

# **Clean Energy Communities Market Evaluation: Program Years 2018-2020**

*Final Report*

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# 1. Introduction

As part of its Clean Energy Fund, the New York State Energy Research and Development Authority (NYSERDA) created an Investment Plan for local governments in New York State. Integral to this effort is the Clean Energy Communities (CEC) Program that encourages investments in energy efficiency and the deployment of clean energy in local government operations and in their communities. Local governments include counties, cities, towns, and villages. The research team uses the terms ‘municipality’ and ‘community’ to refer to the local governments and the area in which they have jurisdictional control.

## 1.1 Program Description

The program provides outreach, guidance, and support, including technical assistance and tools, to overcome common barriers to implementing clean energy projects experienced by local governments. These barriers include a lack of awareness of clean energy opportunities available to municipalities, difficulty prioritizing clean energy projects, a lack of funding, and limited staff capacity and technical knowledge to implement clean energy projects. The program activities are designed to achieve the following goals:

- Decrease the amount of time, expertise, and funding needed to prioritize and implement clean energy actions in New York State communities.
- Increase adoption of high-impact, clean energy policies and actions in city, town, village, and county governments across New York State.
- Support and replicate innovative clean energy initiatives and demonstration projects.
- Demonstrate the value proposition associated with high-impact clean energy actions.

The program outlines High Impact Actions that communities can take to promote the deployment of clean energy projects (Table 1). The High Impact Actions, as described in the Communities Chapter of NYSEDA’s Clean Energy Fund Investment Plan,<sup>1</sup> are provided in Table 1:

**Table 1. High Impact Actions**

High Impact Action	Brief Description
Benchmarking	Municipalities adopt a policy to report the energy use of municipal buildings on an annual basis and, in large communities, municipalities

<sup>1</sup> NYSEDA. (2021). Clean Energy Fund: Communities Chapter. Retrieved from <https://www.nyserda.ny.gov/-/media/Files/About/Clean-Energy-Fund/CEF-Communities-Chapter.pdf>.

High Impact Action	Brief Description
	also adopt legislation requiring the annual disclosure of energy use in large private buildings.
Clean Energy Upgrades	Municipalities achieve a 10 percent reduction in the greenhouse gas emissions from municipal buildings through energy efficiency upgrades and renewable energy.
LED Street Lights	Municipalities convert at least half of the municipal “cobra-head” style streetlights within the jurisdictions to energy-efficient light-emitting diode (LED) technology.
Clean Fleets	Municipalities increase the deployment of alternative fuel vehicles by installing electric vehicle charging stations and/or by deploying a qualifying alternative electric vehicle in the municipality’s fleet.
Community Campaigns	Municipalities undertake a campaign to increase the number customers or either rooftop solar, community solar, or clean heating and cooling equipment in the jurisdictions through group purchasing, locally organized community education and outreach, and a limited time offer.
Unified Solar Permit	Municipalities pass an ordinance to adopt the New York State Unified Solar Permit to reduce costs and delays for solar projects in the jurisdictions.
Energy Code Enforcement Training	Municipalities’ code compliance officers and other municipal officials are educated in best practices in energy code enforcement through training, collaborative plans reviews, and joint on-site inspections of local construction projects.
Climate Smart Communities (CSC) Certification	Municipalities earn CSC Certification at the certified, bronze, silver, and gold levels through compliance with this robust, comprehensive rating system.
Community Choice Aggregation (CCA)	Municipalities transition to a cleaner, more affordable energy supply by passing an ordinance to allow for the aggregated purchase of 100% renewable electric supply for residential and commercial customers within the jurisdictions on an opt-out basis.
Property Assessed Clean Energy (PACE) Financing	Municipalities help property owners undertake clean energy improvements to commercial properties by passing an ordinance to establish a PACE financing program.

Between the Time 1 and Time 2 studies, the CEC program added optional compliance pathways to complete the Solarize High Impact Action. In this report, the name of the action has been changed to the Community Campaigns to reflect the fact that communities could do a campaign to promote clean heating and cooling technologies or community solar instead of a rooftop solar campaign to get credit for the action.

## 1.2 Evaluation Objective and Methods

Table 2 summarizes the objective and methods; see Section 4 for methodological detail and Appendix A for the full list of research objectives.

**Table 2. Evaluation Objective and Methods**

Objective	Purpose	Method
Present the second update to the metrics per the Clean Energy Fund Investment Plan: Communities Chapter	Estimate the updated performance metrics such as number of actions completed	Phone surveys of community representatives & secondary data review
Measure program influence for indirectly completed actions	Understand program influence on completed actions not reported to the program	Phone surveys with community representatives



## 2. Market Characterization and Assessment Results

This section presents the “Time 2” estimates of the program performance metrics described by the Communities Chapter in the Clean Energy Fund Investment Plan with respect to the program-defined High Impact Actions. The Time 2 metrics present a second update to Opinion Dynamics’ market evaluations and account for actions completed by December 2020. Baseline metrics from when the CEC Program began in August 2016 and the Time 1 metrics from August 2018 are included in this report for comparison purposes.

For this market assessment, the team added survey questions to determine program influence on indirectly completed actions. Indirect impacts are communities’ clean energy actions not being incentivized by the program, but at least partially inspired by it, and are expected to accrue over the longer term (known as replication).

### 2.1 Performance Metrics

Table 3 contains metrics indicating how many of the 1,595 New York State communities have completed one or more High Impact Actions, two or more High Impact Actions, three or more High Impact Actions, and four or more High Impact Actions. The market evaluation team estimates that at Time 2, 1,341 communities had completed at least one High Impact Action. This is a substantial increase from the 467 that had completed one action at baseline and a modest increase from the 1,178 that had completed one action at Time 1. At Time 2, approximately 791 communities had completed four or more High Impact Actions, the minimum required to be designated a clean energy community.<sup>2</sup> This was a substantial increase from the 465 communities who had completed four or more actions at Time 1.

The data in Table 3 indicate the program rapidly expanded participation among communities in its first two years and had reached a majority of New York State communities. Between Time 1 and Time 2, the CEC Program added 163 (10%) new communities, but most of the activity in this period was communities choosing to complete additional actions. The large increases in communities that have completed two or more actions (353; 22%) between Time 1 (n=753) and

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<sup>2</sup> The data in Table 3 include direct and indirectly completed actions and do not take into account program influence. The data are presented this way to facilitate comparison with the baseline and Time 1 metrics that also do not take into account program influence on indirectly completed actions.

Time 2 (n=1,106) show that the program drives participating communities to accomplish more than one High Impact Action.

**Table 3. Aggregate Metrics (N=1,595)**

Metric	Baseline (Attained by August 2016)	Time 1 (Attained by August 2018)	Time 2 (Attained by December 2020)
Number of communities that have completed one or more High-Impact Actions	467 (29%)	1,178 (74%)	1,341 (84%)
Number of communities that have completed two or more High-Impact Actions	248 (16%)	753 (47%)	1,106 (69%)
Number of communities that have completed three or more High-Impact Actions	128 (8%)	609 (38%)	943 (59%)
Number of communities that have completed four or more High-Impact Actions (minimum for designation)	10 (1%)	465 (29%)	791 (50%)
Number of communities that indicate clean energy is a priority <sup>a</sup>	473 (30%)	484 (30%)	464 (29%)

*Note:* The population for this table is all 1,595 program-eligible New York State communities. All reported numbers of communities are estimated from a representative sample whose size provided greater than 95 percent confidence and 7 percent precision.

<sup>a</sup> Community representatives indicated whether clean energy is a priority in spring 2017, summer 2018, and fall 2021.

### 2.1.1 Indirect Program Benefits

One goal of the market survey was to assess completion of High Impact Actions not reported to the CEC program. The team found that 1,231 actions have been completed indirectly since the program began. LED streetlights was the action most frequently completed indirectly, comprising 35% of all indirectly completed actions (426 communities did this indirectly). The next highest was community campaigns, which was completed by 182 communities and comprised 15% of all indirectly completed actions. PACE financing and energy code enforcement had the lowest rate of being completed indirectly, each comprising 2% of all indirectly completed actions.

Following the Time 1 report, there was concern that the indirect actions were overestimated. To address this concern in the Time 2 market study, the evaluation team added survey questions to determine if an action not reported to the program was influenced by the program. For these indirectly completed actions, the survey asked community representatives if any of the following influenced their decision to complete the action: (1) Resources from the CEC Program, such as its

website, step by step guides, or Program Coordinator; (2) prior experience with the CEC Program; or (3) a recommendation from other municipalities.<sup>3</sup>

Table 4 shows that some of the indirect actions completed were not influenced by the program, as indicated by the decrease in completed actions when accounting for program influence.

Approximately 97 communities completed at least one High Impact Action without program influence between Time 1 and Time 2, which represents 6% of the population.

**Table 4. Indirect CEC Program Benefits (N=1,595)**

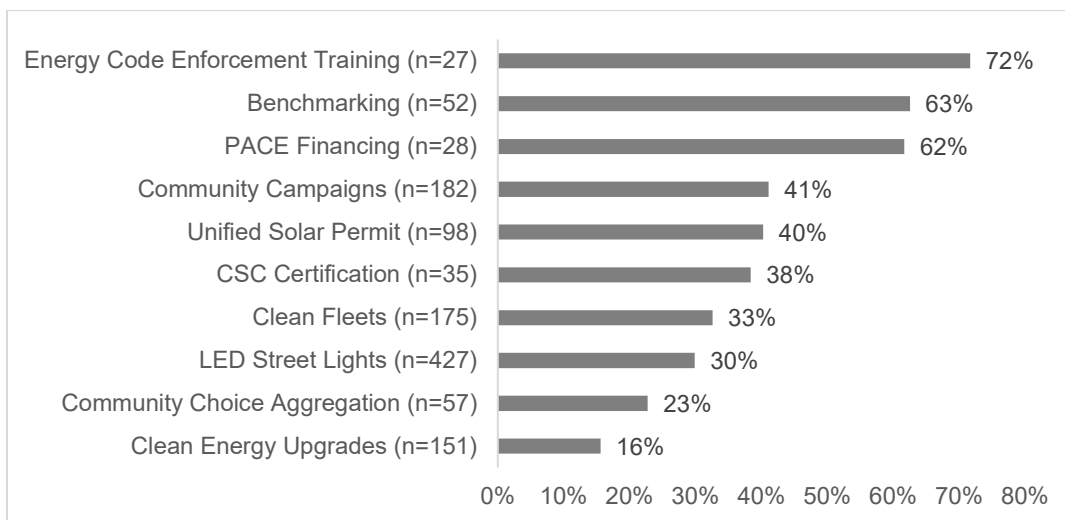
Metric	Time 2 Numbers without accounting for program influence	Time 2 Numbers accounting for program influence
Number of communities that have completed one or more High-Impact Actions	1,341 (84%)	1,244 (77%)
Number of communities that have completed two or more High-Impact Actions	1,106 (69%)	1,030 (65%)
Number of communities that have completed three or more High-Impact Actions	943 (59%)	870 (55%)
Number of communities that have completed four or more High-Impact Actions (minimum for designation)	791 (50%)	735 (46%)

As shown in Figure 1, most of the actions completed indirectly were influenced by the CEC Program. The proportion with low or no program influence ranged from 16% for clean energy upgrades to 72% for energy code enforcement training. As noted above, however, energy code enforcement training had the smallest number of communities completing it indirectly.<sup>4</sup> Looking at the LED streetlights action, which had the largest number of communities completing it indirectly at 427, one can see that the CEC Program influenced 70% of them.

<sup>3</sup> The survey asked respondents to rate the influence of each of those factors from 1 to 7, where “1” meant “not at all influential” and “7” meant “very influential.” If they rated a program-related item a “5,” “6,” or “7,” then the evaluation team counted the action as having program influence.

<sup>4</sup> Only three surveyed communities completed the code enforcement training indirectly, representing 27 communities in the population. Of those surveyed, two reported low program influence, representing 19 communities in the population, for a rate of 72%.

**Figure 1. Proportion of Indirectly Completed Actions with Low or No Program Influence (n=1,231)**



*Note:* Please note that these figures reflect actions completed indirectly since the program began, using our sample and program influence questions from the Time 2 survey.

Large communities, those with a population of 40,000 or more, appear to be more active in completing the program’s High Impact Actions. About 76% of large communities have completed four or more High Impact Actions, while that figure is about half that for small communities—43%. A similar disparity appears when examining the proportion of large and small communities that newly completed four or more actions between Time 1 and Time 2: proportionately, twice as many large communities (45 of 132; 34%) achieved CEC designation as small communities (225 of 1,463; 15%) between Time 1 and Time 2.<sup>5</sup>

Table 5 displays the completed action metrics by community size, accounting for program influence (includes direct actions and indirect actions with program influence). Several community representatives voluntarily mentioned in the survey that their smaller size made it challenging to complete High Impact Actions.

<sup>5</sup> Please note the Time 1 metrics do not include program influence for indirect actions, while the Time 2 metrics do. Table 5 includes actions completed directly and indirectly.

**Table 5. Aggregate Time 2 Metrics by Community Size**

	Small (n=1,463)	Large (n=132)	Total (N=1,595)
One or more actions	1092	132	1224
Two or more actions	903	127	1030
Three or more actions	748	122	870
Four or more actions	635	100	735

Note: Population sizes: Small = 0 to 39,999; Large = 40,000 and above.

### 2.1.2 Disadvantaged Communities

NYSERDA requested that the Time 2 evaluation investigate the number of actions completed among disadvantaged communities.<sup>6</sup> At the time of this study, NYSERDA used an interim definition of disadvantaged communities, which is defined at the census block/tract level. The communities participating in the CEC Program are aggregates of census blocks and tracts. NYSERDA provided the evaluation team with data that indicated whether a municipality contained a disadvantaged community or not. In New York State, 340 of the 1595 municipalities contain a disadvantaged community.

The evaluation found that completion of the CEC Program's High Impact Actions was proportionately higher among municipalities with a disadvantaged community compared to those without one (Table 6). However, the evaluation team suspects that community size may be influencing program activity more than whether they contained a disadvantaged community. Large communities make up 6% of the population, but they comprise 26% of municipalities with a disadvantaged community. Therefore, the highly active large communities are disproportionately represented among the disadvantaged communities.

**Table 6. Time 2 Performance Metrics by Disadvantaged Community Status (N=1,595)**

	Contains a disadvantaged community (n=340)	Does not contain a disadvantaged community (n=1,255)	Contains a disadvantaged community (n=340)	Does not contain a disadvantaged community (n=1,255)
	Not accounting for program influence		Accounting for program influence	
One or more actions	310 (91%)	1,031 (82%)	310 (91%)	914 (73%)

<sup>6</sup> For more information on how a disadvantaged community is defined by New York State, please see: <https://www.nyseda.ny.gov/ny/disadvantaged-communities>

Two or more actions	302 (89%)	804 (64%)	288 (85%)	742 (59%)
Three or more actions	283 (83%)	660 (53%)	283 (83%)	586 (47%)
Four or more actions	259 (76%)	532 (42%)	254 (75%)	481 (38%)

In the current analysis, it is difficult to know the extent to which program activity is benefitting residents of DACs. Once a final definition of DACs is established, future evaluations can delve into this topic more deeply.

### 2.1.3 Clean Energy as Priority

Community representatives were asked objective measures that signify whether clean energy is a priority including: whether their community has either an Energy Action Plan or an energy chapter in their general plan, whether their municipality has a procurement policy that prioritizes the purchase of energy efficiency equipment or products, and whether their municipality has an energy manager or someone explicitly responsible for pursuing energy efficiency in their facilities and operations. Table 7 contains metrics indicating how many of the 1,595 New York State communities reported that they achieved each of these objective measures.

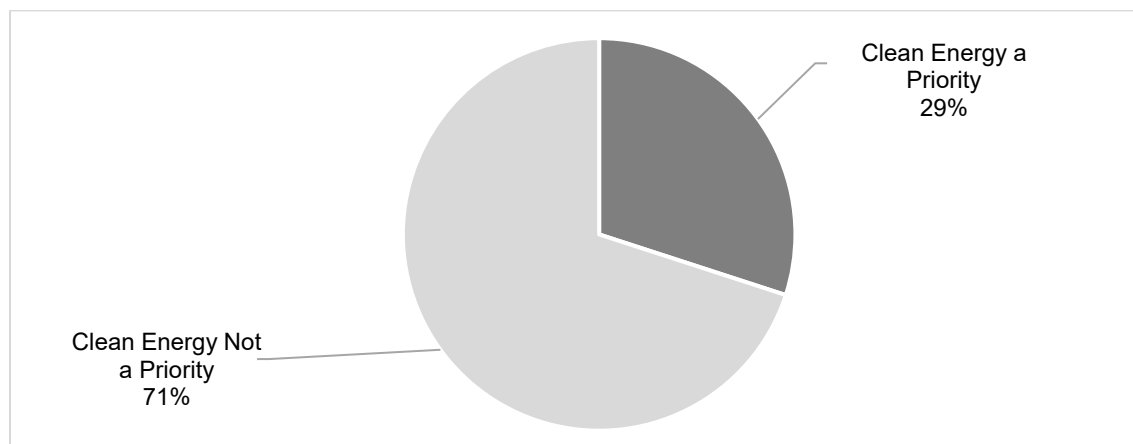
**Table 7. Objective Indicators of Clean Energy as a Priority (N=1,595)**

Objective Indicators	Time 2
Action Plan or Energy Chapter in General Plan	389 (24%)
Procurement Policy Prioritizing Energy Efficient Equipment or Products	216 (14%)
Energy Manager or Someone Explicitly Responsible for Pursuing Energy Efficiency	280 (18%)

*Note:* This table contains data weighted to the population from the 176 survey responses.

In addition to the objective measures, community representatives were asked whether they subjectively considered clean energy a priority in their municipality. Sixty-five percent of community representatives reported clean energy as a priority in their community. If a representative agreed clean energy is a priority and achieved at least one objective measure, the team counted clean energy as a priority for that community. Findings indicate clean energy is a priority for 464 communities, or 29% (Figure 2).

**Figure 2. Clean Energy as a Priority (N=1,595)**



This metric has remained stable across the three evaluation waves, indicating that whether clean energy is a priority for a municipality is not something that program interventions have appreciably influenced.

Of the 176 communities that completed the survey, 117 respondents agreed that clean energy is a priority at their municipality. When asked why clean energy is a priority, the most common answer was that they wanted more energy-efficient municipal operations to save money (65 of 117; 55%). Other reasons given included the importance of clean energy to the environment for our shared future and future generations (27 of 117; 23%), and that the municipal leadership have made it a priority (n=13; 11%).

Fifty-seven communities disagreed with the statement that clean energy is a priority at their municipality. The overwhelming majority of these representatives mentioned taking clean energy action was too expensive (n=21) or that it was not a focus right now (n=26). Fifty-one of the 57 communities that disagreed with the statement were small communities suggesting that the lack of staff and resources likely limit the ability to prioritize clean energy.

#### 2.1.4 Status by Action

Table 8 presents information on how many communities have completed each of the 10 High Impact Actions at baseline, at Time 1, and at Time 2 per the market studies.

Illustrating the first row of Table 8, at program launch in August 2016, 184 communities (12%) had completed the benchmarking action. At Time 1, 448 (28%) had completed the action. At Time 2, 813 (51%) had completed the action without accounting for program influence and 762 (48%) had done so when accounting for program influence. While the information in Table 8 is

not required by the Clean Energy Fund Investment Plan, it may be useful for program staff as they plan program activities.

In the five years since the Clean Energy Communities program launched, the number of communities that completed each action rose considerably. LED Streetlights, Unified Solar Permit, and Benchmarking were the most commonly completed actions, while fewer communities have completed the PACE Financing and Community Choice Aggregation actions.

**Table 8. Status by Action\***

High Impact Action	Number complete at baseline (August 2016)	Number complete at Time 1 (August 2018)	Number complete at Time 2 without accounting for program influence (December 2020)	Number complete at Time 2 accounting for program influence	Number completing since program launch, accounting for program influence
Benchmarking	184	448	813	762	578
Clean Energy Upgrades	55	299	294	223	168
LED Street Lights	109	293	948	800	691
Clean Fleets	132	491	556	490	358
Community Campaigns	88	198	490	401	313
Unified Solar Permit	51	600	850	817	766
Energy Code Enforcement Training	103	711	795	776	673
Climate Smart Communities Certification	56	166	220	199	143
Community Choice Aggregation	50	152	130	91	41
PACE Financing	31	67	97	85	54

*Note:* The baseline numbers rely heavily on self-report data and may overestimate the number of actions complete at baseline. If that is the case, the magnitude of program effects would be greater than displayed.



## 3. Findings and Recommendations

### 3.1 Finding 1

The program has successfully reached a majority of New York State communities and has high retention. Over the five years the program has been available, communities have progressed to complete multiple program-defined actions and do not stop after just one. This finding suggests that the program creates momentum among the participating communities, leading them to progress in their clean energy activities. At the same time, small-sized communities are less active in the program and are less likely to say clean energy is a priority at their municipality.

#### 3.1.1 Recommendation 1

CEC program staff may want to consider conducting additional research to understand whether enhanced support would result in greater program participation among small communities and, if so, whether additional outreach or enhanced support strategies could be provided cost-effectively.

### 3.2 Finding 2

Between Time 1 and Time 2, approximately 97 communities completed at least one High Impact Action indirectly, which represents 6% of the population. Two-thirds of actions completed indirectly were influenced by the program. The LED streetlights action was the most common action completed indirectly and comprised just over one-third of all indirectly completed actions.

#### 3.2.1 Recommendation 2

The market evaluation team recommends that NYSERDA continue the CEC Program, as a majority of indirect actions are influenced by the program. The team also recommends continuing to measure program influence for indirectly completed actions to ensure the program gets credit for actions it inspired.

### 3.3 Finding 3

Whether clean energy is a priority for a municipality is not something that program interventions have appreciably influenced, as indicated by the stability of this metric. Most communities that disagreed with the statement that energy is a priority at their municipality were small-sized, suggesting that the lack of staff and resources likely limit the ability to prioritize clean energy. These communities reported that clean energy actions were too expensive or were not a focus at the time of the survey.

### 3.3.1 Recommendation 3

The evaluation team recommends that this metric not be tracked, as currently defined, in future evaluation waves. The team does not believe that the lack of movement on this metric reflects an issue with program design or execution.

## 4. Methods

To conduct this study, the market evaluation team used a combination of program data, secondary data, and survey data. These data sources supported the objective of measuring the number of completed High Impact Actions. The survey also included questions that measured the program's influence on actions completed but not reported to the program. In addition, the evaluation team assessed whether clean energy is a priority at the municipality, and what some of the outcomes have been from completing the High Impact Actions. At Time 2, the team completed surveys with 176 municipalities and analyzed the data to estimate the Time 2 performance metrics. The sections below describe these research methods in more detail.

### 4.1 Sampling

The team used a list, provided by program staff, of all 1,595 municipalities in New York State to create a stratified sample of municipalities to contact for a phone survey. The goal of the sample design was to create a statewide representative sample that would allow extrapolation of survey findings to the population. At the same time, it was important to adequately represent the smaller segments in the sample so that findings for any segment would not be based on too small a sample size.

The team's first step was to segment the population by their type (town, city, village, or county), whether they contained a disadvantaged community (DAC), and size (large and small). The identified population was highly concentrated in towns, followed by villages, and many more jurisdictions were free of disadvantaged communities than contained them. This situation called for a stratified sample such that the smaller segments were over-represented (proportionally) and the larger segments were under-represented. This design, therefore, calls for weights to be used to accurately represent the whole population.

The team split these groups into mutually exclusive and exhaustive groups. The resulting distribution of communities made it clear that the sample design could not be divided by all potential stratification criteria: community type, size, and DAC status as these combinations yielded sample cell sizes that were much too small to support stable estimates. Thus, community size was eliminated as a stratification variable, and cities and towns were combined prior to sampling. Table 9 shows the resulting sampling frame.

**Table 9. Sampling Frame**

Community Description	Sampling Frame (N = 1595)	Percent of population (100%)	Target Sample (n = 200)	Percent of Sample (100%)
Communities that do not contain a DAC	1255	79%	154	77%
Cities and Counties	8	1%	4	2%
Towns	786	49%	75	38%
Villages	461	29%	75	38%
Communities that contain a DAC	340	21%	46	23%
Cities and Counties	111	7%	18	9%
Towns	146	9%	19	10%
Villages	83	5%	9	5%

The team weighted the sample strata to develop estimates of the numbers of communities in the population reported in this report, as described in Section 4.3, Data Analysis.

The market evaluation team confirmed that the final sample is representative of the population, including its distribution by municipality type (city, county, town, and village), size (large and small), and region (10 regions). Appendix B contains the breakdown of community characteristics in New York State and in the final sample of surveyed communities.

## 4.2 Data Collection

For Time 2 data collection, the team prioritized communities that completed a baseline survey or a Time 1 survey. During fall 2021, the market evaluation team contacted 755 municipalities in New York State and completed surveys with 176 for an overall response rate of 23%. Of the 176 completed surveys, 90 of the communities were in the Time 1 sample—58 of which completed a Time 1 survey. The team called municipal representatives up to four times to collect the necessary data, and spoke with up to two representatives per municipality who were most knowledgeable about their community’s clean energy efforts. Survey timing ranged from 10 to 35 minutes.

Secondary data was used when a reliable source of information was found. This included reports from CCA Administrators; the Climate Smart Communities website (<https://climatesmart.ny.gov/>), and the Energy Improvement Corporation that administers PACE financing. The survey included questions about the extent to which municipalities have made

progress toward implementing each of the High Impact Actions that program data or secondary data showed as incomplete. The team did not ask community representatives about a High Impact Action if they met one of three criteria:

- If program data indicated NYSERDA was aware the community had completed an action prior to the survey.
- If program data indicated a community was ineligible for an action due to their jurisdictional authority/responsibilities.<sup>7</sup>
- If the evaluation team had reliable secondary data showing the community completed the High Impact Action. The actions for which the team used secondary data included Climate Smart Communities, PACE financing, and Community Choice Aggregation.

For these reasons, the number of community representatives answering the survey questions varies. If a community reported they had completed an action in the survey, or a comparison of program data and secondary data indicated the action was completed indirectly, the team asked them what influenced their decision to complete the action.

### 4.3 Data Analysis

The team analyzed the data collected from the sample of surveyed municipalities using *Statistical Software for the Social Sciences (SPSS)* and *Excel* and extrapolated the results from the sample to all the New York State municipalities. The extrapolated results provide estimates for the counts and/or percentages of all municipalities regarding the performance metrics and other questions in the survey. Overall, the final sample size allowed to team to reach 95/7 Confidence/Precision.

The team applied post-stratification weights to the data so the sample data could be extrapolated to the population. Table 10 shows the weights used.

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<sup>7</sup> For example, counties are not responsible for permitting processes or energy code enforcement, and therefore cannot adopt the Unified Solar Permit or participate in code compliance training.

**Table 10. Weighting Scheme**

Community Description	Population	Sample	Weight
Communities that do not contain a DAC			
Cities and Counties	8	5	1.600000
Towns	786	67	11.731343
Villages	461	60	7.683333
Communities that contain a DAC			
Cities and Counties	111	21	5.285714
Towns	146	18	8.111111
Villages	83	5	16.600000

## 4.4 Determining Counts for Performance Metrics

This section explains the methods used to measure completed actions, assess program influence for indirectly completed actions, estimate the number of communities for which clean energy is a priority, and categorize the outcomes of completed actions.

### 4.4.1 Completion of Actions

To obtain the number of communities that completed one or more actions the team determined the number of actions a community completed using a combination of program data, survey data, and data from reliable secondary sources. Then the team grouped the communities into categories of having completed at least one action, at least two actions, at least three actions, and at least four actions. We caution the reader that these are nonexclusive categories. For example, all the communities in the group that had completed at least four actions were also members of the groups completing at least one, at least two, and at least three actions.

### 4.4.2 Assessing Program Influence for Indirectly Completed Actions

A goal of the Time 2 market assessment was to identify the indirectly completed actions that were influenced by the program. Community representatives were asked about what influenced their decision to complete an action if they met one of two criteria:

- If the program database said the action was incomplete, but a secondary source said it was complete, or
- If the program database said the action as incomplete, but the survey questioning determined it was complete.

The survey asked about the following influences: (1) Resources from the CEC Program, such as its website, step-by-step guides, or Program Coordinator; (2) prior experience with the CEC Program; or (3) a recommendation from other municipalities. The survey asked them to rate the influence of each of those factors from 1 to 7, where “1” meant “not at all influential” and “7” meant “very influential.” If they rated an item a “5,” “6,” or “7,” then the team counted the action as having program influence.

If a representative said another municipality influenced them, the team looked up that community’s status for the action in the program database. The team assigned program influence if the program knew the community that influenced the respondent was working on the action or had already completed it.

#### 4.4.3 Communities Indicating Clean Energy Is a Priority

The team also investigated the number of communities that indicated clean energy is a priority at their municipality. Because self-reported, subjective opinion tends to be less valid than self-reported, objective evidence, the team collected multiple data points on this topic and triangulated them to increase the validity of the metric.

First, the team asked representatives about the following objective indicators:

- whether they have an Energy Action Plan or an energy chapter in their General Plan;
- whether they have a procurement policy that prioritizes the purchase of energy efficient equipment or products; and
- whether they have an energy manager or someone explicitly responsible for pursuing energy efficiency in their facilities and operations.

Then, the team asked representatives to subjectively report whether they agreed or disagreed that clean energy is a priority at their municipality and briefly explain why. To determine which communities prioritized clean energy, community representatives had to both agree that clean energy was a priority and demonstrate at least one of the three objective criteria to qualify.

#### 4.4.4 Assessing Outcomes of Completed Actions

The market evaluation team asked each surveyed community representative to describe any outcomes, positive or negative, that have occurred since completing any of the program’s High Impact Actions. The team reviewed these answers and grouped them into thematic categories. These findings can be found in Appendix C.