P12 Schools Initiative Market Evaluation

Executive Summary

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NYSERDA Record of Revision

Document Title

P12 Schools Initiative Market Evaluation March 2024

| Revision Date | Description of Changes | Revision on Page(s) |
|---------------|------------------------|---------------------|
| March 2024 | Original Issue | Original Issue |
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Executive Summary

NYSERDA's P12 Schools Initiative launched in 2017 through the Commercial Chapter of the Clean Energy Fund Compiled Investment Plan Market Development Portfolio. The goals of this Initiative are to "engage the pre-kindergarten through grade 12 (P-12) school sector in pursuing carbon savings and clean energy projects." To achieve the objectives defined within this chapter, NYSERDA launched three discrete programs:

- Benchmarking Program (2019 2022): provided baseline benchmarking reports for school buildings as well as biannual reports for three years.
- Green and Clean Energy Solutions (2019 2022): provided cost sharing for energy studies, clean heating/cooling, and net zero design projects, and energy efficiency measures.
- Clean Green Schools Initiative (2022 Present): serves under-resourced schools (i.e., schools located in DACs, or high needs schools) and provides technical assistance for and/or construction and installation of energy efficiency and clean energy projects.

In addition, the FlexTech program was used from 2023 onward as a funding mechanism for P12 Schools Initiative Program participants.

This market evaluation—the first for the P12 Schools Initiative—began in 2022 included five key research goals:

- Assess market change by measuring key market indicators.
- Assess the indirect benefits of the program.
- Assess the energy efficiency and electrification funding that participating and nonparticipating schools are receiving from utilities, NYSERDA, or other funding sources.
- Assess the program's impact on schools and residents of DACs and high-need schools.
- Assess the impact of COVID-19 on schools' ability to participate in clean energy related activities and the program.

This research included four research tasks: participant interviews (n=30), nonparticipant surveys (n=70), nonparticipant interviews (n=4), and an indirect benefits calculation.

https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/About/Clean-Energy-Fund/2023-11-01-Clean-Energy-Fund-Compiled-Investment-Plans.pdf

Market Assessment Findings

The evaluation team found that progress on the outcome and output indicators was below targets, though this is not unexpected based on the process by which NYSERDA developed the targets prior to program creation and implementation. Table 1 below contains the progress on each indicator found in this research.

Table 1: P12 Schools Initiative Indicators and Progress Made (as of June 2023)

| | Indicators | Baseline (2017) | 2023 Progress | |
|----------|---|--------------------|---------------|--|
| | | | Target | Actual |
| Outputs | Number of schools utilizing NYSERDA funding for student and faculty engagement (i.e. workforce development efforts) | 0 | 25 | 0 (participants only) |
| | Number of projects implemented because of P12 Schools Initiative funding | 0 | 4 | 16 (participants only) |
| Outcomes | Number of schools receiving recognition | 0 | 3 | 5 (participants) 2 (nonparticipants) |
| | Number of schools utilizing benchmarking data and energy master plans to make informed decisions towards future clean energy projects | 0 | 75 | 20 (participants) 8 (nonparticipants) |
| | Number of schools reporting a greater understanding of the benefits of clean energy at their school | 0 | 800 | 20 (participants only) |
| | Number of schools utilizing clean energy case studies to make informed decisions towards future clean energy projects | 0 | 150 | 0 (participants) 0 (nonparticipants) |

More detail on findings related to these indicators is found in Section 3.1.1.

Key Findings and Recommendations

The evaluation team identified several findings and associated recommendations to improve and build upon current P12 Schools Initiative programs, as well as potential future programs.

The long capital funding process and limited non-capital funding opportunities make it difficult for schools to implement clean energy and efficiency projects. The evaluation team found that insufficient funding was the primary barrier for both participants and nonparticipants to implement clean energy and energy efficiency projects. In addition, while often the primary mechanism for schools to fund energy projects, the capital funding process is slow and hampers implementation.

Recommendation: New P12 Initiative programs should support schools to shorten the capital funding route and support schools through the capital funding process and incorporate additional project implementation support.

NYSERDA response to recommendation: Implemented. NYSERDA's Clean Green Schools program supports schools through the capital funding process and offers implementation support.

Aligning the value proposition for clean energy and energy efficiency investments with the priorities of a given school community is key to engaging decision-makers, though this is a time-consuming process. School values are shaped by the communities they serve, and vary by social (e.g., economic stability), political (e.g., conservative, liberal), and geographic (e.g., rural, urban) dimensions. Decision makers respond to messaging that aligns with those values. In addition, school boards comprised of community members are often the key decisionmakers for large energy projects. Many interview and survey respondents representing both public and private schools emphasized the pivotal role that boards play in moving clean energy or energy efficiency efforts forward.

The P12 Schools Initiative engages school staff across many roles with varying decision-making authority. This results in an inconsistent outreach and engagement experience, which may create challenges in driving progress. This makes program engagement difficult, since these distinct roles have varying responsibilities, decision-making power, and different levels of technical expertise. Interview respondents who worked at the district level noted that the variability in who the program engages makes progress difficult, since tactics need to be tailored based on the specific contact.

Recommendation: NYSERDA should investigate strategies to facilitate more streamlined and effective decision-maker (i.e., school board) engagement. Effective outreach is another key ingredient of stakeholder engagement. NYSERDA should customize outreach and engagement based on the role/job title.

NYSERDA response to recommendation: Implemented. NYSERDA coordinates targeted outreach to promote participation in the program to the P-12 decision makers (e.g. Superintendents, Business Officials, Facility Directors, School Boards, etc.) through webinars, in-person presentations, e-mail blasts, newsletters and more.

Recommendation: NYSERDA should highlight case studies from schools and districts. To the extent possible, they could reflect diversity in geography (e.g., region, rural/urban), type (e.g., public, charter, private), and basic characteristics (i.e., size, building age) in marketing materials.

NYSERDA response to recommendation: Implemented. NYSERDA's Clean Green Schools Initiative will develop case studies on the Track II projects (e.g. decarbonization construction projects). In addition, these projects (and project teams) are showcased at P-12 conferences.

Participants were satisfied with the P12 Schools Initiative but wanted more implementation support for recommended energy projects. Seventy-nine percent of respondents gave the P12 Schools Initiative a 4 or higher satisfaction rating (out of 5). However, some respondents wanted more implementation support (e.g., assistance identifying funding and finding contractors) from NYSERDA after participating in the Benchmarking Program.

Recommendation: NYSERDA should consider creating a cohort model for future programs participants. This could build community among peers and facilitate information-sharing—and implementation—on clean energy and energy efficiency in schools.

NYSERDA response to recommendation: Implemented. NYSERDA has built a community among peers and facilitates information sharing around clean energy and energy efficiency in schools. NYSERDA continuously includes program participants to present during webinars, so that their peers can learn from one another on the steps they can take to integrate clean energy into their school buildings.

Recommendation: As the program team begins to see trends in program participation, consider conducting a nonparticipant and/or non-respondent study for the Clean Green Schools Program, which targets DAC and high-need schools, to identify early trends around engagement.

NYSERDA response to recommendation: Pending. NYSERDA's Clean Green Schools Initiative plans to conduct a non-participant survey for the Clean Green Schools Initiative in Q2 2024.

There are no indirect benefits for the P12 Schools Initiative due to high naturally occurring market adoption (NOMAD) and minimal influenced adoption from schools who implemented projects. There are a few considerations that provide context for this finding, discussed in detail in Section 4 of the report.

Recommendation: Consider reworking the indirect benefits framework to be more flexible when evaluating initiatives that contain several unique, complex, and multifaceted program designs. Consider refinements to the process for calculating UEBs to account for the variation in school size, district size, and building square footage as well as reworking influence attribution constraints.

NYSERDA response to recommendation: Pending. This recommendation will be explored as part of the next planned evaluation.