

# Presentation on Climate Leadership and Community Protection Act (Climate Act) by Sameer Ranade, Climate Justice Adviser, NYSERDA

## Two main stakeholder bodies of the Climate Act:

- > 22-member Climate Action Council: Task is to adopt a Scoping Plan that recommends how the State will achieve the Climate Act's goals to achieve net zero greenhouse gas emissions, increase clean energy usage, and ensure climate justice. Co-Chaired by NYSERDA and DEC, it includes 10 other State entity members, and 9 members representing regulated industry, academia, labor, environmental, and social justice movements.
- > 13-member Climate Justice Working Group: Task is to identify disadvantaged communities to guide the equitable implementation of the Scoping Plan. The Working Group is chaired by DEC and includes NYSERDA, the Departments of Health and Labor, and 9 appointed environmental justice community representatives, evenly divided between rural, downstate urban, and upstate urban.

# Climate Act Clean Energy and Justice Goals

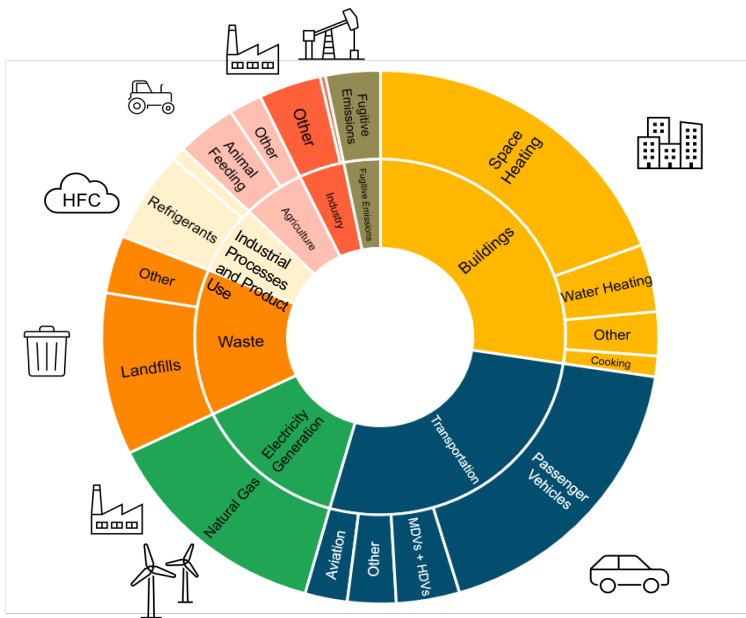
- > **100% zero-emissions electricity by 2040**
- > **70% renewable electricity by 2030**
  - *Currently on pace for over 60%*
- > **9,000 MW of offshore wind by 2035**
  - *30 MW built & over 4300 MW contracted*
- > **6,000 MW of distributed solar by 2025**
  - *3593 MW built & 2417 MW contracted*
- > **3,000 MW of energy storage by 2030**
  - *130 MW built & 1100 MW contracted*
- > **185 TBtu on-site energy savings by 2025**
  - *68 TBtu saved and 14 TBtu contracted (as of June 2021)*

At least 35 percent, with a goal of 40 percent, of the overall benefits of all NY State spending on clean energy and energy efficiency programs must accrue in disadvantaged communities

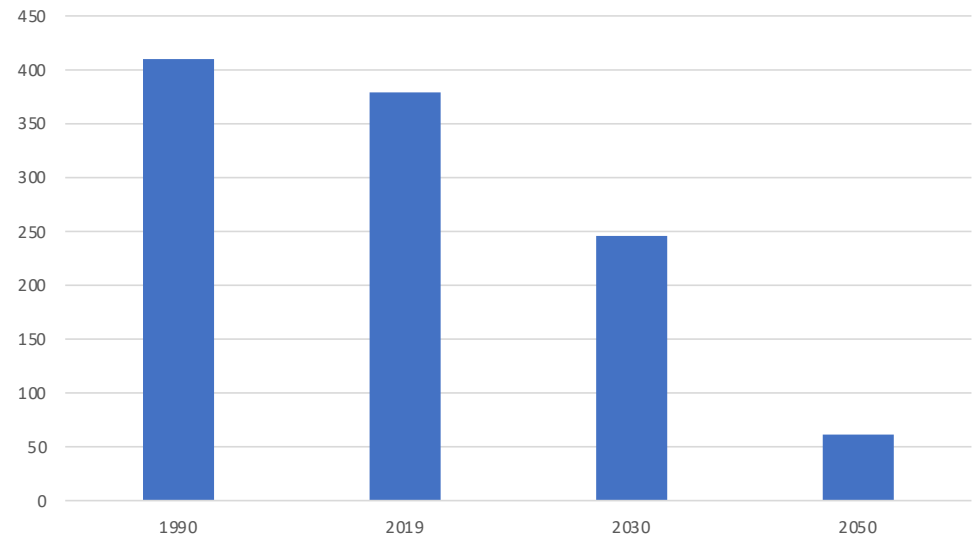
Findings of Barriers & Opportunities report to be leveraged to fully unlock the benefits of clean energy in disadvantaged communities

Scoping Plan Goals: Reduce emissions by 40% of 1990 levels by 2030 and by 100% of 1990 levels by 2050 (at least 85% must come from direct source reductions)

Current Estimated GHG Emissions by Sector



New York State GHG Emissions (MMtCO<sub>2</sub>e)



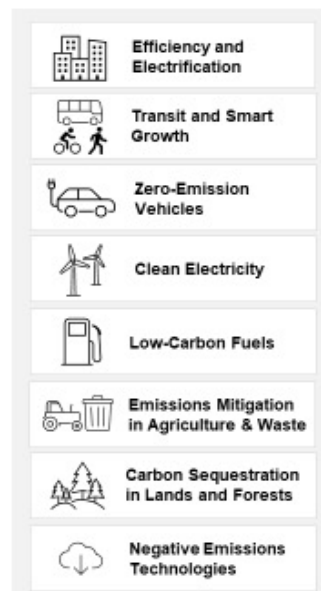
# Integration Analysis Scenario Overview

## > Foundational themes across all mitigation scenarios based on findings from Advisory Panels and supporting analysis

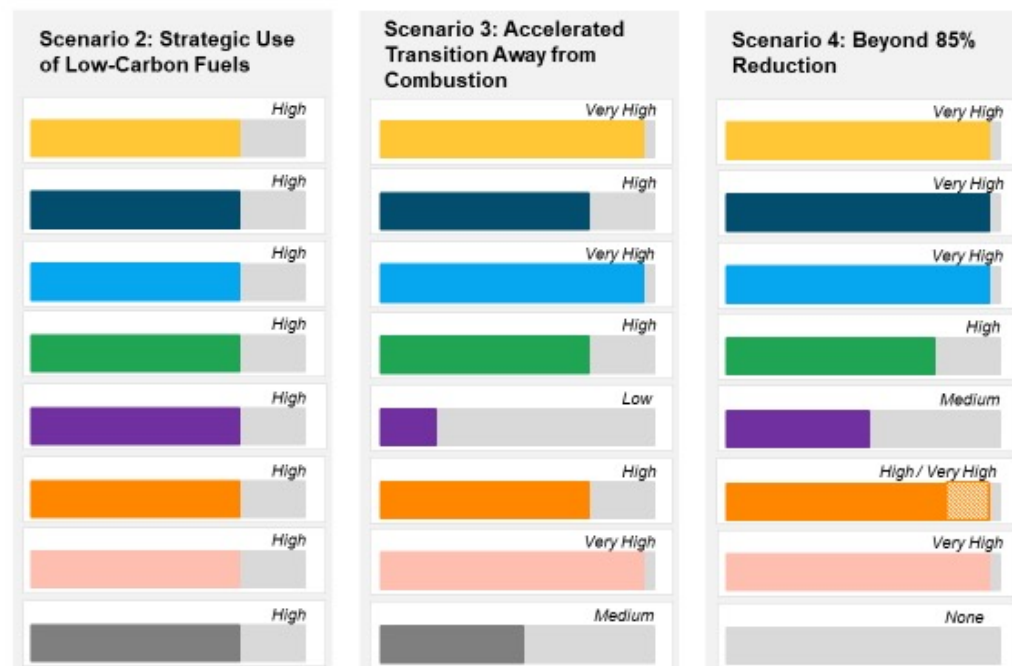
- Zero emission power sector by 2040
- Enhancement and expansion of transit & vehicle miles traveled (VMT) reduction
- More rapid and widespread end-use electrification & efficiency
- Higher methane mitigation in agriculture and waste
- End-use electric load flexibility reflective of high customer engagement and advanced techs

## > Differences among Scenarios

- Level of low-carbon fuel utilization
- Acceleration of electrification
- Need for negative emissions technologies
- Level of natural carbon sequestration
- Level of methane mitigation
- Level of VMT reduction



Level of Transformation by Mitigation Scenario



# Remaining 2022 Scoping Plan Public Hearings Schedule

Date	Time	Location	Address
April 26	4:00PM	Syracuse	SUNY ESF
April 27	3:30PM	Buffalo	Buffalo & Erie County Public Library
May 3	4:00PM	Brooklyn	NYC College of Technology
May 7	10:00AM	WebEx	Virtual
May 10	4:00PM	Tupper Lake	The WILD Center
May 11	4:00PM	WebEx	Virtual

**Note:**

- The deadline for written public comment submissions was extended to June 10
- If COVID safety measures are warranted, in-person hearings will be held virtually at the same scheduled time
- Visit: <https://climate.ny.gov/> and click on the 'Meetings and Events' tab for updated hearing information

# Draft Disadvantaged Communities Criteria



# Draft Disadvantaged Communities Criteria: Summary

## Geographic DAC Definition

1. The geographic definition included 45 indicators of (a) environmental exposures, burdens and climate change risks, and (b) sociodemographic and characteristics and health outcomes in the Disadvantaged Communities criteria
2. The scoring methodology using a multi-step scoring methodology that combines selected indicators
3. The inclusion of 35% of New York State census tracts as Geographic DACs and to automatically include tracts where at least 5% of land is federally-recognized reservation or owned by an Indian Nation.

## Individual Criteria (applicable only for investment purposes, ECL 75-0117)

4. The inclusion of statewide low-income households **only** for the purpose of investing or directing clean energy programs, projects or investments.
5. Defining low-income households as households reporting annual total income at or below 60% of State Median Income or are otherwise categorically eligible for low-income programs.

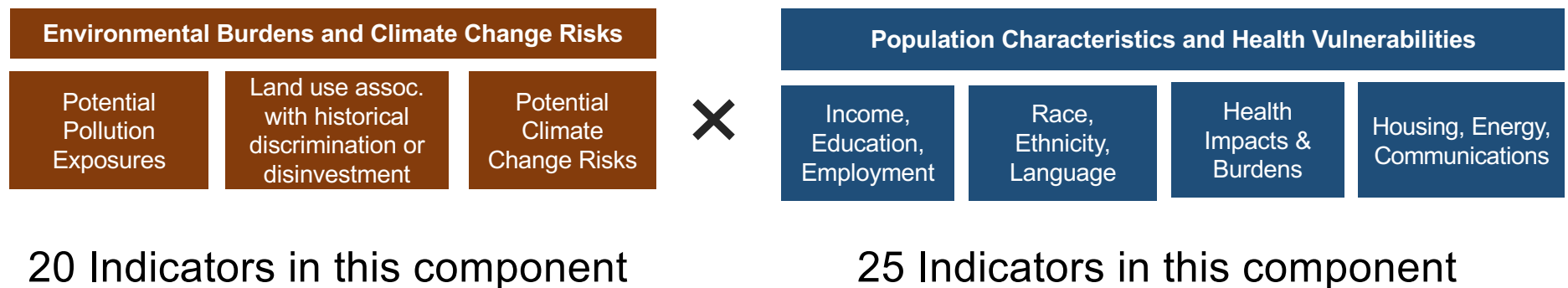
## Annual Evaluation and Review

6. Per statute, CJWG will review DAC criteria and methods at least annually.

\*Public hearings schedule is forthcoming. Written Comments are accepted through July 7: <https://climate.ny.gov/Our-Climate-Act/Disadvantaged-Communities-Criteria>

# Framework: Burdens, Risks & Vulnerabilities

The Geographic DAC scoring approach uses data from national and state sources to select 45 indicators in the following categories for each census tract in NY state.





# 1 Environmental Burdens and Climate Change Risks: Draft Indicators

## Potential Pollution Exposures

- Vehicle traffic density
- Diesel truck and bus traffic
- Particulate Matter (PM2.5)
- Benzene concentration
- Wastewater discharge

## Land use and facilities associated with historical discrimination or disinvestment

- Remediation Sites (e.g., NPL Superfund or State Superfund/Class II sites)
- Regulated Management Plan (chemical) sites
- Major oil storage facilities (incl. airports)
- Power generation facilities
- Active landfills
- Municipal waste combustors
- Scrap metal processors
- Industrial/manufacturing/mining land use (zoning)
- Housing vacancy rate

## Potential Climate Change Risks

- Extreme heat projections (>90° days in 2050)
- Flooding in coastal and tidally influenced areas (projected)
- Flooding in inland areas (projected)
- Low vegetative cover
- Agricultural land
- Driving time to hospitals or urgent/critical care

# 1 Population Characteristics and Health Vulnerabilities: Draft Indicators

## Income, Education & Employment

- Pct <80% Area Median Income
- Pct <100% of Federal Poverty Line
- Pct without Bachelor's Degree
- Unemployment rate
- Pct Single-parent households

Within this factor, both income metrics have 2x weight

## Race, Ethnicity & Language

- Pct Latino/a or Hispanic
- Pct Black or African American
- Pct Asian
- Pct Native American or Indigenous
- Limited English Proficiency
- Historical redlining score

Within this factor, Pct Latino/a and Pct Black have 2x weight

## Health Impacts & Sensitivities

- Asthma ED visits
- COPD ED visits
- Heart attack (MI) hospitalization
- Premature Deaths
- Low Birthweight
- Pct without Health Insurance
- Pct with Disabilities
- Pct Adults age 65+

## Housing, Energy, Communications

- Pct Renter-Occupied Homes
- Housing cost burden (rental costs)
- Energy Poverty / Cost Burden
- Manufactured homes
- Homes built before 1960
- Pct without Internet (home or cellular)

# Jobs Study: Top-level Findings

Top Level Jobs Study Finding	Est. total NYS jobs	% increase (and total # new) from baseline year
<b>By 2030: Overall employment (4 Sector: Buildings, Electricity, Fuels, Transportation)</b>	• <b>189,000 jobs, 2019-2030</b>	• <b>38% increase in workforce</b>
<b>By 2050: Overall employment</b>	• <b>268,000 jobs, 2019-2050</b>	• <b>54% increase in workforce</b>
By 2030: <b>Buildings Sector</b> (6 sub-sectors: commercial HVAC, commercial shell, commercial other, residential HVAC, Res-shell, Res-other)	• 305,126 in 2030	• 85% increase in workforce (+139,895 jobs)
By 2040: <b>Electricity Sector</b> (12 sub-sectors: solar, OSW, hydropower, hydrogen, biomass, T&D, storage, other fossil gen, nuclear)	• 212,000 to 226,000 jobs depending upon scenario	• 61% increase in workforce (+81,185 jobs)
By 2030/40: <b>Fuels Sector</b> (6 sub-sectors: NG, NG distribution, petroleum fuels, hydrogen fuels, and bioenergy)	• 26,000 jobs in 2030 • 20,000 jobs in 2040	• 4% decrease in workforce (-1,172 jobs) • 27% decrease in workforce (-7,386 jobs)
By 2030: <b>Transportation Sector</b> (5 sub-sectors: vehicle mfg, maintenance, wholesale trade parts, conventional fueling stations, charging and hydrogen fuel stations.	• 176,186 jobs in 2030	• <1% decrease in workforce (-193 jobs)

- The wage profile of jobs in the four sectors shows the largest increase from 2019 to 2030 in middle wage positions (\$28 to \$37 an hour), while high wage (>\$37 an hour) and low wage positions (<\$28 an hour) grow at slower rates.
- Geographically, the net job increases from 2019 to 2030 are found in every corner of the state, with each of New York's five regions seeing an increase of between 10,000 and 48,000 net new jobs.

**Under both scenarios, the number of jobs added from the 21 growing sub-sectors outnumbered the number of jobs lost in the seven displaced sub-sectors by a ratio of approximately 10 to 1.**

## PON 3982: On-the-Job Training Program



<p><b>Eligible Businesses</b></p>	<ul style="list-style-type: none"> <li>• HVAC and renewable heating and cooling</li> <li>• High efficiency water heating</li> <li>• Insulation and/or air sealing</li> <li>• High efficiency lighting and controls</li> <li>• Building automation and controls</li> <li>• Smart grid, energy storage &amp; EV charging stations</li> <li>• Building operations and maintenance</li> <li>• Solar electric photovoltaics, solar thermal, and related areas</li> <li>• Offshore and Land-Based Wind and related areas</li> <li>• EV Charging Stations</li> </ul>
<p><b>Wage Reimbursement</b></p>	<ul style="list-style-type: none"> <li>• 50%-75% wage reimbursement for training period               <ul style="list-style-type: none"> <li>○ 75% for MBE/WBE/SDVOB businesses and heat pump hires</li> <li>○ 50% for all other hires</li> <li>○ 6 months for hires from a priority population/disadvantaged community</li> <li>○ 4 months for all other hires</li> </ul> </li> </ul>
<p><b>Process</b></p>	<ul style="list-style-type: none"> <li>• Online business application to verify eligibility for program</li> <li>• NYSDOL review, approval, and support for hiring</li> <li>• New Hire applications submitted to NYSERDA for approval</li> <li>• Invoices submitted for reimbursement after 4 weeks</li> </ul>

- Over 900 individuals hired to date
- \$8,500 per hire average funding
- Businesses can receive up to \$150,000 for hiring traditional workers, with *no cap on hiring individuals from priority populations / disadvantaged communities*

## PON 4000: Clean Energy Internship Program



<b>Examples of Eligible Technology Areas</b>	<ul style="list-style-type: none"> <li>• Energy Efficiency</li> <li>• Renewable Electric Power Generation</li> <li>• Grid Modernization and Energy Storage</li> <li>• Alternative Transportation</li> <li>• Renewable Fuels</li> </ul>
<b>Eligible Interns</b>	<ul style="list-style-type: none"> <li>• NYS residents who are current college students, recent graduates, members of priority populations/disadvantaged communities</li> </ul>
<b>Wage Reimbursement</b>	<ul style="list-style-type: none"> <li>• Reimbursement is available on a sliding scale for hourly wages of up to \$17.00 for up to 480 hours per internship.             <ul style="list-style-type: none"> <li>• <b>90%</b> of intern wages covered for employers with 2-100 employees.</li> <li>• <b>75%</b> of intern wages covered for employers with 101+ employees.</li> </ul> </li> <li>• Minimum requirement of 2+ employees waived for MWBEs, WBEs and SDVOBs.</li> </ul>
<b>Process</b>	<ul style="list-style-type: none"> <li>• Both businesses and interns must apply via online application (one time per business).</li> <li>• Businesses submit an application for each internship, including a job description and signed offer letter.</li> <li>• Invoices submitted for reimbursement at the end of the internship or at 3-month intervals during the internship.</li> </ul>

- Over 1,100 interns hired to date

## PON 4772: Climate Justice Fellowship Program



Photo: Lagos Techie @ [Unsplash](#)

<p><b>Eligible Applicants</b></p>	<ul style="list-style-type: none"> <li>• <b>Businesses:</b> NYS CBOs, universities, municipalities, climate tech investors/start-ups, venture development organizations, clean energy businesses or firms dedicated to advancing climate justice and clean energy priorities in Disadvantaged Communities</li> <li>• <b>Fellows:</b> New hires who are NYS residents and are residents of a Disadvantaged Community or priority population</li> </ul>
<p><b>Fellowship Criteria</b></p>	<ul style="list-style-type: none"> <li>• <b>Duration:</b> 12 months, full-time (35-40 hours/week)</li> <li>• <b>Scope of Work:</b> Environmental and climate justice to advance an equitable clean energy transition for all communities, especially those disproportionately burdened by environmental health hazards</li> <li>• <b>Support Services:</b> Professional development and mentoring + comprehensive benefits</li> </ul>
<p><b>Funding</b></p>	<p>\$6M for 150 Fellowships over 3 years</p>
<p><b>Max. Amount</b></p>	<p>\$40K per Fellow (incl. \$37K salary and \$3K in supportive services)</p>
<p><b>Deadline</b></p>	<p>Due dates anticipated in 2022 and 2023</p>

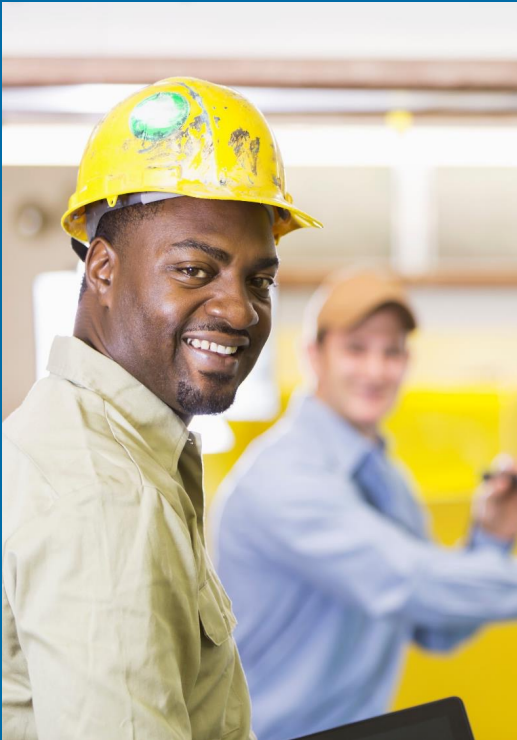
# PON 3981: Energy Efficiency & Clean Technology



<b>Eligible Training Providers</b>	<ul style="list-style-type: none"> <li>• Technical high schools, community colleges, colleges &amp; universities</li> <li>• Trade associations, manufacturers, equipment suppliers, distributors, unions</li> <li>• Firms and subcontractors that support engineering, procurement, construction, operations &amp; maintenance</li> <li>• Renewable energy service providers &amp; project developers</li> <li>• Training and job placement intermediaries, community-based/non-profit organizations</li> </ul>
<b>Technology Focus Areas</b>	<ul style="list-style-type: none"> <li>• Building electrification/heat pump technologies</li> <li>• Insulation &amp; air sealing; smart grid, energy storage</li> <li>• High-efficiency lighting, building automation &amp; controls</li> <li>• EV maintenance &amp; charging station installation</li> <li>• Large-scale, land-based renewable energy generation</li> </ul>
<b>Basic Requirements</b>	<ul style="list-style-type: none"> <li>• Training for existing workers or new workers</li> <li>• Technical training, plus soft skills as appropriate</li> <li>• Industry partnerships to provide hands-on training and relevant work experience + clear job placement paths</li> </ul>
<b>Funding</b>	\$50,000 - \$500,000 per project
<b>Deadline</b>	July 6, 2022; Jan 18, 2023

- New worker training: At least 50% of trainees must be from Disadvantaged Communities or Priority Populations

## PON 4463: Career Pathway Training Partnerships for High Efficiency HVAC and Heat Pumps



<b>Eligible Training Providers</b>	<ul style="list-style-type: none"> <li>High schools, unions, trade associations, community based and non-profit organizations and community colleges, who engage high school students, out-of-school youth, and unemployed or underemployed adults</li> </ul>
<b>Technology Focus Areas</b>	<ul style="list-style-type: none"> <li>Building electrification</li> <li>Air source heat pumps</li> <li>Ground source heat pumps</li> </ul>
<b>Basic Requirements</b>	<ul style="list-style-type: none"> <li>Training for new workers</li> <li>Technical training, plus soft skills as appropriate</li> <li>Industry partnerships to provide hands-on training and relevant work experience + clear job placement goals</li> </ul>
<b>Funding</b>	Max \$550,000 per project
<b>Deadline</b>	Due dates anticipated in 2022 and 2023

- At least 50% of trainees must be from Disadvantaged Communities or Priority Populations



# Additional NYSERDA Clean Energy Workforce Development Programs and Projects

1. [PON 3715 Building Operations & Maintenance Training](#)
2. [Grid for Good](#) – Partnership with National Grid to provide introductory training on heat pumps and building electrification to individuals 16-24 years of age from Disadvantaged Communities



## Cecil Corbin-Mark Fellowship for Environmental Justice



- Available in NYSREDA's Albany or NYC Office
- 1 year full-time paid position with potential for an extension
- Opportunity to work on NYSERDA's policy and programs to advance energy and climate justice
- Fellowship complements the similar one run by WE Act for EJ and would be part of same cohort

# Thank you and stay connected!

- Sameer can be reached at [sameer.ranade@nyserda.ny.gov](mailto:sameer.ranade@nyserda.ny.gov)
- More info on the Climate Act here: [climate.ny.gov](https://climate.ny.gov)
- Sign up for the Climate Act Email List: <https://climate.ny.gov/Email-List>
- Stay abreast of NYSERDA funding opportunities: <https://www.nyserda.ny.gov/Funding-Opportunities/Funding-Opportunity-Email-List>
- Visit the Clean