done by economists, primarily at the University of Massachusetts Political Economy Research Institute (PERI).

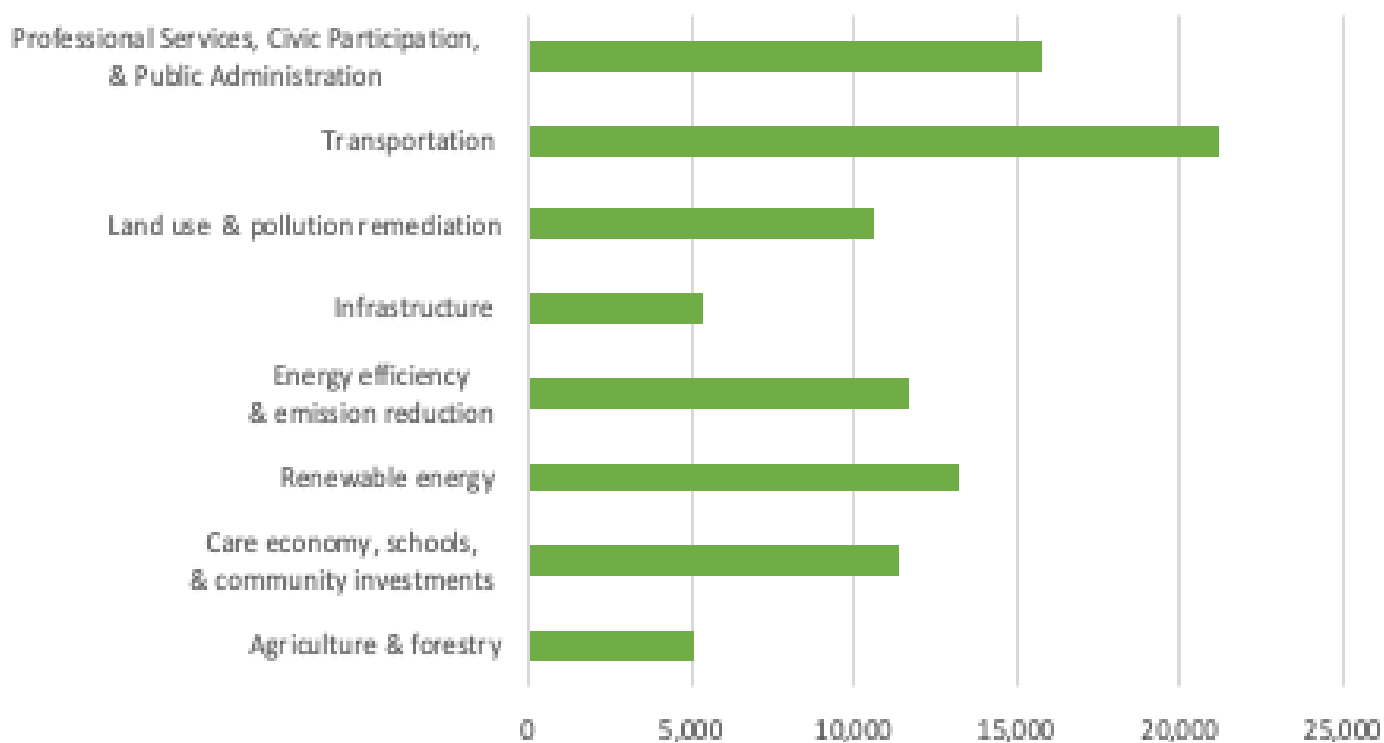
“The possibility of bringing good paying jobs to our community and to also address climate change, for us, that’s everything,” said Elizabeth Yeampierre, executive director of NY Renews Steering Committee member, UPROSE.

“That’s what we fight for. We fight for our people, for our abuelas, for our tias, every single day.”

JOB CREATION SUMMARY

The CCIA doesn't prescribe the transition path or where communities will land but it creates a tool box and a dedicated funding stream to expand the ability of communities in every part of the state to create a just transition. Given the flexibility embedded in the policy to allow communities to tailor-fit climate solutions to their needs, NY Renews can't predict precisely where jobs will be created, however given the CCIA's scale and breadth, employment gains will likely be felt in every area of the economy. The jobs numbers below represent one model of job creation given the CCIA's investment mandates.

Job Estimates for Select Sectors



Examples

For the remainder of this report, we'll dive deeper, exploring the types of job-creating, just transition projects that the CCIA could fund. We'll highlight both existing initiatives and broader categories of opportunity.



AGRICULTURE 5,066 JOBS

While agriculture only accounts for a relatively small part of the overall greenhouse gas emissions in New York State, it is a critically important part of our economy, communities, and lives, and is incredibly vulnerable to weather-related impacts of the climate crisis.

The CCIA will fund community level projects to protect our farms from the climate crisis while increasing opportunities for agricultural employment. These projects could include efforts like flood prevention, nature based climate solutions, community supported agriculture, and local food purchasing for schools across the state.

Agriculture and food systems are literally key to surviving, and must be part of both our resiliency strategy and emission reduction programs.

Buffalo

Western New York is alive with community-driven projects connecting food systems and community development. CCIA funding could help supercharge efforts like:

- the Massachusetts Avenue Project (MAP): a nonprofit urban farm located on Buffalo's West Side providing year-round youth employment and training with job readiness and leadership skills through farming, a Mobile Market, kitchen and nutrition education, as well as food policy training and civic engagement;
- the Good Food Purchasing Program campaign to leverage Buffalo Public School district purchasing power to create local/regional food system and source from area growers.

Rochester

CCIA funding could help expand community based food systems solutions like:

- the [Flower City Noire Collective](#), based in Rochester, which brings agriculture, collective education, and sustainability skill-sharing resources to the community.
- Abundance Food Co-op is a grocery store located in the South Wedge, a vibrant neighborhood of Rochester NY's landscape. Priority is given to local, organic, sustainable, and responsible products; and Taproot Collective, a non-profit organization providing education and employment through urban agriculture.



CARE ECONOMY, SCHOOLS, & COMMUNITY INVESTMENTS - 11,404 JOBS

Equitable climate solutions doesn't just mean solar panels and storm walls. Communities need to strengthen and support their already over-taxed care infrastructure and educational institutions.

Billions of dollars in funding from the CCIA can't and shouldn't replace foundation aid and other broad state and local support for the care economy - schools, day care, assisted living, community centers etc. But it can help make them centers of resiliency and climate action in their community. Funding from the CCIA also can help make care centers healthier and more resilient as we replace failed fossil fuel infrastructure or health hazards with 21st century technology thus improving the health of students and residents with cleaner water and air. Efficiency upgrades also reduce heating, cooling, and maintenance costs.

The CCIA also recognizes, as has been highlighted during the last year of COVID, that without these vital care giving institutions people can't work, can't take care of their families and themselves and can't transform our society to meet the challenge of climate change. The CCIA includes not just infrastructure and capital funding, but funding for day care and program operations expansions to support the whole array of community level initiatives in the bill.

Statewide

The CCIA could support:

- solar panels on every public university and public school building;
- replacing old lead pipes and installing filtered water service stations in public universities and schools; and
- energy efficiency and health and safety retrofits for public universities schools, many of which now have enormous energy loss or safety hazards.

Buffalo

With CCIA funding communities could fund more projects like School 77 created by PUSH Buffalo.

School 77 is an 80,000-square-foot former Buffalo Public School built in 1927, located on the West Side of Buffalo. School 77 was closed and abandoned for nearly six years, but PUSH and the community have now transformed it into solar-powered affordable senior apartments and a community center.



RENEWABLE ENERGY 13,227 JOBS

When people think about emission reductions and job creation they rightly think of renewable energy, but this is not just about installing solar panels and wind turbines. There is a whole array of industries involved in creating, installing, and maintaining these systems and tying them together into a reliable and sustainable whole energy system.

For example, constructing wind farms creates jobs for sheet metal workers, iron workers, electricians, maritime workers, carpenters, machinists, truck drivers, among many others.

Long Island

The Long Island Progressive Coalition designed PowerUp Solar Long Island to reduce the cost of solar for nonprofits and houses of worship by bundling multiple projects to bid them out collectively, making use of tax credits through third-party financing, and offering loan options to avoid upfront costs. With CCIA funding communities across the state could replicate and expand on this success.

Long Island is also becoming a major offshore wind hub. With additional support from the CCIA, Long Island has the opportunity to lead the nation in offshore wind while building out the industry and supply chain.

Capital Region

With CCIA funding communities could lead, just as advocates have been demanding of NY State.

Community leaders are urging New York State to convert the Capitol building and Empire State Plaza (state buildings) to 100% renewable sources for cooling, heating and electricity, and make renewable sources widely available to the surrounding low income, people of color Sheridan Hollow and Arbor Hill neighborhoods.

New York City

As part of its Solar Uptown Now program, WE ACT and its partners trained more than 100 unemployed and underemployed residents of Northern Manhattan. They also placed new solar power projects despite barriers. With CCIA funding communities across the state could follow their lead creating good local jobs and clean renewable energy.



ENERGY EFFICIENCY & EMISSIONS REDUCTION

11,700 JOBS

Increasing buildings' and industrial energy efficiency means creating jobs. Not only in the large numbers of skilled trades retrofitting relies on - roofers, insulators, sheet metal workers, plumbers, HVAC technicians, electricians, and more - but in an array of industries from building inspectors, to sales and outreach, to professional services like architects and energy analysts. It also creates opportunities for jobs in New York State all along the supply chain - from making insulation, manufacturing heat pumps, creating and selling building materials, making a host of sensors, creating building systems, and building and supplying other parts.

The good news is that though there is much to be done, New York's communities have decades of experience in how to retrofit our old building stock to be more sustainable, healthier, and cheaper to maintain and climate control.

Industrial energy efficiency means not only reducing industrial emissions but keeping jobs here in New York even as their overall emissions and energy use goes down.

This all goes hand in glove with the urgent need to convert most household and business energy use to electricity and to maintain a reliable and affordable energy system.

Statewide

Building on the efforts of the Green Jobs Green New York Program, NY-Sun, HeatSmart, Clean Energy Communities, and others, New York State can kickstart the work of home and business energy efficiency improvements. These improvements reduce overall costs and increase efficiency, while building employment opportunities for contractors and community organizations across the state.





INFRASTRUCTURE IMPROVEMENTS 5,340 JOBS

The American Society of Civil Engineers gives U.S. infrastructure a C-, and NY isn't beating the curve. In order to support a just transition, New York's grid and energy-related infrastructure need critical maintenance and substantial upgrades.

The CCIA directs billions of needed dollars to infrastructure with specific focus on improvements that communities feel are urgent, and those areas we need to make New York's energy transition possible and just. Projects like electrical transmission lines and systems to balance renewable energy load, increasing energy storage capacity, and connecting upstate clean energy production to New York City are a must.

Brooklyn

In Brooklyn's Sunset Park, The Green Resilient Industrial District (GRID) supports maritime and industrial development that integrates climate resilience and adaptation measures and provides good local jobs and workforce training. It reflects comprehensive and diverse community needs and prepares Sunset Park for the long-term impacts of climate change.

The GRID will: 1. Leverage the existing green and industrial resources and public investments in Sunset Park, 2. Harness additional targeted technical and financial assistance to improve air quality and local environmental conditions, and 3. Create new green jobs such as those in energy retrofits and green industries, and 4. Provide workforce development to make sure that these benefits accrue to New York City workers, which would support the goals of the Mayor's 80X50 plan, New York City Climate Mobilization Act (CMA), Freight NYC and the Climate Leadership and Community Protection Act.

Brownfield

Previously developed land, either commercial or industrial, which has been cleared for redevelopment.

LAND USE & POLLUTION REMEDIATION 10,580 JOBS

The CCIA includes opportunities for communities to invest in community remediation. Efforts like farmland conservation, community remediation and improvement projects, brownfield rehabilitation, land restoration, ecosystem restoration, urban forestry, urban agriculture, or other green infrastructure projects, public parks and recreation investments are all eligible projects under the CCIA.

These are vital projects that will create jobs, prepare for climate mitigation, and improve communities and health. Efforts at land restoration and ecosystem restoration could include energy resiliency; community directed resiliency and sustainability projects; coastal and other resiliency energy resiliency; community directed resiliency and sustainability projects; coastal and other resiliency.





PROFESSIONAL SERVICES, CIVIC PARTICIPATION, & PUBLIC ADMINISTRATION - 15,764 JOBS

Research by the NYS Labor Market Innovation Service found that the green jobs sector is the fastest growth was the professional services sector.

Jobs could be created for bus drivers and transportation planners, maintenance staff to green existing building operations, architectural, engineering, energy planners, public educators, legal and technical services providers, outreach workers, analysts, public administrators, and workforce development specialists.

Long Island - Shinnecock Nation

The CCIA could help provide a just transition for the state's native nations as they navigate the intersecting harms of centuries of colonialism and the climate crisis. For example, on Long Island the CCIA could support the Shinnecock Nation as it explores energy solutions and climate resiliency projects like retrofits for its building stock, community solar for all Nation members, and battery storage to help address the increasing storms off their shoreline. Additionally, funding through the CCIA could help support job training in the growing renewable energy economy in the region, ensuring that local and traditional knowledge inform the buildout of the Island's renewable energy infrastructure. These types of projects will employ planners, administrators, as well as the construction workers, installers, electricians, and others to get the jobs done.

Statewide

The CCIA will create an onramp allowing New Yorkers to access the clean energy jobs of tomorrow. Investing in new workforce development and education hubs to connect all New Yorkers to the green energy economy, expanding business development efforts, and investing in Minority and Women Business Owners programs are all proven job creators. These efforts create strong businesses in local communities, and coupled with CCIA funding will focus on new clean technology and inclusive business models, workforce readiness, training programs,, and outreach to ensure that these fields are opened up to all community members.



TRANSPORTATION IMPROVEMENTS 21,130 JOBS

While renewable energy is the sector people think most about in the energy transition, transportation is actually the largest source of New York’s climate emissions and one of if not the largest contributor to health impacting emission. Plus, it's one of the emission sources over which we have the most control; we can transition to zero emission vehicles, while also examining where and how New York uses mass transit and how the state, counties, and municipalities are making transportation-related land use decisions.

The CCIA could directly fund electric vehicle conversion for individuals, municipalities, and entire fleets as well as the charging stations and service expansion across New York State.

Shared transit solutions whether buses and trains, or paratransit and last mile solutions are a key piece of reducing our state and nation's addiction to fossil fuels. We can and should give everyone in New York state the opportunity to choose mass transit.

Statewide

The CCIA will fund massively expanding transit options across the state, using electric buses built here in New York, whether that is in Syracuse, the North Country or NYC.





TRANSIT MANUFACTURING 4,560 JOBS

Every year, New York State invests \$800 million to public transportation. If the state were to invest half of that amount, \$400 million, in upstate transit agencies transitioning to battery electric buses it would generate:

- 920 direct jobs for electric bus manufacturers
- 1,360 indirect jobs for component suppliers to the bus manufacturers
- 2,280 total jobs in electric bus transportation sector

The remaining \$300 million would transition MTA buses to battery electric buses and \$100 million for purchasing eclectic paratransit vehicles.

The CCIA procurement process incentivizes bidders to locate facilities in New York State in order to win these electric bus purchases. With the combined purchasing power of upstate transit agencies and the New York City MTA, as the largest transit agency in the U.S., the CCIA procurement process would encourage the bus manufacturers and their related suppliers to locate facilities in New York in order to meet this significant market demand. The jobs created would be supported by the strong labor standards in the CCIA's contracting process

North Country

CCIA funding could help transform the domestic market for electric vehicles and directly fund expanding manufacturing efforts like the Clean Transportation hub in Plattsburg, as well as Bombardier and other transit manufacturers.





APPENDIXES

APPENDIX 1: REVENUE ESTIMATES

For the purposes of this modelling the revenue model was simplified and only uses GHG/Pollution Fee. It does not include the Co-Pollutant Surcharge.

	Year One		2030	
	GHG or equivalent tons	PRICE \$55	GHG or equivalent tons	PRICE \$74
Low Emissions case	201800000	\$11,099,000,000	121,080,000	\$8,959,920,000
Increased Emissions Inventory estimate	262340000	\$14,428,700,000	157,404,000	\$11,647,896,000

The CCIA Pollution Fee is expected to generate \$15 billion in its first year, and will generate an average of \$11,317,703,067 in revenue per year. These calculations include revenue from both greenhouse gas emission fees and fees on co-pollutants.

APPENDIX 2: SPENDING ESTIMATES

With a first year estimate of \$15 Billion dollars, NY Renews estimates job creation based on spending. These areas of spending will create direct, indirect, and induced jobs in New York State. The analysis focused on the two key investment programs Climate Jobs and Infrastructure Fund and the Community Just Transition Fund.

	Percent of funding	Estimated investment level
Worker and Community assurance Fund	7%	\$1,010,009,000
Household and Small business rebate fund	30%	\$4,328,610,000
Climate Jobs and Infrastructure Funding	30%	\$4,328,610,000
Community Just Transition Fund	33%	\$4,761,471,000
Total	100%	\$14,428,700,000

Overall investments will be higher than the programs that are modeled because many of these public funds comprise a minority of investment in any given project, based on actual history of projects and the economic sectors in NY. PERI estimated 5x Public investments or about \$45,450,405,000 overall investments based on the two included funds.

APPENDIX 3: INPUT OUTPUT JOBS MULTIPLIERS AND SOURCES

Job Creation—Direct, Indirect, and Induced Jobs per \$1 Million in Spending

Investment Category	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs	Source
Agricultural R&D		5.2	1.8	2.1	9.1 PERI / NEW YORK PlaNYC Job Creation Analysis Draft PG 4
Air Quality		8.3			16.97 PERI / NEW YORK
Airports - Infrastructure Investments		2.5	0.6	1.1	4.2 PERI / NEW YORK EPI Updated employment multipliers for the U.S. economy PG 24
Architectural, engineering, and related services		5.41	4.87	6.17	11.04 PERI / NEW YORK
Broadband -Infrastructure Investments		1.6	1	1	3.6 PERI / NEW YORK
Building retrofits Energy efficiency		3.4	1.5	1.6	6.5 PERI / NEW YORK
Care economy		16.3	1.5	3.4	21.2 PERI / NEW YORK EPI Updated employment multipliers for the U.S. economy PG 26
Child day care services		21.17	5.04	8.23	13.27 PERI / NEW YORK EPI Updated employment multipliers for the U.S. economy PG 27
Civic, social, professional, and similar organizations		10.67	3.31	7.17	21.15 PERI / NEW YORK
Clean Energy Industry (including 2.5 Manufacturing)		3.9	3.1	4.6	11.6 PERI THRIVE NATIONAL DATA
Community development block grants					15.4 PERI THRIVE NATIONAL DATA
Dams - Infrastructure Investments		6.8	1.4	2.8	11 PERI / NEW YORK
Electricity - Infrastructure Investments		1.5	0.4	0.6	2.5 PERI / NEW YORK

Investment Category	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs	Source	
Energy Planning, outreach, administration, and community engagement		10	3.1	4.8	17.9	Developed internally - Internal Estimates based on \$100,000 per job similar organizations
Energy storage and smart grid programs		3.5	2.9	4.5	10.9	PERI THRIVE NATIONAL DATA
Farmland conservation		6.7	1.2	2.1	10	PERI / NEW YORK
Gas distribution pipelines–leak repairs only - Infrastructure Investments		0.9	1.3	1.3	3.5	PERI / NEW YORK
Hazardous and solid waste - Infrastructure Investments		4.4	1.3	1.9	7.6	PERI / NEW YORK
High-efficiency autos Energy efficiency		0.1	0	0	0.1	PERI / NEW YORK
Industrial efficiency Energy efficiency		2.6	0.7	1.4	4.7	PERI / NEW YORK
Inland waterways/marine ports - Infrastructure Investments		2.5	1	1.3	4.8	PERI / NEW YORK
Land – Brownfields		14			25	PlaNYC Job Creation Analysis Draft - PG 4
Land restoration Closing orphaned wells		0.6	0.8	1	2.4	PERI / NEW YORK
Land restoration Ecosystem restoration		9.4	1.5	2.7	13.6	PERI / NEW YORK
Levees - Infrastructure Investments		6.9	1.5	2.9	11.3	PERI / NEW YORK
Low-Income Home Energy Assistance Program		4.3	3.8	4.5	12.6	PERI THRIVE NATIONAL DATA
Manufacturing of electric vehicles		1.4	3.7	3.6	8.7	PERI THRIVE NATIONAL DATA
Organic farming		7.7	0.7	0.9	9.3	PERI / NEW YORK
Pollution cleanup - Land restoration		5.2	1.3	2.2	8.7	PERI / NEW YORK

Investment Category	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs	Source
Public health		6.7	1.8	2.6	11.1 PERI / NEW YORK
Public parks and recreation - Infrastructure Investments		8.1	1.5	2.7	12.3 PERI / NEW YORK
Pursue natural solutions to improve air quality (Reforestation)	2.11			2.7	PlaNYC Job Creation Analysis PG 32
Rail - Infrastructure Investments	2.2	0.7	1	3.9	PERI / NEW YORK
Regenerative agriculture	7.7	0.7	0.9	9.3	PERI / NEW YORK
Renewable energy - Geothermal energy	4.9	1.4	2.3	8.6	PERI / NEW YORK
Renewable energy - Wind energy	1.7	0.6	0.8	3.1	PERI / NEW YORK
Renewable energy -Solar energy	2.1	0.8	1.1	4	PERI / NEW YORK
Resiliency - FEMA pre-disaster mitigation	5.7	3.6	5.7	15.1	PERI THRIVE NATIONAL DATA
Resources for marginalized farmers	8.2	1	1.8	11	PERI / NEW YORK
School drinking fountain replacement, etc.	4.7	3.3	4.9	12.9	PERI THRIVE NATIONAL DATA
Schools Infrastructure	9.8	1	2.9	13.7	PERI / NEW YORK
School Bus purchasing (Standard Battery Electric Buses with 100% domestic content)	1.127	4.496	3.642	9.265	JMA's BEB report for national job creation numbers: PlaNYC Job Creation Analysis PG29 EPI Updated employment multipliers for the U.S. economy PG 19 PERI THRIVE NATIONAL DATA
Solar energy in City buildings	4.3			7.6	PERI / NEW YORK
Support activities for agriculture and forestry	5.09	4.06	2.61	6.66	PERI THRIVE NATIONAL DATA
Transit (Public transit generally) transportation - Surface-Infrastructure Investments	4.9	3.9	4.2	13	PERI / NEW YORK
Water/wastewater -Infrastructure Investments	7.7	0.8	2.2	10.7	PERI / NEW YORK
Water/wastewater -Infrastructure Investments	4.6	1.2	2	7.8	PERI / NEW YORK

Sources hyperlinks

- PERI NEW YORK: https://drive.google.com/file/d/1q-cmDER-qcn8u4KXHezGOc_SUu-AqF-A/view
- PERI NATIONAL: www.peri.umass.edu/component/k2/item/1397-employment-impacts-of-proposed-u-s-economic-stimulus-programs
- EPI Updated employment multipliers for the U.S. economy: <https://www.epi.org/publication/updated-employment-multipliers-for-the-u-s-economy/>
- PlaNYC Job Creation Analysis: http://www.nyc.gov/html/om/pdf/2008/pr110_planyc_job_creation_analysis.pdf
- JMA's BEB report: <https://jobstomoveamerica.org/resource/transforming-transit-realizing-opportunity/>

APPENDIX 4: INVESTMENT MODEL AND JOBS INVESTMENTS

Because much of the spending will be allocated under community direction significant assumptions and decisions have been made as to allocation of funds for purposes of modeling the jobs impact. In this first stage of the analysis the team from NY Renews evaluated the bill language and assessed what investments were likely to be made.

These investments were then allocated a predicted investment level, and a “multiplier” based on what category of analogous work we could ascribe to them.

It is important to note that NY Renews does not have a detailed plan pre-ordained for how funds will be used, this spending plan represents a model of what might be done with the money after community leadership, the scoping plan from the CAC, and additional direction from the Authority board and programmatic staff are taking into consideration.

The community participatory nature particularly of the new authority makes precise modelling in advance challenging. Funds may be allocated very differently than in the modeling done here but without an allocation it is impossible to accurately model the job. Where we could identify specific projects that are highlighted, these did contribute to the assessment of potential impacts of the bill in the resource allocation estimates and in helping to determine what kind of work would be ascribed to different sections of the bill.

One example of this is the CCIA directs that the first five year plan of the Climate Jobs and Infrastructure fund will target mass transit outside of the MTA catchment area so existing regional transit authorities and population were used to estimate the allocation of \$800,000,000 to transition all of NY state’s transit agencies to battery electric buses and an additional amount for charging infrastructure. If half that funding level is spent to only transition all the NY transit agencies except the MTA, it would likely generate a total of 3,920 jobs in a given year.

Community Just Transition Fund

Investment Area	Estimated investment level	Total Jobs Created
Air Quality Improvements Reducing Emissions From Stationary Sources And Transportation Fleets	\$100,000,000.00	1,697
Air Quality Improvements Reduction Of Other Regulated Air Contaminants In Conjunction With Greenhouse Gas Emissions Reductions	\$100,000,000.00	1,697
Architectural, Engineering And Related Services - Energy Planning, Public Education, Intervenor And Technical Funding, And Outreach	\$124,000,000.00	2,040
Building Retrofits And Energy Efficiency And Energy Demand Reduction; Demand Response	\$750,000,000.00	4,875
Building Retrofits And Energy Efficiency -- New Construction Of Zero Emissions Buildings	\$250,000,000.00	1,625
Building Retrofits And Energy Efficiency -- Energy Upgrades And Decarbonization Of School, Daycares, And Community Centers	\$200,000,000.00	1,300
Care Economy - Energy Resiliency; Community Directed Resiliency And Sustainability Projects; Coastal And Other Resiliency	\$100,000,000.00	2,120
Civic, Social, Professional, And Similar Organization Funding --- Workforce Development / Educational And Employment Expenditures	\$200,000,000.00	4,230
Clean Energy Industry Investments -- Renewable Energy Operations And Maintenance	\$100,000,000.00	1,160
Clean Energy Industry Investments -- Renewable Energy; Community Solar Installation; Community-owned Renewable Assets	\$100,000,000.00	1,160

Community Just Transition Fund

Investment Area	Estimated investment level	Total Jobs Created
Clean Energy Industry Investments -- Energy Upgrades And Decarbonization Of School, Daycares, And Community Centers	\$100,000,000.00	1,160
Electric Infrastructure Investments Local Energy Infrastructure, Community-owned Energy Cooperatives.	\$100,000,000.00	250
Energy Planning, Outreach, Administration, And Community Engagement, Energy Planning, Public Education, Intervenor And Technical Funding, And Outreach	\$248,000,000.00	4,439
Energy Storage And Smart Grid Renewable Energy; Community Solar Installation; Community-owned Renewable Assets	\$100,000,000.00	1,090
Energy Storage And Smart Grid Energy Storage;	\$100,000,000.00	1,090
Energy Storage And Smart Grid Renewable Energy-powered Microgrids;	\$100,000,000.00	1,090
Community Remediation And Improvement Projects --- Farmland Conservation	\$100,000,000.00	1,000
Reducing Emissions From Stationary Sources And Transportation Fleets - High Efficiency Auto Ee Incentives	\$100,000,000.00	10
Industrial Ee -- Manufacturing Improvements And Supply Chain (Direct Investment)	\$100,000,000.00	470
Community Remediation And Improvement Projects -- Land Brownfields Investments	\$100,000,000.00	1,400

Community Just Transition Fund

Investment Area	Estimated investment level	Total Jobs Created
Land Restoration Ecosystem Restoration -- Energy Resiliency; Community Directed Resiliency And Sustainability Projects; Coastal And Other Resiliency	\$100,000,000.00	1,360
Land Restoration Ecosystem Restoration -- Urban Forestry, Urban Agriculture, Or Green Infrastructure Projects;	\$100,000,000.00	1,360
Community Remediation And Improvement Projects -- Organic Farming	\$200,000,000.00	1,860
Public Parks And Recreation Investments -- Community Remediation And Improvement Projects	\$200,000,000.00	2,460
Renewable Energy; Community Solar Installation; Community-owned Renewable Assets (Geothermal)	\$100,000,000.00	860
Renewable Energy; Community Solar Installation; Community-owned Renewable Assets (Wind)	\$100,000,000.00	310
Renewable Energy; Community Solar Installation; Community-owned Renewable Assets (Solar)	\$100,000,000.00	400
Energy Resiliency; Community Directed Resiliency And Sustainability Projects; Coastal And Other Resiliency (Based On Fema Pre-disaster Mitigation And Resilience Funding)	\$100,000,000.00	1,500
Community Remediation And Improvement Projects -- Resources For Marginalized Farmers	\$100,000,000.00	1,100

Investment Area	Estimated investment level	Total Jobs Created
<u>Community Just Transition Fund</u>		
Energy Upgrades And Decarbonization Of School, Daycares, And Community Centers; School Health And Safety Infrastructure including Drinking Fountains	\$100,000,000.00	1,290
Schools Infrastructure - Energy Upgrades And Decarbonization Of School, Daycares, And Community Centers	\$100,000,000.00	1,370
Support For Activities in Agriculture and Forestry--- Community Remediation And Improvement Projects (Local Food Systems And Support For Connecting Local Agricultural Systems)	\$100,000,000.00	1,176
Zero-emissions/Electric School Buses And Paratransit (Surface Transportation Investments)	\$150,000,000.00	1,605

Investment Area	Estimated investment level	Total Jobs Created
<u>Climate Jobs And Infrastructure Funding</u>		
Analysis And Reporting (Architectural Engineering And Related Services)	\$60,000,000.00	987
Energy Efficiency And Conservation Projects In Public Buildings (Building Retrofits)	\$250,000,000.00	1,625
Incentives For New Private Buildings That Achieve High Efficiency Or Net-zero Status (Building Retrofits)	\$150,000,000.00	975

Investment Area	Estimated investment level	Total Jobs Created
<u>Climate Jobs And Infrastructure Funding</u>		
Energy Efficiency, Energy Conservation, Load Balancing, (G) Encouraging The Development Of Programs To Support Communities With High Cumulative Environmental Burden, High Peak Energy Load, And Aging Housing Stock In Order To Preserve Affordable Housing And Enhance Long-term Community Cohesion While Preventing Gentrification And Displacement. (Building Retrofits)	\$200,000,000.00	1,300
Public Schools Energy Efficiency And Renewable Energy Projects In Improve School Infrastructure, Improve Community Resilience (Building Retrofits)	\$100,000,000.00	650
Quality Child Care Facilities And Programs Care Economy Child Day Care Services	\$100,000,000.00	3,444
Wfd Including Opportunities For New Entrants Into The State's Workforce, Long-term Unemployed Or Displaced Workers, Promoting Workforce And Educational Opportunities For Disadvantaged Communities, Including Youth, Children, The Incarcerated And The Formerly Incarcerated And Supporting (J). Encouraging The Development Of Workforce Development Programs That Identify And Utilize Best Practices To Provide And Train Workers For High Quality And Continuous Career And Work Opportunities. (Civic Social Professional And Similar Organizational Investments)	\$100,000,000.00	2,115
Providing Technical Assistance (Civic Social Professional And Similar Organizational Investments)	\$50,000,000.00	1,058
Community Ownership And Governance Of Energy Production, (Clean Energy Investments)	\$100,000,000.00	1,160
And Publicly-owned Renewable Energy Projects, Including Projects On Public Buildings And Land; (Clean Energy Investments)	\$300,000,000.00	3,480

Investment Area	Estimated investment level	Total Jobs Created
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Climate Jobs And Infrastructure Funding

(Electrical Infrastructure Investments) Electric Grid Upgrades Within The State, Including The Construction Of Electricity Transmission, Energy Storage And Smart Grid Infrastructure, And Including Support For Establishing Electric Vehicle Infrastructure And Systems To Optimize Distributed Energy Resources.	\$100,000,000.00	250
Energy Planning Outreach Administration And Community Engagement Technical Assistance To Eligible Applicants.	\$50,000,000.00	895
Energy Storage	\$100,000,000.00	1,090
High Efficiency Autos - Electric And Zero-emissions Vehicles Subsidizing	\$100,000,000.00	10
High Efficiency Autos - Development Of An In-state Manufacturing And Supply Chain For Clean Energy Technologies;	\$100,000,000.00	10
Industrial Energy Efficiency Investments Installation Of Clean Energy Technologies;	\$100,000,000.00	470
Industrial Energy Efficiency Investments Electrification Of Equipment And Appliances For Residential, Commercial And Industrial Applications;	\$100,000,000.00	470
Inland Waterways Marine Ports Infrastructure Investments - Port Facility Electrification And Sustainability Measures, Including At The Port Of Albany, The Port Of Buffalo, And The New York City Waterfront, Including Hunts Point And Sunset Park; And	\$100,000,000.00	480
Sustainable Local Economic Development - Organic Farming	\$100,000,000.00	930

Investment Area	Estimated investment level	Total Jobs Created
<u>Climate Jobs And Infrastructure Funding</u>		
Community-owned Renewable Energy Projects, Such As Community Solar And Community Wind Projects, Wind	\$100,000,000.00	310
Large Scale Renewable Energy Projects Solar	\$100,000,000.00	400
Sustainable Local Economic Development; (Based On The Fema Pre-disaster Mitigation Program)	\$100,000,000.00	1,500
Community Centers (Comparable To Schools Infrastructure Investments	\$100,000,000.00	1,370
Public Transit (Surface Transportation Investments Electric/Zero-emissions Vehicle Infrastructure (Including Charging Infrastructure And Energy Storage Technologies)	\$800,000,000.00	10,400
School Transportation (Including School Buses) Purchasing Standard Electric School Buses With 100% Domestic Content Paying For The Incremental Cost Increase Over Internal Combustion Engine Buses As They Are Replaced	\$150,000,000.00	1,605
	\$700,000,000.00	7,490

Investment Area	Estimated investment level	Total Jobs Created
Rebate Programs	\$4,328,610,000.00	54,540
Worker And Community Assurance Programs	\$1,010,009,000.00	15,554
TOTAL JOBS		165,657

The Climate And Community Investment Act: An Engine For Good Job Creation

Prepared with input from the NY Renews Policy Development Committee, including: Lew Daly, Mo-Yain Tham, Annel Hernandez, Clarke Gocker, Eric Koski, Ian Elder, Miranda Nelson, Lynda Nguyen, Mark Schaeffer, Rachel Spector, Rachel Patterson, Arielle Swernoff, Raya Salter, Josh Kellermann, Summer Sandoval, Stephan Edel, Anthony Rogers-Wright and many others across the coalition.

The NY Renews Steering committee includes: 32BJ SEIU, ALIGN - Alliance for a Greater New York, Catskill Mountainkeeper, Center For Working Families, Citizen Action of New York, Communications Workers of America District 1, Environmental Advocates of NY, GreenFaith, Long Island Progressive Coalition, NYC Environmental Justice Alliance, NYSNA, Our Climate, People's Climate Movement NY, The Point CDC, PUSH Buffalo, Sierra Club, Teamsters Joint Council 16, UPROSE

The full membership of the NY Renews coalition includes more than 275 Member organizations across every region of the state representing tens of thousands of New Yorkers from community groups, faith communities, labor unions, environmental and environmental justice organizations, youth, and beyond. A full list of coalition members can be found at www.nyrenews.org/our-coalition.

NY Renews seeks to build a multi-sector, multi-generational, multi-racial movement and create a path to a just, clean energy future for all New Yorkers through organizing, advocacy, legislative victories and implementation, demonstrating how a Just Transition can be achieved.