

Climate-Positive, Equitable Economic Development

Report of Working Group 7

January 2021

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EXECUTIVE SUMMARY

Working Group 7 defined a concept of climate-positive equitable economic development, which informed the activities of all working groups: *In pursuit of climate-positive, equitable economic development, Rutgers University will implement policies, programs, and projects that accelerate the socially equitable and inclusive transformation of New Jersey's economy to one that is powered by clean, renewable energy, produces net-negative carbon emissions, and is resilient to climate and related impacts and shocks.*

Rutgers has many established programs and initiatives that are relevant to developing a climate-positive, socially equitable set of institutional policies and actions. These resources vary in scale and scope. Development of strategies to better integrate these efforts is needed. There are less than a dozen programs of 50+ included in our assessment that cross-over/cover two or more topics (such as social equity and economic development).

There are initiatives at the local-level in our host communities that are working towards the broad goals of climate-positive equitable economic development. The organizations leading these initiatives are potential partners and resources to the Task Force. We were unable to engage with these local organizations. Pursuit of in-depth engagement with host-community programs is needed.

There are significant opportunities to link Rutgers' efforts to larger state policy goals, and effect transformation towards a climate-positive equitable economy. The Task Force should become engaged in the development/implementation of such state policies.

Climate-positive actions at selected universities (nationally and internationally), cities, and states were identified and evaluated for their successes and failures. Useful examples of solutions are found among the APLU Innovation & Economic Prosperity award winners and within localities that pursue climate change goals through an equity lens and in partnership with academic institutions, such as the Resilient Los Angeles program.

Based on extensive research, we proposed three areas of potential climate solutions for the Task Force to explore. Resiliency (encompassing environmental justice and public health); Business/Economic Development; and Integration/Coalition Building.

- *Resiliency*: Undertake collaborative climate change planning and implementation in partnership with the urban communities that host our three primary campuses, that (a) advances the university's plan on carbon neutrality and climate resilience; (b) advances the state Energy Master Plan to support Community Energy Planning and Action in Underserved Communities; and (c) results in improved health equity outcomes, particularly for goals associated with Healthy New Jersey 2030.
- *Business/Economic Development:* Specifically relating to our role as an anchor institution: Rutgers can build on and extend its initiatives to serve as an anchor institution in New Brunswick, Camden and Newark, including research and investment to house, fund and/or conduct collaborative research that enables/expands climate-positive equitable economic development.
- *Integration/Coalition Building:* Establishment of a Rutgers Sustainability Office is recommended to organize and oversee implementation of actions recommended by the Task Force. Office could play a role in bringing together existing Rutgers programs that are focused on climate change, social equity, inclusion and diversity, and economic development, and foster greater disciplinary cross-over that broadens program scope to include climate-positive equitable economic development considerations.

7.1. Rutgers' current baseline

7.1.4. Related ongoing educational, research, and service activities

Definition

Working Group 7 defined a concept of climate-positive equitable economic development, which can inform the activities of all working groups: *In pursuit of climate-positive, equitable economic development, Rutgers University will implement policies, programs, and projects that accelerate the socially equitable and inclusive transformation of New Jersey's economy to one that is powered by clean, renewable energy, produces net-negative carbon emissions, and is resilient to climate and related impacts and shocks.*

This concept incorporates the following understanding: For development to be climate-positive it must produce a state economy and local municipalities that are resilient to the impacts of climate change. The social elements of resilience are critical. Economic development that is climate positive will foster social resilience by building social capital (skills and networks), diversity and inclusion, public health, public education and social solidarity in ways that support factors critical for climate change mitigation and adaptation, such as innovation, collective problem-solving, collective action and social 'safety nets' that protect the vulnerable and underrepresented. For development to be equitable it must be fair in two primary dimensions: 1. Distribution of costs and benefits and 2. Participation of different social groups in decision-making processes. Rutgers is well-positioned to realize this vision.

Rutgers Baseline Program Assessment

Rutgers has many established programs and initiatives that are relevant to developing a climate-positive, socially equitable set of institutional policies and actions. These resources vary in scale and scope. Some cut across disciplines and campuses, while others are student-run. The committee conducted an in-depth review of relevant programs on all three campuses and examined the purpose of the program, location, and intended audience. The review does not include programs that are solely academic in focus, such as individual courses or degrees. The program areas included: Climate Change (and Environment), Social Equity, Economic Development, and Cross-over: Climate Change & Social Equity, Cross-over: Climate Change & Social Equity, Cross-over: Climate Change, Social Equity, Economic Development, Refer to Appendix 1 for a listing of programs.

External Program Assessment

Climate-positive actions at selected universities (nationally and internationally), cities, and states were identified and evaluated for their successes and failures. Conclusions were drawn for best-practice approaches that Rutgers could adopt for its operations and outreach to communities and the state.

Universities:

Useful examples of solutions that are most relevant to climate-positive economic development are found among the APLU Innovation & Economic Prosperity (IEP) award winners. IEP awards go to APLU member universities that have earned their IEP University designation and demonstrate excellence and leadership in planning, implementing, and evaluating programs and initiatives that support regional economic development and engagement. Some specific examples:

Colorado State University School of Global Environmental Sustainability

CSU's School of Global Environmental Sustainability (SoGES) sits at the nexus of a growing number of exciting sustainability initiatives in research, education and engagement at CSU. The School was designed to apply interdisciplinary perspectives to large-scale environmental, economic, and social questions not easily

addressed through traditional approaches, including 21st century challenges such as biodiversity loss, climate change and food security.

Colorado State University Energy Institute at the Powerhouse Energy Campus

CSU created the Energy Institute in 2013 to consolidate its vast energy research under one virtual organization, employing a unique interdisciplinary approach to global problem-solving. It was designed programmatically with an emphasis on agility and entrepreneurship to position CSU at the forefront of energy research and technology.

Arizona State University - The Downtown Campus

ASU's Downtown Phoenix campus represents a significant public partnership that has garnered community support and enhanced redevelopment opportunities. The partnership between ASU and the city of Phoenix has created jobs, increased public revenue and private investment, stimulated local businesses, improved social services, and most importantly, offered further educational opportunities.

SkySong - The Arizona State University Scottsdale Innovation Center

SkySong is leading the transition of the McDowell Corridor from a former "motor mile" of car dealerships to a major innovation hub for the greater Phoenix Region. SkySong represents a major public-private partnership bringing together the university, the ASU Foundation for a New American University, the City of Scottsdale, the Plaza Companies, and the Holualoa Companies.

There are other innovative and relevant examples of climate-positive equitable economic development outside of the IEP framework. These programs were selected for inclusion in the report because they offer ideas for solutions (refer to section 2.1) that can potentially be implemented at Rutgers:

University of Maryland Francis King Carey School of Law

The School of Law's Small Business & Community Equity Development Clinic and Environmental Law Clinic collaborated with the NAACP Environmental & Climate Justice Program to develop a climate adaptation finance toolkit for communities. The toolkit discusses the links between climate adaptation and economic development, provides information on financing tools that can be used to support adaptation, as well as examples of how others have overcome barriers to access funding and how they've utilized funding to improve community adaptation to climate change impacts like sea level rise and food insecurity. The toolkit can be accessed at:

https://www.nationaladaptationforum.org/sites/default/files/Resourcing%20Revolutionary%20Resilience%20 TOOLKIT%20Modules%201-5.pdf

University of Colorado Eco-Visits

Students can benefit from the program in two ways:

 Through the Eco-Visits program students are trained to conduct residential energy audits and install energy-saving upgrades, learning a valuable hands-on skill in a green job.
 Free energy audits are available for off-campus student housing.

Cornell University

One of the first universities in the country to integrate sustainability management tools into a university management academy - University leadership receives training in triple bottom line decision making. Cornell Global Labor Institute works with trade unions to solve major environmental (and other) challenges, such as climate change.

Northern Arizona University

Partners with the community to provide opportunities for students in the green economy, such as through its ongoing support of the Coconino County Sustainable Economic Development Initiative

University of Northern British Columbia

Collaboration with the Prince George Chamber of Commerce's Chamber Carbon Action Plan - through the project, the chamber pairs businesses with students (most come out of a Carbon and Energy Management class) who create carbon footprint analyses to internationally recognized standards. The students interact directly with the businesses to understand their operational realities, and earn valuable experience, contacts and skills. The chamber also facilitates project funding and generates publicity around the initiative.

Case Study: Climate-Positive Development at European Universities

A case study of European universities was undertaken to identify programs that may serve as models in Rutgers' efforts to promote climate-positive equitable economic development. A summary of the study conclusions is included here. The full text of the report is attached as Appendix 2¹.

The analysis reveals a variety of actions that are connected to both climate change mitigation and adaptation as well as economic development in the local community of the university or more broadly. And although this is a broad topic that can be approached in different ways and universities focus on different aspects, some trends can be observed:

- There is a trend toward hubs that combine interdisciplinary research, but also public and private partners. With these hubs, universities try to ensure that their research and technical development ideas are realized and scaled to be economically profitable while contributing to the fight against global warming.
- Concerning the climate-friendly economic transition, many projects focus on those industry branches that are currently the biggest polluters, or the heavy industries. This transition, they highlight, has to be a holistic one focusing not on single sustainability efforts but on a shift towards new models of economy, such as circular economy.
- Several of the selected universities focus on the topic of smart/sustainable/green/socially just cities. While part of this effort can be attributed to the academic focus of their departments, the universities also *seek to develop the community they are situated in by attracting new companies, providing a good quality of life to their employees and students, and developing an infrastructure that is built to withstand some of the negative expected outcomes of climate change.* In doing so, universities try to find new and more inclusive forms of citizen participation, attempting to ensure the inclusion of residents or workers in the transitions their regions and neighborhoods face.
- Concerning social equity, universities are considering the topic more indirectly, integrating this in broader projects, such as through renewable energy in developing countries.
- Because climate change will affect different parts of the population, universities are considering climate equity in their research, but could improve efforts towards implementing them in their own community. The areas that the universities are based in and are developing often seem to be for students, employees, and professional workers, leaving out lower income groups.
- All universities support climate change related start-ups in their development phase, but many do not seem to track their evolution further.

Cities & States:

Climate-positive actions in cities and states were identified and² and can be found in Appendix 3 *Rutgers Host Community Assessment*

There are initiatives at the local-level in our host communities that are working towards the broad goals of climate-positive, equitable economic development (though the organizations may categorize or define their goals using different terminology). The organizations leading these initiatives are potential partners and

¹ Research conducted by Rutgers Bloustein graduate student Leonie Kattermann

² Research conducted by Rutgers Bloustein graduate student Kevin Keys

resources to the Working Group. An inventory of organizations in Rutgers host communities (i.e., New Brunswick, Newark, Camden) was conducted and is organized by geography and sub-categorized by economic sector (i.e., Government, NGOs, Education/Health Care, and Private). Programs with an eco-footprint were also identified at the New Jersey state level. See Appendix 4 for the full inventory.

Sustainable Jersey

A member of WG7 is on staff at Sustainable Jersey and provided information about the university's relationship with the organization.

<u>Sustainable Jersey</u>, a 501c3 non-profit organization staffed by the Sustainability Institute at The College of New Jersey, has collaborated with Rutgers University since its inception in 2009.

Sustainable Jersey is a network and movement of municipalities and schools working collectively at the local level to achieve a sustainable future for New Jersey. Collaborating with state agencies, foundations and other non-profit organizations, business and academia, Sustainable Jersey sets standards and supplies resources and guidance on best practices for what communities could and should do to contribute to a sustainable future. When municipalities and schools document accomplishment of these prescribed best practices to the satisfaction of expert reviewers, they accrue points towards progressive levels of *sustainability certification*. Prior to attaining certification, municipalities and schools are eligible to participate in the program and apply for grants once they voluntarily form 'green teams' that are recognized by resolution as bodies of local government, or of the school district, and register in the program.

Sustainable Jersey has created over 150 best practices and performance standards in the municipal certification program (termed 'actions') and over 90 in the schools program. These actions are researched and developed by voluntary panels of experts, or 'task forces.' Rutgers faculty and staff have played a crucial role in the development and success of the program by serving not only on these content-focused task forces, but also in the implementation of the program through serving on the Sustainable Jersey Board, the Certifications Standards Committee, grant reviewing committees, certification submission reviewers, co-presenters on panels and co-investigators and partners in grants.

Sustainable Jersey helps strengthen effective engagement by Rutgers with municipal governments, school districts and schools with broad and deep reach across the state. Eighty-nine percent of the New Jersey population now lives in a registered or certified Sustainable Jersey municipality, and the schools certification program is growing rapidly.

The current status of municipalities incorporating and adjacent to Rutgers' campuses is:

- Camden Bronze certified (formerly Silver)
- Highland Park Silver certified (highest current level; applicant for Gold Star in Energy)
- New Brunswick Bronze certified
- Piscataway Not registered
- Newark Expired certification (currently re-applying)

Sustainable Jersey is a strong partner in the dissemination, pilot-testing and improvement of Rutgers' applied research, extension and community engagement. Working with Sustainable Jersey and the cities, towns and schools active in the program provides Rutgers with a learning lab in urban, suburban, rural and K-12 educational contexts. In fulfilling its additional roles as a major employer, contractor, landlord, land manager and politically influential actor in the municipalities hosting its campuses, Rutgers finds through Sustainable Jersey accountable connections with local leadership, local networks of committed individuals and practical guidance for effective local action.

Working with Sustainable Jersey helps Rutgers play a constructive role in collaborative efforts develop and implement research-based, field tested initiatives and policies (or *'actions'*) to advance the shared goals of the [Rutgers Climate Action Plan]. The following is a partial list of current Sustainable Jersey actions under the corresponding goals:

- Reduce greenhouse gas emissions, promote renewable energy:
 - Gold Star Standard in Energy, Climate Action Plan, Residential Energy Efficiency Outreach, Renewable Government Energy Aggregation, Community-Led Solar Initiatives; Onsite Renewable Generation System - Solar (Schools program)
- Promote carbon-positive local land use and transportation:
 - <u>Public Electric Vehicle Charging Infrastructure</u>, Green Infrastructure Planning and Implementation; Sustainable Fleets (Schools)
- Foster local adaptation and resilience to the effects of climate change:
 - Climate Adaptation: Flooding Risk, <u>Enhanced Stormwater Management Control</u> <u>Ordinance</u>; Vulnerable Populations Identification & Tracking; Education for Sustainability (Schools)
- Support climate-positive equitable economic development at the local level through the above actions and also through:
 - Green Jobs/Economic Development, Support Local Businesses, Environmental Justice in Planning and Zoning, Municipal Equity Self-Assessment, Building Healthier Communities; Promote Locally Grow Foods, Inclusive Environments (Schools)

Rutgers could assist Sustainable Jersey in expanding the program by developing new actions (and replicating local innovation) that more directly promote climate-positive equitable economic development. Some new areas of strong relevance to this essential goal include:

- anti-gentrification and displacement policies and practices
- eliminating structural racism and all forms of bias in local governance
- eliminating environmental injustice and health disparities: addressing cumulative burdens from disproportionate pollution; increasing access
- electrified, accessible public transportation
- use of university and municipal infrastructure for community resilience: microgrids for charging stations, broadband, heating and cooling centers,
- local and regional sustainable food and farming systems
- ecological restoration and watershed management
- moving towards a circular economy; circular procurement
- just transition from fossil fuel-based to regenerative local economy
- decarbonizing public investments.

A partial listing of Rutgers University centers and departments actively collaborating with Sustainable Jersey:

- Bloustein School of Planning and Public Policy
 - Alan M. Voorhees Transportation Center
 - Environmental Analysis & Communications Group
- New Jersey Agricultural Experiment Station (NJAES)
 - Rutgers Cooperative Extension, Water Resources
 - Department of Family and Community Health Sciences
 - Rutgers Urban Forestry Outreach Program
- Rutgers Eco-Complex
- Grant F. Walton Center for Remote Sensing & Spatial Analysis, SEBS
- Department of Human Ecology, SEBS
- Rutgers University Graduate School of Education, SAS

NJ State Policy Assessment

There are significant opportunities to link Rutgers' efforts to larger state policy goals, and effect transformation towards a climate-positive equitable economy. There are many instances of alignment between Rutgers' carbon neutrality goal and state aspirations for clean energy, environmental justice and public health. Examples include:

New Jersey Energy Master Plan

The Murphy Administration describes clean energy as "vital for our future from both an economic development and environmental sustainability policy perspective". Through Executive Order 28, Governor Murphy set an ambitious goal of 100% clean energy by 2050. The seventh strategy of the state Energy Master Plan is: Expand the Clean Energy Economy with a focus on supporting the growth of in-state clean energy industries through workforce training, clean energy financing solutions, and investing in innovative research and development programs.

Offshore Wind

Nation's largest single solicitation of 1,100 MW awarded in June 2019; Pipeline of 3,500 MW by 2030 signed into law

• New Jersey Offshore Wind Supply Chain Registry

Allows companies to publicly indicate their interest and ability to supply components and services for US East Coast offshore wind projects; Serves as a resource for companies looking to buy from and partner with New Jersey-based firms.

• Wind Innovation & New Development (WIND) Institute

Public-private partnership will serve as a hub for research, innovation, and workforce development for the offshore wind industry

Electric Vehicles

310+ electric vehicle charging stations; 840+ electric vehicle charging outlets

• Partnership to Plug-In

A first-of-its kind partnership to register 300,000 electric vehicles by 2025

Energy Storage

New Jersey is one of only six states with an energy storage target over the next decade (2,000 MW by 2030); There are currently eight operational energy storage projects

Green Buildings

New Jersey is the first state in the U.S. to require* new construction projects to consider climate change impact (* for projects seeking Department of Environmental Protection permits)

Environmental Justice and Equity

The state **Energy Master Plan** has several specific commitments that are focused on directing clean energy efforts to low and moderate income and Environmental Justice communities.

New Jersey Executive Order 23 (2018) recognizes that "New Jersey's low-income communities and communities of color have been exposed to disproportionately high and unacceptably dangerous levels of air, water, and soil pollution, with the accompanying potential for increased public health impacts."

HR 763

Sustainability work within carbon dividend legislation

7.2. Overview of potential climate solutions

7.2.1. Potential solutions

Proposed solutions are organized into three broad categories: Resiliency (encompassing environmental justice and public health); Business/Economic Development; and Integration/Coalition Building.

1. Resiliency

- *Community Planning*: Undertake collaborative climate change planning and implementation in partnership with the urban communities that host our three primary campuses, that (a) advances the university's plan on carbon neutrality and climate resilience; (b) advances Strategy 6 of the state Energy Master Plan to support Community Energy Planning and Action in Underserved Communities; and (c) results in improved health equity outcomes, particularly for goals associated with outcomes identified in Healthy New Jersey 2030. A grant has been submitted to UC3 by Jeanne Herb to fund this work.
- *Integration of university and municipal infrastructure* for community resilience, such as microgrids, charging (EV, emergency) stations, community broadband, heating and cooling centers
- *Watershed restoration and flood risk reduction:* Build on existing work at Rutgers in partnership with host municipalities, Rutgers Raritan River Consortium, the Lower Raritan Watershed Partnership, NJDEP, Sustainable Jersey and others on watershed restoration, green infrastructure installation and maintenance, stormwater infrastructure improvements, and managed retreat from flood zones, including urban salvage and re-purposing.
- *Health in All Policies*: Rutgers experts conduct a rapid Health Impact Assessment on proposed solutions identified by working groups to demonstrate the value of using health and health equity as a factor in selecting final actions.
- *Environmental Justice:* Rutgers faculty, staff and students work with statewide EJ and community groups to study, recommend actions for selection and funding by the university to contribute to achieving Environmental Justice and improving public health in low and moderate income communities.
- *Anti-gentrification and displacement* policies and practices; energy efficiency and energy democracy, with focus on Rutgers host cities
- *Resource Portal*: Create a portal for communities to access resources at RU (expertise) that can assist local communities in developing climate action plans. Partner with municipal governments, utilities, state agencies and Sustainable Jersey to assist in designing, maintaining and training in the use of supportive data infrastructure and data portal (tracking energy usage, waste, etc.)
- *Sustainable Food Systems*: Explore NJAES program development that focuses on making agriculture, food supply chains, food-processing, food distribution and food waste more resilient to climate change. Partner with local farms, schools, food banks, food service and food-processing businesses.

2. Business/Economic Development

- *Impact investing:* Rutgers should re-assess its investment portfolio towards impact investing that has a goal of generating positive, measurable social or environmental outcomes, alongside a financial return. Investments can be screened for shareholder activism, community impacts, fossil fuels, etc. A portion of assets can be dedicated to support the growth of CDFIs (Community-Development Finance Institutions). Currently, the Social Investment Forum Foundation and Co-op America are leading a campaign to persuade social investment funds to dedicate one percent of their assets to support the growth of CDFIs <u>https://community-wealth.org/strategies/panel/sri/index.html</u>
- Assessment of Rutgers Business Activities: Investigate if economic impact analysis of Rutgers purchasing, building requirements, HR changes can be conducted (possibly IMPLAN analysis) which would also include social and environmental co-benefits. Explore job creation outcomes as a result of Rutgers adoption of climate positive practices, e.g., prioritizing hiring of employees from local community, local procurement, job (re)training in green industries and businesses.

- *Role as Anchor Institution*: Rutgers can build on and extend its initiatives to serve as an anchor institution in New Brunswick, Camden and Newark, including providing/acquiring buildings (e.g., in downtown, blighted areas), research and investment money to house, fund and/or conduct collaborative research. Explore involving Rutgers Health and hospital systems. Examples of specific initiatives may include: job training & business ventures for CDFIs, worker-owned cooperatives, social enterprises, and other 'green' businesses (e.g. forming cooperatives to buy and/or produce renewable energy; organizing employee-owned green businesses; creating nonprofit social enterprise "deconstruction" businesses to salvage materials from existing structures; developing "urban agriculture" programs to sell locally grown, organic produce; creating energy-efficient affordable housing; and engaging in a range of other innovative, eco-focused activities).
 - *Partner with Locally-Based Businesses*: Explore and leverage existing partnerships with companies in New Brunswick, Camden and Newark (e.g., Prudential, Rutgers Health) to implement climate positive, equitable economic development strategies.
 - *Business Financing*: Rutgers could work with non-profits/state to establish a micro-loan program for small businesses to help them develop/implement green practices.
 - *Business Incubation*: Locate a green business incubator in the campus communities that focuses on incorporating green technologies with equitable climate positive economic development.
- *Investigate potential and pilot city and regional-scale initiatives* in circular/regenerative/inclusive economies and just transitions in Rutgers' host communities
- *Clean Energy Workforce:* As part of the development of the Rutgers Plan, the Heldrich Center for Workforce Development and the School of Management and Labor Relations could assist each Working Group in identifying the extent to which any proposed action has the potential to offer specific workforce development opportunities as part of the state's clean energy workforce policies/programs. If undertaken, these efforts should be communicated by the university to the Governor's office to identify opportunities for collaboration during the implementation of the Rutgers Plan.
- *Technological Innovation:* The Rutgers Office of Research and Economic Development (ORED) could provide each Working Group with assistance in identifying actions for which there is the potential for creation of new green businesses. ORED could explore corporate sponsored research collaborations/contract research with companies seeking green/clean chemistry innovation.
- *Student Entrepreneurship:* The Rutgers Entrepreneurship Coalition could work with/create student entrepreneurs in green/clean concepts. Rutgers could develop a student-led/faculty-advised green tech investment fund to support student driven sustainability-oriented ventures.
- *Student-Run Thrift Shop*: A Rutgers thrift shop could be organized and managed by students for experiential learning or internship credit. Earnings could be reinvested into the shop. Clothing and accessories that do not sell within a set number of weeks could be donated to New Brunswick schools and shelters. This would create jobs for students and a pathway for students to support the local community.

3. Integration/Coalition Building

- Integration of Existing Rutgers Programs: As documented in section 1, there are dozens of wellestablished centers and programs at Rutgers that are relevant to developing climate-positive, socially equitable set of institutional policies and actions. However, development of strategies to better integrate these efforts is needed. For example, the vast majority of existing programs focus exclusively on one aspect of climate-positive equitable economic development. There are less than a dozen programs (of 50+ included in the assessment) that incorporate/cross-over/cover two or more topics (such as social equity AND economic development or climate change AND economic development).
- *Create a NJ Sustainability Association (or some other appropriate climate change-related title).* Explore with the most productive relationship with NJ Climate Change Alliance as an economic 'chamber' or separate, allied group. This would be analogous to the NJ Chamber of Commerce, NJ Business and

Industry Association etc. What we are proposing is broader communal engagement that is a member/sponsor-funded NGO that does the following with respect to sustainability:

- Provide an "address for climate change" when it comes to development, advocacy, coordination and communication of collective/joint stakeholder priorities, initiatives and interests-across all economic sectors in NJ-public, corporate, NGO, education, etc.
- Legislative advocacy
- Convenes stakeholder meetings and programs to develop policy, provide idea and resource sharing capabilities
- Facilitates partnerships with other NJ organizations to advance climate-positive, equitable economic development
- Collaboration with Rutgers (RU as convener and host) and other NJ universities.
- *Collaborate with Sustainable Jersey*: Some of the key ways Rutgers can build on its existing collaboration with and support of Sustainable Jersey include:
 - Serve on/work with Task Forces to develop research-based actions and to review ongoing action documentation regularly submitted as part of certification applications
 - o Provide technical assistance to municipalities and schools to implement actions
 - Evaluate programmatic and action impact
 - o Identify and track key climate and sustainability indicators
 - Open data management and access (e.g., municipal dashboards)
 - Fund and support technical expertise to the program, municipalities and schools
 - Pursue external funding for collaborative research and technical assistance
 - Potential topical areas of collaboration include many of the above-listed items:
 - Municipal Climate Action: work with Sustainable Jersey staff, green teams and municipal governments in Newark, Camden, New Brunswick Highland Park and Piscataway to achieve GHG reductions in municipal operations and community-wide energy use and transportation (see first item under Resiliency) (SJ Gold Star in Energy)
 - · Watershed restoration and flood risk reduction (SJ Gold Star in Water)
 - Public Health, Health Equity and Environmental Justice (SJ Gold Star in Health)
 - Integration and use of university and municipal infrastructure for community resilience, such as microgrids for charging stations, broadband, heating and cooling centers
 - Anti-gentrification and displacement policies and practices; affordable housing, energy efficiency and energy democracy, a focus on Rutgers host cities
- Deeper analysis of a network of core partners of the EU Climate-KIC and the initiative itself, focusing on the initiative's and partners' activities related to economic development in a broader sense. This assessment would mainly focus on the innovation programs of the KIC that seek to assist actors working on economic solutions to climate change issues and is mostly carried out by the partner institutions themselves. Actions will be evaluated for their successes and failures, drawing conclusions for best-practice approaches that might be adopted by Rutgers.
- Information Dissemination: The Rutgers Plan should commit partnering and sharing information about the Climate Action Plan with other state and local government agencies and authorities, and with other academic institutions. Creation of a portal for communities to access resources at RU (expertise) across discipline areas and including economic development, resiliency and collaboration building resources that can assist local communities in developing climate action plans. This could be a function of a new Office of Sustainability.

7.2.2. Stakeholder input

• There are initiatives at the local-level in our host communities that are working towards the broad goals of climate-positive, equitable economic development (though the organizations may categorize or define their goals using different terminology). The organizations leading these initiatives are potential partners and resources to the Working Group.

• During the research phase, the working group was unable to engage with local organizations in Newark, New Brunswick and Camden in the planning process. *Pursuit of in-depth engagement with host-community programs is needed. This is an essential follow-up project to pursue in order to fulfill the goal of economic development.*

7.2.3. Early opportunities for action

- Integration of Existing Rutgers Programs: Establishment of a Rutgers Sustainability Office is recommended to organize and oversee implementation of actions recommended by the Task Force. One task for the office could be the organization of a forum that brings together existing Rutgers programs that are focused on climate change, social equity, economic development, for the purpose of discussing opportunities for coordination and collaboration with the goal to foster greater disciplinary cross-over that broadens program scope to include climate-positive equitable economic development considerations.
- *Health in All Policies*: Rutgers experts could conduct a rapid Health Impact Assessment on proposed solutions identified by working groups to demonstrate the value of using health and health equity as a factor in selecting final actions.
- Assessment of Rutgers Business Activities: Investigate if economic impact analysis of Rutgers purchasing, building requirements, HR changes can be conducted (possibly IMPLAN analysis), which would also include social and environmental co-benefits. Explore job creation outcomes as a result of Rutgers adoption of climate positive practices, i.e. prioritizing hiring of employees from local community.
- Clean Energy Workforce: As part of the development of the Rutgers Plan, the Heldrich Center for Workforce Development and the School of Management and Labor Relations assist each Working Group in identifying the extent to which any proposed action has the potential to offer specific workforce development opportunities as part of the state's clean energy workforce policies/programs. These efforts should be communicated by the university to the Governor's office to identify opportunities for collaboration during the implementation of the Rutgers Plan.
- Deeper analysis of a network of core partners of the EU Climate-KIC and the initiative itself, focusing on the initiative's and partners' activities related to economic development in a broader sense. This assessment would mainly focus on the innovation programs of the KIC that seek to assist actors working on economic solutions to climate change issues and is mostly carried out by the partner institutions themselves. Actions will be evaluated for their successes and failures, drawing conclusions for best-practice approaches that might be adopted by Rutgers.

7.2.4. Cross-cutting issues arising in the exploration of potential solutions

- All of the proposed solutions will require greater collaboration across Rutgers units. Ways to incentivize greater collaboration need to be identified.
- Many of these solutions would be well-suited as projects for a new Office of Sustainability.
- *Identification of demonstration and pilot green building projects to inform state policy*: As part of the completion of the Rutgers plan, the university will identify specific actions that will involve pilot and demonstration projects that can serve to inform scale up of state policy. These efforts will be communicated by the university to the Governor's office to identify opportunities for collaboration during the implementation of the Rutgers Plan.
- *Building Temperature Plan:* Given the current Covid-19 pandemic situation, during a time when students are attending classes virtually and staff are telecommuting, it is important that rooms are not needlessly being heated and cooled. This results in wasted energy and wasted dollars. Therefore, setting a temperature schedule for emergency closures could be an added benefit of developing a new building temperature plan. By developing a unique temperature schedule that can be applied to the climate of Rutgers University cities, and communicating such findings to the public, Rutgers could set an example for universities, households, and businesses in cities across the state of New Jersey. Supporting fiscal

responsibility by saving energy is a climate positive economic development solution because it has the potential to save money for state and city businesses, households, and universities to spend elsewhere. Creating a set temperature schedule that would save energy using the climate of New Brunswick, Newark, and Camden, New Jersey is an innovative goal that Rutgers could initiate by collaborating with New Jersey state climatologists and Rutgers offices of communication.

7.3. Assessments of potential climate solutions

7.3.1. Integration of Existing Rutgers Programs

Establishment of a Rutgers Sustainability Office is recommended to organize and oversee implementation of actions recommended by the Task Force. One task for the office could be the organization of a forum that brings together existing Rutgers programs that are focused on climate change, social equity, inclusion and diversity, and economic development, for the purpose of discussing opportunities for coordination and collaboration with the goal to foster greater disciplinary cross-over that broadens program scope to include climate-positive equitable economic development considerations.

Status: Baseline assessment of 50+ programs completed.

7.3.2. In-depth engagement with local organizations in RU host communities:

There are initiatives at the local-level in our host communities that are working towards the broad goals of climate-positive, equitable economic development (though the organizations may categorize or define their goals using different terminology). The organizations leading these initiatives are potential partners and resources to the Working Group (and the larger Task Force). During the research phase, the working group was unable to engage with local organizations in Newark, New Brunswick and Camden in the planning process.

Status: A list of local organizations has been compiled and categorized. Pursuit of in-depth engagement with host-community programs is needed. This is an essential follow-up project to pursue in order to fulfill the goal of economic development.

7.3.3. Community Planning

Undertake collaborative climate change planning and implementation in partnership with the urban communities that host our three primary campuses, that (a) advances the university's plan on carbon neutrality and climate resilience; (b) advances Strategy 6 of the state Energy Master Plan to support Community Energy Planning and Action in Underserved Communities; and (c) results in improved health equity outcomes, particularly for goals associated with outcomes identified in Healthy New Jersey 2030.

Status: A grant has been submitted to UC3 by Jeanne Herb to fund this work. Pursuit of in-depth engagement with local organizations is needed.

APPENDIX A – Rutgers Program Inventory

Climate Change (and Environment)

New Jersey Climate Change Resource Center: Created by an act of the Legislature and signed into law on 1/21/2020. Statutorily charged with: a. Developing and delivering technical guidance to practitioners to enhance adaptation, mitigation, and resilience in the public, private, and nongovernmental sectors; b. Undertaking pilot projects that can be replicable throughout the State and that demonstrate effective mitigation strategies or reduce the risks facing populations most vulnerable to climate change; c. Enhancing the State's capacity to address climate risks and impacts through outreach training, engagement, and education of policymakers, practitioners, the media, and other key stakeholders. *Intended Audience: External to Rutgers; Statewide*

New Jersey Climate Change Alliance: Network of diverse organizations (public, private, NGO) that share the goal of advancing science-informed climate change strategies at the state and local levels in New Jersey, both with regard to adaptation and mitigation. Facilitated by RU through the Rutgers Climate Institute and Bloustein School of Planning and Public Policy. *Intended Audience: External to Rutgers; Statewide*

Office of the NJ State Climatologist (ONJSC): Serves as the State focal point for activities pertaining to the climate of New Jersey. The ONJSC collects and archives climate data, maintains an active research program, and provides climate education and information to the citizens of New Jersey. Part of Rutgers NJAES. *Intended Audience: External to Rutgers; Statewide*

NJAES Research Farms: Undergoing transformation to become models for best practices in soil health, water management and climate change mitigation (starting with Horticultural Farm III) *Intended Audience: External to Rutgers; Statewide; Owners/Operators of Working Lands*

Rutgers Climate Institute: University-wide effort to address climate change through research, networking, and public education and outreach. *Intended Audience: Internal to Rutgers; Campus-wide*

Institute of Earth, Ocean and Atmospheric Sciences: Multidisciplinary community of 100+ faculty and staff across six schools. A major focus of their work is assessing and managing the risks that climate change and habitat change create for communities, economies, and ecosystems. *Intended Audience: Internal to Rutgers; Campus-wide*

Rutgers Energy Institute: Serves as a multi-disciplinary hub for clean energy research, education, policy advice, and community outreach focused on developing efficient and cost-effective pathways for producing energy sources with net zero carbon emissions. *Intended Audience: Internal to Rutgers; Campus-wide.*

Rutgers University Sustainability Committee: Mission to organize and articulate sustainable practices and principles in education and research and university operations, with the goal of reducing Rutgers' impact on the environment.

Intended Audience: Internal to Rutgers; Campus-wide

Center for Urban Environmental Sustainability: Collaboration between the Depts. of Landscape Architecture and Environmental Sciences. The center contributes solutions to a wide-spectrum of urban

environmental issues, such as by providing design support to communities on a wide range of land management, restoration and resilience issues. Intended Audience: Both: Internal to Rutgers (SEBS); External to Rutgers (Statewide)

Rutgers FlexFarm: Pioneering sustainable urban agriculture and food sources; led by faculty from Environmental Sciences and Plant Biology. Part of NJAES. *Intended Audience: Internal to Rutgers; NJAES*

NJPIRG Students: Largest student-run, student-funded nonprofit in the state. Runs nonpartisan campaigns for a wide variety of public interest issues, including 100% Renewable Energy at Rutgers, Save the Bees, curbing the use of single-use plastics, and Zero Waste Zero Hunger. *Intended Audience: Internal to Rutgers; Campus-wide audience; Student body participation*

Take Back the Tap: Seeks to organize students around the issue of safe, accessible and affordable drinking water with a focus on educating the Rutgers community about the problems surrounding the selling of bottled water. Intended Audience: Internal to Rutgers; Campus-wide audience; Student body participation

Rutgers Green Print: A SEBS magazine which provides a creative space for students to explore the environment around them through writing, design and photography. *Intended Audience: Internal to Rutgers; Campus-wide audience; Student body participation*

Students for Environmental Awareness: Student organization that promotes awareness of environmental issues present at Rutgers and globally, and actions that can be taken by students to create positive environmental change within the Rutgers community. *Intended Audience: Internal to Rutgers; Student body*

Students for Environmental & Energy Development: Student club focused on exploring, learning, and applying sustainable scientific and technological solutions to the environmental problems that society faces today.

Intended Audience: Internal to Rutgers; Student body

Rutgers Veg Society: Aims to provide vegan, vegetarian, and veg curious students with a close-knit community, local support and resources, and opportunities for activism and volunteering in the vegan and vegetarian movement. Student club. *Intended Audience: Internal to Rutgers; Student body*

The Wildlife Society: Rutgers Student Chapter: A student run chapter of The Wildlife Society, a national organization whose mission is "To inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation." *Intended Audience: Internal to Rutgers; Student body*

RU Compost: Student club that educates Rutgers students and the larger Rutgers community about food waste and compost and works with other organizations to create a more sustainable Rutgers community. *Intended Audience: Internal to Rutgers; Student body*

Oceanography Club: Student club that is active in cleaning and protecting local Rutgers' and coastal areas, and supporting ocean science research and education. *Intended Audience: Internal to Rutgers; Student body*

Rutgers Solar Car Club: The club is tackling the issue of clean energy in transportation by designing and building, from scratch, an entirely solar-photovoltaic-powered car capable of transporting a person across the country.

Intended Audience: Internal to Rutgers; Student body

Social Equity

Global Health Institute: Fosters collaboration across the university and with partners beyond Rutgers to improve the health of vulnerable populations. Prioritizes focus areas where environmental and human health intersect including: human health and the changing environment; food, nutrition and health; and disasters, community health and resiliency.

Intended Audience: Both: Internal to Rutgers (Campus-wide); External (International)

Division of Diversity, Inclusion and Community Engagement: Leads strategic and campus-wide efforts to advance diversity and inclusion. Based at RU NB.

• Collaborative Center for Community Based Research and Service: Multi-disciplinary center that supports faculty and students' efforts to apply academic concepts in partnership with non-profit organizations with the goal of bettering the communities in which Rutgers resides. *Intended Audience: Both: Internal to Rutgers (NB Campus); External (Newark, Piscataway, New Brunswick, and Camden communities)*

Community Leadership Center: A service and research center that has been recognized as a model program for revitalizing and advancing urban communities. The center spearheaded groundbreaking initiatives including Rutgers/LEAP, the Early Childhood Literacy Initiative Preschool, and the Rutgers JumpStart program. Based at RU Camden. *Intended Audience: External to Rutgers (Camden community)*

Center for Urban Research and Education: Facilitates and promotes research on issues that face Camden, the Philadelphia metropolitan region and other large cities. Through its research and partnerships, the center creates innovative solutions that promote equity and opportunity in communities throughout the nation. Based at RU Camden.

Intended Audience: Both: Internal to Rutgers (Camden Campus); External to Rutgers (National)

Joseph C. Cornwall Center for Metropolitan Studies: The role of the center is to bring the intellectual talent and other resources of RU-Newark to bear on the challenges of revitalizing Newark and similar communities in the region and state, with emphasis on supporting the most vulnerable urban populations. Based at RU-Newark.

Intended Audience: External to Rutgers (Statewide with emphasis on Newark community)

Clement A. Price Institute on Ethnicity, Culture, and the Modern Experience: Community-oriented center for the public arts and humanities, based at RU Newark. The institute is committed to advancing the cause of environmental justice and hosts an Eco Working Group focused on climate change.

Intended Audience: External to Rutgers (Newark community)

RU Ready for Work: A year-round career/work-readiness program for socio-economically challenged 10th -12th grade students in Newark. Partnership with Newark City of Learning Collaborative.

Intended Audience: External to Rutgers (Newark community)

Engineers Without Borders: The Rutgers University Chapter engages in community development programs to design and implement engineering solutions to address basic human needs (active projects located in Guatemala, Kenya, Tanzania, and Camden, NJ). *Intended Audience: Both: Internal to Rutgers (Student body participation); External (International)*

Galvanizing and Organizing Youth Activism (G.O.Y.A.) Project: G.O.Y.A. is a vehicle for the Rutgers student body to address the issues of education, health, poverty and inequality within our communities. G.O.Y.A. creates healthy ties between students and residents of New Brunswick, as well as communities in Haiti, the Dominican Republic and Sierra Leone. Intended Audience: Both: Internal to Rutgers (Study body participation); External (International)

Women's Center Coalition: Student-run organization with a focus on social activism and community building. Key issues of interest include sexism, racism, LGBTQ, ecological issues, social justice concerns, cultural awareness and respect, and human rights. *Intended Audience: Internal to Rutgers; Student Body*

Diversity Peer Educators: Rutgers NB students committed to educating their peers on topics of diversity, inclusion, and social justice. *Intended Audience: Internal to Rutgers; Student Body*

Livingston Social Justice and Service-Learning Community: Self-selected group of students who share similar academic, cultural or language interests and explore them together through common courses and out of classroom activities. Participants in this community learn practices that lead to social justice.

Intended Audience: Internal to Rutgers; Student Body

Rutgers Chapter of the National Association for the Advancement of Colored People: The purpose of the organization is as follows: to uplift and fight for the sole purpose of the minority, to advance the social, political, economical, educational, and cultural status of the minority, to assist in the development of future contributions in history by the minority, and to inform the community of problems affecting the minority.

Intended Audience: Internal to Rutgers; Student Body

Amnesty International (Rutgers): The purpose of this organization shall be the promotion of human rights by providing a forum for activism and for students to undertake research and action focused on preventing and ending grave abuses of the rights to physical and mental integrity, freedom of conscience and expression, and freedom from discrimination. *Intended Audience: Internal to Rutgers; Student Body*

Economic Development

Rutgers Institute for Corporate Social Innovation: The mission of the institute is to help current and new generations of business leaders to develop the mindset and tools that enable organizations to implement innovative business models that create value by solving pressing social problems. *Intended Audience: External to Rutgers; National*

New Jersey Agricultural Experiment Station (NJAES): Extension arm of RU with staff in all 21 counties; priority goal to spur and support economic development in New Jersey

- Rutgers EcoComplex, Clean Energy Innovation Center: A business incubator for clean energy entrepreneurs (located in Bordentown).
- Intended Audience: External to Rutgers; International; Entrepreneurs and Businesses
 Climate Smart Agriculture and Working Lands Initiative for NJ: Exploring options for
- incentivizing owners/operators of productive land to reduce GHG emissions. Intended Audience: External to Rutgers; Statewide; Working Lands Owners/Operators
- **Rutgers Food Innovation Center:** A business incubator and accelerator for food entrepreneurs (locations in Bridgeton and Piscataway). The center works with companies seeking to design foods for the future with an eye toward sustainability and social equity, such as the Impossible Burger.

Intended Audience: External to Rutgers; International; Entrepreneurs and Businesses

New Jersey Small Business Development Center(s) (NJSBDC): Part of a statewide network that provides comprehensive consulting services and educational opportunities to Small Business owners and potential owners through New Jersey; hosted at Rutgers New Brunswick and Camden

• NJSBDC at Rutgers New Brunswick helped launch the NJ Sustainable Business Registry. The program was created to recognize and promote sustainable businesses, nonprofits and higher education institutions across the state. The program is no longer funded.

Intended Audience: External to Rutgers; Statewide

Rutgers Office(s) of Economic Development: These offices work to build relationships with a wide range of businesses and organizations to enhance the economy of their regions and the state.

- Rutgers Camden: Office of Economic Development
 Intended Audience: Both: Internal (Camden Campus); External (Camden community)
- Rutgers New Brunswick: Office of Research and Economic Development (ORED) (Office of Research Commercialization within ORED protects and helps bring to market RU discoveries that have commercial application); and NJAES Office of Economic Development & Innovation (Office supports the Entrepreneurship Coalition, a multi-disciplinary group of staff, faculty and students working together to strengthen and promote student entrepreneurship and innovation)

Intended Audience (ORED): Internal to Rutgers; Campus-wide Intended Audience (NJAES OEDI): Both: Internal (NJAES); External (Statewide)

• *Rutgers Newark:* The Center for Urban Entrepreneurship & Economic Development (CUEED) in the RU Business School Newark; CUEED promotes and fosters a new generation of urban entrepreneurs who actively seek socially conscious urban renaissance. *Intended Audience: Both: Internal (Newark Campus); External (Newark community)*

Anchor Learning Network: Rutgers-Newark and Rutgers-Camden participate in a Coalition of Urban and Metropolitan Universities (CUMU) learning community that supports member institutions' commitment to an anchor mission that intentionally applies their economic power and human capital in a long-term partnership with their local communities to improve mutual well-being.

A Coalition of Urban and Metropolitan Universities (CUMU) member-only learning community created and managed in partnership with The Democracy Collaborative (TDC) and with support from the Annie E. Casey Foundation. CUMU member institutions committed to an anchor mission intentionally apply their economic power and human capital in a long-term partnership with their local communities, to improve mutual well-being **Public Private Community Partnership Program:** Builds capacities of the local community for participation in local economic development facilitated by the private sector. One initiative is a "buy local" program with Newark anchor institutions. Overseen by the Business School. *Intended Audience: External to Rutgers; Newark community*

Rutgers Advanced Institute for the Study of Entrepreneurship and Development: Serves as the platform organization supporting a series of initiatives intended to drive entrepreneurship efforts across **RU** Business School, the larger university, and the communities with which faculty and students engage. Hosts the **RU** Entrepreneurship Clinic to support the social and economic development of communities in which **RU** operates.

Intended Audience: Both: Internal (Campus-wide); External (Newark, NB, Piscataway, Camden)

Makerspace: Collaborative workspace for students, faculty and staff that provides training and access to rapid prototyping technology, a woodshop, textiles, and electronics equipment. *Intended Audience: Internal to Rutgers; Campus-wide*

Cross-over: Climate Change & Social Equity

Environmental Justice Action Group: Connected with the Council on Social Work Environmental Justice Task Force, this recently formed group (2019) hopes to galvanize a group of concerned activists within the university, the field of social work and community partners to focus on various environmental issues. Organized by the Rutgers School of Social Work *Intended Audience: Both: Internal to Rutgers (Campus-wide); External (Statewide)*

Cross-over: Climate Change & Economic Development

Supply Chain Archeology/Green Supply Chains: Rutgers Business School focuses on the decision-making of public and private agencies, organizations and corporate entities to integrate sustainability criteria into 'upstream' supply chain management/procurement processes. *Intended Audience: External to Rutgers; Newark business community*

Rutgers Bloustein School of Planning and Public Policy: Hosts several research Centers and Institutes that focus on environmental planning and economic development

- **Rutgers Center for Green Building:** Conducts applied research utilizing planned and existing green building projects, works with industry and government to promote these concepts, and develops education programs. *Intended Audience: Both: Internal to Rutgers (Campus-Wide); External (Statewide)*
- Rutgers Center for Energy, Economic, & Environmental Policy: Conducts research and education in the areas of housing, transportation, workforce development, public health, economic development, ecological balance, and social equity and justice. *Intended Audience: Internal to Rutgers; Bloustein*

RU Thrifty: Student organization that promotes sustainable fashion choices. Functions as a community space for all Rutgers members to learn about the environmental impacts of the fashion industry and express their creativity through clothes.

Intended Audience: Internal to Rutgers; Student body

Cross-over: Social Equity & Economic Development

Re-Entry through Entrepreneurship: RU Business School is designing a program to help transition previously incarcerated individuals into entrepreneurs.

Intended Audience: External to Rutgers; Statewide

West Ward Community Coalition: Focused on redevelopment and revitalization activity in Newark's West Ward. RU-Newark university-community partnership. Intended Audience: External to Rutgers; Newark community

Enactus: Brings together student, academic and business leaders who are committed to using the power of social entrepreneurial action to improve the quality of life and standard of living for people in need. Aligned with the UN SDGs, teams work on projects to address these social needs. *Intended Audience: Both: Internal to Rutgers (Student body participation); External (International)*

RU Wanawake: Promotes Pan-Africanism. Seeks to improve the economic and social conditions of Africans on the continent and in the Diaspora and to unite college women for the interests of Africa. Student club.

Intended Audience: Both: Internal (Student body participation); External (International)

Cross-over: Climate Change, Social Equity, Economic Development

Environmental Analysis and Communications Group: Conducts research, technical assistance, and policy analyses to advance strategies designed to build communities that are healthier, greener, equitable, resilient and more prosperous. Supports and facilitates collaborative university-wide initiatives including RU Raritan River Consortium, Coastal Risk and Resilience Training Program, Planning Healthy Communities Initiative, among others. Housed at Bloustein. *Intended Audience: Internal to Rutgers; Campus-wide*

Rutgers University Sustainability Coalition: Coalition of student organizations dedicated to advancing the UN SDGs by promoting a culture of sustainability on campus through activism, collaboration, and education.

Intended Audience: Internal to Rutgers; Campus-wide audience; Student body participation

APPENDIX B – Rutgers Host Community Assessment

B.1. Newark (and nearby)

Government:

- Mayor's Office/Office of Economic Development
- Essex County Board of Chosen freeholders
- City of Newark Office of Sustainability (Nathaly Agosto Filión Chief Sustainability Officer)
- Passaic River Coalition
- Passaic Valley Sewerage Commission

Education/Health Care:

- NJIT/NJ Innovation Institute
- Essex County College
- Saint Michael's
- Children's Hospital
- Newark Beth Israel
- Newark Board of Ed.

NGO:

- Newark Alliance
- Newark Downtown District Management Corp
- NJ Institute for Social Justice
- Ironbound Community Corporation
- Habitat for Humanity
- Prudential Center
- Newark Museum of Art
- Newark DIG (Doing Infrastructure Green)
- Choose New Jersey
- Lincoln Park Coast Cultural District

Private Sector:

- Audible.com
- Prudential
- PSEG
- IDT
- Hilton/Doubletree
- Whole Foods
- Tahl Propp Equities
- McCarter and English
- Panasonic

B.2. New Brunswick

Government:

- Mayor's Office
- Middlesex County Board of Chosen freeholders

Education/Health Care:

- Middlesex County College
- St. Peters University Medical Center
- New Brunswick Board of Ed.

NGO:

- New Brunswick Cultural Center
- TechUnited New Jersey (formerly NJ Tech Council)
- Greater Middlesex County Chamber of Commerce
- The Holy Bible Church Of God, Inc.
- New Brunswick Tomorrow

Private Sector:

- Devco
- NB City Market
- Borraie Development/Realty
- J&J
- Bristol Myers Squibb
- Matrix Development Corp.
- Heldrich/Destination Resorts
- Morgan Stanley
- Magyar Bank
- PNC Bank
- Bank of America
- Starbucks (just a "local store" in New Brunswick but the themes we are focusing on align with their company values)
- Small Business Development Center clients who previously expressed interest in issues related to sustainability/climate-change-related training and skill development:
 - o Food Architects
 - o DAVION
 - o Isaac D. Kremer
 - Agraj Seva Kendra
 - White Fox Scooters
 - SIGMA DESIGN
 - PDR Assocs./Energy Assocs.
 - Tranquil Transitions LLC
 - A1 Remodelling
 - IRG (Intelligent Resource Group)

B.3. Camden

Government:

- Mayor's Office/Office of Economic Development
- Camden County Board of Chosen freeholders
- Camden Redevelopment Agency

Education/Healthcare:

- Camcare
- Camden Board of Ed.
- Camden County College

- Cooper University Hospital
- Bancroft Brain Injury Services
- Coriell Institute for Medical Research

NGO:

- NJ Aquarium
- Cooper's Ferry Partnership
- Salvation Army Ray and Joan Kroc Corps Community Center
- PowerCorps Camden
- Camden SMART Initiative

Private Sector:

- Campbell Soup Company
- New Jersey American Water (subsidiary of American Water)
- Subaru of America
- Holtec International
- Philadelphia 76ers
- The Michaels Organization

B.4. State-Level

- Port Authority of NY and NJ
- NJ Sports & Exposition Authority
- NJ Apartment Association
- CAI-NJ (Community Associations Institute of NJ)
- NJ Restaurant Association
- NJ Builders' Association
- NJ School Boards Association
- NJ Sierra Clubs
- NJ Assoc. of Environmental Commissions
- NJ Business Incubator Network
- Sustainable Jersey
- Bellworks
- NJ EDA
- NJDEP
- NJ Division of Agriculture
- NJ Chamber of Commerce
- NJ DOT
- NJBIA
- NJ Turnpike Authority

Private Sector with a major "eco-footprint" in NJ:

- Walmart
- Amazon
- Wakefern
- Simon Properties
- Westfield

- T5 (American Dream)
- Boston Properties
- Garden Homes

APPENDIX C – Climate-Positive Economic Development at European Universities