Clean Energy Communities Market Evaluation

Final Executive Summary

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Executive Summary

The Clean Energy Communities (CEC) Program encourages investments in energy efficiency and the deployment of clean energy in local government operations and in their communities. This report presents Time 1 findings, measured in summer of 2018, and compares them to baseline performance metrics prior to the program's initiation in August 2016.

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. Two of the program's main goals are to:

- 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.

Objectives

The market evaluation's objectives are presented in Table 1.

 Table 1.
 Evaluation Objectives and Methods

Objective	Purpose	Method
Present Time 1 metrics per the	Estimate the Time 1	Phone surveys of community
Clean Energy Investment Fund	performance metrics, such as	representatives
Plan: Communities Chapter	number of actions completed	n=105
Present costs and impacts of,	Understand costs and impacts of	Phone interviews with
and barriers to, completed	completed actions and barriers	community representatives
actions	to incomplete actions	n=29

Findings

The performance metrics indicate that at Time 1, 1,178 communities had completed at least one High Impact Action, a substantial increase from the 467 that had completed one action at baseline.

Metric	Baseline (Attained by August 2016)	Time 1 (Attained by August 2018)	Time 1 Net (Attained between 8/16 and 8/18)
Number of communities that have completed one or more High-Impact Actions	467	1,178	711
	(29%)	(74%)	(44%)
Number of communities that have completed two or more High-Impact Actions	248	753	505
	(16%)	(47%)	(32%)
Number of communities that have completed three or more High-Impact Actions	128	609	481
	(8%)	(38%)	(30%)
Number of communities that have completed four or more High-Impact Actions (minimum for designation)	10	465	455
	(1%)	(29%)	(28%)
Number of communities that indicate clean energy is a priority**	473	484	11
	(30%)	(30%)	(0%)

Table 2. Aggregate Performance Metrics (N=1,600)*

* The population for this table is all 1,600 New York State communities. All reported numbers of communities are estimated from a representative sample whose size provided greater than 90 percent confidence and 10 percent precision.

** Community representatives indicated whether clean energy is a priority in spring 2017 and summer 2018.

Community representatives rated their perceived level of difficulty of implementing each action for which the municipality was both eligible and had not completed. Time 1 results indicate that most actions (8 of 10) were perceived as either easier to complete or similar in difficulty compared to baseline.

Table 3 describes the impacts and costs of completed actions, as described in the interviews. The barriers describe challenges to completing the actions.

High Impact Action	Impacts	Costs	Barriers
Benchmarking	Identification of building energy efficiency upgrade opportunities; increased awareness of clean energy among elected officials	Staff time to draft legislation, issue approval, and enter utility data	Unclear on action requirements; ongoing tracking of utility data tedious
Clean Energy Upgrades	Greenhouse gas emission reductions; operations and maintenance savings; positive citizen and occupant feedback	Equipment; contractor labor; staff time for planning; and administrative costs	Lack of interest, knowledge; logistical challenges

Table 3. High Impact Action Impacts, Costs, and Barriers

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High Impact Action	Impacts	Costs	Barriers
Light-emitting diode (LED) Street Lights	Improved illumination; greater perceived safety; cost savings	Substantial staff time, contractor labor, and equipment costs. Fewer costs when utility owns streetlights	Inventory challenging; Public Service Commission approval lengthy; finding vendors or installers difficult; many steps involved make process cumbersome
Clean Fleets	Greater awareness of electric vehicles (EVs); reduced barriers to EV purchases; greater fleet reliability; community use of charging stations	Equipment; contractors; staff time	Cost of the EVs, charging infrastructure, and installation labor; lack of support from political leadership
Solarize	Reduced barriers to and greater visibility of solar, resulting in more community installations; creation of local, ongoing partnerships	Minimal costs thanks to volunteer-driven campaigns	Lack of staff time to coordinate campaign; unfamiliarity with action; minimal community uptake due to climate, cost, and aesthetics
Unified Solar Permit	Expedited permit review times	Some internal staff time to draft, approve legislation	Current solar permitting process adequate
Energy Code Enforcement Training	Improved awareness of energy codes and their significance	Time attending and traveling to meetings	Lack of staff time and willingness to attend trainings
Climate Smart Communities Certification	Recognition for efforts; networking; planning roadmaps created; ongoing relationships formed	Staff time to document and complete actions in a timely manner; protracted process (possibly years)	Unfamiliarity with program and requirements; lack of staff time
Community Choice Aggregation (CCA)	Increased use and profile of renewable energy; reduced energy costs; ongoing collaboration with Sustainable Westchester	Staff time; legal fees; outreach expenses	Unfamiliarity with CCA; lack of staff capacity; opt- out format; small community size
Property Assessed Clean Energy (PACE) Financing	Some improved awareness of clean energy among elected officials	Moderate staff time; outreach expenses	Unfamiliarity or misunderstanding of program; lack of staff capacity; minimal uptake due to concern about government involvement

Summarized Findings

Finding 1: The program's Coordinators could reduce two main barriers to participation – lack of awareness of the program's actions and lack of political support.

Finding 2: The program structure provides relatively little motivation for communities once they become CEC designated (having completed four High Impact Actions).